ADE CORP
Form 10-Q
March 16, 2001

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

FORM 10-Q

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

For Quarter Ended: JANUARY 31, 2001   Commission File Number 0-26714

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

MASSACHUSETTS	04-2441829
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

80 WILSON WAY, WESTWOOD, MASSACHUSETTS 02090
(Address of principal executive offices, including area code)

(781) 467-3500
(Registrant's telephone number, including area code)

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

YES X   NO ____

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

Common Stock, par value $.01 per share	13,520,128 shares
Class	Outstanding at March 14, 2001

ADE CORPORATION
INDEX

ADE CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEET
(in thousands)

	January 31, 2001	April 30, 2000
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 29,960	$ 35,001
Accounts receivable, net	23,029	14,549
Inventories	37,336	29,968
Prepaid expenses and other current assets	1,816	756

Deferred income taxes	5,798	4,484
Total current assets	97,939	84,758
Fixed assets, net	29,126	30,724
Deferred income taxes	4,792	6,106
Investments	3,237	3,331
Intangible assets, net	3,125	3,892
Restricted cash	3,675	3,705
Other assets	366	354
Total assets	$ 142,260	$ 132,870
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 615	$ 598
Accounts payable	7,254	4,017
Accrued expenses and other current liabilities	16,669	14,096
Deferred income on sales to affiliates	2,801	337
Total current liabilities	27,339	19,048
Long-term debt	11,493	11,950
STOCKHOLDERS' EQUITY:		
Common stock	135	135
Capital in excess of par value	102,161	101,580
Retained earnings	1,132	178
	103,428	101,893
Deferred compensation	-	(21)
Total stockholders' equity	103,428	101,872
Total liabilities and stockholders' equity	$ 142,260	$ 132,870

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

ADE CORPORATION
CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS
(in thousands, except per share data, unaudited)

	Three months	Nine mon

	ended January 31, 2001	2000	ended Janua 2001
Revenue	$28,130	$ 16,576	$ 73,991
Cost of revenue	14,133	9,225	37,224
Gross profit	13,997	7,351	36,767
Operating expenses:			
Research and development	5,731	5,411	16,062
Marketing and sales	3,508	3,134	12,054
General and administrative	3,203	2,964	8,054
Total operating expenses	12,442	11,509	36,170
Income (loss) from operations	1,555	(4,158)	597
Interest income, net	281	318	947
Income (loss) before provision for income taxes and equity in net loss of affiliated companies	1,836	(3,840)	1,544
Provision for income taxes	47	-	111
Income (loss) before equity in net loss of affiliated companies	1,789	(3,840)	1,433
Equity in net loss of affiliated companies	(61)	(676)	(479)
Net income (loss)	$ 1,728	$ (4,516)	$ 954
Basic earnings (loss) per share	$0.13	$(0.34)	$0.07
Diluted earnings (loss) per share	$0.13	$(0.34)	$0.07
Weighted average shares outstanding - basic	13,511	13,403	13,498
Weighted average shares outstanding - diluted	13,748	13,403	13,768

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

ADE CORPORATION
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(in thousands, unaudited)

	Nine months ended January 31, 2001	2000

CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	$ 954	$ (17,571)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	4,465	4,045
Equity in net loss of affiliated companies, net of dividends received	543	1,493
Changes in assets and liabilities:		
Accounts receivable, net	(8,480)	(200)
Inventories	(7,368)	(6,094)
Prepaid expenses and other current assets	(1,060)	(371)
Accounts payable	3,237	1,580
Accrued expenses and other current liabilities	2,573	(3,936)
Deferred income on sales to affiliate	2,464	(812)
Net cash used in operating activities	(2,672)	(21,866)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of fixed assets	(2,100)	(4,862)
Change in restricted cash	30	(222)
Advances to affiliated company	(449)	(685)
Increase in other assets	(12)	(1,048)
Net cash used in investing activities	(2,531)	(6,817)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Repayment of long-term debt	(440)	(425)
Proceeds from issuance of common stock	602	1,136
Net cash provided by financing activities	162	711
Net decrease in cash and cash equivalents	(5,041)	(27,972)
Cash and cash equivalents, beginning of period	35,001	61,278
Cash and cash equivalents, end of period	$ 29,960	$ 33,306

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

ADE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS

1. BASIS OF PREPARATION

The accompanying unaudited condensed consolidated financial statements of ADE Corporation (the "Company") include, in the opinion of management, all adjustments (consisting only of normal and recurring adjustments) necessary for a fair statement of the Company's financial position, results of operations and cash flows at the dates and for the periods indicated. Results of operations for interim periods are not necessarily indicative of those to be achieved for full fiscal years.

Pursuant to accounting requirements of the Securities and Exchange Commission applicable to quarterly reports on Form 10-Q, the accompanying unaudited condensed consolidated financial statements and these notes do not include all disclosures required by generally accepted accounting principles for complete financial statements. Accordingly, these statements should be read in conjunction with the financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended April 30, 2000.

2. INVENTORIES

Inventories consist of the following:

	(in thousands) January 31, 2001 (unaudited)	April 30, 2000
Raw materials and purchased parts	$ 16,577	$ 13,202
Work-in-process	19,308	15,437
Finished goods	1,451	1,329
	$ 37,336	$ 29,968

3. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following:

	(in thousands) January 31, 2001 (unaudited)	April 30, 2000
Accrued salaries, wages, vacation pay and bonuses	$ 2,625	$ 1,844
Accrued commissions	1,756	647
Accrued warranty costs	2,372	1,083
Accrued severance	71	278
Deferred revenue	6,244	6,436
Other	3,601	3,808
	$ 16,669	$ 14,096

ADE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS

4. EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is computed by dividing income available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings per share is computed using the weighted average number of common shares outstanding and gives effect to all dilutive potential common shares outstanding during the period. Potential common shares outstanding include shares issuable upon the assumed exercise of dilutive stock options reflected under the treasury stock method. For the three and nine months ended January 31, 2001, respectively, 385,525 and 369,325 common shares issuable upon the exercise of stock options have been excluded from the computation of diluted earnings per share, as their effect would have been antidilutive. For the three and nine months ended January 31, 2000, respectively, basic and diluted loss per share is the same due to the antidilutive effect of potential common shares outstanding.

The following is a reconciliation of the shares used in calculating basic and diluted earnings per share:

	(in thousands) Three months ended January 31,		(Ni
	2001	2000	2
Shares used in computation:			
a. Weighted average common stock outstanding used in computation of basic earnings (loss) per share	13,511	13,403	
b. Dilutive effect of stock options outstanding	237	-	
c. Shares used in computation of diluted earnings (loss) per share	13,748	13,403	

5. INVESTMENTS

In July 2000, the Company sold its 67.5% investment in Microspec Technologies Ltd. ("Microspec") for $1. The balance of the Company's investment in Microspec was approximately zero at the time of the sale. Therefore, no gain or loss was recorded in the transaction.

6. SEGMENT REPORTING

Beginning in the third quarter of fiscal 2001, the Company consolidated its reported segments to conform with how the Company now manages its business. Prior to the third quarter of fiscal 2001, the Company reported three segments: ADE Semiconductor Systems Group ("SSG"), ADE Phase

Shift ("PST") and ADE Technologies ("ATI"). SSG manufactures and markets metrology and inspection systems to the semiconductor wafer and device manufacturing industries that are used to improve yield and capital productivity. PST manufactures and markets high performance, non-contact surface metrology equipment using advanced interferometric technology that provides enhanced yield management to the data storage, semiconductor and optics industries. ATI manufactures and markets high precision magnetic characterization and non-contact dimensional metrology gaging systems primarily to the data storage industry. Sales of the Company's stand-alone software products and software consulting services were included in the "other" category and are now reported in the SSG segment. Prior year segment information has been recast to conform with the current year presentation.

The Company's reportable segments are determined based upon the nature of the products, the external customers and customer industries and the sales and distribution methods used to market the products. The Company evaluates performance based upon profit or loss from operations. The Company does not measure the assets allocated to the segments. Management fees representing certain services provided by corporate offices have been allocated to each of the reportable segments based upon the usage of those services by each segment. Additionally, other income (loss), the provision for (benefit from) income taxes and the equity in net earnings (losses) of affiliated companies are not included in segment profitability.

ADE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS

6. SEGMENT REPORTING (CONTINUED)

	(IN THOUSANDS)			
	SSG	PST	ATI	TOTAL
FOR THE QUARTER ENDED JANUARY 31, 2001				
Revenue from external customers	$ 24,089	$ 3,848	$ 2,764	$ 30,701
Intersegment revenue	(48)	-	129	81
Income (loss) from operations	2,028	763	24	2,815
Depreciation and amortization expense	1,074	64	35	1,173
Capital expenditures	1,073	20	76	1,169
FOR THE QUARTER ENDED JANUARY 31, 2000				
Revenue from external customers	$ 13,297	$ 1,842	$ 2,889	$ 18,028
Intersegment revenue	344	-	82	426
Loss from operations	(3,356)	(203)	(110)	(3,669)
Depreciation and amortization expense	1,252	63	92	1,407
Capital expenditures	761	54	46	861

(IN THOUSANDS)

	SSG	PST	ATI	TOTAL
FOR THE NINE MONTHS ENDED JANUARY 31, 2001				
Revenue from external customers	$ 62,712	$ 6,972	$ 8,170	$ 77,854
Intersegment revenue	241	-	471	712
Income (loss) from operations	3,102	(106)	(482)	2,514
Depreciation and amortization expense	4,027	190	248	4,465
Capital expenditures	1,846	108	146	2,100
FOR THE NINE MONTHS ENDED JANUARY 31, 2000				
Revenue from external customers	$ 31,335	$ 4,951	$ 5,834	$ 42,120
Intersegment revenue	472	-	196	668
Loss from operations	(15,103)	(837)	(1,938)	(17,878)
Depreciation and amortization expense	3,582	190	273	4,045
Capital expenditures	4,664	93	105	4,862

ADE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS

6. SEGMENT REPORTING (CONTINUED)

The following is a reconciliation for the above items where aggregate reportable segment amounts differ from amounts contained in the Company's consolidated financial statements.

	Three months ended January 31, 2001	2000	Nine mont ended Januar 2001	
Total external revenue for reportable segments	$ 30,701	$ 18,028	$ 77,854	$
Net impact of revenue recognition on sales to affiliate	(2,571)	(1,452)	(3,863)	
Total consolidated revenue	$ 28,130	$ 16,576	$ 73,991	$
Total operating income (loss) for reportable segments	$ 2,815	$ (3,669)	$ 2,514	$
Net impact of intercompany gross profit eliminations and deferred profit on sales to affiliate	(1,260)	(489)	(1,917)	
Total consolidated operating income (loss)	$ 1,555	$ (4,158)	$ 597	$

7. NEW ACCOUNTING PRONOUNCEMENTS

In December 1999, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 101 (SAB 101), "Revenue Recognition in

Financial Statements." SAB 101 summarizes the SEC's views in applying generally accepted accounting principles to selected revenue recognition issues. The Company is required to adopt SAB 101 in the fourth quarter of fiscal 2001. Management has reviewed SAB 101 and has determined the nature of the impact that SAB 101 will have on the Company's financial statements. For some of the Company's sales transactions, a portion, usually 10%, of the fee is not due until installation occurs and the customer accepts the product. SAB 101 will require the deferral of that portion of the fee not due until installation is complete and customer acceptance has occurred. In addition, the Company's financial statements will also reflect a change in the classification of the revenue associated with training and the installation of the Company's products. The Company is in the process of quantifying the cumulative effect of the change in accounting principle that will be recorded in the Company's financial statements for the fiscal year ending April 30, 2001.

In June 1998, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities", which required adoption in periods beginning after June 15, 1999. SFAS No. 133 was subsequently amended by SFAS No. 137, "Accounting for Derivative Instruments and Hedging Activities-Deferral of the Effective Date of FASB Statement No. 133" and will now be effective for fiscal years beginning after June 15, 2000. The Company does not expect SFAS No. 133 to have a material effect on its financial condition or results of operations.

8. ADOPTION OF 2000 EMPLOYEE STOCK OPTION PLAN

On June 21, 2000, the Board of Directors adopted, subject to the approval of the stockholders, the Company's 2000 Employee Stock Option Plan (the "Plan"). Under the Plan, stock rights may be granted which are either (i) options intended to qualify as "incentive stock options" under Section 422(b) of the Internal Revenue Code of 1986, as amended, (ii) non-qualified stock options or (iii) awards of shares of common stock or the opportunity to make a direct purchase of shares of common stock. The adoption of the 2000 Employee Stock Plan was formally approved by the stockholders at the 2000 Annual Meeting of Stockholders held on September 21, 2000.

The Plan authorizes the issuance of up to 900,000 shares of the Company's common stock plus the number of shares of common stock previously reserved for granting of options under the Company's 1995 Stock Option Plan or its 1997 Stock Option Plan which are not granted under either of these plans or which are not exercised and cease to be outstanding by reason of cancellation or otherwise. As of June 21, 2000, 153,705 shares of common stock remained available for granting of options under the 1995 Stock Option Plan or the 1997 Stock Option Plan and

8. ADOPTION OF 2000 EMPLOYEE STOCK OPTION PLAN (CONTINUED)

725,405 shares of common stock were reserved for issuance under outstanding, unexercised options under all of the Company's plans.

9. PENDING LITIGATION

On October 11, 2000, the Company filed a patent infringement lawsuit against KLA-Tencor (KLA), a competitor, in the U.S. District Court in Delaware. The Company seeks damages and a permanent injunction against further infringement of United States Patent Number 6,118,525, entitled "Wafer Inspection System for Distinguishing Pits and Particles." On November 16, 2000, KLA filed a counterclaim in the United States District Court in Delaware alleging that ADE has infringed three patents owned by KLA. KLA is seeking damages for the alleged patent infringement and a permanent injunction against future infringement. In addition, KLA has asked the District Court for a declaration that United States Patent Number 6,118,525, owned by ADE, is invalid and not infringed by KLA. Since these matters are at a preliminary stage, the Company cannot predict the outcome or the amount of gain or loss, if any.

ADE CORPORATION
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INTRODUCTION

ADE Corporation (the "Company") designs, manufactures, markets and services highly precise, automated measurement, defect detection and handling equipment with current applications in the production of semiconductor wafers, semiconductor devices and computer disks.

The following information should be read in conjunction with the unaudited condensed consolidated financial statements and notes thereto included in this Quarterly Report and the audited consolidated financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in the Company's Annual Report on Form 10-K for the fiscal year ended April 30, 2000.

FORWARD-LOOKING STATEMENTS

This quarterly report on Form 10-Q contains certain forward-looking statements that are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed by such statements. Those statements that make reference to the Company's expectations, predictions and anticipations should be considered forward-looking statements. These statements include, but are not limited to, risks and uncertainties associated with the strength of the semiconductor and hard disk markets, wafer pricing and wafer demand, the results of its product development efforts, the success of ADE's product offerings to meet customer needs within the timeframes required by customers in these markets, further increases in backlog, our visibility and the Company's predictions of future financial outcomes. Further information on potential factors that could affect ADE Corporation's business is described in "Other Risks" appearing at the end of this Management's Discussion and Analysis of Financial Condition and Results of Operations and in the Company's reports on file with the Securities and Exchange Commission, including its Form 10-K for the fiscal year ended April 30, 2000.

RESULTS OF OPERATIONS

THREE MONTHS ENDED JANUARY 31, 2001 COMPARED TO THREE MONTHS ENDED

JANUARY 31, 2000

REVENUE. Revenue increased 70% to $28.1 million in the third quarter of fiscal 2001 from $16.6 million in the third quarter of fiscal 2000. Increased sales of the Company's products in the Semiconductor Systems Group ("SSG") segment and the Phase Shift ("PST") segment reflected an increase in demand for capital equipment in the semiconductor wafer and device industries. Wafer and device manufacturers have continued to focus on maximizing production at existing fabs, resulting in capital equipment purchases to increase capacity. Advanced industry requirements have also resulted in technology purchases of the Company's next generation of products. For the three months ended January 31, 2001, 88% of the Company's revenue was derived from the semiconductor industry compared to 71% for the year earlier period. The Company sells its semiconductor products to both wafer and device manufacturers. Historically, the Company's semiconductor revenue has been derived to a greater extent from wafer manufacturers compared to device manufacturers. For the three months ended January 31, 2001, 85% of semiconductor revenue was derived from wafer manufacturers while 15% was derived from device manufacturers compared to 75% and 25%, respectively, for the year earlier period. Any increase in short-term chip demand or increases in semiconductor market capital expenditures is expected to impact device manufacturers prior to wafer manufacturers as wafer manufacturers are further down on the overall semiconductor industry supply chain.

The data storage industry has been experiencing pricing pressure, consolidation and excess supply in many data storage market segments, which has resulted in reduced production and capital equipment purchases. Consequently, revenues in each of the metrology product lines that are marketed to the data storage industry by the Company's ADE Technologies ("ATI") segment have decreased slightly in the third quarter of fiscal 2001

compared with the year earlier period. Data storage industry revenue comprised 12% of total revenue for the three months ended January 31, 2001, compared to 29% for the year earlier period.

GROSS MARGIN. Gross margin increased to 50% in the third quarter of fiscal 2001 from 44% in the third quarter of fiscal 2000. The increase in gross margin was primarily due to the high volume of shipments of legacy products and increased absorption of overhead expenses due to significantly increased manufacturing activity and improved utilization of direct labor in the SSG segment. The Company expects slightly lower margins in the short term due to an expected increase in shipments of newer technologies, which, in their initial stages, carry a somewhat lower margin than the Company's legacy products.

RESEARCH AND DEVELOPMENT. Research and development expense increased $320,000 or 6% to $5.7 million in the third quarter of fiscal 2001 from $5.4 million in the third quarter of 2000 and decreased as a percentage of revenue to 20% from 33% in the third quarter of fiscal 2000. The increase in expense resulted primarily from continued investment by the SSG segment to develop its AFS and AWIS advanced wafer inspection systems to capitalize on the next wave of worldwide capital spending, which is expected to be focused on 300mm wafer production. The decrease in expense as a percentage of revenues resulted primarily from the increase in revenues in the third quarter of fiscal 2001 compared to the third quarter of fiscal 2000. The Company has continued development efforts to enhance its existing 200mm and advanced 200mm wafer systems as its semiconductor industry customers seek to improve their yields on 200mm wafers as well as efforts to develop and enhance bridge tools, which can be used with either 200mm or 300mm wafers. The Company also continues to develop new products for the data storage industry, including those that measure the magnetic properties of materials used in manufacturing disk drives. The Company is committed to continuing its investment in research and development to maintain its position as a technological leader, which may necessitate continued research and development spending at or above current levels.

MARKETING AND SALES. Marketing and sales expense increased $374,000 or 12% to $3.5 million in the third quarter of fiscal 2001 from $3.1 million in the third quarter of 2000 and decreased as a percentage of revenue to 12% from 19% in the third quarter of fiscal 2000. The increased expense resulted primarily from increased commissions expense on sales made through both internal and external sales representatives due to increased sales volume during the third quarter of fiscal 2001 compared to the third quarter of fiscal 2000. The mix of sales channels through which the Company's products are sold may have a significant impact on the Company's marketing and sales expense and the results in any period may not be indicative of marketing and sales expense for future periods. The decrease in marketing and sales expense as a percentage of revenue resulted from the increase in revenue during the third quarter of fiscal 2001 as discussed above.

GENERAL AND ADMINISTRATIVE. General and administrative expenses increased $239,000 or 8% to $3.2 million in the third quarter of fiscal 2001 from $3.0 million in the third quarter of fiscal 2000 and decreased as a percentage of revenue to 11% from 18% in the third quarter of 2000. Expenses increased primarily due to an increase in the reserve for bad debts.

INTEREST INCOME, NET. Net interest income was $281,000 in the third quarter of fiscal 2001 compared to net interest income of $318,000 in the third quarter of fiscal 2000. The decrease in interest income resulted primarily from lower interest returns due to reduced principal balances during the third quarter of fiscal 2001 compared to the year earlier period.

INCOME TAXES. There was a provision for income taxes of $47,000 in the third quarter of fiscal 2001 compared to no provision or benefit from income taxes in the third quarter of fiscal 2000. The provision for income taxes in the third quarter of fiscal 2001 consists primarily of estimated federal taxes recorded in relation to the federal alternative minimum tax. The Company continues to monitor the realizability of its current and long term deferred tax assets and provides for valuation allowances against these assets as appropriate.

EQUITY IN NET LOSS OF AFFILIATED COMPANIES. Equity in net loss of affiliated companies was $61,000 in the third quarter of fiscal 2001 compared to equity in net loss of affiliated companies of $676,000 in the third quarter of fiscal

2000. The decrease in the net loss from affiliated companies in the third quarter of fiscal 2001 compared to the year earlier period was due primarily to the absence of the losses incurred by the Company's former affiliate, Microspec, which was sold during the first quarter of fiscal 2001. The Company's Japanese affiliate sells primarily to the semiconductor industry and the current period loss reflects the timing of shipments and the recognition of revenue by the affiliate.

NINE MONTHS ENDED JANUARY 31, 2001 COMPARED TO NINE MONTHS ENDED JANUARY 31, 2000

REVENUE. Revenue increased 74% to $74.0 million in the nine months ended January 31, 2001 from $42.6 million in the year earlier period. Increased sales of the Company's products in all segments were primarily due to an increase in demand for capital equipment in the semiconductor wafer and device industries as well as the data storage industry. Wafer and device manufacturers have continued to focus on maximizing production at existing fabs, resulting in capital equipment purchases to increase capacity. Advanced industry requirements have also resulted in technology purchases of the Company's next generation of products. For the nine months ended January 31, 2001, 87% of the Company's revenue was derived from sales to the semiconductor industry compared to 75% for the year earlier period. The Company sells its semiconductor products to both wafer and device manufacturers. Historically, the Company's semiconductor revenue has been derived to a greater extent from wafer manufacturers compared to device manufacturers. For the nine months ended January 31, 2001, 82% of semiconductor revenue was derived from wafer manufacturers while 18% was derived from device manufacturers compared to 82% and 18%, respectively, for the year earlier period. Any increase in short-term chip demand or increases in semiconductor market capital expenditures is expected to impact device manufacturers prior to wafer manufacturers as wafer manufacturers are further down on the overall semiconductor industry supply chain.

The data storage industry has been experiencing pricing pressure, consolidation and excess supply in many data storage market segments, which has resulted in a reduction of production and capital equipment purchases. However, for the nine months ended January 31, 2001, due to a slight increase in demand, the Company's ATI segment has experienced increased revenue in its metrology product lines that are marketed to the data storage industry compared to the year earlier period. Data storage industry revenue comprised 13% of total revenue for the nine months ended January 31, 2001, compared to 25% for the year earlier period.

GROSS MARGIN. Gross margin increased to 50% for the nine months ended January 31, 2001 from 40% in the year earlier period. The increase in gross margin was primarily due to the high volume of shipments of legacy products and increased absorption of overhead expenses due to significantly increased manufacturing activity and improved utilization of direct labor in the SSG segment. The Company expects slightly lower margins in the short term due to an expected increase in shipments of newer technologies, which, in their initial stages, carry a somewhat lower margin than the Company's legacy products.

RESEARCH AND DEVELOPMENT. Research and development expense increased $524,000 or 3% to $16.1 million in the nine months ended January 31, 2001 from $15.5 million in the year earlier period and decreased as a percentage of revenue to 22% from 37% in the third quarter of fiscal 2000. The increase in expense resulted primarily from continued investment by the SSG segment to develop its AFS and AWIS advanced wafer inspection systems to capitalize on the next wave of worldwide capital spending, which is expected to be focused on 300mm wafer production. The decrease in expense as a percentage of revenues resulted from the significant increase in revenue as discussed above. The Company has continued development efforts to enhance its existing 200mm and advanced 200mm wafer systems as its semiconductor industry customers seek to improve their yields on 200mm wafers as well as efforts to develop and enhance bridge tools, which can be used with either 200mm or 300mm wafers. The Company also continues to develop new products for the data storage industry, including those that measure the magnetic properties of materials used in manufacturing disk drives. The Company is committed to continuing its investment in research and development to maintain its position as a technological leader, which may necessitate continued research and development spending at or above current levels.

MARKETING AND SALES. Marketing and sales expense increased $2.8 million or 31% to $12.1 million in the nine months ended January 31, 2001 from $9.2 million during the year earlier period and decreased as a percentage of revenue to 16% from 22% in the year earlier period. The increased expense resulted primarily from increased commissions expense on sales made through both internal and external sales representatives due to increased sales volume, particularly in Asia, during the first nine months of fiscal 2001 compared to the first nine months of fiscal 2000. The mix of sales channels through which the Company's products are sold may have a significant impact on the Company's marketing and sales expense and the results in any period may not be indicative of marketing and sales expense for future periods. The decrease in marketing and sales expense as a percentage of revenue resulted from the increase in revenue during the first nine months of fiscal 2001 as discussed above.

GENERAL AND ADMINISTRATIVE. General and administrative expenses decreased $1.3 million or 14% to $8.1 million for the nine months ended January 31, 2001 from $9.4 million for the year earlier period and decreased as a percentage of revenue to 11% from 22% in the year earlier period. Expenses decreased primarily due to cost savings achieved as a result of the consolidation of the Charlotte, North Carolina operations into the Westwood, Massachusetts facility, which was completed in the latter half of fiscal 2000. The decrease in general and administrative expenses as a percent of revenue resulted from both the increase in revenue during the first nine months of fiscal 2001 as discussed above as well as the significant decrease in expenses during the first nine months of fiscal 2001 compared to the year earlier period.

INTEREST INCOME, NET. Net interest income was $947,000 in the nine months ended January 31, 2001 compared to net interest income of $841,000 in the year earlier period. The increase in net interest income resulted primarily from decreased costs associated with maintaining the Company's stand-by letters of credit. The standby letters of credit are required by the Company's obligations under separate $4.5 million and $5.5 million Industrial Development Bonds ("IDB") issued in June 1999 and June 1996, respectively, through various state and local bonding authorities.

INCOME TAXES. There was a provision for income taxes of $111,000 in the nine months ended January 31, 2001 compared to no provision or benefit from income taxes in the year earlier period. The provision for income taxes in the first nine months of fiscal 2001 consists primarily of estimated federal taxes recorded in relation to the federal alternative minimum tax. The Company continues to monitor the realizability of its current and long term deferred tax assets and provides for valuation allowances against these assets as appropriate.

EQUITY IN NET LOSS OF AFFILIATED COMPANIES. Equity in net loss of affiliated companies was $479,000 in the nine months ended January 31, 2001 compared to equity in net loss of affiliated companies of $1.4 million in the year earlier period. The decrease in the net loss from affiliated companies is due to the absence of losses incurred by the Company's former affiliate, Microspec, which was sold during the first quarter of fiscal 2001. The losses from Microspec have been partially offset by the net earnings of the Company's affiliate in Japan during the first nine months of fiscal 2001.

LIQUIDITY AND CAPITAL RESOURCES

At January 31, 2001, the Company had $30.0 million in cash and cash equivalents and $70.6 million in working capital. In addition, the Company had $3.7 million in restricted cash used as security for a tax-exempt Industrial Development Bond issued through the Massachusetts Industrial Finance Agency in December 1997. Under the terms of the bond agreement, the Company may substitute a letter of credit in an amount equal to approximately 105% of the outstanding principal balance as collateral for the Company's obligations under the IDB, assuming the Company has the ability to borrow under a credit facility. Such actions would allow the restricted cash balance to be used for general corporate purposes.

Cash used in operating activities for the nine months ended January 31, 2001 was $2.7 million. This amount resulted from net income of $954,000 adjusted for non-cash charges of $5.0 million and a $8.6 million net increase in working capital accounts. Non-cash items consisted primarily of $4.5 million of depreciation and amortization and $543,000 of the Company's share of the net loss of affiliated companies.

Cash used in investing activities was $2.5 million, and consisted of primarily of $2.1 million for purchases of fixed assets and an $449,000 in advances to an affiliated company.

Cash provided by financing activities was $162,000, which consisted of $602,000 of aggregate proceeds from the issuance of common stock from the exercise of stock options and stock purchased through the employee stock purchase plan, partially offset by $440,000 in repayments of long-term debt.

The Company expects to meet its near-term working capital needs and capital expenditures primarily through cash generated from operations and its available cash and cash equivalents.

OTHER RISK FACTORS

Capital expenditures by semiconductor wafer and device manufacturers historically have been cyclical as they in turn depend upon the current and anticipated demand for integrated circuits. While the semiconductor industry appears to be embarking on its next wave of capital spending, which appears to be focused on 300mm wafer production, it is not clear how long semiconductor wafer manufacturers, who account for approximately 71% of the Company's revenue, will be in a position to sustain or increase their purchases of capital equipment. The data storage industry has been in a period of oversupply and excess manufacturing capacity and this has also had an adverse impact on the Company. At January 31, 2001, the Company's backlog was $54.5 million. The Company remains uncertain about how long sustained growth in revenue will last. The Company continues to evaluate its cost structure relative to expected revenue and will continue to implement aggressive cost containment measures where necessary.

Furthermore, the Company's success is dependent upon supplying technologically superior products to the marketplace at appropriate times to satisfy customer needs. Product development requires substantial investment and is subject to technological risks. Delays or difficulties in product development or market acceptance of newly developed products could adversely affect the future performance of the Company.

NEW ACCOUNTING PRONOUNCEMENTS

In December 1999, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 101 (SAB 101), "Revenue Recognition in Financial Statements." SAB 101 summarizes the SEC's views in applying generally accepted accounting principles to selected revenue recognition issues. The Company is required to adopt SAB 101 in the fourth quarter of fiscal 2001. Management has reviewed SAB 101 and has determined the nature of the impact that SAB 101 will have on the Company's financial statements. For some of the Company's sales transactions, a portion, usually 10%, of the fee is not due until installation occurs and the customer accepts the product. SAB 101 will require the deferral of that portion of the fee not due until installation is complete and customer acceptance has occurred. In addition, the Company's financial statements will also reflect a change in the classification of the revenue associated with training and the installation of the Company's products. The Company is in the process of quantifying the cumulative effect of the change in accounting principle that will be recorded in the Company's financial statements for the fiscal year ending April 30, 2001.

In June 1998, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities", which required adoption in periods beginning after June 15, 1999. SFAS No. 133 was subsequently amended by SFAS No. 137, "Accounting for Derivative Instruments and Hedging Activities-Deferral of the Effective Date of FASB Statement No. 133" and will now be effective for fiscal years beginning after June 15, 2000. The Company does not expect SFAS No. 133 to have a material effect on its financial condition or results of operations.

PART II.

OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS:

On October 12, 2000, the Company filed a patent infringement lawsuit against KLA-Tencor (KLA), a competitor, in the U.S. District Court in Delaware. The Company seeks damages and a permanent injunction against further infringement upon United States Patent Number 6,118,525, entitled "Wafer Inspection System for Distinguishing Pits and Particles." On November 22, 2000, KLA filed a counterclaim in the United States District Court in Delaware that ADE has infringed upon three patents owned by KLA. KLA is seeking damages for patent infringement and a permanent injunction against any future infringement activity. In addition, KLA has asked the District Court for a declaration that United States Patent Number 6,118,525, owned by ADE, is invalid and not infringed upon by KLA. Since these matters are at a preliminary stage, the Company cannot predict the outcome or the amount of gain or loss, if any.

ITEM 2. CHANGES IN SECURITIES:

None

ITEM 3. DEFAULTS UPON SENIOR SECURITIES:

None

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

None

ITEM 5. OTHER INFORMATION:

None

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K:

a. See Exhibit Index, Page 18

b. Reports on Form 8-K

None

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.

ADE CORPORATION

Date: March 14, 2001 /s/ Brian C. James

Brian C. James
Vice President and Chief Financial Officer

Date: March 14, 2001

/s/ Robert C. Abbe

Robert C. Abbe
President and Chief Executive Officer

EXHIBIT INDEX

Exhibit No.	Description
2.1	Agreement and Plan of Merger dated as of February 27, 1997 by and between ADE Corporation, ADE Technologies, Inc., Digital Measurement Systems, Inc., Dennis E. Speliotis, Elias Speliotis, Evanthia Speliotis, Ismene Speliotis, Advanced Development Corporation, David C. Bono and Alan Sliski (filed as Exhibit 10.18 to the Company's Form 10-K for the fiscal year ended April 30, 1997 and incorporated herein by reference).
2.2	Agreement and Plan of Merger dated as of May 31, 1998 by and

	among ADE Corporation, Theta Acquisition Corp., Phase Shift Technology, Inc., Chris Koliopoulos and David Basila (filed as Exhibit 2 to the Company's Form 8-K dated June 25, 1998 and incorporated herein by reference).
2.3	Purchase and Sale Agreement dated as of February 28, 1997 by and between ADE Corporation and Dennis E. Speliotis, individually and as Trustee of Thouria Investment Trust under a Declaration of Trust dated August 18, 1992, Elias Speliotis, Evanthia Speliotis and Ismene Speliotis (filed as Exhibit 10.20 to the Company's Form 10-K for the fiscal year ended April 30, 1997 and incorporated herein by reference).
3.1	Restated Articles of Organization (filed as Exhibit 3.1 to the Company's Registration Statement on Form S-1 (33-96408) or amendments thereto and incorporated herein by reference).
3.2	By-laws (filed as Exhibit 3.2 to the Company's Registration Statement on Form S-1 (33-96408) or amendments thereto and incorporated herein by reference).
4.1	Registration Rights Agreement dated as of February 28, 1997 by and between ADE Corporation and Dennis E. Speliotis, individually and as Trustee of Thouria Investment Trust under a Declaration of Trust dated August 18, 1992 recorded in the Middlesex South District Registry of Deeds at Book 22305, Page 375 (filed as Exhibit 10.21 to the Company's Form 10-K for the fiscal year ended April 30, 1997 and incorporated herein by reference).
4.2	Registration Rights Agreement dated as of February 27, 1997, by and among ADE Corporation and Advanced Development Corporation, David C. Bono and Alan Sliski (filed as Exhibit 10.19 to the Company's Form 10-K for the fiscal year ended April 30, 1997 and incorporated herein by reference).
4.3	Registration Rights Agreement dated as of May 31, 1998 by and among ADE Corporation, Chris Koliopoulos and David Basila (filed as Exhibit 4.6 to the Company's Form 8-K dated June 25, 1998 and incorporated herein by reference).
10.1	Form of Employee Confidentiality Agreement (filed as Exhibit 10.1 to the Company's Registration Statement on Form S-1 (333-96408) or amendments thereto and incorporated herein by reference).
10.2	2000 Stock Option Plan (filed as Exhibit A to the Company's Proxy Statement with respect to its Annual Meeting of Shareholders for the fiscal year ended April 30, 2000 and incorporated herein by reference).*
10.3	1997 Stock Option Plan (filed as Exhibit 4.3 to the Company's Registration Statement on Form S-8(333-46505) or amendments thereto and incorporated herein by reference).*
10.4	Amendment to 1997 Stock Option Plan dated April 7, 1999 (filed as Exhibit 10.3 to the Company's Form 10-K for the fiscal year ended April 30, 1999 and incorporated herein by reference).*

10.5	1995 Stock Option Plan (filed as Exhibit 10.4 to the Company's Registration Statement on Form S-1 (33-96408) or amendments thereto and incorporated herein by reference).*
10.6	1992 Stock Option Plan (filed as Exhibit 10.5 to the Company's Registration Statement on Form S-1 (33-96408) or amendments thereto and incorporated herein by reference).*
10.7	Amendment to 1992 Stock Option Plan dated April 7, 1999 (filed as Exhibit 10.6 to the Company's Form 10-K for the fiscal year ended April 30, 1999 and incorporated herein by reference).*
10.8	1982 Stock Option Plan (filed as Exhibit 4.5 to the Company's Registration Statement on Form S-8 (333-2280) and incorporated herein by reference).*
10.9	Employee Stock Purchase Plan (as amended) (filed as Exhibit 10.6 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).*
10.11	Purchase and Sale Agreement for 80 Wilson Way, Westwood, Massachusetts, dated January 11, 1996, between Met Path New England, Inc., and the Company, with Schedules (filed as Exhibit 10.12 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.12	Loan Agreement dated as of June 7, 1996, among GE Capital Public Finance, Inc., Massachusetts Industrial Finance Agency and the Company (filed as Exhibit 10.9 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.13	Certificate as to Nonarbitrage and Tax Compliance, dated as of June 7, 1996, from the Company to Massachusetts Industrial Finance Agency (filed as Exhibit 10.10 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.14	Letter of Credit Agreement, dated June 7, 1996, between Citizens Bank of Massachusetts and the Company (filed as Exhibit 10.11 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.15	Mortgage, Security Agreement, and Assignment, dated June 7, 1996, from the Company to Citizens Bank of Massachusetts (filed as Exhibit 10.13 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.16	Pledge Agreement, dated June 7, 1996, from the Company to Citizens Bank of Massachusetts (filed as Exhibit 10.14 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.17	Oil and Hazardous Materials Indemnification Agreement, dated June 7, 1996, between the Company and Citizens Bank of Massachusetts (filed as Exhibit 10.15 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.18	Indemnification Agreement, dated as of February 28, 1996, among MetPath of New England, Inc., Corning Life Sciences, Inc. and

	the Company (filed as Exhibit 10.16 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.19	Letter Agreement regarding collateral assignment of Indemnification from the Company to Citizens Bank of Massachusetts, with attachment, (filed as Exhibit 10.17 to the Company's Form 10-K for the fiscal year ended April 30, 1996 and incorporated herein by reference).
10.21	Noncompetition Agreement dated as of May 31, 1998 by and between ADE Corporation and Chris

	Koliopoulos (filed as Exhibit 10.21 to the Company's Form 10-K for the fiscal year ended April 30, 1998, and incorporated herein by reference).
10.22	Noncompetition Agreement dated as of May 31, 1998 by and between ADE Corporation and David Basila (filed as Exhibit 10.22 to the Company's Form 10-K for the fiscal year ended April 30, 1998, and incorporated herein by reference).
10.23	Employment Agreement dated as of May 31, 1998 by and between Phase Shift Technology, Inc. and Chris Koliopoulos (filed as Exhibit 10.23 to the Company's Form 10-K for the fiscal year ended April 30, 1998, and incorporated herein by reference).
10.24	Employment Agreement dated as of May 31, 1998 by and between Phase Shift Technology, Inc. and David Basila (filed as Exhibit 10.24 to the Company's Form 10-K for the fiscal year ended April 30, 1998, and incorporated herein by reference).
21.1	Subsidiaries of the Company (filed as Exhibit 21.1 to the Company's Form 10-Q for the quarter ended October 31, 2000 and incorporated herein by reference).
23.1	Consent of PricewaterhouseCoopers LLP (filed as Exhibit 23.1 to the Company's Form 10-K for the fiscal year ended April 30, 1999 and incorporated herein by reference).

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* Compensatory plan or agreement applicable to management and employees.