UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 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): January 26, 2006

Mercury Computer Systems, Inc.

(Exact Name of Registrant as Specified in Charter)

Massachusetts	000-2359904-2741391(Commission File Number)(IRS Employer Identification No.)	
(State or Other Jurisdiction of Incorporation)		
199 Riverneck Road, Chelmsford, Massachusett	ts	01824
(Address of Principal Executive Offices)		(Zip Code)
Registrant's telephone number, including area code: (978) 25	6-1300	
	N/A	

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On January 26, 2006, Mercury Computer Systems, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended December 31, 2005. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein.

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.

USE OF NON-GAAP FINANCIAL MEASURES

In addition to reporting financial results in accordance with generally accepted accounting principles, or GAAP, the Company provides non-GAAP measures adjusted to exclude certain non-cash and other specified charges, which the Company believes are useful to help investors better understand its past financial performance and prospects for the future. However, the presentation of non-GAAP financial measures is not meant to be considered in isolation or as a substitute for financial information provided in accordance with GAAP. Management believes these non-GAAP financial measures assist in providing a more complete understanding of the Company's underlying operational results and trends, and management uses these measures along with their corresponding GAAP financial measures to manage the Company's business, to evaluate its performance compared to prior periods and the marketplace, and to establish operational goals.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release, dated January 26, 2006, of Mercury Computer Systems, Inc.
<i>))</i> .1	Tress Release, dated sandary 20, 2000, of Wereary computer Systems, me.

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 hereunto duly authorized.

MERCURY COMPUTER SYSTEMS, INC. (Registrant)

Date: January 26, 2006

By:

/S/ ALEX N. BRAVERMAN

Alex N. Braverman Vice President, Controller and Chief Accounting Officer

EXHIBIT INDEX

Exhibit No. 99.1 Description

Press Release, dated January 26, 2006, of Mercury Computer Systems, Inc.





FOR IMMEDIATE RELEASE

Mercury Computer Systems Reports Second Quarter Revenues of \$62.5 Million

GAAP Earnings per Share of \$0.08 Non-GAAP Earnings per Share of \$0.18

CHELMSFORD, Mass. — January 26, 2006 — Mercury Computer Systems, Inc. (NASDAQ: MRCY), reported results for its second quarter ended December 31, 2005.

Second quarter revenues were \$62.5 million, an increase of 5.3% over the prior year's second quarter. Cash flows from operating activities were \$2.6 million in the second quarter. Cash and marketable securities balance for the second quarter was \$165.5 million.

Second quarter GAAP operating income was \$0.7 million, representing 1.1% of revenues. Second quarter GAAP net income was \$1.6 million, or 2.6% of revenues. GAAP diluted earnings per share were \$0.08 for the second quarter. GAAP net income includes \$4.5 million in charges, consisting of \$2.0 million in stock-based compensation costs and \$2.5 million in amortization of acquired intangible assets. Excluding the impact of these charges, second quarter non-GAAP operating income was \$5.2 million, representing 8.4% of revenues. Second quarter non-GAAP net income was \$3.9 million, or 6.3% of revenues. Non-GAAP diluted earnings per share were \$0.18 for the second quarter. Non-GAAP net income and earnings per share also reflect a \$2.2 million net tax impact of the foregoing charges.

"We are pleased that our second quarter revenues came within our guidance range and that discipline on costs allowed us to exceed our guidance on the bottom line. However, delays in the approval of the defense budget contributed to weak bookings as programs slid to the right," said Jay Bertelli, president and chief executive officer of Mercury Computer Systems, Inc. "In all of

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our business units, we are introducing new products and working with our customers on designs that should help offset declining programs. The recently closed acquisitions of SOHARD AG and Echotek Corporation are contributing to our pipeline of new business."

Backlog

The Company's total backlog at the end of the second quarter was \$80.8 million, a \$34.5 million decrease over the same quarter last year. Of the current total backlog, \$71.3 million represents shipments scheduled over the next 12 months. The book-to-bill ratio was 0.85 for the quarter.

Defense

Revenues for the quarter from the Defense business were \$33.8 million, representing 54% of the Company's total revenues. Revenues were strongest in the radar and signals intelligence segments.

Commercial Imaging and Visualization

Revenues for the quarter from Commercial Imaging and Visualization were \$15.2 million, representing 24% of the Company's total revenues. Revenues were strongest in the MRI and digital X-ray markets.

Advanced Solutions

Revenues for the quarter from Advanced Solutions were \$10.8 million, representing 17% of the Company's total revenues.

Modular Products and Services

Revenues for the quarter from Modular Products and Services were \$2.7 million, representing 5% of the Company's total revenues.

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,

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and make themselves aware of the risk factors that may impact the Company's actual performance.

On our October 20, 2005 earnings call, the Company estimated an annual revenue range for the 2006 fiscal year of \$275 to \$285 million. Based primarily on several large defense programs experiencing timing delays, we are currently anticipating revenues in the range of \$250 to \$260 million for the 2006 fiscal year.

Based on anticipated revenues, the Company currently expects 2006 fiscal year GAAP earnings per share to be in the range of a loss of \$0.16 to a profit of \$0.09. Excluding the impact of stock-based compensation costs, amortization of acquired intangible assets, and in-process research and development charges, fiscal year 2006 non-GAAP earnings per share are currently expected to be in the range of \$0.50 to \$0.70.

For the third quarter of fiscal year 2006, revenues are currently expected to be in the range of \$55 to \$58 million.

The Company currently expects third quarter fiscal 2006 GAAP losses per share to be in the range of a loss of \$0.32 to a loss of \$0.26. Excluding the impact of stock-based compensation costs and amortization of acquired intangible assets, third quarter fiscal year 2006 non-GAAP losses per share are currently expected to be in the range of a loss of \$0.10 to a loss of \$0.04.

Recent Highlights

Mercury introduced three new product offerings based on the Cell Broadband Engine[™] processor. The "Turismo" system, announced in November, is designed to deliver performance density to the desktop for computation-intensive rendering and imaging applications, as well as enterprise applications such as centralizing imaging resources in hospitals and similar environments. Prototypes are planned for the third quarter of calendar 2006, with production planned for early 2007.

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Mercury announced in January shipment of its Cell Technology Evaluation System (CTES). Based on the Mercury Dual Cell-Based Blade announced in October 2005, the CTES is a turnkey system that in addition to the Dual Cell-Based Blade, includes an Intel[®] Architecture development/simulation environment, and preinstalled Mercury, IBM, and open-source Cell Technology software. The CTES enables customers to evaluate Cell BE processor-based computing solutions and begin prototyping advanced applications for the defense, medical, industrial inspection, video, and other markets.

The first rugged device with Cell Technology was also announced in January. The PowerBlockTM 200 is a processing appliance designed to deliver an unprecedented 200 GFLOPS of processing power in a half-cubic-foot space for compute-intensive military applications in the harshest environments on land, sea, and in the air. The PowerBlock 200 is planned for shipment in the first half of calendar 2007.

Mercury also announced that it received the 2005 Frost & Sullivan Award for Product Innovation for its VisageRT[™] advanced 3D image and visualization software. VisageRT enables accelerated, embedded reconstruction and visualization of medical image data generated by a variety of diagnostic and interventional imaging tools such as MRI (magnetic resonance imaging), CT (computed tomography) and digital X-ray.

Mercury showcased its Visage[™] OEM product line at the 91st Scientific Assembly and Annual Meeting of the Radiological Society of North America (RSNA) in Chicago, Illinois at the end of November. The imaging and visualization software and solutions are architected to be 3D to the Core to empower the transformation of the diagnostic workflow to fully integrated, seamless 3D visualization. The Company also announced the completion of its 1000th installation of this award-winning web-based PACS (picture archiving and communications system) software. This milestone marks Mercury's position as a leading OEM supplier in the worldwide PACS market.

Also at RSNA, Mercury announced the establishment of the Mercury Clinical Advisory Board, which will assist in directing the Company's product development strategies in the Life Sciences

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group, and in breaking new ground in technology innovations that will help drive the future of image understanding in the medical realm.

In December Mercury announced it has expanded the PowerStream[®] integrated multicomputer family with the PowerStream 6100, the industry's first 6U VME system based on the Serial RapidIO[®] interconnect fabric and compliant with the VXS (VITA 41.2) form factor standard. The PowerStream 6100 triples signals intelligence and radar system antenna channels and improves bisection bandwidth by 10x in military contractor applications – a new record for performance available in the VME form factor.

Mercury announced the MC432 high-performance Serial RapidIO crossbar switch for embedded applications in multiple markets. Compliant with the Serial RapidIO specification 1.2, the MC432 is the fourth-generation IC switch developed by Mercury, providing advanced features including high-reliability support, extended error-handling capabilities, and dynamic bandwidth management. This switch and previous generations provide the functions that enable Mercury to build a wide range of multicomputer products.

Conference Call Information

Mercury will host a conference call Thursday, January 26, 2006 at 5:00 p.m. ET to discuss the second quarter 2006 results and review the financial and business outlook for the remainder of the year.

To listen to the conference call, dial (800) 474-8920 in the USA and Canada, and for international, dial (719) 457-2727. The conference code number is 7734821. 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 Financial Events.

A replay of the call by telephone will be available from approximately 8:00 p.m. ET on Thursday, January 26 through midnight ET on Friday, February 3. To access the replay, dial (888) 203-1112 in the USA and Canada, and for international, dial (719) 457-0820. Enter access code 7734821. A replay of the webcast of the call will be available for an extended period of time on the Financial Events page of the Company's website at www.mc.com/investor.

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Use of Non-GAAP (Generally Accepted Accounting Principles) Financial Measures

In addition to reporting financial results in accordance with generally accepted accounting principles, or GAAP, the Company provides non-GAAP financial measures adjusted to exclude certain non-cash and other specified charges, which the Company believes are useful to help investors better understand its past financial performance and prospects for the future. However, the presentation of non-GAAP financial measures is not meant to be considered in isolation or as a substitute for financial information provided in accordance with GAAP. Management believes these non-GAAP financial measures assist in providing a more complete understanding of the Company's underlying operational results and trends, and management uses these measures along with their corresponding GAAP financial measures to manage the Company's business, to evaluate its performance compared to prior periods and the marketplace, and to establish operational goals. A reconciliation of GAAP to non-GAAP financial results discussed in this press release is contained in the attached exhibits.

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 fiscal 2006 business performance and beyond. 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 unforeseen weakness in the Company's markets, effects of continued geopolitical unrest and regional conflicts, competition, changes in technology, and methods of marketing, delays in completing 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, the timing of such funding, changes in the U.S. Government's interpretation of federal procurement rules and regulations, market acceptance of the Company's products, shortages in components, production delays due to performance quality issues with outsourced components, and inability to fully realize the expected benefits from acquisitions or delays in realizing such benefits, challenges in integrating acquired businesses, and achieving anticipated synergies, and difficulties in retaining key customers. 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2005. 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

About Mercury Computer Systems, Inc.

Mercury Computer Systems, Inc. (NASDAQ: MRCY) is the leading provider of high-performance embedded, real-time digital signal and image processing solutions. Mercury's solutions 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

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generation and wafer inspection. Mercury provides advanced 3D image processing and visualization software and optimized systems to diverse end markets including life sciences, geosciences, and simulation. The Company also provides radio frequency (RF) products for enhanced communications capabilities in military and commercial applications.

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 at www.mc.com.

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Contact: Robert Hult, CFO 978-967-1990 / rhult@mc.com

Cell Broadband Engine is a trademark of Sony Computer Entertainment Inc. IBM is a registered trademark of International Business Machines Corporation. Intel is a registered trademark of Intel Corporation or its subsidiaries in the United States and other countries. PowerBlock, Visage, and VisageRT are trademarks, and PowerStream is a registered trademark of Mercury Computer Systems, Inc. Other product and company names mentioned may be trademarks and/or registered trademarks of their respective holders.

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

	December 31, 2005	June 30, 2005	
	(unaudited)		
Assets			
Current assets:			
Cash and cash equivalents	\$ 29,540	\$ 43,143	
Marketable securities	86,615	131,702	
Accounts receivable, net	38,375	40,033	
Inventory	21,855	16,691	
Deferred tax assets, net	2,664	2,664	
Prepaid expenses and other current assets	5,239	7,737	
Total current assets	184,288	241,970	
Marketable securities	49,334	53,382	
Property and equipment, net	31,018	29,484	
Goodwill	89,939	37,080	
Acquired intangible assets, net	26,496	5,402	
Deferred tax assets, net	_	4,481	
Other non-current assets	5,136	5,327	
Total assets	\$ 386,211	\$377,126	
Liabilities and Shareholders' Equity			
Current liabilities:		• • • • • • • •	
Accounts payable	\$ 12,510	\$ 8,627	
Accrued expenses	11,041	8,091	
Accrued compensation	10,023	13,965	
Notes payable	925	894	
Income taxes payable	3,445	3,128	
Deferred revenues and customer advances	6,367	8,162	
Total current liabilities	44,311	42,867	
Notes payable	135,152	134,997	
Deferred compensation	1,504	1,281	
Other long-term liabilities	1,413	155	
Total liabilities	182,380	179,300	
Shareholders' equity:			
Common stock	210	210	
Additional paid-in capital	70,789	58,674	
Retained earnings	134,658	139,785	
Accumulated other comprehensive loss	(1,826)	(843	
Total shareholders' equity	203,831	197,826	
Total liabilities and shareholders' equity	\$ 386,211	\$377,126	

UNAUDITED CONSOLIDATED STATEMENTS OF INCOME (in thousands, except per share data)

		Three months ended December 31,		Six months ended December 31,	
	2005	2004	2005	2004	
Net revenues	\$62,501	\$59,332	\$129,401	\$114,314	
Cost of revenues	23,222	20,259	47,740	39,723	
Gross profit	39,279	39,073	81,661	74,591	
Operating expenses:					
Selling, general and administrative	21,215	17,880	41,374	33,483	
Research and development	14,834	11,328	30,708	22,850	
Amortization of acquired intangible assets	2,521	572	4,041	992	
In-process research and development			548		
Total operating expenses	38,570	29,780	76,671	57,325	
Income from operations	709	9,293	4,990	17,266	
Interest income	1,483	1,152	3,052	2,146	
Interest expense	(1,050)	(1,056)	(2,086)	(2,110)	
Other income (expense), net	(24)	(49)	(29)	(239)	
Income before income taxes	1,118	9,340	5,927	17,063	
Income tax provision (benefit)	(492)	2,493	1,245	5,119	
Net income	\$ 1,610	\$ 6,847	\$ 4,682	\$ 11,944	
		—			
Net income per share:					
Basic	\$ 0.08	\$ 0.33	\$ 0.22	\$ 0.57	
Diluted	\$ 0.08	\$ 0.29	\$ 0.22	\$ 0.50	
Weighted average shares outstanding:					
Basic	21,006	20,973	20,984	21,075	
Diluted (1)	21,376	25,993	21,435	26,022	

ABOVE PREPARED IN ACCORDANCE WITH GAAP

NON-GAAP CONSOLIDATED STATEMENTS OF INCOME (in thousands, except per share data)

		Three months ended December 31,		Six months ended December 31,	
	2005	2004	2005	2004	
Net revenues	\$62,501	\$59,332	\$129,401	\$114,314	
Cost of revenues (a)	23,200	20,259	47,572	39,723	
Gross profit	39,301	39,073	81,829	74,591	
Operating expenses:					
Selling, general and administrative	19,616	17,880	38,398	33,483	
Research and development	14,460	11,328	29,773	22,850	
Total operating expenses (a) (b) (c)	34,076	29,208	68,171	56,333	
Income from operations (a) (b) (c)	5,225	9,865	13,658	18,258	
Interest income	1,483	1,152	3,052	2,146	
Interest expense	(1,050)	(1,056)	(2,086)	(2,110)	
Other income (expense), net	(24)	(49)	(29)	(239)	
Income before income taxes (a) (b) (c)	5,634	9,912	14,595	18,055	
Income tax provision (d) (e)	1,690	2,646	4,379	5,417	
Net income	\$ 3,944	\$ 7,266	\$ 10,216	\$ 12,638	
Net income per share:					
Basic	\$ 0.19	\$ 0.35	\$ 0.49	\$ 0.60	
Diluted	\$ 0.18	\$ 0.30	\$ 0.45	\$ 0.53	
Weighted average shares outstanding:					
Basic	21,006	20,973	20,984	21,075	
Diluted (1)	25,511	25,993	25,570	26,022	
		_		_	

A reconciliation between net income on a GAAP basis and non-GAAP net income is as follows:

		Three months ended December 31,		Six months ended December 31,	
	2005	2004	2005	2004	
GAAP net income	\$ 1,610	\$ 6,847	\$ 4,682	\$11,944	
(a) Stock-based compensation:					
Cost of revenues	22	_	168	_	
Selling, general and administrative	1,599	_	2,976	_	
Research and development	374		935		
(b) Amortization of acquired intangible assets	2,521	572	4,041	992	
(c) In-process research and development		_	548	_	
(d) Income tax effect (at GAAP rate)	1,990	(153)	(1,820)	(298)	
(e) Adjusted tax rate (excluding impact of non-GAAP items)	(4,172)		(1,314)		
Non-GAAP net income	\$ 3,944	\$ 7,266	\$10,216	\$12,638	

(1) Under GAAP, when calculating diluted earnings per share, convertible debt must be assumed to have converted if the effect on EPS would be dilutive. For Mercury, dilution occurs when net income is \$3.5 million per quarter, or \$3.0 million per quarter on a non-GAAP basis. Accordingly, for net income for the three and six months ended December 31, 2005, diluted shares exclude the conversion of the convertible debt as the effect would be anti-dilutive. For the three and six months ended December 31, 2004, diluted shares assume the conversion of the convertible debt as the effect would be dilutive. Accordingly, for the three and six months ended December 31, 2004, 4.1 million shares have been included in diluted shares and net interest expense and deferred financing costs have been added back to net income for the diluted earnings per share calculation. On a non-GAAP basis for the three and six months ended December 31, 2005 and 2004, diluted shares assume the conversion of the convertible debt as the effect would be anti-dilutive. Accordingly, diluted shares assume the conversion of the three and six months ended December 31, 2005 and 2004, diluted shares assume the conversion of the convertible debt as the effect would be dilutive. Accordingly, on a non-GAAP basis, 4.1 million shares have been included in diluted shares and net interest expense and deferred financing costs have been included in diluted shares and net interest expense and effect would be dilutive.

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

		Three months ended December 31,		Six months ended December 31,	
	2005	2004	2005	2004	
Cash flows from operating activities:					
Net income	\$ 1,610	\$ 6,847	\$ 4,682	\$ 11,944	
Depreciation and amortization	4,888	2,759	8,678	4,809	
Other and non-cash items, net	1,289	985	2,877	1,469	
Changes in operating assets and liabilities	(5,144)	(2,291)	4,106	1,250	
Net cash provided by operating activities	2,643	8,300	20,343	19,472	
Cash flows from investing activities:					
Sales of marketable securities, net	7,949	20,288	48,781	20,274	
Purchases of property and equipment	(2,842)	(2,851)	(5,399)	(4,558)	
Acquisition of businesses, net of cash acquired	(67)	(16,184)	(67,507)	(16,184)	
Other investing items	(2,000)	—	(2,000)	—	
Net cash provided by (used in) investing activities	3,040	1,253	(26,125)	(468)	
Cash flows from financing activities:					
Proceeds from employee stock plans	3,337	2,798	4,789	3,665	
Purchases of common stock	(6,029)	(8,787)	(12,284)	(16,631)	
Principal payments under notes payable	(254)	(829)	(462)	(1,007)	
Other financing items	97	<u> </u>	180	_	
Net cash used in financing activities	(2,849)	(6,818)	(7,777)	(13,973)	
	(-,•)	(0,010)	(.,)	(103,270)	
Effect of exchange rate changes on cash and cash equivalents	97	(415)	(44)	(452)	
Net increase (decrease) in cash and cash equivalents	2,931	2,320	(13,603)	4,579	
Cash and cash equivalents at beginning of period	26,609	20,954	43,143	18,695	
Cash and cash equivalents at end of period	\$29,540	\$ 23,274	\$ 29,540	\$ 23,274	