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 December 31, 1999 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 January 31, 2000:

Class	Number of Shares Outstanding
Common Stock, par value $.01 per share	21,112,103

Total number of pages 16

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PART I. FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

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

	December 31, 1999	June 30, 1999
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,523	$ 3,676
Marketable securities	40,261	12,762
Trade accounts receivable, net of allowances of $352 and $376 at December 31, 1999 and June 30, 1999, respectively	24,463	28,915
Inventory	11,171	12,431
Deferred income taxes, net	2,617	2,617
Prepaid expenses and other current assets	1,024	1,392
Total current assets	84,059	61,793
Marketable securities	14,060	8,978
Investment in joint venture	1,059	--
Property and equipment, net	24,907	25,325
Deferred income taxes, net	668	668
Other assets	716	747
Total assets	$125,469	$97,511
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,664	$ 5,580
Accrued expenses	2,784	3,694
Accrued compensation	4,722	4,292
Capital lease - short term	487	434
Notes payable - short term	508	--
Billings in excess of revenues and customer advances	2,069	3,169
Income taxes payable	3,049	2,312
Total current liabilities	17,283	19,481
Commitments and contingencies	--	--
Capital lease - long term	550	590
Notes payable - long term	13,947	--
Stockholders' equity:		
Common stock, $.01 par value: 40,000,000 shares authorized; 20,977,298 and 10,310,877 shares issued and outstanding at December 31, 1999 and June 30, 1999, respectively	210	103
Additional paid-in capital	30,479	28,515
Retained earnings	63,073	48,945
Cumulative other comprehensive income	(73)	(123)
Total stockholders' equity	93,689	77,440
Total liabilities and stockholders' equity	$125,469	$97,511

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

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

	Three months ended December 31,		Six months ended December 31,	
	1999	1998	1999	1998
Net revenue	$35,405	$25,598	$73,268	$49,660
Cost of revenue	9,333	8,606	19,370	17,066
Gross profit	26,072	16,992	53,898	32,594
Operating expenses:				
Selling, general and administrative	10,144	8,304	19,249	15,662
Research and development	6,851	4,669	12,388	9,376
Total operating expenses	16,995	12,973	31,637	25,038
Income from operations	9,077	4,019	22,261	7,556
Interest income	574	326	896	695
Interest expense	(106)	--	(124)	--
Equity loss in joint venture	(926)	--	(1,441)	--
Other income, net	93	261	77	306
Income before income taxes	8,712	4,606	21,669	8,557
Provision for income taxes	2,876	1,572	7,541	2,994
Net income	$ 5,836	$ 3,034	$14,128	$ 5,563
Net income per share:				
Basic	$ .28	$ .15	$ .68	$ .28
Diluted	$ .26	$ .14	$ .63	$ .26
Weighted average shares outstanding:				
Basic	20,871	20,234	20,779	20,144
Diluted	22,660	21,574	22,370	21,408

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

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

	Six months ended December 31, 1999	1998
Cash flows provided from operating activities:		
Net income	$ 14,128	$ 5,563
Adjustments to reconcile net income to net cash		
Provided by (used in) operating activities:		
Depreciation and amortization of property and equipment	2,388	1,666
Amortization of capitalized software development costs	156	261
Equity loss in joint venture	1,441	--
Provision for inventory write-downs	1,303	1,796
Changes in assets and liabilities:		
Trade accounts receivable	4,488	949
Inventory	(99)	(1,909)
Prepaid expenses and other current assets	376	(548)
Other assets	(117)	86
Accounts payable	(1,914)	2,131
Accrued expenses and compensation	(489)	1,165
Billings in excess of revenues and customer advances	(1,100)	(218)
Income taxes payable	734	(918)
Net cash provided by operating activities	21,295	10,024
Cash flows from investing activities:		
Purchase of marketable securities	(71,616)	(41,723)
Sale of marketable securities	38,944	38,128
Purchases of property and equipment	(1,701)	(6,787)
Investment in joint venture	(2,500)	--
Capitalized software development costs	--	(575)
Note receivable from related parties	--	325
Net cash used in investing activities	(36,873)	(10,632)
Cash flows from financing activities:		
Proceeds from employee stock purchase plan and the exercise of stock options	2,071	1,513
Proceeds from issuance of notes	14,500	--
Payments of debt	(45)	
Payments of capital lease obligations	(229)	--
Net cash provided by financing activities	16,297	1,513
Net increase in cash and cash equivalents	719	905
Effect of exchange rate change on cash and cash equivalents	128	(61)
Cash and cash equivalents at beginning of period	3,676	6,054
Cash and cash equivalents at end of period	$ 4,523	$ 6,898
Cash paid during the period for:		
Interest	$ 124	$ --
Income taxes	6,532	4,109

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

MERCURY COMPUTER SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(TABLES IN THOUSANDS EXCEPT PER SHARE DATA)

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 10-K, filed with the Securities and Exchange Commission. 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.

B. INVENTORY

	December 31, 1999	June 30, 1999
Raw materials	$ 2,592	$ 3,508
Work in process	5,676	6,841
Finished goods	2,903	2,082
Total	$11,171	$12,431

C. NET INCOME PER COMMON SHARE

The following table sets forth the computation of basic and diluted net income per common share:

	Three Months Ended December 31,		Six Months Ended December 31,	
	1999	1998	1999	1998
Net income	$ 5,836	$ 3,034	$14,128	$ 5,563
Shares used in computation:				
Weighted average common shares outstanding used in computation of basic net income per share	20,871	20,234	20,779	20,144
Dilutive effect of stock options	1,789	1,340	1,591	1,264
Shares used in computation of diluted net income per share	22,660	21,574	22,370	21,408
Basic net income per share	$ .28	$ .15	$ .68	$ .28
Dilutive net income per share	$ .26	$ .14	$ .63	$ .26

Options to purchase 0 and 11,685 shares of common stock were outstanding during the three months ended December 31, 1999 and 1998, respectively, 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 25,587 and 89,380 shares of common stock were outstanding during the six months ended December 31, 1999 and 1998, respectively, 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. NEW ACCOUNTING PRONOUNCEMENTS

In June 1999, the Financial Accounting Standards Board issued SFAS No. 137, "Accounting for Derivative Instruments and Hedging Activities - Deferral of the Effective Date of FASB Statement No. 133." SFAS No. 137 amends SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" which was issued in June 1998. SFAS No. 137 defers the effective date of SFAS No. 133 to all fiscal quarters beginning after June 15, 2000. Accordingly, the Company will adopt the provisions of SFAS No. 133 for its fiscal year 2001, which commences on July 1, 2000. SFAS No. 133 requires that all derivative instruments be recorded on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or accumulated other comprehensive income, depending on whether a derivative is designated as part of a hedge transaction and the type

MERCURY COMPUTER SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, CONTINUED
(TABLES IN THOUSANDS EXCEPT PER SHARE DATA)

of hedge transaction. Management anticipates that, due to its limited use of derivative instruments, the adoption of SFAS No. 133 will not have a material impact on its financial position or results of operations.

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 staff's view in applying generally accepted accounting principles to selected revenue recognition issues. The application of the guidance in SAB 101 will be required in the Company's first quarter of the fiscal year 2001. The effects of applying this guidance will be reported as a cumulative effect adjustment resulting from a change in accounting principle. The Company does not expect the application to have a material effect on their financial statements, however the final evaluation of SAB 101 is not yet complete.

E. COMPREHENSIVE INCOME

Mercury's total comprehensive income was as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	1999	1998	1999	1998
Net income	$5,836	$3,034	$14,128	$5,563
Other comprehensive income, net of tax:				
Foreign currency translation adjustments	2	99	90	115
Unrealized gain or (loss) on securities	(48)	(14)	(60)	13
Other comprehensive income	(46)	85	30	128
Total comprehensive income	$5,790	$3,119	$14,158	$5,691

F. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION

As of December 31, 1999, the Company had eight principal operating segments: North American defense and commercial, medical imaging, international defense and commercial, shared storage, digital wireless, digital video, research and development, and other commercial businesses. These operating segments were determined based upon the nature of the products offered to customers, the market characteristics of each operating segment, and the Company's management structure. The Company has five reportable segments: North American defense and commercial segment, medical imaging segment, shared storage segment, other defense and commercial segment, and research and development segment. The other defense and commercial segment is comprised of international defense and commercial, digital wireless, digital video, and other commercial businesses unrelated to the defense, medical imaging or shared storage businesses.

The accounting policies of the business segments are the same as those described in "Note B: Summary of Significant Accounting Policies" in the Company's Annual Report on Form 10-K for the year ended June 30, 1999. The following table provides operating segment information for the three-month and six-month periods ended December 31, 1999 and 1998:

MERCURY COMPUTER SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, CONTINUED
(TABLES IN THOUSANDS EXCEPT PER SHARE DATA)

	North American Defense and Commercial Segment (2)	Medical Imaging Segment	Shared Storage Segment	Other Defense and Commercial Segment	Research and Development Segment	Corporate	Consolidated
THREE MONTHS ENDED DECEMBER 31, 1999:							
Sales to unaffiliated customers	$23,819	$ 6,875	$ 1,228	$3,483	--	--	$35,405
Income (loss) before taxes (1)	16,637	2,807	77	399	(6,417)	(4,791)	8,712
Depreciation/amort. expense	34	11	23	40	301	878	1,287
THREE MONTHS ENDED DECEMBER 31, 1998:							
Sales to unaffiliated customers	$17,814	$ 4,282	$ 689	$2,813	--	--	$25,598
Income (loss) before taxes (1)	11,245	1,740	(379)	912	(4,421)	(4,491)	4,606
Depreciation/amort. expense	37	15	20	63	281	560	976
SIX MONTHS ENDED DECEMBER 31, 1999:							
Sales to unaffiliated customers	$54,072	$11,836	$ 1,600	$5,760	--	--	$73,268
Income (loss) before taxes (1)	38,576	4,825	(472)	798	(11,642)	10,416)	21,669
Depreciation/amort. expense	68	22	44	74	573	1,763	2,544
SIX MONTHS ENDED DECEMBER 31, 1998:							
Sales to unaffiliated customers	$36,209	$ 7,414	$ 1,252	$4,785	--	--	$49,660
Income (loss) before taxes (1)	22,750	3,018	(768)	1,573	(8,896)	(9,120)	8,557
Depreciation/amort. expense	73	35	39	98	547	1,135	1,927

(1) Interest income, interest expense and foreign exchange gain/(loss) are reported in Corporate and not allocated to the principal operating segments. Only expenses directly related to an operating segment were charged to the appropriate operating segment. All other expenses for marketing and administrative support activities that could not be specifically identified with a principal operating segment were allocated to Corporate.

(2) The North American defense and commercial segment differs in definition from the defense market segment described in the Company's management discussion and analysis ("MD&A"). The defense market segment in the MD&A refers to the worldwide defense market. The North American defense and commercial segment is an operating segment as defined by Statement No. 131 and includes (i) the defense business in North America and (ii) a portion of the Company's North American commercial business.

G. LENDING AGREEMENT

On November 3, 1999, the Company completed a lending agreement with a commercial financing company, issuing two 7.30% senior secured financing notes ("the Notes"), due November 2014. The original principal value of the Notes amounted to $14,500,000. The Company's corporate headquarters and an adjacent building with a combined cost basis of $17,670,000, secure the Notes.

H. SUBSEQUENT EVENT

On January 18, 2000, the Company completed the sale of its Shared Storage Business Unit ("SSBU") to International Business Machines Corporation ("IBM"). Anticipated proceeds from the sale total $23.5 million. Payments are structured with an initial payment of $5.5 million (including $1.0 million to be held in escrow until the final payment), followed by 12 quarterly payments of $1.5 million plus interest. The quarterly payments are contingent upon IBM's continued use of the technology. If IBM defaults, Mercury has the right to recover the assets, including the patent and other intellectual property.

ITEM 2. MANAGEMENT DISCUSSION AND ANALYSIS OF 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, results 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 assurances 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 Form 10-K filed with the Securities and Exchange Commission.

RESULTS OF OPERATIONS :
REVENUES

The Company's total revenues increased 38% from $25.6 million during the three months ended December 31, 1998 to $35.4 million during the three months ended December 31, 1999. The Company's total revenues increased 48% from $49.7 million during the six months ended December 31, 1998 to $73.3 million during the six months ended December 31, 1999.

Defense electronics revenues increased 31% from $19.2 million or 75% of total revenues during the three months ended December 31, 1998 to $25.2 million or 71% of total revenues during the three months ended December 31, 1999. Defense electronics revenues increased 51% from $37.0 million or 74% of total revenues during the six months ended December 31, 1998 to $55.8 million or 76% of total revenues during the six months ended December 31, 1999. The increase in revenues was due primarily to continued strong unit demand for defense electronics products, largely comprised of, advanced military applications in radar, sonar and airborne surveillance.

Medical imaging revenues increased 61% from $4.3 million or 17% of total revenues during the three months ended December 31, 1998 to $6.9 million or 19% of total revenues during the three months ended December 31, 1999. Medical imaging revenues increased 59% from $7.4 million or 15% of total revenues during the six months ended December 31, 1998 to $11.8 million or 16% of total revenues during the six months ended December 31, 1999. The increase in medical imaging revenues reflects the Company's ongoing investment in this business, expansion of our customer's computed tomography ("CT") business, and the resulting increased unit demand.

Other revenues increased 61% from $2.1 million or 8% of total revenues during the three months ended December 31, 1998 to $3.3 million or 9% of total revenues during the three months ended December 31, 1999. This increase in other revenues was due primarily to the increased unit demand for our commercial products, particularly Shared Storage software products. Other revenues increased slightly from $5.3 million or 11% of total revenues during the six months ended December 31, 1998 to $5.7 million or 8% of total revenues during the six months ended December 31, 1999.

COST OF REVENUES

Cost of revenues increased 8% from $8.6 million during the three months ended December 31,1998 to $9.3 million during the three months ended December 31, 1999. Cost of revenues increased 14% from $17.1 million during the six months ended December 31,1998 to $19.4 million during the six months ended December 31, 1999. As a percent of total revenues, cost of revenues decreased from 34% for the three months and six months ended December 31, 1998 to 26% for the three months and six months ended December 31, 1999, respectively. This decrease in cost as a percentage of revenue was primarily due to a decline in component costs and the relationship of fixed manufacturing costs to the higher level of sales.

SELLING, GENERAL AND ADMINISTRATIVE

Selling, general, and administrative expenses increased 22% from $8.3 million during the three months ended December 31, 1998 to $10.1 million during the three months ended December 31, 1999. Selling, general, and administrative expenses increased 23% from $15.7 million during the six months ended December 31, 1998 to $19.2 million during the six months ended December 31, 1999. These increases reflect the hiring of additional sales and administrative personnel, increased commissions associated with higher sales volume, and the ongoing development of the Company's financial, administrative and management infrastructure to support the Company's growth.

RESEARCH AND DEVELOPMENT

Research and development expenses increased 47% from $4.7 million during the three months ended December 31, 1998 to $6.9 million during the three months ended December 31, 1999. Research and development expenses increased 32% from $9.4 million during the six months ended December 31, 1998 to $12.4 million during the six months ended December 31, 1999. These increases were due primarily to the hiring of additional software and hardware engineers to develop and enhance the features and functionality of the Company's products in response to increased demand for next generation products.

INCOME FROM OPERATIONS

Income from operations more than doubled from $4.0 million during the three months ended December 31, 1998 to $9.1 million during the three months ended December 31, 1999. Income from operations nearly tripled from $7.6 million during the six months ended December 31, 1998 to $22.3 million during the six months ended December 31, 1999. This increase is associated with higher sales volume coupled with improved operating efficiency.

Included in income from operations during the three months ended December 31, 1999 were $1.2 million in software revenues and $1.2 million in direct expenses related to the shared storage business. Included in income from operations during the three months ended December 31, 1998 were $689,000 in hardware and software revenues and $1.1 million in direct expenses related to the shared storage business. Included in income from operations during the six months ended December 31, 1999 were $1.6 million in hardware and software revenues and $2.1 million in direct expenses related to the shared storage business. Included in income from operations during the six months ended December 31, 1998 were $1.3 million in hardware and software revenues and $2.0 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, prototype development and direct costs related to the sale of the product, including certain hardware costs.

EQUITY LOSS IN JOINT VENTURE

In September, 1999, the Company formed a new joint venture company ("AgileVision") with Sarnoff Corporation, the developer of color television and a pioneer in the creation of digital television ("DTV"). AgileVision will provide products and services that allow an economical entry point to DTV services, with the option of expanding performance and features to meet the demands of the evolving DTV audience. The Company's initial contribution to AgileVision was $2.5 million in cash. During the three months and six months ended December 31, 1999, the Company recognized $926,000 and $1.4 million, respectively, in expenses related to the operation of AgileVision. No expenses were recognized during the three months or six months ended December 31, 1998.

PROVISION FOR INCOME TAX

The Company recorded a tax provision of $2.9 million during the three months ended December 31, 1999 reflecting a 33% tax rate as compared to a $1.6 million tax provision during the three months ended December 31, 1998, reflecting a 34% tax rate. The Company recorded a tax provision of $7.5 million during the six months ended December 31, 1999 reflecting a 35% tax rate as compared to a $3.0 million tax provision during the six months ended December 31, 1998 reflecting a 35% tax rate. Though the tax rate remained fairly constant year over year and quarter over quarter, the tax rate decreased significantly from 36% during the first quarter of the current fiscal year to 33% during the second quarter. This decrease in the rate was due to a one-time tax provision adjustment during the current quarter to reflect congressional extension of the research and experimentation tax credit.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 1999, the Company had cash and marketable investments of approximately $58.8 million. During the six months ended December 31, 1999, the Company generated approximately $21.3 million in cash from operations compared to $10.0 million generated during the six months ended December 31, 1998. The increase in cash generated from operations was primarily due to increased profitability. Days sales outstanding was 62 days and 58 days at December 31, 1999 and 1998, respectively.

During the six months ended December 31, 1999, the Company's investing activities used cash of $36.9 million which consisted of $32.7 million for the purchase of marketable securities (net of sales), $2.5 million for the investment in a joint venture, and $1.7 million for computers, furniture and equipment. During the six months ended December 31, 1998, the Company's investing activities used cash of $10.6 million, consisting of $3.6 million for the purchase of marketable securities (net of sales) $4.8 million for the development of additional office space, $2.0 million for computers, furniture and equipment, and $575,000 for capitalized software. These cash outflows were partially offset by a reduction in notes receivable from related parties amounting to $325,000.

During the six months ended December 31, 1999 the Company's financing activities generated cash of $16.3 million, which consisted primarily of $14.5 million in proceeds received upon the issuance of two 7.30% senior secured financing notes. These notes are due November 2014. In addition, $2.1 million in cash was generated from the employee stock purchase plan and the exercise of stock options. These cash inflows were partially offset by the payment of debt and capital lease obligations amounting to $274,000. During the six months ended December 31, 1998, the Company's financing activities provided approximately $1.5 million in cash, all related to the employee stock purchase plan and the issuance of stock options.

On January 18, 2000, the Company completed the sale of its Shared Storage Business Unit ("SSBU") to International Business Machines Corporation ("IBM"). Anticipated proceeds from the sale total $23.5 million. Payments are structured with an initial payment of $5.5 million (including $1.0 million to be held in escrow until the final payment), followed by 12 quarterly payments of $1.5 million plus interest. The quarterly payments are contingent upon IBM's continued use of the technology. If IBM defaults, Mercury has the right to recover the assets, including the patent and other intellectual property.

Management believes that the Company's available cash, cash generated from operations, and the cash generated from the sale of SSBU as described above, will be sufficient to provide for the Company's working capital and capital expenditure requirements for the foreseeable future. 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.

YEAR 2000 COMPLIANCE

The Company is aware of the potential for industry wide business disruption which could be caused by computer systems, software products and embedded micro-processing chips which may be coded to accept only two-digit entries in the date code field and may not be able to distinguish 20th century dates from 21st century dates as The Company believes it has implemented a prudent plan to address these issues within our Company and our supply chain.

State of Readiness. The Company has completed the process of evaluating the Year 2000 readiness of hardware and software products sold by the Company ("Products"), information technology systems used in its operations ("IT Systems"), and its non-IT Systems such as building security, voice mail and other systems. This evaluation has covered a number of phases: (i) identification of all Products, IT Systems, and non-IT Systems; (ii) assessment of repair or replacement requirements; (iii) repair or replacement; (iv) testing; (v) implementation; and (vi) creation of contingency plans in the event of Year 2000 failures. As the date of this report, the Company has not experienced any business disruption resulting from any Year 2000 failures from either its Products, IT Systems, or non-It Systems.

Products. The Company has completed a review of the source code for all versions of its Products sold after January 1, 1997. Based on such review the Company believes that such Products are "Year 2000 Compliant," meaning that when used properly and in conformity with the product information provided by the Company, the product furnished by the Company will accurately store, display, process, provide, and/or receive data from, into, and between 1999 and 2000, including leap year calculations, provided that all technology used in combination with the Company product properly exchanges date data with the Company product. In general, software provided by the Company does not require the user to input date fields and depends instead on date information supplied by host operating systems not manufactured by the Company. Therefore, the assessment of whether a complete system or device in which a Product is embedded will operate correctly for an end-user depends in large part on the Year 2000 Compliance of the system's other components, most of which are supplied by parties other than the Company. For this reason, end-users must consult with the manufacturers of host operating systems and test such systems in their entirety for Year 2000 Compliance. The Company has determined that it is not feasible to test versions of its Products sold prior to January 1, 1997. However, based on similarities in source code between prior and current Product versions, the Company believes that versions of its Products sold prior to January 1, 1997 are Year 2000 Compliant.

IT and Non-IT Systems. The Company has compiled a comprehensive list of the Company's IT and non IT systems. Based on the Company's internal assessment, the Company believes that most of these systems are Year 2000 compliant. The source code underlying the Company's financial and accounting software has been reprogrammed and tested using the Company's internal technical resources. The Company has determined to its satisfaction that its financial and accounting system is Year 2000 Compliant.

Third Parties. The Company relies, both domestically and internationally, upon various vendors, governmental agencies, utility companies, telecommunications service companies, delivery service companies and other service providers who are outside of Mercury's control. The Company has completed a questionnaire-based assessment of its primary vendors to assess their ability to continue to provide goods and services to the Company from, into and between 1999 and 2000. While the Company has received assurances from vendors regarding their Year 2000 compliance status, the Company may never be able to know with certainty whether its vendors are compliant. Failure of critical vendors to achieve Year 2000 compliance could result in delayed deliveries of products and services to the Company. If such delays are extensive, they could have a material adverse effect on the Company's business.

Costs. Most of the Company's effort toward Year 2000 readiness is funded as ongoing operating expense. Expenditures directly related to the Year 2000 readiness program, consisting of dedicated staff and consulting services, are estimated at less than $1,000,000.

Risks. The failure to correct a material Year 2000 problem could result in an interruption in, or a failure of, certain normal business activities. Such failures could materially and adversely affect the Company's results of operations, liquidity and financial condition. Due to the general uncertainty inherent with the Year 2000 issue, resulting in large part from the uncertainty of the Year 2000 readiness of third-parties outside of the Company's control, the Company is unable to determine at this time whether the consequences of a Year 2000 failure will have a material impact on the Company's results of operations, liquidity, or financial position. The Year 2000 compliance project is expected to reduce, but not eliminate, the Company's level of uncertainty about the Year 2000 issue and in particular, about the Year 2000 compliance and readiness of its critical vendors. The Company believes that, with the completion of the Year 2000-compliance project, the possibility of significant interruptions to normal operations has been significantly reduced.

Contingency Plan. The Company has developed a contingency plan for its information technology infrastructure as well as non-IT elements. This plan includes provisions for additional customer and facility support.

ITEM 3 Quantitative and Qualitative Disclosures about Market Risk

INTEREST RATE RISK MANAGEMENT

There were no material changes in the Company's exposure to market risk from June 30, 1999.

PART II. OTHER INFORMATION

ITEM 2. Use of Proceeds from Registered Securities: None

ITEM 4. Submission of Matters to a Vote of Security Holders

On November 18, 1999, the Company held a Special Meeting of Stockholders in lieu of the 1999 Annual Meeting. At the meeting, Dr. Gordon Baty and Sherman Mullen were reelected as directors for terms ending in 2002. The voting results were as follows:

Dr. Gordon Baty	For 9,465,131	Withheld 12,881
Sherman Mullen	For 9,459,974	Withheld 18,038

The other members of the Board of Directors whose terms continued after the meeting were: Serving a term ending in 2000, James R. Bertelli and R. Schorr Berman; and Serving a term ending in 2001, Dr. Albert P. Belle Isle and Melvin Sallen.

At the meeting, the stockholders adopted an amendment to the Company's Articles of Organization to increase the number of shares of common stock which the Company has authority to issue from 25,000,000 shares to 40,000,000 shares. The vote was as follows:

For 9,239,014	Against 223,627	Abstain 15,371

The stockholders also increased the number of shares issuable pursuant to the Company's 1997 Stock Option Plan from 1,325,000 shares to 2,325,000 shares. The vote was as follows:

For 5,342,519	Against 2,213,526	Abstain 16,306

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. On February 2, 2000, the Company filed Form 8-K disclosing the sale of its Shared Storage Business Unit to IBM.

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: February 11, 2000 By: /s/ G. MEAD WYMAN

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

5
1
U.S. DOLLARS

3-MOS
JUN-30-2000
OCT-01-1999
DEC-31-1999
1
4,523
54,321
24,815
352
11,171
84,059
42,062
17,155
125,469
17,283
14,497
0
0
210
93,479
125,469
35,405
35,405
9,333
9,333
17,828
0
(468)
8,712
2,876
5,836
0
0
0
5,836
.28
.26