SCHEDULE 14A INFORMATION Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No. \_\_) Filed by the Registrant [X] Filed by a Party other than the Registrant [ ] Check the appropriate box: [ ] Preliminary Proxy Statement Confidential, for Use of the Commission Only (as permitted by Rule [] 14a-6(e)(2)Definitive Proxy Statement [X] [ ] Definitive Additional Materials [] Soliciting Material Pursuant to ss. 240.14a-11(c) or ss. 240.14a-12 CIENA Corporation ------(Name of Registrant as Specified In Its Charter) CIENA Corporation \_\_\_\_\_ (Name of Person(s) Filing Proxy Statement) Payment of Filing Fee (Check the appropriate box): [X] No fee required [] Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11. 1) Title of each class of securities to which transaction applies: 2) Aggregate number of securities to which transaction applies: 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11:1/ 4) Proposed maximum aggregate value of transaction: 5) Total fee paid: \_\_\_\_ 1/ Set forth the amount on which the filing fee is calculated and state how it was determined. [] Fee paid previously with preliminary materials. Check box if any part of the fee is offset as provided by Exchange  $\ensuremath{\operatorname{Act}}$ Γ 1 Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing. 1) Amount Previously Paid: Form, Schedule or Registration Statement No.: 3) Filing Party:

4) Date Filed:

[LOGO]

## CIENA CORPORATION 1201 Winterson Road Linthicum, Maryland 21090

# NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

The 1999 Annual Meeting of Stockholders of CIENA Corporation will be held at the Harbor Inn Pier 5, 711 Eastern Avenue, Baltimore, Maryland on Wednesday, March 10, 1999 at 3:00 p.m. for the following purposes:

- 1. To elect two Class II directors.
- 2. To ratify the selection of PricewaterhouseCoopers LLP as independent public accountants for the Corporation.
- 3. To consider and act upon such other business as may properly come before the meeting.

Whether or not you expect to attend the meeting, please sign, date and return the enclosed proxy as promptly as possible in the enclosed stamped envelope.

By Order of the Board of Directors

/s/ G. Eric Georgatos

G. Eric Georgatos Secretary

Linthicum, Maryland February 8, 1999

#### PROXY STATEMENT

#### Annual Meeting of Stockholders

## March 10, 1999

This Proxy Statement is furnished on or about February 8, 1999 to stockholders of CIENA Corporation (the "Corporation"), 1201 Winterson Road, Linthicum, Maryland 21090, in connection with the solicitation by the Board of Directors of the Corporation of proxies to be voted at the Annual Meeting of Stockholders. The stockholder giving the proxy has the power to revoke the proxy at any time before it is exercised. Such right of revocation is not limited by or subject to compliance with any formal procedures.

The Corporation will bear the cost of soliciting proxies. Copies of solicitation material may be furnished to brokers, custodians, nominees and other fiduciaries for forwarding to beneficial owners of shares of the Corporation's Common Stock, and normal handling charges may be paid for such forwarding service. Officers and other management employees of the Corporation, who will receive no additional compensation for their services, may solicit proxies by mail, personal interview, telephone and telegraph.

At the close of business on January 13, 1999, there were 103,318,508 shares of the Common Stock of the Corporation outstanding and entitled to vote at the meeting. There were 924 record holders as of January 13, 1999 and only stockholders of record on that date will be entitled to vote at the meeting. Each share will have one vote.

### PROPOSAL 1

#### Election of Directors

#### General

The Board of Directors currently consists of seven members. The directors are divided into three classes, each class serving for a staggered three-year term. Classes I and II each contain two Directors, while Class III contains three Directors. Class I, whose term expires in 2001, consists of Drs. Bayless and Nettles; Class II, whose term expires at the Annual Meeting, consists of Messrs. Cash and Zak; and Class III, whose term expires in 2000, consists of Professor Bradley and Messrs. Higgerson and Oliver. At the Annual Meeting, two directors will be elected to fill positions in Class II. Each of the nominees for Class II, if elected, will serve for terms expiring at the 2002 annual meeting of stockholders.

Unless otherwise instructed on the proxy, it is the intention of the persons named in the proxy to vote the shares represented by each properly executed proxy for the election as directors of the persons named below as nominees. The Board of Directors believes that all such nominees will stand for election and will serve if elected. However, if any of the persons nominated by the Board of Directors fails to stand for election or is unable to accept election, proxies will be voted by the proxy holders for the election of such other person or persons as the Board of Directors may recommend.

The following table presents information concerning persons nominated for election as directors of the Corporation and for those directors whose term of offices will continue after the meeting.

Nominees for Election as a Director for Terms Expiring in 2002

Harvey B. Cash ..... Director of the Corporation since April 1994. Mr. Cash, age 60, is a general partner of InterWest Partners, a venture capital firm in Menlo Park, California which he joined in 1985. Mr. Cash serves on the board of directors of Benchmarq Microelectronics, Liberte, Inc., AMX Corporation, i2 Technologies Inc. and Aurora Electronics, Inc. He is also an advisor to Austin Ventures. Mr. Cash received a B.S. in electrical engineering from Texas A&M University and an M.B.A. from Western Michigan University. Mr. Cash serves on the Corporate Governance Committee of the Board of Directors.

Michael J. Zak ...... Director of the Corporation since December 1994. Mr. Zak, age 45, has been employed by Charles River Ventures of Waltham, Massachusetts since 1991 and has been a general partner of Charles River Partnership VII and its related entities since 1993. From 1986 through 1991, he was a founder and corporate officer of Concord Communications, Inc., a developer of network management software. He is a director of three private companies. Mr. Zak has a B.S. degree in engineering from Cornell University and an M.B.A. from Harvard Business School. Mr. Zak serves on the Human Resources and Corporate Governance Committees of the Board of Directors.

Directors Continuing in Office

- Jon W. Bayless, Ph.D. ..... Director of the Corporation since April 1994 and Chairman of the Board of Directors since November 1996. Dr. Bayless, age 58, is a general partner of various venture capital funds associated with Sevin Rosen Funds where, since 1981, he has focused on developing business opportunities in the fields of telecommunications and computers. Dr. Bayless is also the controlling stockholder and sole director of Jon W. Bayless, Inc., the general partner of Atlantic Partners L.P., which is the general partner of Citi Growth Fund L.P., a venture capital investment firm. Dr. Bayless currently serves as a director of 3DX Technologies Inc. and of several private companies. Dr. Bayless is also Chairman of the Board of Directors of Shared Resource Exchange, Inc. which filed for reorganization under Chapter 11 of the Federal Bankruptcy Code in August 1996. A plan under Chapter 11 has been approved. Dr. Bayless has held faculty positions at Southern Methodist University, Virginia Polytechnic Institute, and the Catholic University of America. He holds patents in the field of digital patents in the digital telecommunications, and is a senior member of the Institute of Electronic Engineers. Dr. Bayless earned his B.S. degree in electrical engineering at the University of Oklahoma. He earned his M.S. degree in electrical engineering at the University of Alabama, and his Ph.D. in electrical engineering at Arizona State University. Dr. Bayless serves on the Audit, Human Resources and Corporate Governance Committees of the Board of Directors. Mr. Bayless' term as Director expires 2001.
- Stephen P. Bradley, Ph.D. ... Director of the Corporation since April 1998. Professor Bradley, age 57, is a William Ziegler Professor of Business Administration and the Chairman of the Program for Management Development at the Harvard Business School. A member of the Harvard faculty since 1968, Professor Bradley is also Chairman of Harvard's Executive Program in Competition and Strategy and teaches in Harvard's

Delivering Information Services program. Professor Bradley has written extensively on the telecommunications industry and the impact of technology on competitive strategy. Professor Bradley received his B.E. in electrical engineering from Yale University in 1963 and his M.S. and Ph.D. in operations research from the University of California, Berkeley, in 1965 and 1968 respectively. Professor Bradley serves on the Audit Committee of the Board of Directors. Professor Bradley's term as a Director expires in 2000.

- Clifford H. Higgerson ...... Director of the Corporation since April 1994. Since 1991, Mr. Higgerson, age 59, has been a general partner of Vanguard Venture Partners, a venture capital firm specializing in high technology start-ups, located in Palo Alto, California. Mr. Higgerson is also a partner of Communications Ventures. Mr. Higgerson is a director of Advanced Fibre Communications and Digital Microwave Corp. Mr. Higgerson earned his B.S. in electrical engineering from the University of Illinois and an M.B.A. in finance from the University of California at Berkeley. Mr. Higgerson serves on the Audit and Corporate Governance Committees of the Board of Directors. Mr.Higgerson's term as Director expires in 2000.
- Patrick H. Nettles, Ph.D. ... Chief Executive Officer of the Corporation since February 1994, President and Chief Executive Officer of the Corporation since April 1994 and Director of the Corporation since February 1994. From 1992 until 1994, Dr. Nettles, age 55, served as Executive Vice President and Chief Operating Officer of Blyth Holdings Inc., a publicly-held supplier of client/server software. From late 1990 through 1992, Dr. Nettles was President and Chief Executive Officer of Protocol Engines Inc., a development stage enterprise, formed as an outgrowth of Silicon Graphics Inc., and targeted toward very large scale integration-based solutions for high-performance computer networking. From 1989 to 1990, Dr. Nettles was Chief Financial Officer of Optilink, a venture start-up which was acquired by DSC Communications. Dr. Nettles received his B.S. degree from the Georgia Institute of Technology and his Ph.D. from the California Institute of Technology. Dr. Nettles' term as Director expires 2001.
- Billy B. Oliver ..... Director of the Corporation since June 1996. Since his retirement in 1985 after nearly 40 years of service at AT&T, Mr. Oliver, age 73, has worked as a self-employed communications consultant. During his last 15 years with AT&T, he held the position of Vice President, Engineering Planning and Design, where he was directly involved in and had significant responsibility for the evolution of AT&T's long distance network during that period. He was a co-recipient of the Alexander Graham Bell Medal for the conception and implementation of Nonhierarchical Routing in AT&T's network. Mr. Oliver is also a director of Digital Microwave Corp., Communications Network Enhancement Inc. and Enterprise Network Services Inc. Mr. Oliver earned his B.S.E.E. degree from North Carolina State University. Mr. Oliver serves on the Human Resources Committee of the Board of Directors. Mr. Oliver's term as Director expires in 2000.

#### Board Committees

The current committees of the Board of Directors each consist entirely of non-employee directors. The Corporation's Audit Committee makes recommendations concerning the engagement of independent public accountants, reviews the plans and results of the audit engagement with the independent public accountants, reviews the independence of the independent public accountants, considers the range of audit and non-audit fees and reviews the adequacy of the Corporation's internal accounting controls. Dr. Bayless, Mr. Higgerson and Professor Bradley are the members of the Audit Committee. Mr. Zak was also a member of the Audit Committee through September 1998, when Professor Bradley joined the Audit Committee in his place. The Corporation's Human Resources Committee determines compensation for the Corporation's executive officers and administers the Corporation's Amended and Restated 1994 Stock Option Plan and the 1999 Employee Stock Purchase Plan. Dr. Bayless and Messrs. Oliver and Zak are the members of the Human Resources Committee. The Corporation's Corporate Governance Committee reviews at least annually the operation of the Board, monitors evolving corporate governance standards and guidelines, and may recommend to the full Board the adoption or implementation of actions believed appropriate to improve the operation of the Board relative to such standards and guidelines. Dr. Bayless and Messrs. Higgerson and Zak are the members of the Corporate Governance Committee.

## Attendance at Meetings

During fiscal 1998, the Board of Directors held 26 meetings, the Audit Committee held five meetings, the Human Resources Committee held five meetings, and the Corporate Governance Committee held two meetings. Each director of the Corporation attended 75% or more of all Board of Director meetings and 75% or more of all meetings of each committee on which he served. Professor Bradley was nominated to the Board of Directors in February 1998 and attended 75% or more of all Board of Director meetings and 75% or more of all meetings of each committee on which he served during his term.

# Directors' Fees

Members of the Board of Directors receive \$2,500 for participation in each regular meeting of the full Board of Directors and \$1,250 for each committee meeting. The Corporation also reimburses each member of the Board of Directors for out-of-pocket expenses incurred in connection with attendance at meetings. Under the Corporation's 1996 Outside Directors Stock Option Plan, non-employee Directors are eligible to receive stock options in consideration for their services.

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# Beneficial Ownership of Common Stock

The following table sets forth certain information as of December 31, 1998 (unless otherwise specified) with respect to the beneficial ownership of the Corporation's Common Stock by each person who is known to the Corporation to have beneficial ownership of more than 5% of the outstanding shares of Common Stock, each director, each Named Executive Officer (as defined below), and all directors and executive officers as a group.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percent of Class	
Patrick H. Nettles, Ph.D.(2)(3)	3,927,010	3.8%	
Steve W. Chaddick(2)		*	
Lawrence P. Huang(2)	761,250	*	
Joseph R. Chinnici(2)	265,750	*	
Mark Cummings(2)	203,000	*	
G. Eric Georgatos(2)		*	
Jon W. Bayless(2)	183,791	*	
Harvey B. Cash(2)		*	
Clifford H. Higgerson(2)(4)	2,250,077	2.2%	
Billy B. Oliver(2)		*	
Michael J. Zak(2)(5)		*	
Stephen P. Bradley, Ph.D.(2)		*	
All officers and directors as a group (17 persons)(2)	7,937,034	7.5%	

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- \* Represents less than 1%.
- (1) The persons named in this table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws where applicable and except as indicated in the other footnotes to this table. Beneficial ownership is determined in accordance with the rules of the United States Securities and Exchange Commission ("SEC"). In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of Common Stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days after December 31, 1998 are deemed outstanding. Such shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person.
- (2) Includes shares issuable upon exercise of stock options granted under the Corporation's Amended and Restated 1994 Stock Option Plan (the "1994 Plan") or 1996 Outside Directors Stock Option Plan (the "Directors Plan"). Options granted under the 1994 Plan that are reflected in the beneficial ownership table are generally exercisable immediately but may be subject to a right of repurchase based on a scheduled vesting period. Generally, shares underlying options vest over four years and options must be exercised within ten years. Initial grants of options under the Directors Plan vest over a period of three years, annual grants vest in full on the first anniversary date of the grant and options must be exercised within ten years of the date of grant.
- (3) Does not include 175,000 shares held by the Patrick H. and Marion S. Nettles Charitable Trust, as to which Dr. Nettles disclaims beneficial ownership.
- (4) Includes 1,963,419 shares of Common Stock owned by Vanguard IV, L.P., which Mr. Higgerson may be deemed to beneficially own by virtue of his status as a general partner of Vanguard IV, L.P. Mr. Higgerson disclaims beneficial ownership of the shares held by such entity except to the extent of his proportionate partnership interest therein. Mr. Higgerson has direct ownership of 281,658 shares of Common Stock.

(5) Includes 500,000 shares of Common Stock owned by Charles River Partnership VII, which Mr. Zak may be deemed to beneficially own by virtue of his status as a general partner of Charles River Partnership VII. Mr. Zak disclaims beneficial ownership of the shares held by such entity except to the extent of his proportionate partnership interest therein. Mr. Zak has direct ownership of 211,200 shares of Common Stock.

### Compensation

# Summary Compensation Table

The following table sets forth the annual and long-term compensation for services in all capacities to the Corporation for the fiscal years ended October 31, 1998, 1997 and 1996 of the Chief Executive Officer and the other five most highly compensated persons who were executive officers of the Corporation as of October 31, 1998 (the "Named Executive Officers").

				Long-Term Compensation	
		Annual Compensatio	n	Securities	
	Year	Salary	Bonus	Underlying Options	
Patrick H. Nettles, Ph.D	1998	\$300,000	\$150,000	Θ	
President and Chief Executive Officer	1997	\$253,365	\$168,750	Θ	
	1996	\$174,000	\$154,000	875,000	
Steve W. Chaddick	1998	\$225,000	\$ 56,250	Θ	
Senior Vice President, Strategy	1997	\$160,385	\$ 67,500	0	
and Corporate Development	1996	\$132,000	\$ 87,000	312,500	
Lawrence P. Huang	1998	\$225,000	\$ 84,375	Θ	
Senior Vice President, Strategic	1997	\$160,385	\$ 81,562	Θ	
Account Sales	1996	\$132,000	\$ 87,000	312,500	
Joseph R. Chinnici	1998	\$225,000	\$ 56,250	Θ	
Senior Vice President, Finance and	1997	\$159,519	\$ 67,500	Θ	
Chief Financial Officer	1996	\$115,000	\$ 79,000	72,500	
Mark Cummings	1998	\$225,000	\$ 56,250	Θ	
Senior Vice President, Operations	1997	\$159,519	\$ 67,500	0	
	1996	\$ 53,077	\$ 41,592	250,000	
G. Eric Georgatos	1998	\$225,000	\$ 56,250	Θ	
Senior Vice President, General Counsel	1997	\$160,385	\$ 67,500	Θ	
and Secretary	1996	\$ 87,500	\$ 25,688	200,000	

#### Option Grants in Last Fiscal Year

The corporation did not grant any stock options to the Named Executive Officers during fiscal 1998.

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Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table provides the specified information concerning unexercised options held as of October 31, 1998 by the Named Executive Officers:

	Shares Acquired on	Value	Number of Securities Underlying Unexercised Options at October 31, 1998(1)		Value of Unexercised in-the-Money Options at October 31, 1998(2)	
	Exercise	Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
Patrick H. Nettles, Ph.D	0	\$ 0	875,000	Θ	\$13,352,500	\$0
Steve W. Chaddick	225,000	\$6,919,113	596,250	0	\$ 9,743,225	\$0
Lawrence P. Huang	120,000	\$7,125,559	532,500	0	\$ 8,626,050	\$0
Joseph R. Chinnici	25,500	\$1,539,789	245,250	0	\$ 4,135,385	\$0
Mark Cummings	29,500	\$1,587,154	188,000	0	\$ 3,053,120	\$0
G. Eric Georgatos	25,000	\$1,467,902	129,200	Θ	\$ 2,217,072	\$0

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- (1) All options are immediately exercisable at the date of grant, but shares purchased upon exercise of options are subject to repurchase by the Corporation based upon a scheduled vesting period. Of the shares underlying options 291,667, 268,125, 204,375, 158,167, 89,042 and 62,533 of the shares underlying options held by Messrs. Nettles, Chaddick, Huang, Chinnici, Cummings and Georgatos, respectively, are vested.
- (2) Calculated on the basis of the fair market value of the underlying Common Stock as of October 31, 1998 of \$17.56 per share, less the aggregate exercise price. The value of vested in-the-money options held by Messrs. Nettles, Chaddick, Huang, Chinnici, Cummings and Georgatos is \$4,450,838, \$4,700,569, \$3,583,394, \$2,773,395, \$1,446,042, and \$1,073,066, respectively.

#### Ten-year Option Repricings(1)

	Date	Number of Securities Underlying Options Repriced or Amended	Market Price of Stock at Time of Repricing or Amendment	Exercise Price at Time of Repricing or Amendment	New Exercise Price	Length of Original Option Term Remaining at Date of Repricing or Amendment
Jesus Leon		128,000	\$12.375	\$16.27	\$12.375	98 months
Gary B. Smith		40,000	\$12.375	\$55.00	\$12.375	110 months

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(1) The option repricings did not affect any of the Named Executive Officers. Messrs. Leon and Smith became executive officers of the Company in connection with their promotions to Senior Vice President, Products and Technology, and Senior Vice President, Worldwide Sales, respectively.

## Human Resources Committee Report on Option Repricing

On September 17, 1998, the Human Resources Committee of the Board of Directors approved a reduction in the exercise price of certain outstanding stock options to \$12.375 per share, the fair market value of the Corporation's Common Stock on September 17, 1998. The reduction of exercise price affected options to purchase 2,905,116 shares of common stock with an average exercise price of \$42.87 per share. Employees other than directors and executive officers also hold these options.

As set forth in the Plan, stock options are intended to provide incentives to the Corporation's officers and employees. The Human Resources Committee believes that such equity incentives are a significant factor in the Corporation's ability to attract, retain and motivate key employees who are critical to the Corporation's long-term success. The Human Resources Committee believed that, at their original exercise prices, the disparity between the exercise price of these options and recent market prices for the Corporation's Common Stock did not provide meaningful incentives to the employees holding these options. The Human Resources Committee approved the repricing of these options as a means of ensuring that optionees will continue to have meaningful equity incentives to work toward the success of the Corporation. The Human Resources Committee deemed the adjustment to be in the best interest of the Corporation and its shareholders.

Submitted by the members of the Human Resources Committee:

Jon W. Bayless, Ph.D. Billy B. Oliver Michael J. Zak

# Employment Agreements and Change-in-Control Arrangements

In April 1994, the Corporation entered into an employment agreement with Dr. Nettles. The employment agreement specifies that Dr. Nettles is an employee at will. In the event that he is terminated for cause, as defined in the employment agreement, he will receive a severance payment equal to his monthly base salary until the earlier of the expiration of six months or the commencement of employment with a person or entity other than the Corporation.

In November 1998, the Corporation entered into a transfer of control/severance agreement with each of the Named Executive Officers. The initial term of each of these agreements is three years. The agreements provide for the payment of up to one year of salary and bonus continuation in the event that the Named Executive Officer's employment is terminated without cause or for "good reason," as defined in the agreements, within one year following a change-in-control of the Corporation.

## Human Resources Committee Report on Executive Compensation

The Human Resources Committee of the Board of Directors consists of Dr. Bayless and Messrs. Oliver and Zak, none of whom are employees or officers of the Corporation. The Committee advises and assists management in developing the Corporation's compensation and personnel policies, and provides Board oversight of their implementation. The Committee endeavors to meet no less than four times per year to review issues associated with compensation, human resources policies, personnel recruitment and retention and to consider, amend, or approve quarterly objectives for management recommended by the Corporation's Chief Executive Officer.

The Committee has adopted a performance-based compensation policy which considers both the long and short term. These two components are linked in a way intended to focus management on increasing the strength of the business and its ability to serve important customers with leading, high-value products, while building the organization in a deliberate, thoughtful way. The Committee believes that this policy will increase stockholder value over the long term. On an annual basis, the Committee approves the Corporation's compensation package for executive officers, which includes a combination of an annual base salary and benefits, performance-based quarterly bonuses, and long-term compensation consisting of stock options. Annual base salaries are established following an assessment by the Committee of market survey data for comparable positions in comparable companies compiled by an independent compensation for various positions at levels that are generally favorable to the averages indicated by the market survey data. Quarterly bonus payments to members of management are awarded following assessment by the Committee of performance compared to corporate objectives.

Annual base salaries for members of management, including Patrick H. Nettles, the President and Chief Executive Officer of the Corporation, were most recently reassessed and reset in accordance with the foregoing policy, effective in August 1997. In the aftermath of the terminated merger with Tellabs on September 14, 1998, and after taking into account the attendant adverse effect on the Corporation and its stockholders, the resetting of expectations for future operations, and the perceived need to maintain stability and restore focus on the continuing business, the Committee decided to leave annual base salaries for members of management unchanged for the fiscal year commencing November 1, 1999, except in the case of newly promoted members of management. The Committee also determined that the Corporation's quarterly corporate objectives were met or otherwise satisfied during only the first two of the four fiscal quarters of the fiscal year ending October 31, 1998, and bonuses were paid accordingly at the conclusion of each of those quarters. Except for grants of stock options to new members of management who joined the Corporation during the fiscal year ended October 31, 1998, no stock options were granted to existing members of management during such fiscal year. Management participates, along with all other employees, in the Corporation for at least one year. The annual grant of stock options was implemented in November 1998.

With respect to the compensation of Dr. Nettles for the overall fiscal year ended October 31, 1998, the Committee recognized his unique role and responsibility as President and Chief Executive Officer of the Corporation, but otherwise considered no factors or criteria different from those applied to members of management generally.

For fiscal 1999, if the Committee determines that the corporate objectives have been met or otherwise satisfied in each of the four fiscal quarters, the bonus payments, which are paid quarterly on an equal pro rata basis, will equal 35%, 50%, 75% or 100% of base salary, with the exact percentage based on the particular officer's title and responsibilities, as viewed by the Committee. Only the Chief Executive Officer is eligible for a bonus of up to 100% of base salary in fiscal 1999.

Section 162(m) of the Internal Revenue Code limits tax deductions for executive compensation to \$1 million. There are several exemptions to Section 162(m), including one for qualified performance-based compensation. To be qualified, performance-based compensation must meet various requirements, including shareholder approval. The Committee intends to consider annually whether it should adopt a policy regarding 162(m) and to date has concluded that it is not appropriate to do so. One reason for this conclusion is that, assuming the current compensation policies and philosophy remain in place, Section 162(m) will not be applicable in the near term to any executive's compensation.

Submitted by the members of the Human Resources Committee:

Jon W. Bayless, Ph.D. Billy B. Oliver Michael J. Zak

## Compensation Committee Interlocks and Insider Participation

The Human Resources Committee of the Board of Directors, which serves the traditional functions of a compensation committee, consists of Jon W. Bayless, Ph.D., Billy B. Oliver and Michael J. Zak. None of Dr. Bayless or Messrs. Oliver and Zak was at any time during the fiscal year ended October 31, 1998, or at any other time, an officer or employee of the Corporation. No member of the Human Resources Committee of the Corporation serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of the Corporation's Board of Directors or Human Resources Committee.

## Shareholder Return Performance Presentation

The following graph shows a comparison of cumulative total returns for an investment in the Common Stock of the Corporation, the NASDAQ Telecommunications Index and the S&P 500 Index. Although the SEC requires the Corporation to present such a graph for a five-year period, the Common Stock has been publicly traded only since February 7, 1997 and, as a result, the following graph commences as of such date. This graph is not deemed to be "soliciting material" or to be "filed" with the SEC or subject to the SEC's proxy rules or to the liabilities of Section 18 of the Exchange Act of 1934,

and the graph shall not be deemed to be incorporated by reference into any prior or subsequent filing by the Corporation under the Securities Act of 1933 or the 1934 Act.

Assumes \$100 invested in CIENA Corporation, NASDAQ Telecom Index and S&P 500 on February 7, 1997, with all dividends reinvested at month-end.

[THE FOLLOWING TABLE WAS REPRESENTED BY A LINE GRAPH IN THE PRINTED MATERIAL.]

	CIENA	NASDAQ	
	Common	Telecom	
	Stock	Index	S&P 500
IPO	\$100	\$100	\$100
Feb-97	\$171	\$97	\$100
Mar-97	\$124	\$91	\$96
Apr-97	\$136	\$94	\$101
May-97	\$203	\$106	\$107
Jun-97	\$205	\$114	\$112
Jul-97	\$244	\$121	\$121
Aug-97	\$208	\$117	\$114
Sep-97	\$215	\$132	\$120
0ct-97	\$239	\$136	\$116
Nov-97	\$235	\$137	\$121
Dec-97	\$266	\$145	\$123
Jan-98	\$239	\$154	\$124
Feb-98	\$182	\$167	\$133
Mar-98	\$185	\$183	\$140
Apr-98	\$242	\$181	\$141
May-98	\$226	\$178	\$138
Jun-98	\$303	\$195	\$144
Jul-98	\$322	\$203	\$142
Aug - 98	\$122	\$155	\$131
Sep-98	\$62	\$174	\$129
0ct-98	\$75	\$187	\$139

#### PROPOSAL 2

## Ratification of Independent Public Accountants

The independent public accounting firm of PricewaterhouseCoopers LLP has acted as the Corporation's independent auditors for the year ended October 31, 1998 and has been selected by the Board of Directors to act as such for the examination of the Corporation's 1999 financial statements, subject to ratification by the stockholders. Representatives of PricewaterhouseCoopers LLP are expected to be present at the stockholders' meeting and will have an opportunity to make a statement if they desire and to respond to appropriate questions.

In the event the appointment of PricewaterhouseCoopers LLP as independent public auditors for 1999 is not approved by the stockholders, the adverse vote will be considered as a direction to the Board of Directors to consider the selection of other auditors for the following year. However, because of the difficulty in making any substitution of auditors so long after the beginning of the current year, it is contemplated that the appointment for the year 1999 will be permitted to stand unless the Board finds other good reason for making a change.

The Board of Directors believes that ratification of the selection of PricewaterhouseCoopers LLP as the corporation's independent public accountants for the 1999 fiscal year is in the best interests of all stockholders and, accordingly, recommends a vote FOR Proposal 2. Your proxy will be so voted unless you specify otherwise.

# Voting Procedures

Shares can be voted only if the stockholder is present in person or by proxy. Whether or not you plan to attend in person, you are encouraged to sign and return the enclosed proxy card. The representation in person or by proxy of at least a majority of the outstanding shares entitled to vote is necessary to provide a quorum at the meeting. Directors are elected by a plurality of the affirmative votes cast by the stockholders present at the Meeting (in person or by proxy). Proposal 2 must be approved by a majority of the shares of Common Stock voting for or against the Proposal at the Meeting. Unless otherwise indicated, executed proxies will be voted for Proposals 1 and 2.

Abstentions and "non-votes" are counted as present in determining whether the quorum requirement is satisfied. Abstentions and "non-votes" are treated as votes against proposals presented to stockholders other than elections of directors. A "non-vote" occurs when a nominee holding shares for a beneficial owner votes on one proposal, but does not vote on another proposal because the nominee does not have discretionary voting power and has not received instructions from the beneficial owner.

### Stockholder Proposals

All stockholder proposals intended to be presented at the 2000 Annual Meeting of the Corporation must be received by the Corporation not later than October 16, 1999 and must otherwise comply with the rules of the SEC for inclusion in the Corporation's proxy statement and form of proxy relating to that meeting.

All proposals intended to be presented at the 2000 Annual Meeting of the Corporation which are not sought to be included in the proxy statement must be received by the Corporation no later than December 30, 1999.

# Section 16(a) Beneficial Ownership Reporting Compliance

Each of Jon W. Bayless and Rebecca K. Seidman filed one late Form 4, each reporting one transaction.

#### Other Matters

Management knows of no matters to be presented for action at the meeting other than those mentioned above. However, if any other matters properly come before the meeting, it is intended that the persons named in the Corporation's form of proxy will vote on such other matters in accordance with their judgment of the best interests of the Corporation.

> By Order of the Board of Directors /s/ G. Eric Georgatos G. Eric Georgatos Secretary

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#### PROXY

## CIENA CORPORATION Proxy Solicited on behalf of the Board of Directors Annual Meeting of Stockholders to be held March 10, 1999

The undersigned hereby appoints Patrick H. Nettles, Joseph R. Chinnici and G. Eric Georgatos, or any of them, the proxies of the undersigned, with full power of substitution, to vote all shares of Common Stock of CIENA Corporation which the undersigned is entitled to vote at the Annual Meeting of Stockholders of the Corporation to be held March 10, 1999, or any adjournment thereof, as follows:

1. Election of Two Directors by all Stockholders

 FOR all	nominees	listed	below	 WITHHOLD	AUTHORITY	to
except a	as marked	to the	contrary	vote for	all nomine	es
				listed below		

Harvey B. Cash and Michael J. Zak

(Instruction: To withhold authority to vote for any individual nominee, write that nominee's name on the space provided below):

2. Proposal to ratify the selection of PricewaterhouseCoopers LLP as independent public accountants for the Corporation.

FOR AGAINST ABSTAIN

3. The proxies are authorized to vote in their discretion on any other matters which may properly come before the Annual Meeting to the extent set forth in the proxy statement.

The Board of Directors recommends a vote "FOR" each of the listed proposals.

PLACE AN "X" HERE IF YOU PLAN TO VOTE YOUR SHARES AT THE MEETING.

Execute proxy exactly as your name appears on this form. If stock is registered in more than one name, each joint holder should sign. When signing as trustee, executor or other fiduciary, please so indicate:

Signature of holder

Signature of co-holder (if any)

Date