UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED APRIL 30, 1998

OR

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

FOR THE TRANSITION PERIOD FROM..................TO.........................

COMMISSION FILE NUMBER: 0-21969

CIENA CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	23-2725311
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1201 WINTERSON ROAD, LINTHICUM, MD	21090
(Address of Principal Executive Offices)	(Zip Code)

(410) 865-8500
(Registrant's telephone number, including area code)

920 ELKRIDGE LANDING ROAD, LINTHICUM, MD 21090
(Former name, former address and former fiscal year, if changed since last report)

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:

CLASS	OUTSTANDING AT MAY 21, 1998
Common stock. $.01 par value	101,590,437

CIENA CORPORATION

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ITEM 1. FINANCIAL STATEMENTS

CIENA CORPORATION

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

	Quarter Ended		Six Months Ended	
	April 30, 1997	April 30, 1998	April 30, 1997	April 30, 1998
Revenue	$ 97,603	$ 142,718	$ 161,276	$ 287,810
Cost of goods sold	40,400	63,915	68,653	122,895
Gross profit	57,203	78,803	92,623	164,915
Operating expenses:				
Research and development	4,699	16,648	7,749	26,851
Selling and marketing	4,946	11,044	8,016	21,012
General and administrative	2,797	14,448	9,800	18,240
Purchased research and development	-	9,503	-	9,503
Total operating expenses	12,442	51,643	25,565	75,606
Income from operations	44,761	27,160	67,058	89,309
Interest and other income (expense), net	1,951	3,431	2,382	7,206
Interest expense	(105)	(81)	(234)	(165)
Income before income taxes	46,607	30,510	69,206	96,350
Provision for income taxes	18,127	15,205	26,871	41,347
Net income	$ 28,480	$ 15,305	$ 42,335	$ 55,003
Basic net income per common share	$ 0.31	$ 0.15	$ 0.80	$ 0.54
Diluted net income per common share and dilutive potential common share	$ 0.27	$ 0.14	$ 0.41	$ 0.51
Weighted average basic common shares outstanding	92,644	101,350	53,002	100,996
Weighted average basic common and dilutive potential common shares outstanding	105,456	107,560	102,486	107,598

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

CIENA CORPORATION

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT SHARE DATA)
(UNAUDITED)

	October 31, 1997	April 30, 1998
ASSETS		
Current assets:		
Cash and cash equivalents	$ 268,588	$ 174,474
Marketable debt securities	-	51,765
Accounts receivable, net	72,336	131,990
Inventories, net	41,109	68,955
Deferred income taxes	9,139	10,335
Prepaid expenses and other	3,093	7,438
Total current assets	394,265	444,957
Equipment, furniture and fixtures, net	67,618	114,252
Goodwill and other intangible assets, net	-	13,436
Other assets	1,396	2,412
Total assets	$ 463,279	$ 575,057
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 24,760	$ 36,629
Accrued liabilities	32,022	43,451
Income taxes payable	261	2,180
Deferred revenue	2,591	3,576
Other current obligations	1,179	936
Total current liabilities	60,813	86,772
Deferred income taxes	28,167	30,124
Other long-term obligations	1,885	1,779
Total liabilities	90,865	118,675
Commitments and contingencies	-	-
Stockholders' equity:		
Preferred stock - par value $.01; 20,000,000 shares authorized; zero shares issued and outstanding	-	-
Common stock - par value $.01; 360,000,000 shares authorized; 100,287,653 and 101,573,933 shares issued and outstanding	1,003	1,016
Additional paid-in capital	245,219	274,408
Notes receivable from stockholders	(64)	(277)
Translation adjustment	(5)	(29)
Retained earnings	126,261	181,264
Total stockholders' equity	372,414	456,382
Total liabilities and stockholders' equity	$ 463,279	$ 575,057

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

CIENA CORPORATION

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

	Six Months Ended April 30,	
	1997	1998
Cash flows from operating activities:		
Net income	$ 42,335	$ 55,003
Adjustments to reconcile net income to net cash provided by operating activities:		
Non-cash charges from equity transactions	20	20
Amortization of premiums on marketable debt securities	-	164
Effect of Translation Adjustments	(13)	(24)
Purchased research and development	-	9,503
Write down of leasehold improvements	571	-
Depreciation and amortization	3,209	13,925
Allowance for doubtful accounts	492	194
Provision for inventory excess and obsolescence	2,098	1,683
Provision for warranty and other contractual obligations	5,872	6,400
Changes in assets and liabilities:		
Increase in accounts receivable	(15,187)	(59,848)
Increase in prepaid expenses and other	(418)	(4,345)
Increase in inventories	(11,729)	(29,529)
Increase in deferred income tax asset	(2,607)	(1,196)
Increase in other assets	(593)	(3,664)
Increase in accounts payable and accruals	20,501	16,898
Increase in income taxes payable	6,805	1,919
Increase in deferred income tax liability	-	1,957
(Decrease) increase in deferred revenue and other obligations	(3,078)	1,131
Net cash provided by operating activities	48,278	10,191
Cash flows from investing activities:		
Additions to equipment, furniture and fixtures	(27,567)	(57,979)
Purchases of marketable debt securities	-	(88,305)
Maturities of marketable debt securities	36,376	
Net cash paid for business combination	-	(2,103)
Net cash used in investing activities	(27,567)	(112,011)
Cash flows from financing activities:		
Principal payments on notes payable	(556)	-
Proceeds for issuance of common stock and warrants	122,517	1,316
Tax benefit related to exercise of stock warrants	17,560	6,885
Repayment of other obligations	(468)	(495)
Net cash provided by financing activities	139,053	7,706
Net increase (decrease) in cash and cash equivalents	159,764	(94,114)
Cash and cash equivalents at beginning of period	24,040	268,588
Cash and cash equivalents at end of period	$ 183,804	$ 174,474

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

CIENA CORPORATION

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, 1997 audited consolidated financial statements and notes thereto included in the Company's Form 10-K annual report for the fiscal year ended October 31, 1997.

As more fully described in Note 5, the Company acquired ATI Telecom International Ltd., ("Alta") in February 1998. The acquisition was accounted for as a pooling of interests, and the historical consolidated financial statements of the Company for all periods prior to this acquisition have been restated to include the financial position, results of operations and cash flows of Alta.

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-completion method, measured by the percentage of costs incurred to date compared to estimated total costs for each contract. Amounts received in excess of revenue recognized are included as deferred revenue in the accompanying balance sheets. For distributor sales where risks of ownership have not transferred, the Company recognizes revenue when the product is shipped through to the end user.

Marketable debt securities

The Company has classified its investments in marketable debt securities as held-to-maturity securities as defined by Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities". Such investments are recorded at their amortized cost in the accompanying consolidated balance sheets. As of April 30, 1998 all of the marketable debt securities are corporate debt securities with contractual maturities of six months or less.

Goodwill and other intangibles

The Company's goodwill and other intangibles are the result of external purchases of technology and goodwill and are recorded at the lower of their cost or the fair market value disbursed in conjunction with the purchase. The goodwill and other intangibles are amortized over the useful life of the assets, determined by

management to be between five and fourteen years, on a straight-line basis. For the period ended April 30, 1998, the Company recorded goodwill amortization of approximately $568,000, resulting in accumulated amortization of $947,000 as of April 30, 1998.

Computation of Basic Net Income per Common Share and Diluted Net Income per Common and Dilutive Potential Common Share

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, stock options and warrants using the treasury stock method and shares issued upon conversion of all outstanding shares of Mandatorily Redeemable Preferred Stock. (in thousands except per share amounts)

	For the Quarter Ended April 30, 1998		
	Income (Numerator)	Shares (Denominator)	Per Share Amount
BASIC EPS			
Income available to common stockholders	$15,305	101,350	$ 0.15
EFFECT OF DILUTIVE SECURITIES			
Stock options	-	6,210	
DILUTED EPS			
Income available to common stockholders + assumed conversions	$15,305	107,560	$ 0.14

	For the Quarter Ended April 30, 1997		
	Income (Numerator)	Shares (Denominator)	Per Share Amount
BASIC EPS			
Income available to common stockholders	$28,480	92,644	$ 0.31
EFFECT OF DILUTIVE SECURITIES			
Stock options and warrants	-	8,652	
Conversion of Preferred Stock	-	4,160	
DILUTED EPS			
Income available to common stockholders + assumed conversions	$28,480	105,456	$ 0.27

	For Six Months Ended April 30, 1998		
	Income (Numerator)	Shares (Denominator)	Per Share Amount
BASIC EPS			
Income available to common stockholders	$55,003	100,996	$ 0.54
EFFECT OF DILUTIVE SECURITIES			
Stock options and warrants	-	6,602	
DILUTED EPS			
Income available to common stockholders + assumed conversions	$55,003	107,598	$ 0.51

	For Six Months Ended April 30, 1997		
	Income (Numerator)	Shares (Denominator)	Per Share Amount
BASIC EPS			
Income available to common stockholders	$42,335	53,002	$ 0.80
EFFECT OF DILUTIVE SECURITIES			
Stock options and warrants	-	9,607	
Conversion of Preferred Stock	-	39,877	
DILUTED EPS			
Income available to common stockholders + assumed conversions	$42,335	102,486	$ 0.41

Stock options to purchase 1,070,275 and 709,500 shares of common stock were outstanding during the quarter ended and six months ended April 30, 1998, respectively, but were not included in the computation of diluted EPS because the options' exercise price was greater than the average market price of the common shares.

(2) INVENTORIES

Inventories are comprised of the following (in thousands):

	October 31, 1997	April 30, 1998
Raw materials	$ 27,716	$ 35,826
Work-in-process	5,679	17,747
Finished goods	15,180	22,891
	48,575	76,464
Less reserve for excess and obsolescence	(7,466)	(7,509)
	$ 41,109	$ 68,955

(3) EQUIPMENT, FURNITURE AND FIXTURES

Equipment, furniture and fixtures are comprised of the following (in thousands):

	October 31, 1997	April 30, 1998
Equipment, furniture and fixtures	$ 65,378	$ 116,126
Leasehold improvements	14,019	22,660
	79,397	138,786
Accumulated depreciation and amortization	(12,279)	(24,794)
Construction-in-progress	500	260
	$ 67,618	$ 114,252

(4) ACCRUED LIABILITIES - COMMITMENTS AND CONTINGENCIES

LITIGATION

During the fiscal year ended October 31, 1997 the Company accrued approximately $7.5 Million for legal and related costs associated with its involvement in certain litigation. The Company has accrued an additional $10.0 million during the second quarter ending April 30, 1998; $11.1 million of the total accrual is remaining. While the company believes its estimate of legal and related costs is adequate based on its current understanding of the overall facts and circumstances, the estimate may be increased in future periods depending on the course of the legal proceedings. See part ii, item 1, "Legal Proceedings".

Accrued Liabilities

Accrued liabilities are comprised of the following (in thousands):

	October 31, 1997	April 30, 1998
Warranty and other contractual obligations	$12,265	$13,586
Accrued compensation	8,086	9,727
Legal and related costs	4,577	11,597
Consulting and outside services	3,295	2,976
Unbilled construction-in-process and leasehold improvements	1,427	911
Other	2,372	4,654
	$32,022	$43,451

(5) ACQUISITION

Astracom

During December 1997 the Company completed an Agreement and Plan of Merger with Astracom, Inc. ("Astracom"), an early stage telecommunications company located in Atlanta, Georgia. The purchase price was approximately $13.1 million and consisted of the issuance of 169,754 shares of CIENA common stock, the payment of $2.4 million in cash, and the assumption of certain stock options. The transaction was recorded using the purchase accounting method with the purchase price representing approximately $11.4 million in goodwill and other intangibles, and approximately $1.7 million in net assets assumed. The amortization period for the intangibles, based on management's estimate of the useful life of the acquired technology, is five years. The operations of Astracom are not material to the consolidated financial statements of the Company, and accordingly, separate pro forma financial information has not been presented.

ATI Telecom

On February 19, 1998, the Company acquired ATI Telecom International Ltd., ("Alta"), a Canadian corporation headquartered in Norcross, Georgia, in a transaction valued at approximately $52.5 million. Alta provides a range of engineering, furnishing and installation services for telecommunications service providers in the areas of transport, switching and wireless communications. Under the terms of the agreement, the Company acquired all of the outstanding shares of Alta in exchange for 1,000,000 shares of CIENA common stock. The transaction was accounted for as a pooling of interests. The historical consolidated financial results of CIENA for prior periods have been restated to include the financial position and results of operations of Alta. The following results of operations and selected financial data shows the historical results of the combined CIENA and Alta for the periods prior to the consummation of the merger of the two entities:

(in thousands except share and per share data)
Statement of Operations Data:

	Year Ended October 31,			Quarter Ended January 31,
	1995	1996	1997	1998
Revenue	$ 21,691	$ 88,463	$ 413,215	$ 145,092
Cost of goods sold	16,185	47,315	166,472	58,980
Gross profit	5,506	41,148	246,743	86,112
Operating expenses:				
Research and development	6,361	8,922	23,308	10,203
Selling and marketing	1,907	5,641	22,627	9,968
General and administrative	3,034	6,422	19,323	3,792
Total operating expenses	11,302	20,985	65,258	23,963
Income from operations	(5,796)	20,163	181,485	62,149
Interest and other income (expense), net	435	1,096	7,593	3,775
Interest expense	(263)	(443)	(408)	(84)
Income before income taxes	(5,624)	20,816	188,670	65,840
Provision for income taxes	824	3,553	72,703	26,142
Net income (loss)	$ (6,448)	$ 17,263	$ 115,967	$ 39,698
Basic net income (loss) per common share	$ (0.51)	$ 1.25	$ 1.53	$ 0.39
Diluted net income (loss) per common share and dilutive potential common share	$ (0.51)	$ 0.19	$ 1.11	$ 0.37
Weighted average basic common shares outstanding	12,717	13,817	75,802	100,641
Weighted average basic common and dilutive potential common shares outstanding	12,717	92,407	104,664	107,552

(in thousands)
Balance Sheet Data:

	Year Ended October 31,			Quarter Ended January 31,
	1995	1996	1997	1998
Cash, cash equivalents and marketable debt securities	$ 8,261	$ 24,040	$268,588	$288,514
Working capital	7,221	42,240	333,452	364,358
Total assets	17,706	79,676	463,279	551,105
Long-term obligations, excluding current portion	2,074	3,465	1,885	1,942
Mandatorily redeemable preferred stock	14,454	40,404	-	-
Stockholders' equity (deficit)	(6,662)	10,783	372,414	430,360

The following table shows the separate historical results of CIENA and Alta for the periods prior to the consummation of the merger of the two entities:

(in thousands)	Year Ended October 31, 1995	1996	1997	Quarter Ended January 31, 1998
Revenues:				
CIENA	$ -	$ 54,838	$ 373,827	$ 134,267
Alta	21,691	33,625	39,531	11,349
Intercompany eliminations	-	-	(143)	(524)
Consolidated total, as restated	$ 21,691	$ 88,463	$ 413,215	$ 145,092
Net Income (loss):				
CIENA	$ (7,629)	$ 14,718	$ 112,945	$ 39,768
Alta	1,181	2,545	3,022	(70)
Consolidated total, as restated	$ (6,448)	$ 17,263	$ 115,967	$ 39,698

Terabit

During April 1998 the Company completed an Agreement and Plan of Reorganization with Terabit Technology, Inc. ("Terabit"), a developer of optical components known as photodetector or optical receivers. Terabit is located in Santa Barbara, California. The purchase price was approximately $11.5 million and consisted of the issuance of 134,390 shares of CIENA common stock, the payment of $1.1 million in cash, and the assumption of certain stock options. The transaction was recorded using the purchase accounting method with the purchase price representing approximately $9.5 million in purchased research and development, 1.8 million in goodwill and other intangibles, and approximately $0.2 million in net assets assumed. The amortization period for the intangibles, based on management's estimate of the useful life of the acquired technology, is five years. The operations of Terabit are not material to the consolidated financial statements of the Company, and accordingly, separate pro forma financial information has not been presented.

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, 1997, and in a Form 8-K filed on December 29, 1997, 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 8-K or 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 8-K and 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 leading supplier of dense wavelength division multiplexing ("DWDM") systems for fiberoptic communications networks. CIENA's DWDM systems alleviate capacity constraints and enable flexible provisioning of additional bandwidth on high-traffic routes in carriers' networks.

Revenues for the six months ended April 30, 1998 of $287.8 million were the result of MultiWave(R) Sentry(TM)("Sentry"), Multiwave 4000 ("4000"), and Multiwave 1600 ("1600") systems sales, the significant majority of which were to Sprint Corporation ("Sprint"). The Company also recognized revenues from 1600 sales to LDDS WorldCom ("WorldCom"). Substantially all of the revenue recognized from the sales to WorldCom occurred in the Company's first quarter ended January 31, 1998. During the first quarter of 1998 the Company received initial product acceptance and revenue recognition from Sentry systems supplied to Mercury Communications Limited, a U.K. based subsidiary of Cable and Wireless Communications Group ("Cable and Wireless"). Additionally, during the first quarter of 1998, the Company was awarded a second contract with Cable and Wireless and subsequently received in the second quarter of 1998 product acceptance and revenue recognition from the Sentry systems supplied under that contract. Also during the six months ended April 30, 1998 the Company recognized revenue from sales of 4000 systems to Digital Teleport, Inc. ("DTI") and through the Company's distributor, NISSHO Electronics Corporation ("NISSHO"), sales of Sentry systems to Teleway Japan Corporation ("Teleway") and to Japan Telecom Co., Ltd ("Japan Telecom"). Revenue recognition for the Cable and Wireless, Teleway and Japan Telecom shipments had been previously deferred until completion of initial field testing and product acceptance. Revenues for the six months ended April 30, 1998 also included the Company's initial product acceptance and revenue recognition from 1600 system sales to GST Telecommunications, Inc. ("GST"). Revenues received from GST represent the Company's first sales in the competitive local exchange carrier ("CLEC") market.

In March 1998 the Company announced an agreement to supply Bell Atlantic with DWDM optical transmission systems. The supply agreement has no minimum purchase commitments and includes the Company's 1600, Sentry and Multiwave Firefly(TM) ("Firefly") systems. Firefly is the Company's short distance 24 channel product. Deployment and revenue recognition is expected in the second half of 1998, subject to successful completion of ongoing testing. The Bell Atlantic DWDM deployment is expected to mark the first time a regional Bell operating company ("RBOC") has committed to deployment of the DWDM technology. In April 1998 the Company signed a one year exclusive contract with Hermes Europe Railtel ("Hermes") to supply the 4000 system. Deployment and revenue recognition is expected to occur in the second half of 1998. See "Risk Factors".

In February 1998 the Company completed its acquisition of ATI Telecom International Ltd., ("Alta"), a provider of telecommunications engineering, furnishing and installation services, located in Norcross, Georgia. The addition of Alta provides the Company with the installation experience and extensive field support capability required to assist customers with equipment deployment. See Note 5 of Notes to Consolidated Financial Statements.

During the first quarter of 1998 the Company continued its effort to expand its manufacturing capabilities by leasing an additional facility of approximately 35,000 square feet located in the Linthicum, Maryland area. This facility is used for manufacturing and customer service activities. In April 1998 the Company leased an additional manufacturing facility in the Linthicum area of approximately 57,000 square feet. With the addition of this new facility the Company has a total of four facilities with approximately 192,500 square feet that can be used for manufacturing operations. In April 1998 the Company completed the transfer of its principal executive, sales, and marketing functions located in Linthicum in a portion of its 96,000 square foot facility to an approximately 67,000 square foot facility also located in Linthicum. During the first quarter of 1998, the Company began the process of renovating the vacated portions of the 96,000 square foot facility for the purpose of accommodating expanding research and development functions. These renovations are expected to be completed in the second half of 1998.

As of April 30, 1998 the Company employed 1,247 persons, which includes 161 persons as a result of the Company's acquisition of Alta. This was an increase of 406 persons over the 841 persons employed on October 31, 1997.

RESULTS OF OPERATIONS

THREE MONTHS ENDED APRIL 30, 1997 COMPARED TO THREE MONTHS ENDED APRIL 30, 1998

REVENUE. The Company recognized $97.6 million and $142.7 million in revenue for the second quarters ended April 30, 1997 and 1998, respectively. The approximate $45.1 million or 46% increase in revenues in the second quarter 1998 compared to the second quarter 1997 was largely the result of increased sales to Sprint, DTI and Cable and Wireless, offset by a substantial decline in sales to WorldCom. A majority of the revenues from Sprint and DTI in the Company's second quarter 1998 was attributed to sales of the Company's 4000 system, the Company's 40 channel version of the Sentry, which was not available for sale in the second quarter of 1997. The Company expects revenues in the near term to be largely dependent upon sales to Sprint, several new customers and, depending on the results of ongoing testing and evaluation, AT&T Corporation ("AT&T"). These revenues are expected to be derived primarily from sales of the Sentry and 4000, and to a lesser extent, from Firefly, the Company's short distance 24 channel product. There are material risks associated with the Company's dependence on these customers, as well as its transition to multiple product lines. See "Risk Factors".

GROSS PROFIT. Gross profits were $57.2 million and $78.8 million for the second quarters ended April 30, 1997 and 1998, respectively. The approximate $21.6 million or 38% increase in gross profit in the second quarter 1998 compared to the second quarter 1997 was the result of increased revenues in the second quarter 1998 compared to second quarter 1997. Gross margin as a percentage of revenues was 58.6% and 55.2% for the second quarters 1997 and 1998, respectively. The decrease in gross margin percentage for the second quarter 1998 compared to the second quarter 1997 was largely the result of a reduction in selling price due to increased competition. The Company expects that gross margins in the near future may decrease primarily due to competitive market pricing, although the Company's manufacturing efficiencies and improvements in component costs should moderate the rate and magnitude of any decrease. The Company's future gross margins will also vary depending on the mix of product features and configurations sold in a period as well as the extent of services provided. See "Risk Factors."

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were $4.7 million and $16.6 million for the second quarters ended April 30, 1997 and 1998, respectively. During the second quarters 1997 and 1998, research and development expenses were 4.8% and 11.6% of revenue, respectively. The approximate $11.9 million or 253% increase in research and development expenses in the second quarter 1998 compared to the second quarter 1997 was the result of increases in staffing levels, consumption of prototype materials, utilization of outside consultants for certain development efforts and higher costs of test equipment used to develop and test new products and features. The Company expects that its research and development expenditures will continue to increase during the remainder of fiscal year 1998 to support the continued development of the MultiWave products, the exploration 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 $4.9 million and $11.0 million for the second quarters ended April 30, 1997 and 1998, respectively. During the second quarters 1997 and 1998, selling and marketing expenses were 5.0% and 7.7% of revenue, respectively. The approximate $6.1 million or 124% increase in selling and marketing expenses in the second quarter 1998 compared to the second quarter 1997 was primarily the result of increased staffing levels in the areas of sales, technical assistance and field support, and increases in commissions earned, trade show participation, promotional costs, travel expenditures and rent expense. The Company anticipates that its selling and marketing expenses will increase during the remainder of fiscal year 1998 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 $2.8 million and $14.4 million for the second quarters ended April 30, 1997 and 1998, respectively. During the second quarters 1997 and 1998, general and administrative expenses were 2.9% and 10.1% of revenue, respectively. The approximate $11.6 million or 414% increase in general and administrative expenses from the second quarter 1997 compared to the second quarter 1998 was primarily the result of a $10.0 million charge to accrue estimated legal and related costs associated with pending litigation. See Note 4 of Notes to Consolidated Financial Statements. See Part II, Item 1 "Legal Proceedings". The remaining increase is 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 1998 will increase due to the expansion of the Company's administrative staff required to support its expanding operations.

PURCHASED RESEARCH AND DEVELOPMENT. Purchased research and development costs were $9.5 million for the second quarter 1998. These costs were for the purchase of technology associated with the acquisition of Terabit during the second quarter 1998. See Note 5 of Notes to Consolidated Financial Statements.

OPERATING MARGINS. The Company's operating margins were $44.8 million and $46.7 million for the second quarters ended April 30, 1997 and 1998, respectively, exclusive of the effect of charges for purchased research and development and the estimated legal and related costs accrual. During the second quarters 1997 and 1998, operating margins were 45.9% and 32.7% of revenue, respectively, exclusive of the effect of a one-time charge for purchased research and development and legal and related costs accrual. The Company expects that its operating margins may decrease as it continues to hire additional personnel and increase operating expenses to support its business. The results of operations for the second quarter 1998 are not necessarily indicative of results to be expected in future periods. See "Risk Factors."

INTEREST AND OTHER INCOME (EXPENSE), NET. Interest income and other income (expense), net were $2.0 million and $3.4 million for the second quarters ended April 30, 1997 and 1998, respectively. The approximate $1.4 million increase in interest income and other income (expense), net was attributable to higher invested cash balances.

PROVISION FOR INCOME TAXES. The Company's provision for income taxes were $18.1 million and $15.2 million for the second quarters ended April 30, 1997 and 1998, respectively. During the second quarters 1997 and 1998, the provision for income taxes were 38.8% and 38.0% of income before income taxes, respectively, exclusive of the effect of one-time charges for purchased research and development expenses. Purchased research and development charges are not deductible for tax purposes. The decline in the income tax rate in second quarter 1998 compared to second quarter 1997 was the result of a lower combined effective state income tax expenses, a larger benefit from the Company's Foreign Sales Corporation and an increase in expected tax credits derived from research and development activities.

SIX MONTHS ENDED APRIL 30, 1997 COMPARED TO SIX MONTHS ENDED APRIL 30, 1998

REVENUE. The Company recognized $161.3 million and $287.8 million in revenue for the six months ended April 30, 1997 and 1998, respectively. The approximate $126.5 million or 78% increase in revenues in the six months ended April 30, 1998 compared to the six months ended April 30, 1997 was largely the result of increased sales to Sprint, Cable and Wireless, DTI, Teleway, and Japan Telecom offset by a decline in sales to WorldCom. The Company had no sales for Cable and Wireless , DTI, and Japan Telecom in the first six months of 1997. A significant portion of the increase in the Company's six month 1998 revenues compared to six month 1997 revenues was attributed to sales of the Company's Sentry and 4000 systems, which were not available for sale in the first six months of 1997. The Company expects revenues, in the near term to be largely dependent upon sales to Sprint, several new customers and, depending on the results of ongoing testing and evaluation, AT&T Corporation ("AT&T"). These revenues are expected to be derived primarily from sales of the Sentry and 4000, and to a lesser extent, from Firefly, the Company's short distance 24 channel product. There are material risks associated with the Company's dependence on these customers, as well as its transition to multiple product lines. See "Risk Factors".

GROSS PROFIT. Gross profits were $92.6 million and $164.9 million for the six months ended April 30, 1997 and 1998, respectively. The approximate $72.3 million or 78% increase in gross profit in the first six months of 1998 compared to the first six months of 1997 was the result of increased revenues for those periods. Gross margin as a percentage of revenues was 57.4% and 57.3% for the first six months of 1997 and 1998, respectively. The relative constant gross margin percentage for the comparable periods was the result of a combination of factors that increased the gross margin percentage such as reductions in component costs; increased manufacturing volumes and efficiencies; reductions in the percentage of significantly lower margin installation service revenue to total revenues for the periods; offset by a reduction in selling prices. The Company expects that gross margins in the future may decrease primarily due to competitive market pricing, although the Company's manufacturing efficiencies and improvements in component costs should moderate the rate and magnitude of any decrease. The

Company's future gross margins may also decrease because of the mix of product features and configurations sold in a period as well as the extent of services provided. See "Risk Factors."

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were $7.7 million and $26.9 million for the six months ended April 30, 1997 and 1998, respectively. During the first six months of 1997 and 1998, research and development expenses were 4.8% and 9.3% of revenue, respectively. The approximate $19.2 million or 249% increase in research and development expenses in the first six months of 1998 compared to the first six months of 1997 was the result of increases in staffing levels, consumption of prototype materials, utilization of outside consultants for certain development efforts and higher costs of test equipment used to develop and test new products and features. The Company expects that its research and development expenditures will continue to increase during the remainder of fiscal year 1998 to support the continued development of the MultiWave products, the exploration 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 $8.0 million and $21.0 million for the six months ended April 30, 1997 and 1998, respectively. During the first six months of 1997 and 1998, selling and marketing expenses were 5.0% and 7.3% of revenue, respectively. The approximate $13.0 million or 163% increase in selling and marketing expenses in the first six months of 1998 compared to the first six months of 1997 was primarily the result of increased staffing levels in the areas of sales, technical assistance and field support, and increases in commissions earned, trade show participation, promotional costs, travel expenditures and rent expense. The Company anticipates that its selling and marketing expenses will increase during the remainder of fiscal year 1998 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 $9.8 million and $18.2 million for the six months ended April 30, 1997 and 1998, respectively. During the first six months of 1997 and 1998, general and administrative expenses were 6.1% and 6.3% of revenue, respectively. The approximate $8.6 million or 8.6% increase in general and administrative expenses in the first six months of 1998 compared to the first six months of 1997 was primarily due to increases in legal and related costs associated with Pirelli litigation, staffing levels and outside consulting services. The Company believes that its general and administrative expenses for the remainder of fiscal 1998 may increase due to the expansion of the Company's administrative staff required to support its expanding operations.

PURCHASED RESEARCH AND DEVELOPMENT. Purchased research and development costs were $9.5 million for the six months ended April 30, 1998. These costs were for the purchase of technology associated with the acquisition of Terabit during the second quarter 1998. See Note 5 of Notes to Consolidated Financial Statements.

OPERATING MARGINS. The Company's operating margins were $67.1 million and $89.3 million for the six months ended April 30, 1997 and 1998, respectively. During the first six months of 1997 and 1998, operating margins were 41.6% and 31.0% of revenue, respectively, or 34.3% of revenue for first six months of 1998 exclusive of the $9.5 million in charges related to purchased research and development. The Company expects that its operating margins may decrease as it continues to hire additional personnel and increase operating expenses to support its business. The results of operations for the six months ended April 30, 1998 are not necessarily indicative of results to be expected in future periods. See "Risk Factors."

INTEREST AND OTHER INCOME (EXPENSE), NET. Interest income and other income (expense), net were $2.4 million and $7.2 million for the six months ended April 30, 1997 and 1998, respectively. The approximate $4.8 million increase in interest income and other income (expense), net was attributable to higher invested cash balances.

PROVISION FOR INCOME TAXES. The Company's provision for income taxes was $26.9 million and $41.3 million for the six months ended April 30, 1997 and 1998, respectively. During the first six months of 1997 and 1998, the provision for income taxes was 38.8% and 38.4% of income before income taxes, respectively, exclusive of the effect of one-time charges for purchased research and development expenses recorded in the second quarter of 1998 and an adjustment to the estimated state income tax liability associated with the Alta operations recorded in Alta's first quarter of 1998. Purchased research and development charges are not deductible for tax purposes. The decrease in the income tax rate, exclusive of one-time charges, for the first six months of 1998

compared to first six months of 1997 was the result of a lower combined effective state income tax expense, a larger benefit from the Company's Foreign Sales Corporation and an increase in expected tax credits derived from research and development.

LIQUIDITY AND CAPITAL RESOURCES

At April 30, 1998, the Company's principal source of liquidity was its cash and cash equivalents of $174.5 million and its marketable debt securities of $51.8 million. The Company's marketable debt securities have maturities no longer than six months.

Cash generated from operations was $10.2 million for the six months ended April 30, 1998. This amount was principally attributable to net income, the non-cash charges of depreciation, amortization, provisions for inventory obsolescence and warranty, purchased research and development, increases in accounts payable, accrued expenses and income tax payable; offset by increases in accounts receivable and inventory due to increased revenue and to the general increase in business activity.

Investment activities in the six months ended April 30, 1998 included the net purchase of $51.9 million worth of corporate debt securities, $58.0 million invested in capital expenditures and $2.1 million used in the acquisition of Astracom and Terabit. Of the amount invested in capital expenditures, $47.9 million was used for additions to capital equipment and furniture and the remaining $10.1 million was invested in leasehold improvements.

The Company expects to use an additional $1.0 million to $5.0 million of capital during the remainder of fiscal 1998 to complete the construction of leasehold improvements for its new facilities and the conversion to full research and development activities of its current 96,000 square foot facility.

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

YEAR 2000 READINESS

The Company has taken actions to understand the nature and extent of the work required to make its systems, products and infrastructure Year 2000 compliant. The Company began work this year to change its main financial, manufacturing and information system to a company-wide Year 2000 compliant enterprise resource planning ("ERP") computer-based system and expects to have the ERP system fully installed in the second half of 1998. The Company believes, based on available information, that it will be able to manage its Year 2000 transition without any material adverse effect on the Company's business, financial condition and results of operations.

RISK FACTORS

CONCENTRATION OF POTENTIAL CUSTOMERS; DEPENDENCE ON MAJOR CUSTOMERS; DEVELOPMENT OF AT&T AS MAJOR CUSTOMER. The Company's business, and particularly the size of its revenue growth potential, has historically been dependent on two customers, Sprint and WorldCom, and will in the near term continue to be highly dependent on those two customers, and on the development of AT&T as a major customer. While the scope of commercial applications of the Company's MultiWave Metro product (scheduled for general availability in the fall of 1998) is expected to expand the number of potential customers for the Company, in the near term, additional potential customers, consisting almost exclusively of long distance and other telecommunications carriers using fiberoptic networks, are relatively few in number, and of those, a very small number have revenue potential comparable to that of Sprint, WorldCom and AT&T. The number of potential major customers may also decrease if and as customers merge with or acquire one another. In November 1997, WorldCom and MCI announced an agreement to merge and in May 1998, SBC and Ameritech also announced an agreement to merge. The distraction and/or reorganization sometimes attendant to such mergers could delay, limit or otherwise adversely affect the capital equipment purchasing patterns of the parties to them, with a corresponding adverse effect on the Company's sales, even if the customer is otherwise satisfied with the Company's products and intends to purchase more.

The Company believes WorldCom is very satisfied with the Company's products, and intends to continue significant purchases; however, WorldCom informed the Company in February 1998 that its DWDM system

requirements for 1998 will be substantially reduced, based on a change in WorldCom's capital equipment acquisition policies. According to information shared with the Company in February 1998, WorldCom purchased equipment during 1997, based on a policy designed to meet an estimated two years worth of anticipated network capacity requirements. The new policy calls for purchasing activity and bandwidth deployment to more closely coincide with just in time inventory management, which, according to WorldCom, means significant purchasing from CIENA may resume in the latter part of calendar 1998. Consistent with WorldCom's announced change in purchasing practices, WorldCom's purchases in the Company's second quarter were not material.

Although the Company has previously announced a trial evaluation agreement and a five year agreement to supply 16-channel MultiWave Sentry systems to AT&T, before AT&T would become a purchasing customer, the Company will have to be successful in rigorous testing and evaluation which are ongoing. The Company believes it ultimately will be successful in such testing and evaluation, but there is no assurance of that outcome, nor is there assurance as to when the period of testing will be completed. Testing is an interactive and dynamic process which is unpredictable, frequently subject to unanticipated delay, and not often accelerated. The products under test with AT&T are pilot production/prototype versions of the 16 channel MultiWave Sentry which are customized for AT&T requirements, including specific embedded software as well as element management software ("EMS") designed for AT&T and not used or currently implemented in the Company's manufactured products. The EMS software is believed by the Company to be the first of its kind in the DWDM industry, and represents an important aspect of AT&T's move to a multivendor environment. A number of unpredictable delays in development have occurred and are attributable to these sophisticated and complex software requirements, as well as the prototype nature of the hardware. The Company and AT&T have expended considerable collaborative and good faith efforts to address and resolve these delays, but the cumulative effect has been to slow the Company's prospects for shipping to AT&T by approximately five months, and to forego revenues which might otherwise have been obtainable during that period. The Company does not expect shipments to begin until the second half of 1998 (with acceptance and revenue recognition to follow), and in any event the Company is unable to predict the volume, duration or timing of any purchases which might ensue from AT&T. Additionally, AT&T recently announced plans to test and deploy a proposed 80-channel DWDM system being developed by Lucent Technologies, Inc. ("Lucent"). Lucent has announced that this proposed product is expected to be commercially available worldwide in the fourth quarter. If such a product is in fact developed, performs as advertised, and is manufacturable by Lucent in volume quantities by the fourth quarter of this year, and if core demand for bandwidth is sufficient to prompt widespread market interest in such a product, the likelihood of significant orders from AT&T for the Company's MultiWave Sentry system may diminish. See "Competition". The Company currently believes the impact of Lucent's announcement on AT&T's likely orders for the Company's systems will not be material; however, Lucent also is believed to have a 16 channel system in testing with AT&T. The extended testing of MultiWave Sentry has in any event delayed the timing of shipments and revenue recognition from AT&T, and may have an adverse impact on the relative proportion of 16 channel DWDM purchases which AT&T allocates between its two announced DWDM vendors, Lucent and CIENA, and could also lead AT&T to consider other products to replace the gap caused by the delays. If material delays in reaching successful conclusion of testing continue, or if AT&T for any reason allocates a materially lower share of DWDM purchases to the Company in absolute terms or relative to AT&T's second vendor, the effect could cause substantial swings, and potentially material and adverse effects, on the Company's quarterly financial condition and results of operations.

The reduction, delay or cancellation of orders for, or a delay in shipment of the Company's products to Sprint, or a failure by WorldCom to resume purchasing at significant levels in the latter part of calendar 1998 , or the inability to develop AT&T as a significant customer, as well as additional customers in the telecommunications market, likely would have a material adverse affect on the Company's business, financial condition and results of operations.

Additionally, the size and complexity of the Company's potential customers, and the typically long and unpredictable sales cycles associated with them, require the Company to make considerable early investments in account management personnel, product customization efforts in both engineering and manufacturing, and in some cases, facilities in proximity to the customer's locations, without assurance of future revenues. Due to the size and complexity of the AT&T network, and the uniqueness of AT&T's requirements for the MultiWave Sentry, the Company has invested and expects over fiscal 1998 to continue to invest considerable financial, engineering, manufacturing and logistics support resources in positioning the commercial relationship to be successful. The Company's acquisition of Alta, an installation services company, is an example of this risk. This acquisition, closed in the second fiscal quarter of 1998, has brought approximately 160 installation personnel to the Company, and was

undertaken in large part to position the Company to be able to service the installation requirements associated with any AT&T deployment, even though the Company has no assurance as to the volume, duration or timing of any purchases which might ensue from AT&T. The Company also intends to invest in developing significant customer relationships with Bell Atlantic and other RBOCs and CLECs, as well as internationally. Over the near term, this investment of resources will be evident in increased operating expenses and in a rise in the Company's general overhead structure, with the result that the Company's near term growth in earnings may moderate or even decline, even if revenues increase. If the Company is unable to convert these investments into significant revenue generating relationships by the second half of fiscal 1998, the Company's business, financial condition and results of operations for the year could be materially and adversely affected.

COMPETITION. The Company believes the rapid pace at which the need for higher and more cost-effective bandwidth has developed was not widely anticipated in the global telecommunications industry. The Company further believes its MultiWave 1600 is the only commercially deployed and operational full 16-channel open architecture DWDM system anywhere in the world, and further believes the demonstrated commercial manufacturability of its MultiWave 4000 system gives the Company's high-capacity product offerings a level of credibility not possessed by its competitors. However, 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 and more extensive and established customer relationships with network operators than the Company. Each of Lucent, Alcatel, Nortel, NEC, Pirelli, Siemens and Ericsson are moving very aggressively to capture market share in the DWDM market. The Company expects aggressive competitive moves from industry participants, which have to date included early announcement of competing or alternative products, and substantial and increasing price discounting. Such early announcements of competing products can cause confusion and delay in customer purchasing decisions, particularly if the announcements are viewed as credible in terms of both the performance of the announced product, and the time within which it will be available. For example, Lucent recently announced a proposed high-capacity DWDM system which it claims will handle 400 Gb/s of capacity per fiber, and which it further claims will be commercially available worldwide in the fourth quarter. There can be no assurance that announcements like those of Lucent or others in the industry will not cause confusion and delay in customer purchasing decisions. Further, if new products such as that announced by Lucent are in fact developed, perform as advertised, and are manufacturable in volume quantities by the fourth quarter of this year, the likelihood of significant orders from AT&T and other customers for the Company's 16-channel MultiWave Sentry and 40-channel MultiWave 4000 systems may diminish. The timing of shipments by the Company and corresponding revenue, if delayed by reason of deferred deployment of MultiWave Sentry or MultiWave 4000 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.

In addition, Lucent, Alcatel, Nortel, NEC and Siemens are already providers of a full complement of switches, fiberoptic transmission terminals and fiberoptic signal regenerators and thereby can position themselves as vertically integrated, "one-stop shopping" solution providers to potential customers.

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 scaleability requirements, the Company's customers are themselves under increasing competitive pressure to deliver their services 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 also generally prefer to have at least two sources for key network equipment such as DWDM systems, but the Company has until recently been the only supplier of 16 channel, or greater than 16 channel, 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.

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.

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 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.

DEPENDENCE ON EFFECTIVE TRANSITION TO MULTIPLE PRODUCT LINES. The Company believes the largest portion of its production capacity for the balance of fiscal 1998 will be shifted to the MultiWave Sentry, the MultiWave 4000 and, to a lesser extent, the MultiWave Firefly systems. While much of the manufacturing process for these systems is identical to that involved in the manufacture of the MultiWave 1600, there are important differences in raw materials and components, as well as even more precise performance specifications. Manufacturing yields in the first several months of production may be adversely impacted as the transition is made to full production of these new systems. Additionally, not all of the component suppliers for these new systems have demonstrated the ability to ramp up their production to keep pace with the Company's needs, and certain of the new components are critical to system operation, such as the apparatus for multiplexing and demultiplexing of signals in the 24-channel Firefly system. One of the Company's planned vendors for this apparatus has notified the Company that it continues to have difficulty in achieving overall yield and process stability. The Company is comfortable that its immediate needs for this component can be met by another vendor, but neither vendor has yet demonstrated the ability to ramp up as may be necessary to meet the Company's future needs. Further, the volume of pilot production/prototype equipment required for AT&T testing, and the need to be responsive to testing issues and resulting modification requests, consumes manufacturing resources which would otherwise be available for other products. The Company must effectively manage all of these risks during the transition in manufacturing, with a minimum of delay or disruption in product deliveries. The failure to do so would likely have an adverse effect on the Company's customer relationships, with attendant risk of adverse effects on the level and timing of ongoing customer orders, as well as on the development of new customers. Even if effectively managed, new products like the MultiWave Sentry, MultiWave 4000, MultiWave Firefly, and late in 1998, the MultiWave Metro, are typically subjected by the customers to lengthier initial acceptance testing periods than will occur with later shipments. The timing of these lengthier acceptance periods would affect the timing of revenue recognition for these products, which may cause substantial differences in quarter to quarter operating results. These differences could lead to increased volatility in the Company's stock price, irrespective of the Company's overall performance or actual longer term prospects. See "Fluctuation in Quarterly and Annual Results".

ANTICIPATING DEMAND FOR BANDWIDTH. The Company's systems enable high capacity transmission over long distance, and with the introduction of MultiWave Firefly, 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 over what periods of time, as well as how to convert such capacity into revenue. Those views reflect the carriers' 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 have believed the deployment of large scale capacity quickly will be a competitive advantage--i.e., they have assumed the accelerating demand for bandwidth will continue and the 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. 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, WorldCom informed the Company in February 1998 that its DWDM system requirements for 1998 would be substantially below last year's purchases of $184.5 million. WorldCom indicated to the Company that last year it purchased DWDM systems from the Company at a level that contemplated two years' of capacity requirements, and that this year's purchases would be substantially reduced because limited to one year's estimate of capacity requirements. WorldCom's information in February 1998 demonstrated that there

can be surprises as network operators and their purchasing groups grapple with unprecedented changes and challenges to network planning.

Under these circumstances, for so long as the Company remains dependent on two or even three 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.

LONG AND UNPREDICTABLE SALES CYCLES. The purchase of network equipment such as DWDM equipment is typically carried out by network operators pursuant to multiyear purchasing programs which may increase or decrease annually as the operators adjust their capital equipment budgets and purchasing priorities. The Company's customers do not typically share detailed information on the duration or magnitude of planned purchasing programs, nor do they consistently provide to the Company advance notice of contemplated changes in their capital equipment budgets and purchasing priorities. Additionally, a typical year end wind-down of customers' annual capital equipment procurement cycles, or a seasonal slow down in purchasing, neither of which was experienced by the Company in its first year of product shipments, may be experienced in this and future years. These uncertainties substantially complicate the Company's manufacturing planning, and may lead to substantial and unanticipated fluctuations in the timing of orders and revenue. The Company has in fact experienced such unanticipated fluctuations in prior quarters, but any unanticipated reduction in orders from one customer has previously been offset in part or in whole by unanticipated increases in orders for other routes with the same customer or in orders from another customer. In the quarter just completed, the unanticipated reduction in orders from WorldCom was offset in large part by a significant increase in orders from Sprint. Unless and until WorldCom resumes purchases at a level comparable to the prior fiscal year, the Company will continue to need material purchases from one or more other customers in order to offset the reduction from WorldCom. There can be no assurance that this historical ability to offset reductions will continue, and in particular, Sprint is unlikely to continue purchasing at the rate experienced in the quarter just completed.

Any curtailment or termination of customer purchasing programs, decreases in customer capital budgets or reduction in the purchasing priority assigned to equipment such as DWDM equipment, particularly if significant and unanticipated by the Company and not offset by increased purchasing from other customers, could have a material adverse effect on the Company's business, financial condition and results of operations. Further, as is the case with most manufacturing companies, the Company has manufactured, and from time to time in the future likely will manufacture finished products on the basis of non-binding customer forecasts rather than actual purchase orders. However, in contrast to most manufacturing companies, given the Company's dependence on very few customers, and the relatively high cost of the Company's DWDM systems, the financial consequences of mismatches between what is built and what is actually ordered can be magnified. Long distance carriers may also encounter delays in their build out of new routes or in their installation of new equipment in existing routes, with the result that orders for the MultiWave systems may be delayed or deferred. Any such delay with any major customer, as well as any other delay or deferral of orders for MultiWave systems, could result in material fluctuations in the timing of orders and revenue, and could have a material adverse effect on the Company's business, financial condition and results of operations.

FLUCTUATION IN QUARTERLY AND ANNUAL RESULTS. The Company's revenue and operating results are likely 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, as well as order delays or deferrals and shipment delays and deferrals, may cause material fluctuations in revenue. Delays or deferrals in purchasing decisions may increase as competitors introduce new competing products, customers change purchasing practices, and as the Company develops or introduces other DWDM products, such as the MultiWave Sentry, MultiWave 4000, MultiWave Firefly and the MultiWave Metro. 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, may also lead to delay or deferral of purchasing decisions. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer". Changes in customers' approaches to bandwidth deployment can also materially impact purchasing decisions. See "Anticipating Demand for Bandwidth." The Company's dependence on a small number of existing and potential customers increases the revenue impact of each customer's actions relative to these factors. 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 two quarters are expected to reflect substantially increased investment in financial, engineering, manufacturing and logistics support resources in positioning the AT&T, RBOC, international and other potential commercial relationships to be successful, even though there is no assurance as to the volume, duration or timing of any purchases which might ensue from AT&T or others. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer". Over the near term, this investment of resources will be evident in increased inventory levels and operating expenses, and in a rise in the Company's general overhead and expense structure, with the result that the Company's near term earnings may moderate or decline, even if revenues increase. In general, quarter-to-quarter sequential revenue in the first two or three years of operations are likely to vary widely and therefore may not be reliable indicators of annual performance.

MANAGEMENT OF EXPANSION. The Company is experiencing rapid expansion in all areas of its operations, particularly in manufacturing, and the Company anticipates that this expansion will continue in the near future. Total personnel grew from 841 at October 31, 1997, to 1,247 at April 30, 1998. The Company's Atlanta, Georgia research and development support organization grew from 12 personnel at October 31, 1997 to 41 at April 30, 1998. Approximately 160 more employees have joined the Company as a result of the Company's acquisition, closed during the second fiscal quarter 1998, of Alta , an installation services provider.

This expansion, and the attendant separation and relocation of various functions to different facilities, has placed strains on the material, financial and personnel resources of the Company and will continue to do so. The pace of the Company's expansion, in combination with the complexity of the technology involved in the manufacture of the Company's systems, demands an unusually high level of managerial effectiveness in anticipating, planning, coordinating and meeting the operational needs of the Company and the needs of the Company's customers, who are among the most demanding customers in the world in terms of requirements for quality, reliability, timely delivery and post-installation field support. The rapid pace and volume of new hiring, the timely build out of new facilities, and the accelerated ramp up in manufacturing capacity, if not effectively managed, could adversely affect the quality or efficiency of the Company's manufacturing process. The conversion to full scale production in fiscal 1998 of the Company's new MultiWave Sentry, MultiWave 4000 and MultiWave Firefly product lines will also present substantial management and manufacturing challenges, as the scope of material planning and labor involvement are different and more expansive than was the case with the Company's original MultiWave 1600 product line. The assimilation of Alta, and the effective utilization of its installation services personnel, will also be critical to the Company's efforts to satisfy its larger customers and, ultimately, to further ramp up its production and sales volume to those customers.

The Company also continues to increase its flow of materials, optical assembly, final assembly and final component module and system test functions, as well as the size of its sales and marketing organization for all product lines, in anticipation of a level of customer orders that may not be achieved. Many of the highest cost components in the Company's new products are also those with the longest lead ordering times. As a result, the importance of effective coordination between component ordering relative to anticipated customer orders is increased, and the inability to manage this effectively may result in increased inventory levels, and potentially, inventory obsolescence, particularly if there are slips in delivery and final acceptance of the Company's newest products. Increased inventory levels could also result from any significant deferral of material purchases from any of the Company's major customers. This could occur if testing of the Company's products at AT&T is extended significantly. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer."

The Company's expansion over the past several quarters has also resulted in an outgrowing of the Company's information management systems. A major shift to a new and greatly expanded internal network and information management system is scheduled for the third quarter of 1998. This shift will impact virtually all areas

of the business, including manufacturing, purchasing, accounting, payroll, documentation and recordkeeping, and could have adverse effects on Company operations in the near term if not managed effectively.

Given the small number of existing and potential customers for the Company's systems, as well as the widely varying volume requirements they may have once a purchasing decision has been made, the adverse effect on the Company resulting from a lack of effective management in any of these areas will be substantially magnified, and the potential exists for additional stock price volatility if investor expectations do not account for this risk. See "Stock Price Volatility". Prolonged inability to manage the expansion of the Company's business would also have a material adverse effect on the Company's longer term business prospects, financial condition and 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. The complexity of the technology involved in product development efforts in the DWDM field, including product customization efforts for individual customers such as AT&T, can result in unanticipated delays. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer". 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. The software certification process for new telecom equipment used in 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 Firefly. The failure to deliver new and improved products, or appropriately customized products, in a timely fashion relative to customer expectations (which expectations 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 is currently facing its first major test in this area, with its general commitment to the delivery of MultiWave Sentry, MultiWave 4000 and MultiWave Firefly at various times during this fiscal year. The Company's performance on this commitment relative to customer expectations will likely have a material impact on the Company's ability to further solidify its position in the telecom 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 continued purchasing by its customers.

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 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 and its competitors. 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 Company's dependence on a small number of existing and potential customers, long and unpredictable sales cycles and customer purchasing programs, the absence of unconditional minimum purchase commitments from any customer, a declining level of visibility into its customers' deployment plans over the course of the capital equipment procurement year, and the lack of reliable data on which to anticipate core demand for high bandwidth transmission capacity. An example of this uncertainty is evidenced in the February 1998 communication from WorldCom that its DWDM system requirements for 1998 would be substantially reduced relative to last year's purchases, due to a change in its purchasing policies. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer".

The WorldCom example indicates that divergence between the Company's actual or anticipated financial results and published expectations of stock analysts 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. For so long as the Company remains highly dependent on two or three customers, and particularly in years, like the current fiscal year, when substantial majority of purchases by these customers are likely to be focused on products, such as MultiWave Sentry, MultiWave 4000, and MultiWave

Firefly, being introduced for the first time, there is substantial risk of widely varying quarterly results, including the so-called "missed quarter" relative to investor expectations which do not account for these issues, with attendant risk of higher volatility in the Company's stock price. See "Concentration of Potential Customers; Dependence on Major Customers; Development of AT&T as Major Customer"; "Dependence on Effective Transition to Multiple Product Lines"; and "Anticipating Demand for Bandwidth".

PART II. - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

PIRELLI LITIGATION

CHRONOLOGICAL SEQUENCE OF LITIGATION

On December 20, 1996, a U.S. affiliate of Pirelli SpA ("Pirelli") filed suit in U.S. District Court in Delaware, alleging willful infringement by the Company of five U.S. patents held by Pirelli. The lawsuit (the "First Pirelli Lawsuit") seeks treble damages, attorneys' fees and costs, as well as preliminary and permanent injunctive relief against the alleged infringement. On February 10, 1997, the Company filed its answer denying infringement, alleging inequitable conduct on the part of Pirelli in the prosecution of certain of its patents, and stating a counterclaim against the relevant Pirelli parties for a declaratory judgment finding the Pirelli patents invalid and/or not infringed. Following the filing of the Company's answer, Pirelli dedicated to the public and withdrew from the lawsuit all infringement claims relating to one of the five patents. In September 1997, Pirelli withdrew another patent from the suit, leaving three patents at issue in the First Pirelli Lawsuit.

In February 1997, the Company filed a complaint against Pirelli with the International Trade Commission ("ITC"), based on the Company's belief that a 32 channel DWDM system announced by Pirelli infringed at least two of the Company's patents. The Company's complaint sought a ban on the importation by Pirelli into the U.S. of any infringing 32 channel system. A formal investigative proceeding was instituted by the ITC on April 3, 1997. On November 24, 1997, the parties settled the matter by entry of a Consent Order. Under the Consent Order, Pirelli has agreed not to import into the United States WDM components and or systems which infringe the Company's patented in fiber Bragg gratings-based WDM systems.

On March 14, 1997, the Company filed suit against Pirelli in U.S. District Court in the Eastern District of Virginia, alleging willful infringement by Pirelli of three U.S. patents held or co-owned by the Company. In September 1997, the Company withdrew one of the three patents from the suit. The two patents which remained at issue related to certain of Pirelli's cable television equipment, and to certain Pirelli fiberoptic communications equipment announced by Pirelli in January 1997 as being deployed in a field trial in the MCI network. As to the second of the two patents, on December 5, 1997, the court issued an order granting partial summary judgment for Pirelli on the issue of non-infringement, and denying Pirelli's motion for summary judgment of invalidity of this patent. The court later amended its ruling to specifically affirm the validity of this patent. The Company has elected to appeal the partial summary judgment of non-infringement, and has agreed to dismiss its other claims, with the right to reassert certain of them, pending the outcome of the appeal. The appellate decision is not expected until late 1998 at the earliest.

In the First Pirelli Lawsuit, the so-called "Markman" hearing was conducted in September 1997. Markman hearings are pre-trial proceedings typically required in patent infringement litigation, and result in rulings by the trial judge on certain issues of patent claim construction. These rulings then become the basis for later jury determination of the infringement claims, and can be very influential in determining the outcome of the litigation. The Delaware court's Markman ruling in the First Pirelli Lawsuit was issued in November. The Company believes the Markman ruling is generally favorable to the Company's position, and nothing in the ruling, including the ruling as recently amended in response to Pirelli's motion for reargument, has changed the Company's view that its MultiWave systems do not infringe any valid claim of the three remaining Pirelli patents and believes certain of the Pirelli patents and/or claims are invalid.

The Company anticipated, and continues to anticipate, that as the now-consolidated First and Third Pirelli Lawsuits (see below) approach trial, either or both parties might take actions to amend or add to the patent infringement claims already pending.

On December 26, 1997, the Company received word that Pirelli filed on December 23, 1997, a new complaint in U.S. District Court in Delaware, alleging willful infringement by the Company of two additional U.S. patents held by Pirelli (the "Second Pirelli Lawsuit"). Further, after the Court ruled in early January 1998, that Pirelli's attempts to allege infringement against products other than the MultiWave 1600 were not timely in the First Pirelli Lawsuit, on January 14, 1998, Pirelli filed a third complaint in Delaware (the "Third Pirelli Lawsuit"), alleging willful infringement of the same three patents still at issue in the First Pirelli Lawsuit, but alleging the infringement against unspecified other products of the Company. The Second Pirelli Lawsuit and the Third Pirelli Lawsuit seek treble damages, attorneys' fees and costs, as well as preliminary and permanent injunctive relief against the alleged infringement.

On February 4, 1998, the Company filed its answer to the Third Pirelli Lawsuit, denying infringement, and stating a counterclaim against the relevant Pirelli parties for a declaratory judgment finding the Pirelli patents invalid and/or not infringed.

On February 13, 1998, and based upon the Court's Markman ruling in the First Pirelli Lawsuit, the Company filed a motion for summary judgment of non-infringement on two of the three remaining patents in the First Pirelli Lawsuit, and of invalidity on portions of the third. Pirelli filed a motion for summary judgment of literal infringement of a single claim of the patent as to which the Company has filed for summary judgment of invalidity. No hearing date has been set for argument on the motions for summary judgment. There is no assurance that Pirelli's motion will not be granted, or that the Company's motions will result in complete disposition of the First Pirelli Lawsuit. The Company continues to plan on going to trial in all litigation.

On February 17, 1998, the Company filed its answer to the Second Pirelli Lawsuit, denying infringement, alleging inequitable conduct on the part of Pirelli in the prosecution of the two patents, and stating a counterclaim against the relevant Pirelli parties for a declaratory judgment finding the Pirelli patents invalid and/or not infringed.

RECENT DEVELOPMENTS IN LITIGATION

Concurrent with the filing of its answer to the Second Pirelli Lawsuit, the Company filed a motion to consolidate the First, Second and Third Lawsuits for purposes of trial. This motion was denied by the Court, and consolidation is presently ordered only with respect to the First and Third Lawsuits. Trial of the consolidated lawsuit is not expected until late 1998 or early 1999. Trial of the unconsolidated Second Pirelli Lawsuit is not expected until after conclusion of the first.

In March 1998, the Company filed an amended answer and counterclaim in the Second Lawsuit, adding a counterclaim for violation of U.S. antitrust laws. The Company is investigating the possibility of additional claims against Pirelli.

Also in March 1998, the Company filed a new, second complaint against Pirelli with the ITC based on the Company's belief that a 32 channel DWDM system announced by Pirelli infringed a patent newly issued to the Company. The Company's complaint seeks a ban on the importation by Pirelli into the U.S. of any infringing 32 channel system, including the system which the Company understands has passed laboratory testing at Sprint. A formal investigative proceeding was instituted by the ITC in April 1998.

The Pirelli proceedings have been and will continue to be costly and involve a substantial diversion of the time and attention of some members of management. Further, the Company believes Pirelli and other competitors have used the existence of the Delaware litigation to raise questions in customers' and potential customers' minds as to the Company's ability to manufacture and deliver MultiWave systems. There can be no assurance that such efforts by Pirelli and others will not disrupt the Company's existing and prospective customer relationships.

The Company and Pirelli have recently agreed to suspend legal proceedings for a brief period to pursue settlement discussions. Unless mutually extended, the suspension will lapse by the end of May 1998 if no

settlement is reached. There is no assurance a settlement will be reached by the end of May, and the Company believes that if no settlement is reached within this time period, the likelihood of resolving the matter before trial will be significantly reduced. In view of the risks that no settlement will be reached, and in light of the complexity and likely time-consuming nature of the litigation, including the new ITC proceeding, and the Company's expanded antitrust claim and potentially other claims, the Company accrued in the second fiscal quarter of 1998 an additional $10.0 million for legal fees and expenses, which is management's current estimate of the legal expenses necessary to carry the litigation through to resolution on the merits.

There can be no assurance that the Company will be successful in the Pirelli litigation, and an adverse determination in the Delaware court, either on a motion for summary judgment or in trial, could result from a finding of infringement of only one claim of a single patent. An adverse determination in the litigation could preclude the Company from producing MultiWave systems until it were able to implement a non-infringing alternative design to any portion of any system to which such a determination applied. An adverse determination in the Pirelli litigation could also involve the payment of significant amounts (including substantially more than the $10.0 million which has been accrued this quarter for the legal fees and expenses necessary to litigate the dispute to resolution on the merits), and/or could lead to royalty payments or other terms in addition to such payments, which could have a material adverse effect on the Company's business, financial condition and results of operations. The Company continues to believe, however, that its MultiWave systems do not infringe any valid claims of any patents held by Pirelli. The Company further believes certain of the Pirelli patents and/or claims are invalid, and that certain of the Pirelli patents were obtained through inequitable conduct.

The Company will take all of these factors into account, as well as the costs and uncertainties associated with litigation in general and patent infringement litigation in particular, in determining whether and on what terms a settlement would be acceptable. The Company also believes a settlement which includes a license to the Pirelli patents may have value in connection with the design and development of future DWDM products. There is, however, no assurance that any settlement will be reached. The legal proceedings will resume in June if settlement is not reached.

KIMBERLIN LITIGATION

Kevin Kimberlin and parties controlled by him (the "Kimberlin Parties") are owners of Common Stock of the Company, the substantial majority of which has been derived from the conversion at the time of the Company's IPO of Series A, Series B and Series C Preferred Stock then owned by them. On November 20, 1996, the Kimberlin Parties filed suit in U.S. District Court for the Southern District of New York against the Company, and certain directors of the Company, alleging that the Kimberlin Parties were entitled to purchase additional shares of Series C Preferred Stock at the time of the closing of the Series C Preferred Stock financing, but were denied that opportunity by the defendants. The lawsuit alleges that certain rights of first refusal existing under the Series B Preferred Stock Purchase Agreement entitled the Kimberlin Parties to purchase more shares of Series C Preferred Stock than were in fact purchased by them at the time of the closing of the Series C Preferred Stock financing in December 1995. The lawsuit claims breach of contract, breach of fiduciary duty and violation of Securities and Exchange Commission Rule 10b-5 by the defendants. On January 6, 1997, the Company filed its answer to the Kimberlin Parties complaint, and filed a counterclaim for rescission of the sale of the shares of Series C Preferred Stock purchased by the Kimberlin Parties in the Series C Preferred Stock financing. The Kimberlin Parties amended their complaint in May 1997, alleging that the same facts and conduct with respect to the private placement of Series C Preferred Stock represent a violation of federal insider trading laws.

The number of shares to be purchased by each party to the Series C Preferred Stock financing was communicated in writing to the Kimberlin Parties in December 1995 prior to the Series C closing. Further, as permitted under the Series B Preferred Stock Purchase Agreement, the Series C Preferred Stock Purchase Agreement expressly stated that all rights of first refusal referred to in the lawsuit were waived. The required number of Series B investors, including the Kimberlin Parties, signed the Series C Preferred Stock Purchase Agreement containing that waiver. In July 1996, the Kimberlin Parties reaffirmed to the Company in writing that their beneficial ownership of shares did not include any shares which they have subsequently claimed in the lawsuit they were entitled to purchase. The Kimberlin Parties allege that they were misled into waiving their right of first refusal, and did not discover that they had been misled until October 1996.

The Company believes that the Kimberlin Parties' claims, brought as the Company's IPO was being prepared, and the amended claims, are without merit and intends to defend itself vigorously. The Company has moved for summary judgment on the entire matter, including the Company's counterclaim for rescission. The Kimberlin Parties have also moved for summary judgment on a portion of the dispute. A hearing on the Company's and the plaintiff's motions for summary judgment is currently scheduled for June 15, 1998. The Company believes its motion for summary judgment should be granted, but there is no assurance of that outcome. If the motion is not granted the Company intends to proceed to trial.

If the Company's motion for summary judgment is denied, the Company intends to take the matter to trial; if the plaintiff's motion is granted, the Company intends to appeal. There can be no assurance of the outcome of the pending motions.

ITEM 2. CHANGES IN SECURITIES

During the quarter ended April 30, 1998, the Company issued an aggregate of 134,390 shares of Common Stock to the shareholders of Terabit for the purchase of the Terabit business. These shares were not registered in reliance on the exemption provided under Section 4(2) of the Securities Act of 1933, as amended, and Registration D promulgated thereunder.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

The annual meeting of stockholders of the Registrant was held on March 11, 1998. At the annual meeting, the stockholders voted on the following matters:

	Votes For	Votes Against	Votes Abstained	Non-Votes
Election of two Class 1 Directors				
Patrick H. Nettles	83,819,921		153,549	
Jon W. Bayless	83,817,546		155,924	
To approve the Corporation's 1998 Stock Purchase Plan	64,243,794	19,427,084	185,822	116,770
To amend the Corporation's Third Restated Certifcate of Incorporation to increase the number of shares of common stock authorized for issuance thereunder from 180 million shares to 360 million shares	81,068,819	2,799,341	105,310	-
To ratify the selection of Price Waterhouse LLP as independent public accounts for the corporation	83,917,314	15,940	40,216	-

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibit Description

Exhibit	Description
10.17	CIENA Corporation Non-qualified Management Deferred Compensation Plan
11.0	Statement of Computation of Per Share Earnings - see Note 1 of Notes to Consolidated Financial Statements
27.0	Financial Data Schedule (filed only electronically with the sec)

(b) No reports on Form 8-k were filed during the period ended April 30, 1998.

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: MAY 21, 1998

BY: /S/ Patrick H. Nettles

Patrick H. Nettles
President, Chief Executive Officer
and Director
(Duly Authorized Officer)

DATE: MAY 21, 1998

BY: /S/ Joseph R. Chinnici

Joseph R. Chinnici
Senior Vice President, Finance And
Chief Financial Officer
(Principal Financial Officer)

Exhibit 10.17

CIENA CORPORATION

NONQUALIFIED

MANAGEMENT DEFERRED COMPENSATION PLAN

EFFECTIVE AS OF JANUARY 1, 1998

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NONQUALIFIED

MANAGEMENT DEFERRED COMPENSATION PLAN

OF

CIENA CORPORATION

EFFECTIVE: JANUARY 1, 1998

WHEREAS, CIENA Corporation ("CIENA") has decided to establish a deferred compensation plan for a select group of its key management and highly compensated employees;

WHEREAS, the purpose of this Plan is to provide eligible executives with a tax-deferred savings program through their voluntary deferrals of Base Salary and Bonus and the allocation of Company Discretionary Contributions.

NOW, THEREFORE, the Nonqualified Management Deferred Compensation Plan of CIENA Corporation is hereby adopted in accordance with the following terms and conditions:

ARTICLE 1 - DEFINITIONS

Unless the context or subject matter otherwise requires, the following definitions shall govern the Plan:

SECTION 1.01 BASE SALARY - the salary established by the Company which is to be earned by a Participant during a calendar year.

SECTION 1.02 BENEFICIARY - a person (other than a Participant) who is entitled to receive benefits under the Plan because of his designation for such benefits by a Participant under the provisions of this Plan.

SECTION 1.03 BOARD - the Board of Directors of CIENA Corporation.

SECTION 1.04 BONUS - incentive compensation provided to a Participant by the Company each Quarter.

SECTION 1.05   COMMITTEE - the Management Committee appointed by the Board to administer the Plan.

SECTION 1.06   COMPANY - CIENA Corporation and its successors.

SECTION 1.07   COMPANY DISCRETIONARY CONTRIBUTIONS - the contributions made by the Company to the Rabbi Trust pursuant to the provisions of Section 3.02 of the Plan.

SECTION 1.08   DEFERRAL ACCOUNT - the separate account established for each Participant pursuant to the provisions of Article 6 of the Plan, which is credited with Company Discretionary Contributions and Deferrals made on the Participant's behalf. To the extent necessary to reflect different vesting schedules and/or distribution dates, a Participant's Deferral Account can include multiple sub-accounts.

SECTION 1.09   DEFERRALS - the portion of a Participant's Base Salary and Bonus which is deferred and contributed to the Rabbi Trust by the Company on behalf of a Participant pursuant to the provisions of Article 3 of the Plan.

SECTION 1.10   DEFERRAL ELECTION FORM - the form designated by the Company for use by Participants to contribute Deferrals to the Plan, designate the investment of the Deferral Account, and select the timing and form of the distribution subject to Sections 3.01, 7.01 and 7.02. The execution and filing of this Form with the Committee is subject to Board approval. The Form may be changed at any time by the Board.

SECTION 1.11   EFFECTIVE DATE - January 1, 1998.

SECTION 1.12   FISCAL YEAR - November 1 - October 31.

SECTION 1.13   FORFEITURE - that portion of a Participant's Deferral Account which is not Vested.

SECTION 1.14   INVOLUNTARY TERMINATION OF EMPLOYMENT - events which result in a separation from service with the Company and which are generally not initiated by a Participant, including but not limited to a layoff, disability, or discharge by the Company for any reason.

SECTION 1.15   PARTICIPANT - an employee of the Company who has been

designated by the Committee for participation in the Plan.

SECTION 1.16 PLAN- this Nonqualified Management Deferred Compensation Plan and any modification, amendment, extension or renewal thereof.

SECTION 1.17 PLAN YEAR - the calendar year ending each December 31.

SECTION 1.18 QUARTER - every three months of the Fiscal Year.

SECTION 1.19 RABBI TRUST - the grantor trust within the meaning of Section 671 of the Internal Revenue Code established pursuant to the Trust Agreement, as amended and restated, effective as of January 1, 1998, between the Company and Crestar Bank.

SECTION 1.20 TRUSTEE - means Crestar Bank unless the Company delegates another person or entity to act as the trustee pursuant to the Trust Agreement.

SECTION 1.21 VALUATION DATE - the last day of each month.

SECTION 1.22 VESTED - a Participant's nonforfeitable interest in a portion of his Deferral Account. A Participant's Vested interest shall be determined in accordance with the provisions of Article 5 of the Plan.

SECTION 1.23 VOLUNTARY TERMINATION OF EMPLOYMENT - events, other than those classified as an Involuntary Termination of Employment, which are initiated by the Participant and which result in a separation from service with the Company. For purposes of this Plan, a Participant's death will constitute a Voluntary Termination of Employment.

ARTICLE 2 - ELIGIBILITY AND PARTICIPATION

SECTION 2.01 ELIGIBLE PERSONS. As of the Effective Date, eligibility to participate in the Plan is limited to the individuals listed on Attachment A.

SECTION 2.02 PARTICIPATION. The Committee may designate additional persons who may participate in the Plan. The Committee must notify in writing the person of his designation to participate in the Plan.

SECTION 2.03 DATE OF ENTRY. A person listed on Attachment A shall become a Participant on the Effective Date of this Plan. Those persons who are

designated to participate in the Plan on or after the Effective Date shall become a Participant on the date they are notified in writing of their designation to participate in the Plan.

SECTION 2.04 APPLICATION FOR PARTICIPATION. A person who is eligible to participate in this Plan must initially complete a Deferral Election Form and a life insurance application. If a Participant fails to submit either form in a timely manner, he will be deemed to have elected not to participate in the Plan and will be ineligible to make Deferrals and receive an allocation of the Company Discretionary Contributions.

SECTION 2.05 LIMITATION ON PARTICIPANTS. The Committee, in its sole discretion, may determine who qualifies as a Participant and may change the criteria at any time. The effective date of any such change shall be determined by the Committee.

SECTION 2.06 REMOVAL FROM PARTICIPATION. The Committee may terminate a Participant's participation for any reason. A Participant who is prospectively terminated from participating in this Plan is ineligible to make Deferrals or receive an allocation of Company Discretionary Contributions.

ARTICLE 3 - PARTICIPANT DEFERRALS AND COMPANY CONTRIBUTIONS

SECTION 3.01 PARTICIPANT DEFERRALS. As set forth more fully below, a Participant may defer a portion of his annual Base Salary which would otherwise be earned and payable for the Plan Year, and/or Bonus, which would otherwise be earned and payable for the first Quarter of the Fiscal Year after the Effective Date of this Plan and each subsequent 12-month period, respectively, by executing a Deferral Election Form pursuant to this Section. Subject to the rules set forth by the Committee, the minimum Deferral is five thousand dollars ($5,000) and, subject to the limitations set forth below, the maximum Deferral is one hundred percent (100%) of the Participant's annual Base Salary and Bonus. No deferral election shall reduce a Participant's compensation below the amount necessary to satisfy the following obligations: applicable employment taxes (e.g., FICA/Medicare) on amounts deferred; withholding requirements of an employer-sponsored benefit plan; or income tax withholding for compensation that cannot be deferred.

(a) SALARY DEFERRAL CONTRIBUTION.

(i) SUBMISSION OF DEFERRAL ELECTION FORM. Each Participant who wishes to participate in the Plan and defer a portion of his Base Salary must submit a Deferral Election Form to the Committee no later than December 15 of the Plan Year preceding the Plan Year with respect to which the election is to be initially effective. The

Deferral Election Form, once properly completed and submitted to the Committee, shall be effective as of the first pay period of the following Plan Year. In the case of a person who becomes a Participant for the first time (including all Participants listed on Attachment A) after the Effective Date, the Deferral Election Form must be filed with the Committee no later than thirty (30) days after he becomes eligible to participate in the Plan. However, such election shall be prospective and shall apply only to Base Salary earned after the election is made. Unless a Participant files a new Deferral Election Form by December 15th of any subsequent Plan Year, the existing Deferral Election Form shall remain effective for subsequent Plan Years.

(ii) MODIFICATION OF SALARY DEFERRAL CONTRIBUTION. An election under Section 3.01(a) may only be increased, decreased, or terminated by filing a new Deferral Election Form by December 15th of the Plan Year (or First Plan Year, if applicable) prior to the effective date of the change. Any such modification will become effective as of the first pay period of the following Plan Year. If a Participant has terminated his deferral election with respect to Base Salary, no further deferrals of Base Salary shall be permitted until the next Plan Year.

(iii) DEFERRAL PERIOD. The Deferral Election Form will establish the deferral period for the Base Salary. The deferral period shall begin on the first day of the Plan Year with respect to which the Deferral Election Form is filed (or, in the case of Participants becoming eligible mid-year, on the first day of a pay period following the filing of a Deferral Election Form). The deferral period shall end as determined under Article 7. The Participant may designate different deferral periods for the Base Salary contributed in each Plan Year by filing a separate Deferral Election Form in accordance with Section 3.01(a)(i).

(b) BONUS DEFERRAL CONTRIBUTION.

(i) SUBMISSION OF DEFERRAL ELECTION FORM. Each Participant who wishes to participate in the Plan must submit a Deferral Election Form to the Committee no later than December 15 of each Plan Year. The Deferral Election Form, once properly completed and submitted to the Committee, shall be effective for the Bonus earned between February 1, 1998 and January 31, 1999. In the case of a person who becomes a Participant after the Effective Date, the Deferral Election Form must be filed with the Committee no later than thirty (30) days after he becomes eligible to participate in the Plan. The Deferral Election Form with respect to the Bonus is effective for one 12-moth period only. A Participant must file a new Deferral Election Form by December 15th of each Plan Year in order to defer the Bonus which is earned during the subsequent 12-month period commencing each February 1.

(ii) DEFERRAL PERIOD. The Deferral Election Form will establish the deferral period for the Bonus. The deferral period shall begin each February 1 (or, in the case of Participants becoming eligible mid-year, the first day of a pay period following the filing of a Deferral Election Form). The deferral period shall end as determined under Article 7. The Participant may designate different deferral periods by filing a separate Deferral Election Form for each Bonus in accordance with Section 3.01(b)(i).

SECTION 3.02 COMPANY CONTRIBUTIONS. The Company, in its sole and absolute discretion, may make a Company Discretionary Contribution to the Rabbi Trust. The Contribution may be made on an annual basis commencing with and including the Company's current Fiscal Year. The Company shall determine the amount of the discretionary contribution, which Participants are eligible to share in the allocation of the Company contribution, and how the contribution will be allocated among the Participants' Deferral Accounts, and the timing and form in which amounts attributable to the contribution will be distributed under Section 7.01 and 7.02.

ARTICLE 4 - INVESTMENT OF DEFERRAL ACCOUNT

SECTION 4.01 PARTICIPANT ELECTION. The Committee may (but is not required to) invest the funds reflected in the Deferral Account of a Participant in accordance with the Participant's direction. The Participant may elect to have a specified percentage invested in one or more investment fund(s) as set forth on Attachment B provided that the specified percentage is in whole numbers, the minimum designation is ten percent (10%) and the sum of the percentages allocated does not exceed one hundred percent (100%). The Participant agrees on behalf of himself and his Beneficiary to assume all risks in connection with any decrease in the value of funds which are invested or which continue to be invested in accordance with the provisions of the Plan.

SECTION 4.02 CHANGE OF INVESTMENT ELECTION. Subject to any restrictions imposed by the underlying investment, a Participant may transfer all or a portion of his Deferral Account among the investments then allowed by the Plan not more frequently than once every thirty (30) days by providing the Committee with such completed forms as the Committee may require. Any such election shall be effective within thirty (30) days after receipt of such completed forms by the Committee or as soon as administratively feasible thereafter. Any change in the investment of a Participant's Deferral Account is applicable to both future elective Deferrals and existing assets in the Deferral Account.

SECTION 4.03 INVESTMENT OPTIONS. In addition to those investment funds listed on Attachment B, any funds credited to the Deferral Account may be kept in cash

or invested and reinvested in mutual funds, stocks, bonds, securities, insurance contracts, or any other assets as may be selected by the Committee. The Company may add, delete or otherwise alter the investments allowed under this Plan at any time without the necessity of a Plan amendment.

ARTICLE 5 - VESTING AND FORFEITURE OF BENEFITS

SECTION 5.01 PARTICIPANT DEFERRAL. Each Participant will be Vested in the amounts in his Deferral Account attributable to Deferrals at all times.

SECTION 5.02 COMPANY CONTRIBUTIONS. Each Participant will be Vested in the amounts in his Deferral Account attributable to Company Discretionary Contributions upon the earlier of: (i) the date the Participant satisfies the vesting schedule established by the Company at the time the Company's Discretionary Contribution is allocated to the Participant's Deferral Account; (ii) the date the Participant reaches age sixty (60) provided the Participant is still employed by the Company; or (iii) December 31st of the tenth Plan Year in which the Participant has maintained a balance at all times in his Deferral Account in the Plan. Notwithstanding the above, if a Participant dies while in the employ of the Company, all amounts credited to the Participant's Deferral Account will be Vested.

ARTICLE 6 - DEFERRAL ACCOUNTS

SECTION 6.01 DEFERRAL ACCOUNTS. The Committee shall establish and maintain a Deferral Account for each Participant under the Plan. Each Participant's Deferral Account shall be further divided into separate subaccounts ("investment fund subaccounts"), each of which corresponds to an investment fund elected by the Participant pursuant to Section 4.01. A Participant's Deferral Account shall be credited as follows:

(a) As of each Valuation Date, the Committee shall credit the investment fund sub-accounts of the Participant's Deferral Account with an amount equal to the Deferrals contributed by the Participant during each pay period ending in that month in accordance with the Participant's elections under Section 4.01; that is, the portion of the Participant's Deferrals that the Participant has elected to be deemed to be invested in a certain type of investment fund shall be credited to the investment fund sub-account corresponding to that investment fund.

In addition, the Committee shall credit the investment fund sub-accounts of the Participant's Deferral Account with an amount equal to any Company Discretionary Contributions made during that month in accordance with the Participant's elections

under Section 4.01.

(b) As of each Valuation Date, each investment fund sub-account of a Participant's Deferral Account shall be credited with earnings or losses in an amount equal to that determined by multiplying the balance credited to such investment fund subaccount as of the prior Valuation Date by the interest rate for the corresponding fund selected by the Company.

(c) In the event that a Participant elects for a given Plan Year's Deferral to have a scheduled withdrawal date pursuant to Section 7.04, all amounts attributed to the Deferrals for such Plan Year shall be accounted for in a manner which allows separate accounting for the Deferrals and investment gains and losses associated with such Plan Year's Deferrals.

SECTION 6.02 QUARTERLY REPORTS. The Committee shall advise each Participant of his Deferral Account at least quarterly.

SECTION 6.03 TITLE TO ASSETS. Title to and beneficial ownership of any assets which the Company has designated to pay the deferred compensation benefits hereunder shall at all times be subject to the general creditors of the Company, and a Participant shall have no property rights in those assets.

SECTION 6.04 UNFUNDED ARRANGEMENT. In conjunction with the establishment of this Plan, the Company has established a Rabbi Trust in respect of its obligations under the Plan. To the extent that any person acquires a right to receive benefits under this Plan, such right shall be no greater than the right of any unsecured general creditor of the Company. It is the intention of the Company that this Rabbi Trust shall not affect the status of the Plan as an unfunded plan maintained for the purpose of providing deferred compensation for a select group of management or highly compensated employees for purposes of Title I of the Employee Retirement Income Security Act of 1974.

SECTION 6.05 NOTICE OF INSOLVENCY. The Committee must inform the Trustee in writing of the Company's insolvency, as defined in the Trust Agreement. Upon receipt of this information regarding the Company's insolvency, the Trustee must discontinue payments of deferred obligations and must hold assets for the benefit of the Company's general creditors. If the Trustee receives other written notice of the Company's insolvency, the Trustee must notify the Committee in writing which shall confirm or refute such determination within 30 calendar days. If the Trustee does not receive a response from the Committee within said period, the Trustee must suspend all Participant or Beneficiary related payments and deliver trust assets to satisfy the claims of the Company's general creditors as directed by a court of competent

jurisdiction.

SECTION 6.06 RETURN OR DIVERSION OF ASSETS. Except as permitted by the terms of the Trust Agreement, the Company has no right to direct the Trustee to return or divert trust assets before payment of all Plan benefits to the Participant or Beneficiary except (i) if necessary to discharge the claims of creditors, or (ii) if benefits have been forfeited.

SECTION 6.07 ANNUAL EXPENSES. The Company will be responsible for paying the annual expenses of operating this Plan which will include, but not be limited to, funding the Plan benefits, the administrative fees, separately stated fees for investment allocations and fees based on the amount of assets in the Plan. The annual expenses of the Plan will not be deducted from the assets of the Plan.

ARTICLE 7 - BENEFIT DISTRIBUTIONS

SECTION 7.01 IN GENERAL. A Participant who is eligible to receive benefits under the Plan, unless they are forfeited in accordance with Article 5, shall have the obligation satisfied by the assets of the Rabbi Trust. The terms and conditions of such benefit payments are set forth in this Article. Distributions pursuant to Section 7.04 (other than paragraph 7.04(b)), 7.05, and 7.06 shall be made as soon as administratively feasible after the requested distribution is approved by the Committee. All other distributions will commence as soon as administratively feasible after the first day of the month following the end of the quarter containing the separation from service date.

SECTION 7.02 COMMENCEMENT OF BENEFITS. The amount in a Participant's Deferral Account shall be paid to the Participant at the time elected on the Deferral Election Form when Deferrals are initially made or, in the case of amounts attributable to Company discretionary contributions, at the time prescribed by the Company under Section 3.02.

(a) IN GENERAL. The Deferral Election Form shall permit Participants to direct payments to commence upon the earlier of a Voluntary Termination of Employment or on a scheduled withdrawal date pursuant to Section 7.04.

(b) INVOLUNTARY TERMINATION OF EMPLOYMENT. Notwithstanding any other provision of this Article 7, upon a Participant's Involuntary Termination of Employment, the Participant will receive an immediate distribution of benefits from his Deferral Account in one (1) lump sum payment.

SECTION 7.03 DISTRIBUTION FORM. The distribution form is elected on the

Deferral Election Form when Deferrals are initially contributed or, in the case of amounts attributable to Company discretionary contributions, in the form prescribed by the Company under Section 3.02. The distribution form can be changed by giving the Committee written notice at least one year in advance of the distribution date, on a form supplied by the Committee.

(a) NORMAL FORM OF DISTRIBUTION. The normal form of distribution is forty (40) Quarterly installments.

(b) OPTIONAL FORMS OF DISTRIBUTION. Participants who properly complete and submit a Deferral Election Form in accordance with Article 3 may elect to receive their distribution of benefits in one (1) lump sum payment or in twenty (20) or sixty (60) Quarterly installments.

(c) DISTRIBUTION OF SMALL BENEFITS. If the Participant's Deferral Account is twenty-five thousand dollars ($25,000) or less, a distribution for any reason shall be made in the form of a lump-sum payment.

SECTION 7.04 SCHEDULED IN-SERVICE WITHDRAWALS. In order to select a scheduled withdrawal date, a Participant must complete a Deferral Election Form and elect a distribution date which is at least four (4) years from the date the deferral period commenced. A Participant can make separate elections with regard to the Deferrals contributed in each Plan Year.

(a) ELECTION TO EXTEND SCHEDULED WITHDRAWAL. Subject to the consent of the Committee, a Participant may elect to postpone the scheduled withdrawal date specified on a Deferral Election Form (or the date specified by the Company under Section 3.02) by filing with the Committee a subsequent Deferral Election Form specifying a later scheduled withdrawal date. Such an election to postpone the scheduled withdrawal date must be made at least one year prior to the scheduled withdrawal date. The extension of the scheduled withdrawal date may be made in one-year increments.

(b) TERMINATION OF EMPLOYMENT PRIOR TO SCHEDULED WITHDRAWAL DATE. In the event of a Voluntary Termination of Employment prior to distribution of a scheduled withdrawal, benefit payments shall commence as soon as administratively feasible after the first day of the month following the end of the quarter containing the separation from service date. A Participant can make a separate election on the Deferral Election Form as to the form of payment upon Voluntary Termination of Employment prior to a scheduled withdrawal. The distribution form can be changed by giving the Committee written notice at least one year in advance of the distribution date, on a form supplied by the Committee.

SECTION 7.05 NONSCHEDULED IN-SERVICE WITHDRAWALS. A Participant may request to receive the benefits in his Deferral Account in the form of a lump sum payment at any time. Subject to the approval of the Committee, a Participant who elects this type of benefit distribution will receive ninety percent (90%) of the Vested benefits in his Deferral Account and will forfeit the remaining ten-percent (10%). As a result of such non-scheduled in-service withdrawal, the Participant will be ineligible to participate in the Plan for purposes of making Deferrals or receiving Company Discretionary Contributions for the duration of the Plan Year in which he received the lump sum payment and for the following Plan Year.

SECTION 7.06 HARDSHIP DISTRIBUTIONS - WITHDRAWAL OF DEFERRALS. Upon application, the Committee may, when in its sole discretion, it determines that a Participant has incurred a hardship, permit such Participant to withdraw all or part of the amounts in his Deferral Account. While such a determination shall be within the discretion of the Committee, a hardship withdrawal request shall only be considered upon satisfactory demonstration that the Participant has incurred an immediate financial need arising out of events beyond the control of the Participant.

SECTION 7.07 DEATH BENEFITS.

(a) DEATH BEFORE SEPARATION FROM SERVICE. In the event that a Participant incurs a Voluntary Termination of Employment because of death, his Beneficiary shall be entitled to receive a death benefit which shall equal the value of the Participant's Deferrals and Company Discretionary Contributions in the Participant's Deferral Account, as of the Valuation Date immediately preceding the distribution date, plus the proceeds of any insurance policy held on the life of the deceased Participant, but subject to the terms of any Split Dollar Life Insurance Agreement then in effect.

(i) The portion of the death benefit attributable to the Participant's Deferrals and the Company Discretionary Contributions in the Participant's Deferral Account shall be paid in accordance with the distribution form selected by the Participant (but subject to 7.03(c)).

(ii) The portion of the death benefit attributable to any life insurance policy shall only be paid if the insurance company agrees that the Participant is insurable and shall be subject to all conditions and exceptions set forth in the applicable insurance policy. Notwithstanding the provision of this Plan or any other document to the contrary, the Company shall not have any obligation to pay the Participant or his or her Beneficiary any death benefit except the Participant's Deferrals and Company Discretionary Contributions in the Participant's Account; the portion of the death benefit

attributable to life insurance shall be payable solely from the proceeds of the life insurance policy, if any. Furthermore, the Company is not obligated to maintain the policy; no death benefit attributable to life insurance shall be payable hereunder if the Company has discontinued the policy for the Participant. In addition, no policy shall be allocated to any Account. In the event a Participant dies while the life insurance policy is in effect but before the Split Dollar Life Insurance Agreement has been executed, the proceeds of the life insurance policy will be paid into the Rabbi Trust. The Company shall pay to the Participant's Beneficiary the death benefit set forth in Section 3(a) of the Split-Dollar Life Insurance Agreement as if the agreement had been effective at death.

(b) DEATH AFTER SEPARATION FROM SERVICE. In the event that a Participant who is in pay status after incurring a Voluntary Termination of Employment dies, his Beneficiary shall be entitled to receive the remaining installment payments, if any, from the Participant's Deferral Account as they become due. Payment of benefits under this Section shall be made in the form of payment selected by the Participant.

SECTION 7.08 TAX LIABILITY. In the event the Plan is required to distribute benefits to any Participant in compliance with a change in the law, the Participant shall bear all tax consequences associated with the premature payment of his Deferral Account. Notwithstanding the above, the Participant will be responsible for all taxes in conjunction with the deferral or distribution of his benefits.

ARTICLE 8 - ADMINISTRATION

SECTION 8.01 RESPONSIBILITIES AND POWERS OF COMMITTEE. The Committee shall be the agent for service of legal process regarding any litigation arising out of the operation and administration of the Plan. The Committee may act in one or more fiduciary capacities with respect to the Plan and may allocate to others certain aspects of the responsibilities for the operation and administration of the Plan, including the employment of advisors and the delegation of any fiduciary or ministerial duties or functions to appropriate individuals. The Committee shall also have the power to manage and control the investment of plan assets, and to establish and revise rules and procedures relating to the administration of the Plan.

SECTION 8.02 INTERPRETATION OF PLAN. The Committee shall, subject to the requirements of the law, be the sole judge of the standard of proof required in any case and the application and interpretation of this Plan, and decisions of the Committee shall be final and binding on all parties. The Committee shall have the exclusive right and discretionary authority to construe the terms of the Plan, to resolve any ambiguities, and to determine any questions which may arise with the Plan's application or administration, including but not limited to, determination of eligibility for benefits. Whenever in the

Plan the Committee is given discretionary powers, the Committee shall exercise such powers in a uniform and non-discriminatory manner. The Committee shall process a claim for benefits as speedily as is feasible, consistent with the need for adequate information and proof necessary to establish the Participant's benefit rights and to commence payment of benefits.

ARTICLE 9 - APPLICATION FOR BENEFITS AND CLAIMS PROCEDURE

SECTION 9.01 NOTICE OF DENIAL OF BENEFIT. In the event that a request for distribution of benefits is denied in whole or in part, a Participant whose request for benefits has been denied shall be notified of such denial in writing by the Committee. The denial notice shall specify the reason or reasons for the denial, make specific references to pertinent Plan provisions, describe any additional material or information necessary for the Participant to perfect the claim, and shall advise the Participant of the procedure for the appeal of such denial.

SECTION 9.02 APPEALS PROCEDURE. All appeals shall be made in accordance with the following procedure:

(a) The Participant or his duly authorized representative shall file with the Committee a request to appeal the denial within sixty (60) days of notification by the Committee of the claim denial. The request shall be made in writing, and shall set forth all of the facts upon which the appeal is based. Appeals not timely filed shall be barred.

(b) The Committee shall consider the merits of the Participant's written presentations, the merits of any facts or evidence in support of the denial of benefits, and such other facts and circumstances as it shall deem relevant.

(c) Within one hundred and twenty (120) days after a request for review has been received, the Committee shall render a decision upon the appealed claim which shall be in writing and shall include specific reasons for the decision and specific references to the pertinent Plan provisions on which the decision was based. The decision rendered by the Committee shall be binding on all parties.

ARTICLE 10 - GENERAL PROVISIONS

SECTION 10.01 NO ALIENATION OR ASSIGNMENT OF BENEFITS. Payments of benefits under this Plan to any Participant shall not be subject to any claim of any creditor of such Participant, and, in particular, to the fullest extent permitted by law, all such

payments shall be free from attachment, garnishments, trustee's process, or any other legal or equitable process available to any creditor of such Participant. No Participant shall have the right to alienate, anticipate, commute, pledge, encumber, assign, sell, or transfer any potential payment of benefits hereunder.

SECTION 10.02 NO CONTRACT OF EMPLOYMENT. Nothing contained herein shall be construed as conferring upon a Participant the right to continue in the employ of the Company.

SECTION 10.03 OTHER RETIREMENT PLANS. Any compensation deferred under this Plan shall not be deemed salary or other compensation to a Participant for the purpose of computing benefits to which he may be entitled under any benefit plan of the Company, provided it is permissible to do so under the plan.

SECTION 10.04 HEIRS, ASSIGNS AND SUCCESSORS. This agreement is binding upon and inures to the benefit of the Company, its successors and assigns and the Participant and his heirs, executors, administrators and legal representatives.

SECTION 10.05 AMENDMENT OR TERMINATION. The Board retains the right to amend this Plan, with retroactive effect if necessary, or terminate this Plan, at any time, as determined by the Board.

SECTION 10.06 SEVERABILITY OF PROVISIONS. If any provision of this Plan shall be held invalid or unenforceable, such invalidity or unenforceability shall not affect any other provisions hereof, and this Plan shall be construed and enforced as if such provisions had not been included.

SECTION 10.07 CONTROLLING LAW. This Plan shall be construed in accordance with and governed by the laws of the State of Maryland.

SECTION 10.08 GRAMMATICAL CONSTRUCTION. Pronouns or other words indicating the masculine gender shall be deemed to include the feminine gender, and singular words shall include the plural in all cases where such meaning would be appropriate.

SECTION 10.9 UNAUTHORIZED REPRESENTATIONS. The Company shall not be bound by the representations of any person, other than the Committee, regarding eligibility for benefits under the Plan or any other matter relating to the Plan.

SECTION 10.10 DESIGNATION OF DEATH BENEFIT BENEFICIARY. Each Participant may designate any person or persons (primarily or contingently) as his

Beneficiary to whom his Plan benefits shall be paid if he dies prior to receipt of all such benefits. Such Beneficiary designation shall be effective only if in writing on forms provided by the Committee and if such form is delivered to the Committee during the lifetime of the Participant. If a Participant has a spouse, an election to name a primary designated Beneficiary other than or in addition to the spouse shall be ineffective unless the Participant's spouse consents in writing on form provided by the Committee to such designation.

SECTION 10.11 EFFECT OF CHANGE OF CONTROL. Notwithstanding the provisions of Section 6.04 above, following a Change in Control (as defined in the 1994 Ciena Corporation Incentive Stock Option Plan, as amended), in no event may the Company amend the Plan in any manner that adversely affects the benefits under the Plan or to remove the trustee of the trust established pursuant to Section 1.19 above.

IN WITNESS WHEREOF, the Company has caused this Plan to be executed by its duly authorized officers who have set their hands and affixed the corporate seal hereto as of this 20th day of April, 1998 effective the day first above written.

ATTEST:	CIENA CORPORATION
By: /s/ Eric Georgatos (Seal)	By: /s/ Patrick H. Nettles (Seal)
, Secretary	, President

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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 April 30, 1998, and is qualified in its entirety by reference to such financial statements.

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OCT-31-1998
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EPS Primary is same as EPS Basic.