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 the quarter ended March 31, 1998 — Commission File Number 0-23599

MERCURY COMPUTER SYSTEMS, INC.
(Exact name of registrant as specified in its charter)

MASSACHUSETTS	04-2741391
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
199 RIVERNECK ROAD CHELMSFORD, MA	01824
(Address of principal executive offices)	(Zip Code)

978-256-1300
(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

Number of shares outstanding of the issuer's classes of common stock as of April 30, 1998:

Class	Number of Shares Outstanding
Common Stock, par value $.01 per share	9,934,506

Total number of pages 14

MERCURY COMPUTER SYSTEMS, INC.
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PART I. FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

MERCURY COMPUTER SYSTEMS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	MARCH 31, 1998 (UNAUDITED)	JUNE 30, 1997
ASSETS		
Current assets:		
Cash and cash equivalents	$17,188	$15,193
Short term investments	4,616	--
Trade accounts receivable, net of allowances of $218 and $119 at March 31, 1998 and June 30, 1997, respectively	17,371	12,816
Contracts in progress	---	1,096
Inventory	9,840	8,314
Deferred income taxes, net	1,152	926
Prepaids and other current assets	1,278	728
Total current assets	51,445	39,073
Long term investments	11,242	---
Property and equipment, net	7,058	4,984
Capitalized software costs, net	184	483
Deferred income taxes, net	144	39
Other assets	320	269
Total assets	$70,393	$44,848
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,871	$ 2,801
Accrued expenses	3,407	1,903
Accrued compensation	3,377	2,316
Billings in excess of revenues and customer advances	1,517	2,877
Income taxes payable	1,005	1,629
Total current liabilities	12,177	11,526
Commitments and contingencies (Note D)		
Stockholders' equity:		
Preferred stock, $.01 par value; 1,000,000 shares and 2,000,000 shares authorized, none and 1,000,000 shares designated as Series A convertible Preferred Stock, none and 852,264 shares Issued and outstanding at March 31, 1998 and June 30, 1997, respectively, (liquidation preference of none and $1,200,000)	--	1,200
Common stock, $.01 par value: 25,000,000 shares authorized; 9,921,046 and 5,202,231 shares issued and outstanding at March 31, 1998 and June 30, 1997, respectively	99	52
Additional paid-in capital	25,797	5,703
Retained earnings	32,771	26,752
Cumulative translation adjustment	(126)	(60)
Subscriptions and related parties notes receivable	(325)	(325)
Total stockholders' equity	58,216	33,322
Total liabilities and stockholders' equity	$70,393	$44,848

The accompanying notes are an integral part of the consolidated financial statements

MERCURY COMPUTER SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(Unaudited)

	THREE MONTHS ENDED MARCH 31		NINE MONTHS ENDED MARCH 31,	
	1998	1997	1998	1997
Net revenue	$22,364	$17,154	$62,027	$45,298
Cost of revenue	7,832	5,356	21,776	15,022
Gross profit	14,532	11,798	40,251	30,276
Operating expenses:				
Selling, general and administrative	7,104	5,737	20,595	16,040
Research and development	3,749	3,759	10,535	9,584
Total operating expenses	10,853	9,496	31,130	25,624
Income from operations	3,679	2,302	9,121	4,652
Interest income, net	263	148	713	426
Other income (expenses), net	(7)	(125)	(50)	(146)
Income before income taxes	3,935	2,325	9,784	4,932
Provision for income taxes	1,495	904	3,765	1,917
Net income	$ 2,440	$ 1,421	$ 6,019	$ 3,015
Net income per share:				
Basic	$ 0.29	$ 0.28	$ 0.95	$ 0.59
Diluted	$ 0.24	$ 0.18	$ 0.69	$ 0.38
Weighted average shares outstanding:				
Basic	8,476	5,151	6,333	5,123
Diluted	9,991	7,874	8,778	7,893

The accompanying notes are an integral part of the consolidated financial statements

MERCURY COMPUTER SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	NINE MONTHS ENDED MARCH 31, 1998	NINE MONTHS ENDED MARCH 31, 1997
Cash flows provided from operating activities:		
Net income	$ 6,019	$ 3,395
Adjustments to reconcile net income to net cash Provided by (used in) operating activities:		
Depreciation and amortization	2,438	2,446
Deferred income taxes	(332)	-
Changes in assets and liabilities:		
Trade accounts receivable	(4,686)	(2,826)
Contracts in progress	1,096	-
Inventory	(1,671)	(840)
Prepaid expenses and other current assets	(586)	(144)
Other assets	(31)	(373)
Accounts payable	72	366
Accrued expenses and compensation	2,580	962
Billings in excess of revenues and customer advances	(1,349)	72
Income taxes payable	(610)	934
Net cash provided by operating activities	2,940	3,992
Cash flows from investing activities:		
Purchase of marketable securities	(15,858)	-
Purchases of property and equipment	(4,172)	(2,152)
Capitalized software development costs	(65)	(550)
Net cash used in investing activities	(20,095)	(2,702)
Cash flows from financing activities:		
Net proceeds from issuance of common stock in connection with initial public offering	18,578	-
Proceeds from exercise of stock options and warrants	363	210
Net cash provided by financing activities	18,941	210
Effect of exchange rate change on cash and cash equivalents	209	(73)
Net change in cash and cash equivalents	1,995	1,427
Cash and cash equivalents at beginning of period	15,193	9,704
Cash and cash equivalents at end of period	$ 17,188	$11,131
Cash paid during the year for:		
Interest	$ -	$ -
Income taxes	4,720	995
Supplemental disclosure of non-cash financing transactions:		
Conversion of preferred stock into common stock	$ 1,200	$ -

The accompanying notes are an integral part of the consolidated financial statements

MERCURY COMPUTER SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A. BASIS OF PRESENTATION

These consolidated financial statements should be read in conjunction with the Company's financial statements and footnotes included in the Company's Form S-1 registration statement (File No. 333-41139) which was declared effective by the Securities and Exchange Commission on January 29, 1998. In the opinion of management, the accompanying unaudited financial statements include all adjustments, consisting of normal recurring adjustments, necessary to present fairly the consolidated financial position, results of operations and cash flows of Mercury Computer Systems, Inc. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been omitted pursuant to the Securities and Exchange Commission rules and regulations.

B. INVENTORY

	MARCH 31, 1998 (IN THOUSANDS)	JUNE 30, 1997 (IN THOUSANDS)
Raw materials	$4,447	$2,925
Work in process	3,448	3,084
Finished goods	1,945	2,305
Total	$9,840	$8,314

C. NET INCOME PER COMMON SHARE

The Company has adopted Statement of Financial Accounting Standard ("SFAS") No. 128, "Earnings Per Share," which specifies the computation, presentation and disclosure requirements for net income per common share. Basic net income per common share is computed based on the weighted average number of common shares outstanding during the period. Diluted net income per common share gives effect to all diluted potential common shares outstanding during the period. Under SFAS No. 128, the computation of diluted earnings per share does not assume the issuance of common shares that have an antidilutive effect on net income per common share.

Prior to the adoption of this statement, all common and common equivalent shares issued during the twelve month period prior to the filing of the initial public offering ("cheap stock") were included in the calculation of basic and diluted earnings per share as if they were outstanding for all periods presented. Adoption of this statement, and the related guidance set out in Securities and Exchange Commission Staff Accounting Bulletin No. 98, has eliminated the inclusion of cheap stock from the calculation of basic and diluted earnings per share prior to issuance of the securities. Accordingly, basic and diluted earnings per share for the three month and nine month periods ended March 31, 1997 have been restated from $.17 and $.36, respectively.

	THREE MONTHS ENDED MARCH 31,		NINE MONTHS ENDED MARCH 31,	
	1998 (IN THOUSANDS)	1997 (IN THOUSANDS)	1998 (IN THOUSANDS)	1997 (IN THOUSANDS)
Net income	$2,440	$1,421	$6,019	$3,015
Shares used in computation:				
Weighted average common shares outstanding used in computation of basic net income per share	8,476	5,151	6,333	5,123
Dilutive effect of convertible preferred stock	852	2,557	1,989	2,557
Dilutive effect of stock options	663	166	456	213
Shares used in computation of diluted net income per share	9,991	7,874	8,778	7,893
Basic net income per share	$ 0.29	$ 0.28	$ 0.95	$ 0.59
Dilutive net income per share	$ 0.24	$ 0.18	$ 0.69	$ 0.38

Options to purchase 0 and 34,600 shares of common stock were outstanding during the three months ended March 31, 1998 and March 31, 1997, respectively, but were not included in the calculation of diluted net income per common share because the option price was greater than the average market price of the common shares during the period.

Options to purchase 5,980 and 34,970 shares of common stock were outstanding during the nine months ended March 31, 1998 and

March 31, 1997, respectively, but were not included in the calculation of diluted net income per common share because the option price was greater than the average market price of the common shares during the period.

D. INTERNAL REVENUE SERVICE AUDIT

On December 12, 1997, the Internal Revenue Service ("IRS") concluded an audit of the Company's tax returns for the years ended June 30, 1992 through June 30, 1995, and issued a formal report reflecting proposed adjustments with respect to the years under audit. The proposed IRS adjustments primarily relate to the disallowance of research and development tax credits claimed by the Company, as well as treatment of certain other items. The Company is in the process of appealing the proposed adjustments to the Appeals Division of the IRS. While the Company does not believe that the final outcome of the IRS audit will have a material adverse effect on the Company's financial condition or results of operations, no assurance can be given as to the final outcome of the audit, the amount of any final adjustments or the potential impact of such adjustments on the Company's financial condition or results of operations.

E. INITIAL PUBLIC OFFERING

On January 29, 1998, 3,500,000 shares of the Company's common stock were sold in the Company's initial public offering ("IPO"), of which 2,000,000 shares were sold by the Company and 1,500,000 shares were sold by certain stockholders of the Company. The Company received $18,578,000 in net proceeds from the IPO after deducting underwriting discounts and commissions of $1,470,000 and approximately $952,000 in offering expenses.

F. NEW ACCOUNTING PRONOUNCEMENTS

In June 1997, the Financial Accounting Standards Board (the "FASB") issued SFAS No. 130, "Reporting Comprehensive Income." This statement requires that changes in comprehensive income be shown in a financial statement that is displayed with the same prominence as other financial statements. The statement will be effective for annual periods beginning after December 15, 1997 and the Company will adopt its provisions in fiscal 1999. Reclassification for earlier periods is required for comparative purposes. The Company is currently evaluating the impact this statement will have on its financial statements; however, the Company does not expect the statement to have a material impact on its financial position or results of operations because the statement requires only additional disclosure.

In June of 1997, the FASB issued SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information." This statement supercedes SFAS No. 14, "Financial Reporting for Segments of a Business Enterprise." This statement includes requirements to report selected segment information quarterly and entity-wide disclosures about products and services, major customers, and the material countries in which the entity holds assets and reports revenues. The statement will be effective for annual periods beginning after December 15, 1997 and the Company will adopt its provisions in fiscal 1999. Reclassification for earlier periods is required, unless impracticable, for comparative purposes. The Company is currently evaluating the impact this statement will have on its financial statements; however, the Company does not expect the statement to have a material impact on its financial position or results of operations because the statement requires only additional disclosure.

In October 1997, the American Institute of Certified Public Accountants ("AICPA") issued the statement of position ("SOP") 97-2 "Software Revenue Recognition," which will supersede SOP 91-1, SOP 97-2 has not changed the basic rules of revenue recognition but does provide more guidance particularly with respect to multiple deliverables and "when and if available" products. SOP 97-2 is effective for transactions entered into for fiscal periods beginning after December 15, 1997. The Company will adopt SOP 97-2 in fiscal 1999 and has not yet determined its impact.

In February 1998, the FASB issued SFAS No. 132, "Employees' Disclosures about Pensions and Other Postretirement Benefits." The new requirements require increased disclosures for public entities. SFAS No. 132 only effects disclosure issues and does not change any existing measurement or recognition provisions previously required. The statement is effective for fiscal years beginning after December 15, 1997. Reclassification for earlier periods is required for comparative purposes. Management does not expect the statement to have a material impact on its financial position or results of operations.

In March 1998, the American Institute of Certified Public Accountants issues SOP 98-1, "Internal Use Software," which provides guidance on the accounting for the costs of software developed or obtained for internal use. SOP 98-1 is effective for fiscal years beginning after December 15, 1998. Management does not expect the statement to have a material impact on its financial position or results of operations.

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

CERTAIN FACTORS THAT MAY AFFECT FUTURE RESULTS

From time to time, information provided by the Company, statements made by its employees or information included in its filings with the Securities and Exchange Commission may contain statements which are not historical facts but which are "forward-looking statements" which involve risks and uncertainties. The words "may," "will," "expect," "anticipate," "continue", "estimate", "project," "intend" and similar expressions are intended to identify forward-looking statements regarding events, conditions and financial trends that may affect the Company's future plans of operations, business strategy, result of operations and financial position. These statements are based on the Company's current expectations and estimates as to prospective events and circumstances about which there can be no firm assurance given. Further, any forward-looking statement speaks only as of the date on which such statement is made, and the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made. As it is not possible to predict every new factor that may emerge, forward-looking statements should not be relied upon as a prediction of actual future financial condition or results. Important factors that may cause the Company's actual results to differ from forward-looking statements are referenced in the Company's registration statement on Form S-1 (File No. 333-41139) and in the Company's prospectus dated January 29, 1998 included as part of such registration statement including the section thereof entitled "Risk Factors".

RESULTS OF OPERATIONS

REVENUES

The Company's total revenues increased 30% from $17.2 million during the three months ended March 31, 1997 to $22.4 million during the three months ended March 31, 1998. The Company's total revenues increased 37% from $45.3 million during the nine month period ended March 31, 1997 to $62.0 million during the nine month period ended March 31, 1998. These increases in revenues reflect volume increases in all lines of businesses.

Defense electronics revenues increased 25% from $14.1 million or 82% of total revenues during the three months ended March 31, 1997 to $17.6 million or 79% of total revenues during the three months ended March 31, 1998. Defense electronics revenues increased 36% from $35.7 million or 79% of total revenues during the nine months ended March 31, 1997 to $48.4 million or 78% of total revenues during the nine months ended March 31, 1998. The increase in revenues was due primarily to increased unit demand for defense electronics products.

Medical imaging revenues increased 24% from $2.1 million or 12% of total revenues during the three months ended March 31, 1997 to $2.6 million or 12% of total revenues during the three months ended March 31, 1998. Medical imaging revenues increased 40% from $5.5 million or 12% of total revenues during the nine months ended March 31, 1997 to $7.7 million or 12% of total revenues during the nine months ended March 31, 1998. The increase in revenues was due both to increased unit demand for medical imaging products and increased average selling prices due to demand for higher computing power.

Other revenues increased 120% from $1.0 million or 6% of total revenues during the three months ended March 31, 1997 to $2.2 million or 10% of total revenues during the three months ended March 31, 1998. Other revenues increased 44% from $4.1 million or 9% of total revenues during the nine months ended March 31, 1997 to $5.9 million or 10% of total revenues during the nine months ended March 31, 1998. The increase in revenues was primarily due to increased unit demand by new and existing commercial and shared storage customers.

COST OF REVENUES

Cost of revenues increased 46% from $5.4 million during the three months ended March 31, 1997 to $7.8 million during the three months ended March 31, 1998. Cost of revenues increased 45% from $15.0 million during the nine months ended March 31, 1997 to $21.8 million during the nine months ended March 31, 1998. As a percent of total revenues, cost of revenues increased from 31% for the three months ended March 31, 1997 to 35% for the three months ended March 31, 1998. Cost of revenues as a percent of total revenues increased from 33% for the nine months ended March 31, 1997 to 35% for the nine months ended March 31, 1998. This increase in cost of revenues as a percentage of total revenues was due primarily to the shift in product mix to lower margin products, in particular a domestic defense electronics development contract which yielded lower gross margins than gross margins historically achieved by the Company as a whole.

SELLING, GENERAL AND ADMINISTRATIVE

Selling, general, and administrative expenses increased 24% from $5.7 million during the three months ended March 31, 1997 to $7.1 million during the three months ended March 31, 1998. Selling, general, and administrative expenses increased 28% from $16.0 million during the nine months ended March 31, 1997 to $20.6 million during the nine months ended March 31, 1998. These increases reflect the hiring of additional sales and administrative personnel, increased commissions and costs related to the expansion of European operations.

RESEARCH AND DEVELOPMENT

Research and development expenses remained constant at approximately $3.7 million for the three months ended March 31, 1998 and 1997. Research and development expenses increased 10% from $9.6 million during the nine months ended March 31, 1997 to $10.5 million during the nine months ended March 31, 1998. The increase was due primarily to the hiring of additional software and hardware engineers to develop and enhance the features and functionality of the Company's products.

INCOME FROM OPERATIONS

Income from operations increased 60% from $2.3 million during the three months ended March 31, 1997 to $3.7 million during the three months ended March 31, 1998. Included in income from operations during the three months ended March 31, 1998 were $300,000 in hardware and software revenues and $1,096,000 in direct expenses related to the shared storage business. Included in income from operations during the three months ended March 31, 1997 were no revenues and $1.0 million in direct expenses related to the shared storage business. The direct expenses include expenses from marketing and engineering activities, primarily related to compensation, trade shows, and prototype development and direct costs related to the sale of the product, including certain hardware costs.

Income from operations increased 96% from $4.7 million during the nine months ended March 31, 1997 to $9.1 million during the nine months ended March 31, 1998. Included in income from operations during the nine months ended March 31, 1998 were $385,000 in hardware and software revenues and $2.6 million in direct expenses related to the shared storage business. Included in income from operations during the nine months ended March 31, 1997 were $2.1 million in hardware and software revenues and $3.1 million in direct expenses related to the shared storage business.

INTEREST INCOME, NET

Interest income, net increased 78% from $148,000 during the three months ended March 31, 1997 to $263,000 during the three months ended March 31, 1998. Interest income, net increased 67% from $426,000 during the nine months ended March 31, 1997 to $713,000 during the nine months ended March 31, 1998. This increase reflects an increase in the Company's average cash balances primarily as a result of cash received from the Company's initial public offering. Offsetting the effect of higher average cash balances were lower yields achieved on the Company's cash. These lower yields were the result of a shift during the three month period ended March 31, 1998, in investment strategy from taxable money market instruments to non-taxable securities.

PROVISION FOR INCOME TAX

The Company recorded a tax provision of $1.5 million during the three months ended March 31, 1998 reflecting a 38% tax rate as compared to a $904,000 tax provision during the three months ended March 31, 1997, reflecting a 39% tax rate. During the nine months ended March 31, 1998, the Company recorded a tax provision of $3.8 million, reflecting a 38% tax rate as compared to a $1.9 million tax provision recorded during the nine months ended March 31, 1997, reflecting a 39% tax rate.

LIQUIDITY AND CAPITAL RESOURCES

As of March 31, 1998, the Company had cash and marketable investments of approximately $33.0 million. During the nine months ended March 31, 1998, the Company generated approximately $2.9 million in cash from operations compared to $4.0 million generated during the nine months ended March 31, 1997. The decrease in cash generated from operations was due to a number of factors, including the investment of Company resources in a defense electronics development project and increases in inventory which were partially offset by the Company's increased profitability. Days sales outstanding increased from 67 days at March 31, 1997 to 70 days at March 31, 1998. Days sales outstanding increased primarily due to one large account not settling until immediately after March 31, 1998.

From June 30, 1997 to March 31, 1998, inventory increased due to anticipation of new product introductions and an increase in customer orders.

The Company has a line of credit agreement with a commercial bank on which the Company can borrow up to $6.0 million at an interest rate equal to the prime rate or, at the election of the Company, two and one quarter percentage points above the London InterBank Offered Rate. As of March 31, 1998, there was no outstanding borrowing on this line of credit.

During the nine months ended March 31, 1998, the Company's investing activities used cash of $20.1 million which consisted of the purchase of marketable securities amounting to $15.9 million, $3.0 million for computers, furniture and equipment, $1.2 million for the acquisition of a parcel of land and related expenditures for development of additional office space, and $65,000 for capitalized software. During the nine months ended March 31, 1997, the Company's investing activities used cash of $2.7 million, consisting of $2.2 million for computers, furniture and equipment and $550,000 for capitalized software.

During the nine months ended March 31, 1998, the Company's financing activities provided approximately $18.9 million in cash, consisting of $18.6 million in net proceeds received in connection with the initial public offering and $363,000 from the issuance of stock options and warrants. During the nine months ended March 31, 1997, the Company's financing activities provided $210,000 in cash from the issuance of stock options.

The Company believes that its available cash, cash generated from operations, and the Company's line of credit, will be sufficient to provide for the Company's working capital and capital expenditure requirements for the foreseeable future and any final adjustments resulting from the IRS audit described in the notes to the financial statements. If the Company acquires one or more businesses or products, the Company's capital requirements could increase substantially. In the event of such an acquisition or in the event that any unanticipated circumstances arise which significantly increase the Company's capital requirements, there can be no assurance that necessary additional capital will be available on terms acceptable to the Company, if at all.

MERCURY COMPUTER SYSTEMS, INC.
PART II. OTHER INFORMATION

ITEM 2. RECENT SALES OF UNREGISTERED SECURITIES; USES OF PROCEEDS FROM REGISTERED SECURITIES

(c) Recent Sales of Unregistered Securities

During the three months of January, February, and March, 1998 the Company issued the following securities, none of which has been registered under the Securities Act of 1933:

In transactions exempt from registration pursuant to Rule 701 under the Securities Act the Company has issued the following securities:

1. On March 30, 1998, the Company issued 1,000 shares of Common Stock at a price of $2.00 per share upon exercise of a stock option.

2. On March 24, 1998, the Company issued 3,000 shares of Common Stock at a price of $1.50 per share upon exercise of a stock option.

3. On March 19, 1998, the Company issued 720 shares of Common Stock at a price of $4.00 per share and 3,000 shares of Common Stock at a price of $1.50 per share upon exercise of two stock options.

4. On March 18, 1998, the Company issued 390 shares of Common Stock at a price of $4.00 per share and 5,000 shares of Common Stock at a price of $2.00 per share upon exercise of three stock options.

5. On March 4, 1998, the Company issued 500 shares of Common Stock at a price of $4.00 per share upon the exercise of two stock options.

6. On March 2, 1998, the Company issued 75 shares of Common Stock at a price of $4.00 per share and 600 shares of Common Stock at a price of $5.00 per share upon the exercise of two stock options.

7. On February 5, 1998, the Company issued 20,000 shares of Common Stock at a price of $2.00 per share, 188 shares of Common Stock at a price of $4.00 per share, and 2,400 shares of Common Stock at a price of $5.00 per share upon the exercise of four stock options.

8. On January 28, 1998, the Company issued 2,000 shares of Common Stock at a price of $3.50 per share upon the exercise of a stock option.

9. On January 23, 1998, the Company issued 3,000 shares of Common Stock at a price of $2.00 per share upon the exercise of a stock option.

10. On January 21, 1998, the Company issued 200 shares of Common Stock at a price of $7.50 per share upon the exercise of a stock option.

11. On January 14, 1998, the Company issued 4,000 shares of Common Stock at a price of $2.00 per share upon the exercise of a stock option.

12. On January 12, 1998, the Company issued 3,000 shares of Common Stock at a price of $1.50 per share upon the exercise of a stock option.

(d) Use of Proceeds from Registered Securities.

The Company registered 3,500,000 shares of its Common Stock, par value $.01 per share, on a Registration Statement on Form S-1 (File No. 333-41139), which was declared effective by the Securities and Exchange Commission on January 29, 1998. Trading of the Company's registered Common Stock commenced on January 30, 1998 and closed on February 4, 1998. The managing underwriters were Prudential Securities Incorporated and Cowen & Company. All 3,500,000 shares were sold, of which 2,000,000 shares were sold by the Company and 1,500,000 shares were sold by certain existing stockholders of the Company (the "Selling Stockholders"). The aggregate gross proceeds of the Company from the sale of the 2,000,000 shares sold by the Company were $21,000,000 and the aggregate gross proceeds to the Selling Stockholders from the sale of the 1,500,000 shares sold by the Selling Stockholders were $15,750,000. The net proceeds to the Company were $18,578,000 after deducting $1,470,000 in underwriters' discounts and commissions and approximately $952,000 in other expenses. None of the underwriting discounts and commissions or expenses were paid directly or indirectly to affiliates, directors, officers or persons owning 10 percent or more of any class of the Company's equity securities. During the three months of January, February, and March 1998, the Company used approximately $133,000 of proceeds received from the sale of the 2,000,000 shares to begin construction of an additional facility as discussed in the Company's S-1 Registration Statement.

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

(a) Exhibits. See as listed

Exhibit Item #	
27.1	Financial Data Schedule

(b) Reports on Form 8-K. None.

MERCURY COMPUTER SYSTEMS, INC.
SIGNATURE

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.

MERCURY COMPUTER SYSTEMS, INC.

Date: May 12, 1998

By: /s/ G. MEAD WYMAN

G. Mead Wyman
Vice President, Chief Financial Officer
and Treasurer
(Principal Financial and Accounting Officer)

MERCURY COMPUTER SYSTEMS, INC.
EXHIBIT INDEX

Exhibit Item #	
27.1	Financial Data Schedule

5
1,000
U.S. DOLLARS

3-MOS
JUN-30-1998
OCT-01-1997
MAR-31-1998
1
17,188
15,858
17,371
218
9,840
51,445
18,466
11,408
70,393
12,177
0
0
0
99
58,117
70,393
22,364
22,364
7,832
7,832
10,597
50
0
3,935
1,495
2,440
0
0
0
2,440
.29
.29