

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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of report (Date of earliest event reported): October 16, 2003

MERCURY COMPUTER SYSTEMS, INC.

(Exact Name of Registrant as Specified in Charter)

Massachusetts

000-23599

04-2741391

(State or Other Jurisdiction of Incorporation)

(Commission File Number)

(IRS Employer Identification No.)

199 Riverneck Road, Chelmsford, Massachusetts

01824

(Address of Principal Executive Offices)

(Zip Code)

Registrant's telephone number, including area code (978) 256-1300

N/A

(Former Name or Former Address, if Changed Since Last Report)

Item 7. Financial Statements, Pro Forma Financial Information and Exhibits.

(c) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release, dated October 16, 2003, of Mercury Computer Systems, Inc.

Item 12. Results of Operations and Financial Condition.

On October 16, 2003, Mercury Computer Systems, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended September 30, 2003. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

The information in this Current Report on Form 8-K and the Exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

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.

MERCURY COMPUTER SYSTEMS, INC.

Dated: October 16, 2003

By: /s/ JOSEPH M. HARTNETT

Name: Joseph M. Hartnett
Title: Vice President, Controller and
Interim Chief Financial Officer (principal financial and
accounting officer)

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release, dated October 16, 2003, of Mercury Computer Systems, Inc.

Mercury Computer Systems Reports First Quarter 2004 EPS of \$0.15**Cash Flow From Operations of \$9.2 Million****Backlog increased to \$63 Million**

CHELMSFORD, Mass. – October 16, 2003 – Mercury Computer Systems, Inc. (NASDAQ: MRCY) today reported results for its first quarter ended September 30, 2003. The Company posted its 51st consecutive quarter of profitable performance.

- First quarter revenues were \$40.5 million, an increase of 3% over the prior year's first quarter.
- Operating income was \$4.5 million, representing 11% of revenues.
- First quarter net income was \$3.3 million, or 8% of revenues. Diluted earnings per share were \$0.15 for the first quarter.
- Cash flows from operating activities were \$9.2 million in the first quarter.

“We are pleased with the good financial results posted for the first quarter and the growth in backlog,” said Jay Bertelli, president and chief executive officer of Mercury Computer Systems. “We continued to demonstrate good progress on operational effectiveness initiatives as operating income expanded 12% over the same quarter last year, and cash flow from operating activities was very strong at \$9 million.”

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Backlog

The Company's total backlog at the end of the quarter was \$63.4 million, up from \$57.3 million at the beginning of the quarter. Of the current total backlog, \$57.8 million represents shipments scheduled over the next 12 months. The book to bill ratio for the first quarter exceeded one.

Revenues

Revenues for the first quarter of 2004 were \$40.5 million, an increase of 3% compared to \$39.4 million for the same period last year. Defense electronics revenues grew to \$28.8 million, an increase of \$3.3 million from last year, driven by growth in radar and signals intelligence business. Medical imaging revenues of \$7.2 million were down \$2.7 million from last year based primarily on declining CT-related revenues. OEM solutions revenues expanded to \$4.6 million, up \$0.5 million from last year on growth related to applications serving the semiconductor market.

Business Unit Revenues

(in thousands)

	Quarter Ended Sept. 30, 2003	Percent of Total	Quarter Ended Sept. 30, 2002	Percent of Total
Defense Electronics	\$ 28,782	71%	\$ 25,515	65%
Medical Imaging	7,159	18%	9,844	25%
OEM Solutions	4,580	11%	4,048	10%
Total	\$ 40,521	100%	\$ 39,407	100%

Recent Highlights

- Mercury and Xilinx, Inc. demonstrated a new software-defined radio (SDR) platform that enables rapid development and reconfiguration of high-performance SDR systems at the Military Communications Conference (MILCOM 2003) in Boston.
- Mercury announced it shipped the industry's first middleware product that includes the new Data Reorganization Interface (DRI) standard application programming interface (API). The DRI standard enables easier development of digital signal and image processing applications for multiprocessor computers.

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- Mercury announced the release of MCOE™ 6.0 software, a new and enhanced version of its multicomputer operating environment that provides expanded development support for embedded software standards. With DRI and the Linux® operating system standard, Mercury's software environment now provides the broadest support for software standards in the high-performance embedded computing industry.
- Mercury announced it shipped RACE++ multicomputers to General Dynamics Electric Boat for use in the development of its Ship Monitoring program. Sensors pick up noise generated by submarines and Mercury's systems will process the acoustic data that are recorded.

Business Outlook

This section presents our current expectations and estimates, given current visibility, on our business outlook. It is possible that actual performance will differ materially from the ranges and estimates given—either on the upside or on the downside. Investors should consider all of the risks, including those listed in the Safe Harbor Statement below, with respect to these estimates and make themselves aware of the risk factors that may impact the Company's actual performance.

In the second quarter of fiscal year 2004, revenues are expected to be in the range of \$39 to \$42 million. At these revenue levels, the Company projects a range of \$0.13 to \$0.17 for earnings per share for the second quarter ended December 31, 2003.

Forward-Looking Safe Harbor Statement

This press release contains certain forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including those relating to anticipated second quarter business performance. You can identify these statements by our use of the words "may," "will," "should," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. Such risks and uncertainties include, but are not limited to, general economic and business conditions, including continuing economic weakness in the Company's markets, effects of continued geo-political unrest and regional conflicts, competition, changes in technology and methods of marketing, delays in completing various engineering and manufacturing programs, changes in customer order patterns, changes in product mix, continued success in technological advances and delivering technological innovations, continued funding of defense programs, and the timing of such funding, market acceptance of the Company's products, shortages in components, production delays due to performance quality issues with outsourced components, and as a US Government contractor, the effect of procurement rules and regulations and the possible imposition of fines and penalties or the termination of the Company's contracts if the Company were to violate specific laws or regulations.

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These risks and uncertainties also include such additional risk factors as are discussed in the Company's recent filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2003. The Company cautions readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. 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. The Company may, in its discretion, provide information in future public announcements regarding its outlook that may be of interest to the investment community. The format and extent of future outlooks may be different from the format and extent of the information contained in this release.

Conference Call Information

Management will host a conference call today at 11:00 a.m. ET to review the first quarter results. To listen to the conference call, dial (888) 857-6929 in the USA and Canada, and for international, dial (719) 457-2600. The conference code number is 680823. Please call five to ten minutes prior to the scheduled start time. This call will also be broadcast live over the web at www.mc.com/investor under Investor Events.

A replay of the call by telephone will be available from approximately 2:00 p.m. ET on Thursday, October 16 through midnight ET on Monday, October 20. To access the replay, dial (888) 203-1112 in the USA and Canada, and for international, dial (719) 457-0820. Enter access code 680823. A replay of the webcast of the call will be available for an extended period of time on the Investor Events page of the Company's website at www.mc.com/investor.

About Mercury Computer Systems, Inc.

Mercury Computer Systems, Inc. (NASDAQ: MRCY) is the leading supplier of high-performance embedded, real-time digital signal and image processing computer systems. Mercury's products play a critical role in a wide range of applications, transforming sensor data to information for analysis and interpretation. In military reconnaissance and surveillance platforms, the company's systems process real-time radar, sonar, and signals intelligence data. Mercury's systems are also used in state-of-the-art medical diagnostic imaging devices including MRI, PET, and digital X-ray, and in semiconductor imaging applications including photomask generation and wafer inspection.

Based in Chelmsford, Massachusetts, Mercury serves customers in North America, Europe and Asia through its direct sales force and a network of subsidiaries and distributors.

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Contact:

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Joseph Hartnett
VP, Controller & Interim Chief Financial Officer
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Visit Mercury on the Web: www.mc.com

RACE++ is a registered trademark and MCOE is a trademark of Mercury Computer Systems, Inc. Product and company names mentioned may be trademarks and/or registered trademarks of their respective holders.

MERCURY COMPUTER SYSTEMS, INC.
UNAUDITED CONSOLIDATED BALANCE SHEETS
(in thousands)

	September 30, 2003	June 30, 2003
Assets		
Current assets:		
Cash and cash equivalents	\$ 37,850	\$ 27,158
Marketable securities	42,068	40,892
Accounts receivable, net	19,427	22,975
Inventory	8,494	10,735
Deferred tax assets	4,778	4,778
Prepaid expenses and other current assets	1,689	3,513
Total current assets	114,306	110,051
Marketable securities	41,804	45,211
Property and equipment, net	25,666	26,349
Goodwill	4,225	4,225
Acquired intangible assets, net	1,939	2,339
Deferred tax assets, net	1,321	1,321
Other assets	1,174	1,059
Total assets	\$ 190,435	\$ 190,555
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 4,801	\$ 5,235
Accrued expenses	4,067	4,354
Accrued compensation	7,330	10,053
Notes payable	731	718
Income taxes payable	2,020	2,440
Deferred revenues and customer advances	2,580	2,741
Total current liabilities	21,529	25,541
Notes payable	11,412	11,599
Deferred compensation	872	759
Total liabilities	33,813	37,899
Stockholders' equity:		
Common stock	223	223
Additional paid-in capital	52,413	52,174
Treasury stock, at cost	(39,110)	(40,197)
Retained earnings	142,725	140,142
Accumulated other comprehensive income	371	314
Total stockholders' equity	156,622	152,656
Total liabilities and stockholders' equity	\$ 190,435	\$ 190,555

MERCURY COMPUTER SYSTEMS, INC.

UNAUDITED CONSOLIDATED STATEMENTS OF INCOME

(in thousands, except per share data)

	Three months ended September 30,	
	2003	2002
Net revenues	\$40,521	\$39,407
Cost of revenues	14,539	13,746
Gross profit	25,982	25,661
Operating expenses:		
Selling, general and administrative	12,796	12,561
Research and development	8,734	9,124
Total operating expenses	21,530	21,685
Income from operations	4,452	3,976
Interest income	429	481
Interest expense	(223)	(236)
Gain on sale of division	—	1,600
Other income, net	116	138
Income before income taxes	4,774	5,959
Income tax provision	1,480	1,847
Net income	\$ 3,294	\$ 4,112
Net income per share:		
Basic	\$ 0.16	\$ 0.19
Diluted	\$ 0.15	\$ 0.19
Weighted average shares outstanding:		
Basic	21,002	21,134
Diluted	21,580	21,828

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

	Three months ended September 30,	
	2003	2002
Cash flows from operating activities:		
Net income	\$ 3,294	\$ 4,112
Depreciation and amortization	1,916	1,982
Gain on sale of division	—	(1,600)
Other non-cash items, net	425	202
Changes in operating assets and liabilities	3,527	10,124
Net cash provided by operating activities	9,162	14,820
Cash flows from investing activities:		
Sales of marketable securities, net	2,319	1,745
Purchases of property and equipment	(1,011)	(1,371)
Proceeds from sale of division	—	1,600
Net cash provided by investing activities	1,308	1,974
Cash flows from financing activities:		
Proceeds from stock issuances	375	207
Principal payments of debt	(174)	(203)
Net cash provided by financing activities	201	4
Effect of exchange rate changes on cash and cash equivalents	21	(8)
Net increase in cash and cash equivalents	10,692	16,790
Cash and cash equivalents at beginning of period	27,158	17,513
Cash and cash equivalents at end of period	\$37,850	\$34,303