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 27, 2010 (January 26, 2010)

Mercury Computer Systems, Inc.

(Exact Name of Registrant as Specified in Charter)

Massachusetts (State or Other Jurisdiction of Incorporation) 000-23599 (Commission File Number) 04-2741391 (IRS Employer Identification No.)

201 Riverneck Road, Chelmsford, Massachusetts (Address of Principal Executive Offices) 01824 (Zip Code)

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

Not Applicable

(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)

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

Dere-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, 2010, Mercury Computer Systems, Inc. (the "Company") issued a press release regarding its financial results for the quarter ended December 31, 2009. 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 Item 2.02 of this Current Report on Form 8-K and the exhibit 99.1 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (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, as amended, 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 adjusted EBITDA, a non-GAAP financial measure adjusted to exclude certain non-cash and other specified charges, which the Company believes is useful to help investors better understand its past financial performance and future prospects. However, the presentation of adjusted EBITDA is not meant to be considered in isolation or as a substitute for financial information provided in accordance with GAAP. Management believes the adjusted EBITDA financial measure assists in providing a more complete understanding of the Company's underlying operational results and trends, and management uses this measure along with the corresponding GAAP financial measure to manage the Company's business, to evaluate its performance compared to prior periods and the marketplace, and to establish operational goals.

Item 8.01 Other Events.

On January 26, 2010, the Company issued a press release announcing the appointment of David R. Martinez as president of the Company's Mercury Federal Systems, Inc. subsidiary, effective as of March 1, 2010. A copy of the press release announcing the appointment of Mr. Martinez is attached hereto as Exhibit 99.2 and incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.

Description

99.1 Press Release, dated January 26, 2010, of Mercury Computer Systems, Inc. (earnings release).

99.2 Press Release, dated January 26, 2010, of Mercury Computer Systems, Inc. (David R. Martinez).

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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.

Dated: January 27, 2010

MERCURY COMPUTER SYSTEMS, INC.

By:

/S/ ROBERT E. HULT

Robert E. Hult Senior Vice President, Chief Financial Officer, and Treasurer

EXHIBIT INDEX

Description

Press Release, dated January 26, 2010, of Mercury Computer Systems, Inc. (earnings release) Press Release, dated January 26, 2010, of Mercury Computer Systems, Inc. (David R. Martinez). 99.1

Exhibit No.

99.2

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News Release

FOR IMMEDIATE RELEASE

Mercury Computer Systems Reports Second Quarter Fiscal 2010 Results

Second quarter operating results highlights include: Revenues of \$45.2 million Book-to-bill ratio of 1.24-to-1 Operating cash flow of \$5.2 million GAAP diluted earnings per share from continuing operations of \$0.10 Adjusted EBITDA of \$6.1 million

CHELMSFORD, Mass. – January 26, 2010 – Mercury Computer Systems, Inc. (NASDAQ: MRCY) reported operating results for its second quarter of fiscal 2010 ended December 31, 2009. All results are presented and compared on a continuing operations basis, with prior year results reclassified for fiscal 2009 divestitures.

Second Quarter Fiscal 2010 Results

Second quarter revenues were \$45.2 million, an increase of \$0.1 million over the second quarter of the prior fiscal year. Revenues from defense customers increased by \$1.0 million over the prior year's second quarter; however, this increase was mostly offset by a decline in revenues from commercial customers.

Second quarter GAAP income from continuing operations was \$2.4 million, or \$0.10 per diluted share, as compared with a GAAP loss from continuing operations of \$(1.2) million, or \$(0.05) per diluted share, for the prior year's second quarter.

Beginning with the first quarter of fiscal 2010, Mercury changed its non-GAAP measure for reporting financial performance to adjusted EBITDA (earnings from continuing operations before interest income and expense, income taxes, depreciation, amortization of acquired intangible assets, restructuring, impairment of long-lived assets and stock-based compensation costs). Second quarter GAAP income from continuing operations includes approximately \$1.5 million in stock-based compensation costs, \$1.2 million in depreciation expense, \$0.4 million in tax expense, \$0.4 million in amortization of acquired intangible assets, \$0.2 million in impairment charges and \$0.1 million of net interest income. Excluding the impact of these charges, second quarter adjusted EBITDA was \$6.1 million.

Cash flows from operating activities were a net inflow of \$5.2 million in the second quarter of fiscal 2010 as compared with \$2.7 million in the second quarter of fiscal 2009. Free cash flow in the second quarter of fiscal 2010 was a net inflow of \$3.2 million after deducting cash outflows for capital expenditures of \$2.0 million. Cash, cash equivalents, and marketable securities as of December 31, 2009, were \$96.6 million, an increase of \$2.6 million from September 30, 2009.

"This was another quarter of solid progress for Mercury," said Mark Aslett, President and CEO, Mercury Computer Systems. "Revenue and GAAP income from operations both exceeded the high end of our guidance range. On our Q1 earnings call I noted that we expected a large missile defense radar order to push from Q2 to Q3. I am pleased to report that the receipt of this major order during the quarter led to a very strong bookings performance. Defense bookings grew year-over-year by 43 percent to \$47.8 million, and our defense backlog increased 55 percent."

"Mercury's growing defense bookings and backlog demonstrate our continued success in strengthening and expanding our core business in line with the fundamental changes taking place in military procurement," Aslett said. "The Department of Defense is shifting its priorities from major new weapons systems development to upgrades of existing platforms and programs, while at the same time implementing procurement reform designed to deliver new capabilities to the warfighter faster and more cost-effectively. We have refocused our business to grow and prosper in this new environment, creating a strong presence for Mercury in several key defense electronics markets such as airborne ISR, missile defense, electronic warfare and counter-IED."

"Looking forward, we believe that Mercury is well-positioned to benefit from the Defense Department's strategic commitment to ISR programs and its budgetary focus on best-of-breed, commercial items and open systems architectures procurement in the image, signal and sensor processing domain," said Aslett. "We are improving our product velocity and winning new designs in our target markets, each of which should continue to be well-funded in the years ahead. In addition, Mercury's commercial business appears to have stabilized, with the potential for renewed growth if demand in the semiconductor industry rebounds. We have made solid strides toward achieving our growth and profitability goals in the first half of fiscal 2010, and we are committed to extending this progress in the second half and beyond."

Backlog

Mercury's total backlog at the end of the second quarter was \$110.4 million, a \$10.9 million sequential increase from the first quarter of fiscal 2010, and a \$35.3 million increase from the second quarter last year. Of the second quarter total backlog, \$88.2 million represents orders scheduled to be shipped over the next 12 months. The book-to-bill ratio was 1.24 to 1 for the second quarter.

Revenues by Operating Unit

<u>Advanced Computing Solutions (ACS)</u> — Revenues for the second quarter from ACS were \$43.8 million, representing a decrease of \$0.2 million from the second quarter of fiscal 2009 primarily due to a decrease in revenues from commercial customers. Approximately 76 percent of ACS revenues for the quarter related to defense business, as compared to approximately 75 percent in the second quarter last year.

<u>Mercury Federal Systems (MFS)</u> — Revenues for the second quarter from MFS were \$3.3 million, representing an increase of \$2.2 million from the second quarter of fiscal 2009.

The revenues by operating unit do not include adjustments to eliminate any inter-segment revenues.

Business Outlook

This section presents our current expectations and estimates, given current visibility, on our business outlook for the upcoming fiscal quarter. It is possible that actual performance will differ materially from the 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 our actual performance.

For the third quarter of fiscal 2010, revenues are expected to be in the range of approximately \$41.0 million to \$43.0 million. At this range, GAAP losses from continuing operations per share are expected to be in the range of (\$0.15) to (\$0.11). These estimates do not include revenue associated with the large missile defense radar order received by Mercury in the second quarter of fiscal 2010. Should a portion of this order ship for revenue in the third quarter of fiscal 2010, Mercury expects to promptly update these estimates.

Because of the circumstances related to the timing of shipments for this order and since Mercury does expect to ship and recognize revenue on a portion of this order in fiscal year 2010, Mercury is providing a revenue estimate for the full-year. Revenues for the full-year fiscal 2010 are expected to be approximately \$195 million. Mercury does not expect to provide full-year revenue guidance on a regular basis going forward.

Beginning with the first quarter of fiscal 2010, Mercury changed its non-GAAP measure for reporting financial performance to adjusted EBITDA (earnings from continuing operations before interest income and expense, income taxes, depreciation, amortization of acquired intangible assets, restructuring, impairment of long-lived assets and stock-based compensation costs). Adjusted EBITDA for the third quarter of fiscal 2010 is expected to be in the range of (\$1.1) million to \$0.1 million.

Recent Highlights

January 26—Mercury Computer Systems announced it has named David R. Martinez president of its subsidiary, Mercury Federal Systems, Inc. (MFS). Mr. Martinez joins MFS from MIT Lincoln Laboratory, where he was head of the ISR Systems and Technology Division. Mr. Martinez will have responsibility for the Mercury subsidiary and will report to the MFS Board of Directors working with Mark Aslett, President and CEO of Mercury Computer Systems. MFS provides system architecture consultation, design, analysis, integration, and software engineering services that enable clients to deploy ISR smart processing solutions on an accelerated time cycle.

October—Mercury Computer Systems highlighted the progress of its Services and Systems Integration (SSI) team's capabilities. The Company added these capabilities and developed this internal team in 2008 to provide professional design, integration, and consulting services to accelerate customers' time-to-market. The SSI team of seasoned experts leverages more than 25 years of Mercury expertise in delivering scaleable, robust, high-performance embedded computing solutions to help prime contractors meet changing requirements.

October—Mercury Computer Systems announced the industry's first Intel-based, RapidIO–enabled advanced mezzanine card. The Ensemble 2000 Series LDS 2100 Advanced Mezzanine Card (AMC) can be combined with the wide range of Ensemble 2000 family AMCs to create powerful MicroTCA and AdvancedTCA (ATCA) form factor solutions. The LDS 2100 contains an Intel[™] Penryn processor and an innovative FPGA-based bridge, providing access to both RapidIO[®] and 10 Gigabit Ethernet interfaces.

October—Mercury Computer Systems announced the completion of V1.0 OpenVPX specification, a new architecture that drives system interoperability and lowers costs. Mercury founded the OpenVPX[™] Industry Working Group (www.openvpx.org), an alliance of 28 leading defense prime contractors and embedded computing systems suppliers, which developed the V1.0 OpenVPX System Specification. Mercury launched the OpenVPX Industry Working Group to take a proactive approach to addressing the VPX system-level interoperability concerns associated with the VPX (VITA 46) family of specifications.

October—Mercury Computer Systems announced a broad range of products compliant with new V1.0 OpenVPX system specification. The new specification mandates interoperability at both system and board levels to reduce customization, cost, and risk. It is a clear response to recent demands from government officials and agencies to promote performance migration towards open solutions, and away from proprietary, closed architectures. In support of these new specifications, the Company introduced the Ensemble™ 3000 Series 3UOpenVPX and Ensemble™ 6000 Series 6UOpenVPX product lines, which deliver rugged solutions for high-density, high-performance computing, suitable for use in radar, EO/IR, and electronic warfare applications on ship-borne, ground-based, and both manned and unmanned airborne platforms.

October—Mercury Computer Systems announced it received a multimillion-dollar system order from a leading defense supplier for its global radar upgrade program. Mercury will deliver a complete signal processing solution employing its <u>OpenVPX</u>-compliant Ensemble 6000 Series products. In addition, Mercury's SSI team is providing comprehensive professional services aimed at the development, validation, and qualification of the complete subsystem for this ground-based defense system.

October—Mercury Computer Systems announced initial shipments of its Ensemble 8000 Series AdvancedTCA (<u>ATCA</u>) system to Artiza Networks, supporting Artiza's market-leading, next-generation test equipment for wireless applications. The Ensemble 8000 Series platform meets the rigorous performance requirements of this application due to the combination of DSP, FPGA, and control plane processing coupled to the RapidIO[®] deterministic switch fabric. Application developers can use the platforms to combine extreme processing density, with low-latency, deterministic communications.

November—Mercury Computer Systems announced availability of OpenVPX reference design kits to provide customers who are currently engaged with Mercury's Services and Systems Integration (SSI) team with an engineering blueprint that significantly reduces customization, cost, and risk in the development of OpenVPX-compliant 3U and 6U payload and switch modules. The VITA-owned <u>OpenVPX</u> V1.0 System Specification, led by Mercury Computer Systems and co-authored with embedded computing suppliers and defense primes, is a direct response to the edict issued by a broad range of government officials and agencies for performance migration through the use of open source software and the development of open architecture systems.

December—Mercury Computer Systems released upgrades to the RACE++ series product line. Mercury continues to enhance the award-winning RACE++ Series product line with the latest processor and memory technologies, extending the product life cycle well into the future. The RACE++ Series PowerPC Multicomputer upgrades offer faster clock speeds and larger memory options, resulting in accelerated application performance of up to 30 to 50 percent over previous RACE++ Series products. Mercury also now offers the RACE++ Series PowerPC 7448 Multicomputer for use in rugged air-cooled and conduction-cooled environments such as those found in manned aircraft and unmanned aerial vehicles (UAVs). By maintaining commonality with previous RACE++ Series PowerPC products, Mercury provides customers with an easy, low-cost migration path without the need for software application changes.

Conference Call Information

Mercury will host a conference call on Tuesday, January 26, 2010, at 5:00 p.m. EST to discuss the second quarter fiscal 2010 results and review the financial and business outlook going forward.

To listen to the conference call, dial (888) 791-4316 in the USA and Canada, and (913) 312-0709 in all other countries. The conference code number is 4651091. 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. EST on Tuesday, January 26, through 8:00 p.m. EST on Friday, February 5, 2010. To access the replay, dial (888) 203-1112 in the USA and Canada, and (719) 457-0820 in all other countries. Enter access code 4651091. 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.

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 adjusted EBITDA, a non-GAAP financial measure adjusted to exclude certain non-cash and other specified charges, which the Company believes is useful to help investors better understand its past financial performance and prospects for the future. However, the presentation of adjusted EBITDA is not meant to be considered in isolation or as a substitute for financial information provided in accordance with GAAP. Management believes the adjusted EBITDA financial measure assists in providing a more complete understanding of the Company's underlying operational results and trends, and management uses this measure along with the corresponding GAAP financial measure 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.

Mercury Computer Systems, Inc. – Where Challenges Drive Innovation™

Mercury Computer Systems (www.mc.com, NASDAQ: MRCY) provides embedded computing systems and software that combine image, signal, and sensor processing with information management for data-intensive applications. With deep expertise in optimizing algorithms and software and in leveraging industry-standard technologies, we work closely with customers to architect comprehensive, purpose-built solutions that capture, process, and present data for defense electronics, semiconductor equipment manufacturing, commercial computing, homeland security, and other computationally challenging markets. Our dedication to performance excellence and collaborative innovation continues a 25-year history in enabling customers to gain the competitive advantage they need to stay at the forefront of the markets they serve.

Mercury is based in Chelmsford, Massachusetts, and serves customers worldwide through a broad network of direct sales offices, subsidiaries, and distributors.

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 fiscal 2010 business performance and beyond and the Company's plans for growth and improvement in profitability and cash flow. You can identify these statements by the 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, inability to fully realize the expected benefits from acquisitions and divestitures or delays in realizing such benefits, challenges in integrating acquired businesses and achieving anticipated synergies, timing and costs associated with disposing of businesses, and difficulties in retaining key customers. These risks and uncertainties also include such additional risk factors as are discussed in the Company's filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2009. The Company cautions readers not to place und

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Contact: Robert Hult, CFO, Mercury Computer Systems, Inc. 978-967-1990

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

Assets	December 31, 2009 (unaudited)	June 30, 2009
Current assets:		
Cash and cash equivalents	\$ 52,197	\$ 46,950
Marketable securities	44,444	44,977
Accounts receivable, net	31,239	28,595
Inventory	17,416	16,805
Option to sell auction rate securities at par	4,741	5,030
Prepaid expenses and other current assets	3,184	3,748
Total current assets	153,221	146,105
Property and equipment, net	8,283	7,960
Goodwill	57,653	57,653
Acquired intangible assets, net	2,043	2,911
Other non-current assets	6,058	4,743
Total assets	\$ 227,258	\$219,372
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 5,290	\$ 3,770
Accrued expenses	6,498	7,449
Accrued compensation	9,065	9,372
Borrowings under line of credit and current capital lease obligations	32,716	33,408
Income taxes payable	3,042	2,316
Deferred revenues and customer advances	7,314	7,840
Current liabilities of discontinued operations	121	1,234
Total current liabilities	64,046	65,389
Deferred gain on sale-leaseback	7,292	7,870
Other non-current liabilities	1,595	1,076
Total liabilities	72,933	74,335
Shareholders' equity:		
Common stock	226	224
Additional paid-in capital	107,321	104,843
Retained earnings	46,191	39,313
Accumulated other comprehensive income	587	657
Total shareholders' equity	154,325	145,037
Total liabilities and shareholders' equity	\$ 227,258	\$219,372

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

		Three months ended December 31,		Six months ended December 31,	
	2009	2008	2009	2008	
Net revenues	\$45,158	\$ 45,094	\$92,589	\$ 89,934	
Cost of revenues (1)	18,762	19,690	38,891	39,603	
Gross profit	26,396	25,404	53,698	50,331	
Operating expenses:					
Selling, general and administrative (1)	13,485	13,929	24,829	26,014	
Research and development (1)	9,901	11,632	20,097	21,883	
Impairment of long-lived assets	150	—	150		
Amortization of acquired intangible assets	434	447	868	1,457	
Restructuring	(19)	235	254	474	
Total operating expenses	23,951	26,243	46,198	49,828	
Income (loss) from operations	2,445	(839)	7,500	503	
Interest income	163	686	242	1,681	
Interest expense	(113)	(945)	(170)	(1,783)	
Other income (expense), net	281	(119)	535	(265)	
Income (loss) from continuing operations before income taxes	2,776	(1,217)	8,107	136	
Income tax expense	412		1,318		
Income (loss) from continuing operations	2,364	(1,217)	6,789	136	
(Loss) income from discontinued operations, net of tax	(15)	(15,863)	15	(18,992)	
Gain on disposal of discontinued operations, net of tax	171	16	74	488	
Net income (loss)	\$ 2,520	\$(17,064)	\$ 6,878	\$(18,368)	
Basic earnings (loss) per share:					
Income (loss) from continuing operations	\$ 0.10	\$ (0.05)	\$ 0.30	\$ 0.01	
(Loss) income from discontinued operations	—	(0.72)	—	(0.86)	
Gain on disposal of discontinued operations	0.01		0.01	0.02	
Net income (loss) per share	\$ 0.11	\$ (0.77)	\$ 0.31	\$ (0.83)	
Diluted earnings (loss) per share:					
Income (loss) from continuing operations	\$ 0.10	\$ (0.05)	\$ 0.30	\$ 0.01	
(Loss) income from discontinued operations	_	(0.72)	—	(0.85)	
Gain on disposal of discontinued operations	0.01		—	0.02	
Net income (loss) per share	\$ 0.11	\$ (0.77)	\$ 0.30	\$ (0.82)	
Weighted average shares outstanding:					
Basic	22,500	22,121	22,450	22,065	
Diluted	22,870	22,121	22,806	22,318	
(1) Includes stock-based compensation expense, which was allocated as follows:					
Cost of revenues	\$ 73	\$ 141	\$ 110	\$ 209	
Selling, general and administrative	\$ 1,318	\$ 1,785	\$ 1,718	\$ 2,515	
Research and development	\$ 145	\$ 413	\$ 197	\$ 725	

MERCURY COMPUTER SYSTEMS, INC. UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

		Three months ended December 31,		ths ended iber 31,
	2009	2008	2009	2008
Cash flows from operating activities:				
Net income (loss)	\$ 2,520	\$(17,064)	\$ 6,878	\$(18,368)
Depreciation and amortization	1,658	2,393	3,346	5,419
Impairment of goodwill and long-lived assets	150	14,555	150	14,555
Other non-cash items, net	462	2,573	(1,164)	3,061
Changes in operating assets and liabilities	377	277	(1,436)	703
Net cash provided by operating activities	5,167	2,734	7,774	5,370
Cash flows from investing activities:				
Sales (purchases) of marketable securities, net	448	(57,737)	850	(57,628)
Purchases of property and equipment, net	(1,983)	(1,108)	(2,800)	(2,219)
Proceeds from liquidation of insurance policies		831		831
Payments on sale of discontinued operations, net	(923)		(707)	
Payments for acquired intangible assets	(67)		(125)	
Net cash used in investing activities	(2,525)	(58,014)	(2,782)	(59,016)
Cash flows from financing activities:				
Proceeds from employee stock option and purchase plans	750	247	823	413
Repurchases of common stock	(142)	(58)	(367)	(297)
(Payments) borrowings under line of credit	(514)	31,410	(773)	31,410
Payments under capital leases	(8)	(93)	(45)	(135)
Gross tax windfall from stock-based compensation	278	92	614	450
Net cash provided by financing activities	364	31,598	252	31,841
Effect of exchange rate changes on cash and cash equivalents	(59)	714	3	718
Net increase (decrease) in cash and cash equivalents	2,947	(22,968)	5,247	(21,087)
Cash and cash equivalents at beginning of period	49,250	60,926	46,950	59,045
Cash and cash equivalents at end of period	\$52,197	\$ 37,958	\$52,197	\$ 37,958

UNAUDITED SUPPLEMENTAL INFORMATION - RECONCILIATION OF GAAP TO NON-GAAP MEASURES

Beginning with the first quarter of fiscal 2010, Mercury changed its non-GAAP measure for reporting financial performance to adjusted EBITDA. This financial measure excludes the impact of certain items and, therefore, has not been calculated in accordance with GAAP. The adjustments to this non-GAAP financial measure, and the basis for such adjustments, are outlined below:

Stock-based compensation expense. The Company incurs expense related to stock-based compensation included in its GAAP presentation of cost of revenues, selling, general and administrative expense and research and development expense. Although stock-based compensation is an expense of the Company and viewed as a form of compensation, these expenses vary in amount from period to period, and are affected by market forces that are difficult to predict and are not within the control of management, such as the market price and volatility of the Company's shares, risk-free interest rates and the expected term and forfeiture rates of the awards. In accordance with FASB ASC 718, previously SFAS No. 123R, stock-based compensation expense is calculated as of the grant date of each stock-based award, and generally cannot be changed or influenced by management after the grant date. Management believes that exclusion of these expenses allows comparisons of operating results that are consistent with periods prior to the Company's adoption of FASB ASC 718, and allows comparisons of the Company's operating results to those of other companies, both public, private or foreign, that disclose non-GAAP financial measures that exclude stock-based compensation.

Amortization of acquired intangible assets. The Company incurs amortization of intangibles related to various acquisitions it has made in recent years. These intangible assets are valued at the time of acquisition, are then amortized over a period of several years after the acquisition and generally cannot be changed or influenced by management after the acquisition. Management believes that exclusion of these expenses allows comparisons of operating results that are consistent over time for both our newly-acquired and long-held businesses.

Depreciation. The Company incurs depreciation expense related to capital assets purchased to support the ongoing operations of the business. These assets are recorded at cost and are depreciated using the straight-line method over the useful life of the asset. Purchases of such assets may vary significantly from period to period and without any correlation to underlying operating performance. Management believes that exclusion of depreciation expense allows comparisons of operating results that are consistent across past, present and future periods.

Restructuring. The Company incurs restructuring charges in connection with management's decisions to undertake certain actions to realign operating expenses through workforce reductions and the closure of certain Company facilities, businesses and product lines. Management believes this item is outside the normal operations of the Company's business and is not indicative of ongoing operating results, and that exclusion of this expense allows comparisons of operating results that are consistent across past, present and future periods.

Impairment of long-lived assets. The Company incurs impairment charges of long-lived assets based on events that may or may not be within the control of management. Management believes these items are outside the normal operations of the Company's business and are not indicative of ongoing operating results, and that exclusion of these expenses allows comparisons of operating results that are consistent across past, present and future periods.

Income Taxes. The Company's GAAP tax expense can fluctuate materially from period to period due to tax adjustments that have no relation to underlying operating performance. Management feels that exclusion of tax expense allows comparisons of operating results that are consistent across past, present and future periods.

Interest Income and Expense. The Company receives interest income on investments and incurs interest expense on loans, capital leases and other financed arrangements. These charges may vary from period to period due to changes in interest rates driven by general market conditions or other circumstances outside of the normal course of Mercury's operations. Management believes that exclusion of these items allows comparisons of operating results that are consistent across past, present and future periods.

Mercury uses adjusted EBITDA as a principal indicator of the operating performance of its business. Management excludes the above-described items from its internal forecasts and models when establishing internal operating budgets, supplementing the financial results and forecasts reported to the Company's board of directors, determining the portion of bonus compensation for executive officers and other key employees based on operating performance, evaluating short-term and long-term operating trends in the Company's operations, and allocating resources to various initiatives and operational requirements. The Company believes that adjusted EBITDA permits a comparative assessment of its operating performance, relative to its performance based on its GAAP results, while isolating the effects of charges that may vary from period to period without any correlation to underlying operating performance. The Company believes that these non-GAAP financial adjustments are useful to investors because they allow investors to evaluate the effectiveness of the methodology and information used by management in its financial and operational decision-making. The Company believes that trends in its adjusted EBITDA are valuable indicators of its operating performance.

Adjusted EBITDA is a non-GAAP financial measure and should not be considered in isolation or as a substitute for financial information provided in accordance with GAAP. This non-GAAP financial measure may not be computed in the same manner as similarly titled measures used by other companies. The Company expects to continue to incur expenses similar to the adjusted EBITDA financial adjustments described above, and investors should not infer from the Company's presentation of this non-GAAP financial measure that these costs are unusual, infrequent or non-recurring.

The following tables reconcile the non-GAAP financial measures to their most directly comparable GAAP financial measures.

(in thousands)

		Three months ended December 31,		is ended er 31,
	2009	2008	2009	2008
Income (loss) from continuing operations	\$2,364	\$(1,217)	\$ 6,789	\$ 136
Income tax expense	412		1,318	_
Interest (income) expense, net	(50)	259	(72)	102
Depreciation	1,224	1,440	2,478	2,940
Amortization of acquired intangible assets	434	447	868	1,457
Impairment of long-lived assets	150		150	_
Restructuring	(19)	235	254	474
Stock-based compensation expense	1,536	2,339	2,025	3,449
Adjusted EBITDA	\$6,051	\$ 3,503	\$13,810	\$8,558

MERCURY COMPUTER SYSTEMS, INC. RECONCILIATION OF FORWARD-LOOKING GUIDANCE RANGE Quarter Ending March 31, 2010

Beginning with the first quarter of fiscal 2010, the Company changed its reported non-GAAP measure of financial performance to adjusted EBITDA. The Company defines adjusted EBITDA as income from continuing operations before interest, income taxes, depreciation, amortization of acquired intangible assets, restucturing, impairment of long-lived assets and stock-based compensation costs.

The following table reconciles the adjusted EBITDA financial measure to its most directly comparable GAAP measure:

(in thousands, except per share data)

	RANGE	
	LOW	HIGH
GAAP expectation — Loss from continuing operations per share	\$ (0.15)	\$ (0.11)
GAAP expectation — Loss from continuing operations	\$(3,499)	\$(2,503)
Adjust for:		
Income tax benefit	(632)	(453)
Interest income, net	(33)	(33)
Depreciation	1,421	1,421
Amortization of acquired intangible assets	434	434
Impairment of long-lived assets	_	_
Restructuring	_	
Stock-based compensation expense	1,239	1,239
Adjusted EBITDA expectation	\$(1,070)	\$ 105



News Release

FOR IMMEDIATE RELEASE

Mercury Computer Systems Names David R. Martinez President of Mercury Federal Systems

CHELMSFORD, Mass., January 26, 2010/PRNewswire-FirstCall/ — Mercury Computer Systems, Inc. (NASDAQ: MRCY) (www.mc.com), a leading provider of embedded computing systems and software for image, sensor, and signal processing applications, today announced it has elected David R. Martinez as president of its subsidiary, Mercury Federal Systems, Inc. (MFS), effective as of March 1, 2010. Mr. Martinez joins MFS from MIT Lincoln Laboratory, where he was head of the ISR Systems and Technology Division.

Mr. Martinez will have responsibility for MFS and will report to its Board of Directors working with Mark Aslett, President and CEO of Mercury Computer Systems. MFS provides system architecture consultation, design, analysis, integration, and software engineering services that enable clients to deploy ISR smart processing solutions on an accelerated time cycle. In Fiscal Year 2009, MFS's first full year of operations, the business posted revenues of \$5.7 million and bookings of \$11.9 million.

"We are pleased to add a leader like David to our MFS team," said Aslett. "Our customers will be able to leverage David's significant signal processing and ISR domain expertise to help them rapidly develop and deploy advanced, open system solutions for the intelligence and persistent ISR markets. These solutions will help to meet the warfighter's rapidly evolving needs in theater. I also want to thank Mike Johnson for his role as the interim president of MFS. Mike kept MFS moving ahead and provided the leadership we needed as we searched for a new president."

Mr. Martinez joined the MIT Lincoln Laboratory in 1988 and most recently led the ISR Systems and Technology Division. He had direct responsibility for the division's programs in the development of advanced techniques and prototypes for surface surveillance, laser systems, active and passive adaptive array processing, integrated sensing and decision support, undersea warfare, and embedded hardware and software computing. The division reached over \$140M in total operating budget in FY09 and had more than 330 employees.

Mr. Martinez received his Bachelor of Science degree in electrical engineering from New Mexico State University in 1976, a Master of Science degree in electrical engineering from the Massachusetts Institute of Technology (MIT), and an Electrical Engineer degree jointly from MIT and the Woods Hole Oceanographic Institution. He earned an M.B.A. from the Southern Methodist University, and has attended the Program for Senior Executives in National and International Security at the John F. Kennedy School of Government, Harvard University. He was elected as an IEEE Fellow in 2003, and was awarded the Eminent Engineer Award in 2008 from the College of Engineering at New Mexico State University.

Mercury Computer Systems, Inc. – Where Challenges Drive Innovation™

Mercury Computer Systems (www.mc.com, NASDAQ: MRCY) provides embedded computing systems and software that combine image, signal, and sensor processing with information management for data-intensive applications. With deep expertise in optimizing algorithms and software and in leveraging industry-standard technologies, we work closely with customers to architect comprehensive, purpose-built solutions that capture, process, and present data for defense electronics, semiconductor equipment manufacturing, commercial computing, homeland security, and other computationally challenging markets. Our dedication to performance excellence and collaborative innovation continues a 25-year history in enabling customers to gain the competitive advantage they need to stay at the forefront of the markets they serve.

Mercury is based in Chelmsford, Massachusetts, and serves customers worldwide through a broad network of direct sales offices, subsidiaries, and distributors.

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 the senior management of the Company's Mercury Federal Systems, Inc. subsidiary. 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 geo-political 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, inability to fully realize the expected benefits from acquisitions or dispositions 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 filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2009. 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

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Contact: Robert Hult, CFO, Mercury Computer Systems, Inc. 978-967-1990

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