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): April 15, 2004

MERCURY COMPUTER SYSTEMS, INC.

(Exact Name of Registrant as Specified in Charter)

Massachusetts
(State or Other Jurisdiction of Incorporation)

000-23599 (Commission File Number) $\begin{array}{c} \textbf{04-2741391} \\ \textbf{(IRS Employer Identification No.)} \end{array}$

199 Riverneck Road, Chelmsford, Massachusetts (Address of Principal Executive Offices)

01824 (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.

Exhibit No.	Description

99.1 Press Release, dated April 15, 2004, of Mercury Computer Systems, Inc.

Item 12. Results of Operations and Financial Condition.

On April 15, 2004, Mercury Computer Systems, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended March 31, 2004. 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: April 15, 2004

/s/ JOSEPH M. HARTNETT

By:

Name: Joseph M. Hartnett Title: Vice President, Controller and Chief Accounting Officer

EXHIBIT INDEX

Exhibit No. Description

99.1 Press Release, dated April 15, 2004, of Mercury Computer Systems, Inc.

Mercury Computer Systems Reports Third Quarter 2004 EPS of \$0.29

Backlog Increased to \$81.6 Million

CHELMSFORD, Mass. — April 15, 2004 — Mercury Computer Systems, Inc. (NASDAQ: MRCY) today reported results for its third quarter which ended March 31, 2004. The Company posted its 53rd consecutive quarter of profitable performance.

- Third quarter revenues were \$45.4 million.
- Operating income was \$8.3 million, representing 18.3% of revenues.
- Third guarter net income was \$6.3 million, or 13.9% of revenues.
- Earnings per share were \$0.29 for the third quarter.
- Cash and marketable securities balance at the end of the quarter was \$128.8 million.

"We are pleased with the strong financial results posted for the third quarter, including the third consecutive quarter of backlog growth," said Jay Bertelli, president and chief executive officer of Mercury Computer Systems, Inc. "We believe in our ability to drive growth through innovation coupled with deep understanding of our customers' requirements. Commitment to customer success is at the core of our strategic vision."

Earlier in the week the Company announced that it had signed an agreement to purchase the TGS Group for approximately \$18.5 million, consisting of \$6.0 million in Mercury common stock and the remainder in cash, subject to closing adjustments. TGS is a leading supplier of three-dimensional (3-D) image processing and visualization software to diverse end markets including life sciences (medical imaging and biotechnology), geosciences (earth sciences including oil and gas exploration), and simulation (commercial and defense). The acquisition, which is expected to close in the fourth quarter of fiscal 2004, is subject to certain closing conditions.

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199 Riverneck Road, Chelmsford, Massachusetts 01824-2820 U.S.A. 978-256-1300 • Fax 978-256-0852 • www.mc.com

Backlog

The Company's total backlog at the end of the quarter was \$81.6 million, up from \$74.7 million at the beginning of the quarter. Of the current total backlog, \$69.5 million represents shipments scheduled over the next 12 months. The book to bill ratio for the third quarter exceeded one.

Revenue

Revenues for the third quarter of fiscal 2004 were \$45.4 million. Defense electronics revenues of \$26.7 million, were less than planned, primarily due to the timing of customer orders. Medical imaging revenues of \$9.4 million were up \$1.2 million from last year based primarily on strength in digital x-ray. OEM Solutions revenues of \$9.3 million grew \$3.2 million, or 53%, from last year, primarily due to strength in semiconductor equipment market applications.

Business Unit Revenues

(in thousands)

	arter Ended ar 31, 2004	Percent of Total	ter Ended : 31, 2003	Percent of Total
Defense Electronics	\$ 26,702	59%	\$ 34,443	71%
Medical Imaging	9,397	21%	8,191	17%
OEM Solutions	9,287	20%	6,063	12%
Total	\$ 45,386	100%	\$ 48,697	100%

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.

The acquisition of the TGS Group is expected to add approximately \$1.0 million to fourth quarter revenues depending on the closing date. The acquisition of the TGS Group is expected to be accretive for both the second half and full fiscal year of 2005.

In the fourth quarter of fiscal year 2004, revenues are expected to be in the range of \$54 million to \$57 million. At these revenue levels, the Company projects a range of \$0.39 to \$0.43 for earnings per share for the fourth quarter ended June 30, 2004. For the full year, revenues are expected to be in the range of \$180 million to \$183 million. At these revenue levels, the Company projects a range of \$1.00 to \$1.04 for earnings per share for the fiscal year ended June 30, 2004.

For the fiscal year 2005, revenues are expected to be in the range of \$220 million to \$230 million. At these levels the Company anticipates gross margins to approximate 64%, and operating income of 16%. The projected tax rate for 2005 is 30%.

Third-Quarter News Highlights

- During the quarter, Mercury launched a Future Combat Systems Project Office (FCS-PO) as part of its worldwide Defense Electronics Group. The FCS-PO facilitates access to Mercury's signal and image processing products and technologies for sensor companies competing for business in the U.S. Army's transformational Future Combat Systems program.
- In February, Mercury announced that Raytheon Company licensed its RACE++® Series multicomputers for use in the Integrated Core Processing (ICP) system of the F-35 Joint Strike Fighter (JSF). Mercury's multiprocessor technology will be used in the signal processor and signal processor input/output modules in the initial design phase of the ICP for Raytheon's Space and Airborne Systems (SAS) business.
- Venture Development Corporation ranked Mercury as the top supplier of merchant DSP boards in real-time and embedded applications in the technology research firm's Digital Signal Processing (DSP): Global Market Demand Analysis study.
- In March, Mercury shipped its ImpactRT[™] 3100 RapidIO[®]-based system to Micronic Laser Systems for use in the Swedish firm's laser pattern generation equipment for flat panel

displays. By leveraging Mercury's leading position in RapidIO solutions, Micronic is able to offer its customers higher-performance and more cost-effective pattern generation systems.

- Mercury announced its new PowerPC® 7447 compute node daughtercards based on Motorola's PowerPC "G4+" processors with AltiVec™ technology. The daughtercards boost CPU clock speed by 60 percent over current RACE++ daughtercards and double the speed of on-chip FFTs.
- In February, Mercury announced its RACE++ Series MCJ6 FCN module, which integrates field-programmable gate arrays (FPGAs) into RACE++ VME multicomputers. The MCJ6 FCN modules increase performance, saving customers space, weight, power, and money.
- At the Bus & Board Conference in January, Mercury and others jointly announced support for the new VITA 46 VME standard which addresses the needs of deployed military systems. Together these leading defense VME manufacturers are ensuring the next VME specification meets the I/O, processing, and power distribution requirements of the military and aerospace market.

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Conference Call Information

Management will host a conference call today at 11:00 a.m. ET to review the third quarter results and to discuss our business outlook. To listen to the conference call, dial (800) 289-0437 in the USA and Canada, and for international dial (913) 981-5508. The conference code number is 498098. 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.

A replay of the call will be available by telephone from approximately 2:00 p.m. ET on Thursday, April 15 through midnight ET on Thursday, April 22. To access the replay, dial (888) 203-1112 in the USA and Canada, and for international, dial (719) 457-0820. Enter access code 498098. A replay of the webcast of the call will be available for an extended period of time on the Company's website at www.mc.com/investor.

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 fourth quarter and fiscal years' 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, the failure to locate favorable acquisition and partnership opportunities and achieve expected results, the possibility that the TGS transaction may not close on a timely basis or at all, due to the failure to satisfy closing conditions or otherwise, the challenges of achieving expected synergies and integrating the TGS Group with our business, and as a U.S. 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. 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.

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. Visit Mercury on the web: www.mc.com

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Contacts:

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RACE++ and PowerStream are registered trademarks and ImpactRT 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

UNAUDITED CONSOLIDATED BALANCE SHEETS		
	March 31, 2004	June 30, 2003
(in thousands)		
Assets		
Current assets:	ф ЭС 0ЭС	ф 27.1F0
Cash and cash equivalents	\$ 36,826	\$ 27,158
Marketable securities	58,173	40,892
Accounts receivable, net	28,085 7,604	22,975 10,735
Inventory Deferred tax assets	4,463	4,778
Prepaid expenses and other current assets	4,403	3,513
Frepalu expenses and other current assets	4,104	
Total current assets	139,335	110,051
Marketable securities	33,771	45,211
Property and equipment, net	24,960	26,349
Goodwill	4,225	4,225
Acquired intangible assets, net	1,551	2,339
Deferred tax assets, net	1,321	1,321
Other assets	5,309	1,059
Total assets	\$ 210,472	\$ 190,555
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Liabilities and Stockholders' Equity Current liabilities:		
Accounts payable	\$ 8,041	\$ 5,235
Accrued expenses	5,256	4,354
Accrued expenses Accrued compensation	7,928	10,053
Notes payable	7,320	718
Income taxes payable	2,778	2,440
Deferred revenues and customer advances	3,528	2,741
Deterred revenues and customer advances		
Total current liabilities	28,289	25,541
Notes payable	11,026	11,599
Deferred compensation	1,087	759
Total liabilities	40,402	37,899
Stockholders' equity:		
Common stock	223	223
Additional paid-in capital	53,449	52,174
Treasury stock, at cost	(33,900)	(40,197)
Retained earnings	149,761	140,142
Accumulated other comprehensive income	537	314
Total stockholders' equity	170,070	152,656
Total liabilities and stockholders' equity	\$210,472	\$ 190,555

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

		Three months ended March 31,		Nine months ended March 31,		
	2004	2003	2004	2003		
Net revenues	\$45,386	\$48,697	\$ 126,464	\$ 135,769		
Cost of revenues	15,443	16,804	43,668	47,123		
Gross profit	29,943	31,893	82,796	88,646		
Operating expenses:						
Selling, general and administrative	12,483	13,415	38,025	39,881		
Research and development	9,172	9,919	26,783	28,769		
Total operating expenses	21,655	23,334	64,808	68,650		
Income from operations	8,288	8,559	17,988	19,996		
Interest income	455	434	1,334	1,417		
Interest expense	(217)	(228)	(664)	(697)		
Gain on sale of division	<u>—</u> `	2,600		5,800		
Other income, net	66	32	104	196		
Income before income taxes	8,592	11,397	18,762	26,712		
Income tax provision	2,289	3,533	5,441	8,281		
Net income	\$ 6,303	\$ 7,864	\$ 13,321	\$ 18,431		
No. diamondo de la constanta d						
Net income per share:	Ф 0.20	¢ 0.27	¢ 0.00	¢ 0.07		
Basic	\$ 0.30	\$ 0.37	\$ 0.63	\$ 0.87		
Diluted	\$ 0.29	\$ 0.35	\$ 0.61	\$ 0.84		
Weighted average shares outstanding:						
	21.104	21 100	21.004	21 165		
Basic	21,184	21,188	21,084	21,165		
Diluted	22,057	22,178	21,787	22,045		

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

		Three months ended March 31,		Nine months ended March 31,	
	2004	2003	2004	2003	
Cash flows from operating activities:					
Net income	\$ 6,303	\$ 7,864	\$ 13,321	\$ 18,431	
Depreciation and amortization	1,543	2,098	5,314	6,119	
Gain on sale of division	_	(2,600)	_	(5,800)	
Other non-cash items, net	1,160	851	1,775	1,550	
Changes in operating assets and liabilities	(6,257)	(1,907)	182	22,649	
Net cash provided by operating activities	2,749	6,306	20,592	42,949	
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Cash flows from investing activities:					
(Purchases) sales of marketable securities, net	(5,625)	(23,832)	(5,582)	(26,830)	
Purchases of property and equipment	(1,350)	(1,700)	(3,312)	(4,417)	
Other, net	(55)	2,600	(3,900)	5,800	
Net cash used in investing activities	(7,030)	(22,932)	(12,794)	(25,447)	
Cash flows from financing activities:					
Proceeds from employee stock purchase plan and the exercise of stock options	779	696	2,574	2,118	
Purchases of treasury stock	_	(4,193)		(5,746)	
Principal payments under notes payable	(180)	(168)	(533)	(588)	
Net cash provided by (used in) financing activities	599	(3,665)	2,041	(4,216)	
Effect of exchange rate changes on cash and cash equivalents	(142)	(248)	(171)	(288)	
Net (decrease) increase in cash and cash equivalents	(3,824)	(20,539)	9,668	12,998	
Cash and cash equivalents at beginning of period	40,650	51,050	27,158	17,513	
Cash and cash equivalents at end of period	\$36,826	\$ 30,511	\$ 36,826	\$ 30,511	