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) June 22, 2005

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.)

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)

	ck 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 visions (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)
1	Pre-commencement communications pursuant to Rule 14d-2(h) under the Exchange Act (17 CFR 240 14d-2(h))

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

<u>Item 7.01</u> <u>Regulation FD Disclosure.</u>

The management of Mercury Computer Systems, Inc. ("Mercury") will present an overview of the Company's business on Wednesday, June 22, 2005 at the William Blair & Co. 25th Annual Growth Stock Conference. Attached as Exhibit 99.1 to this Current Report on Form 8-K (the "Report") is a copy of the slide presentation to be made by Mercury at the conference.

This information is being furnished pursuant to Item 7.01 of this Report and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section and will not be incorporated by reference into any registration statement filed by Mercury under the Securities Act of 1933, as amended, unless specifically identified as being incorporated therein by reference. This Report will not be deemed an admission as to the materiality of any information in this Report that is being disclosed pursuant to Regulation FD.

Please refer to page 2 of Exhibit 99.1 for a discussion of certain forward-looking statements included therein and the risks and uncertainties related thereto.

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.

Date: June 22, 2005 By: /S/ JOSEPH HARTNETT

Name: Joseph M. Hartnett

Title: Vice President, Controller and
Chief Accounting Officer

EXHIBIT INDEX

Exhibit No. Description

Exhibit 99.1 Presentation Materials dated June 22, 2005 *

* Filed herewith.



Forward-Looking Safe Harbor Statement



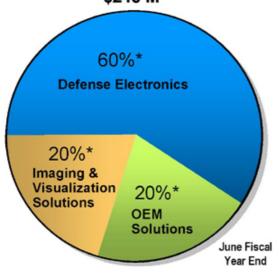
Mercury management will present an overview and outlook for the Company. In addition, Company representatives will answer questions concerning business and financial developments, trends, and other matters affecting the Company, some of the responses to which may contain information that has not been previously disclosed. This presentation contains certain forwardlooking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including those relating to anticipated fiscal 2005 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 unforeseen 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, the failure to locate favorable acquisition and partnership opportunities, risks associated with the integration of acquisitions, failure of the acquisition to achieve desired or projected results, continued funding of defense programs, timing of such fundings, market acceptance of the Company's products, shortages in components, production delays due to performance quality issues with outsourced components, and various other factors beyond the Company's control. 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. The Company cautions audience members 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.

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Company Overview



FY05 Revenues Projection: \$245 M*

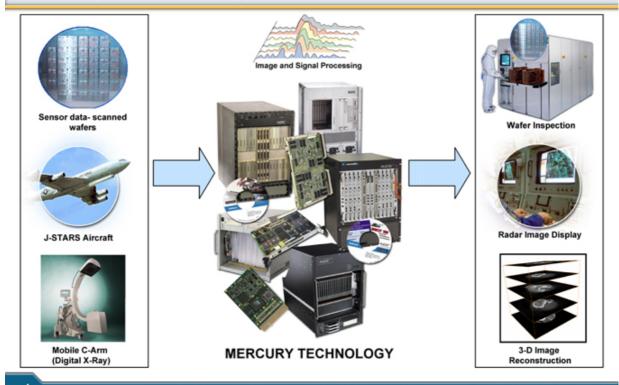


- Founded in 1981
- Leading provider of innovative, engineered computing solutions for computeintensive applications
- Office locations in U.S., UK, France, Germany and Japan; R&D centers in U.S., France, and Germany
- 733 employees worldwide;
 300 engineers
- Investment in knowledge of customer applications

^{*}Per company guidance, April 21, 2005 conference call

Mercury Technology in Action





William Blair & Co. 25th Annual Growth Stock Conference 6/22/2005



Defense Electronics Group



Deployed across all environments

- Air, land, and sea platforms
- Commercial, rugged, and conduction- and spraycooled configurations

Provide full life-cycle support

From R&D through deployment

Positioned for growth

 Driving innovation for the next-generation applications



Representative

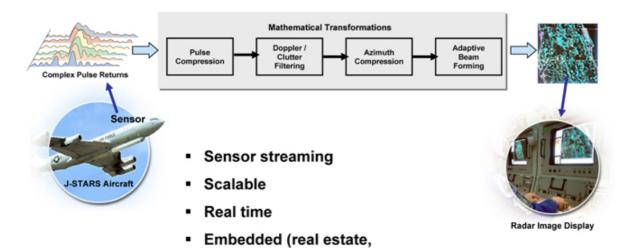
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William Blair & Co. 25th Annual Growth Stock Conference 6/22/2005

DEG Value Proposition



Real-time signal and image processing applications



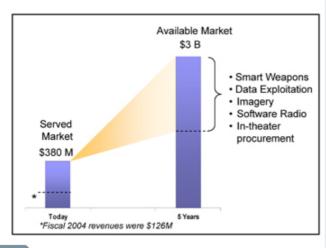
environmental, cooling constraints)

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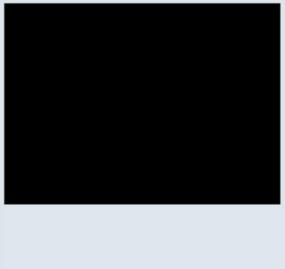
DEG Growth Drivers



- DoD transformation agenda/ISR initiative
- Expansion to lower echelons
- Network Centric Warfare

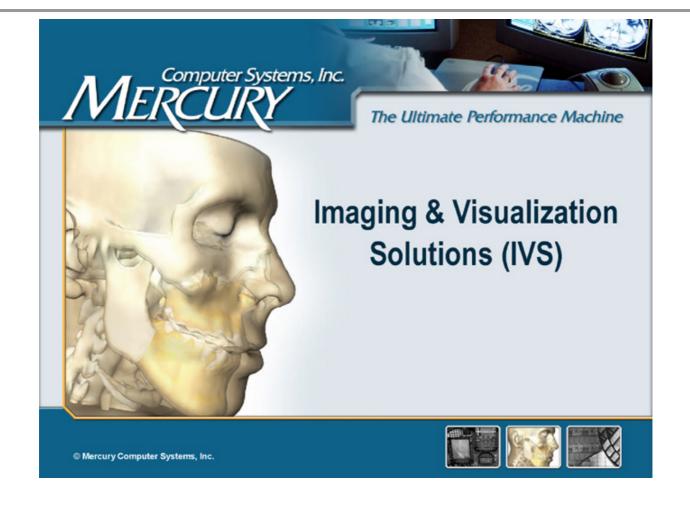


\$3 Billion Market Opportunity



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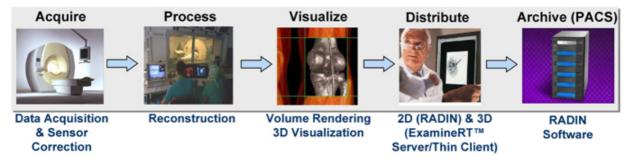
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Value Proposition



Increase Data Throughput, Dramatically Accelerating Imaging Workflow

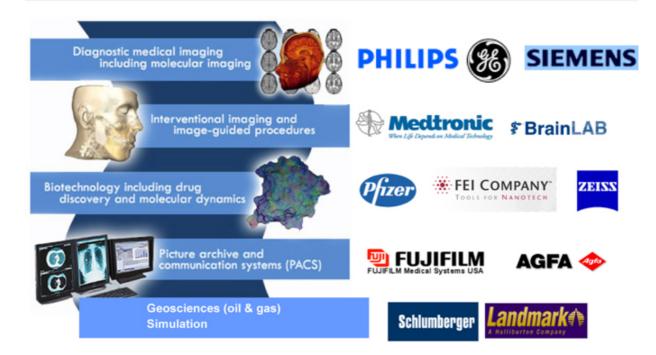


- Image reconstruction, processing, and visualization
- All steps from scanner output to end user
- Embedded components and integrated solutions
- Broad end-to-end medical systems OEM Solution portfolio

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Market Opportunities





Grow through Technology



June 9, 2005 - "Mercury Computer Systems to Acquire SOHARD AG"

- 19M €
- \$10M revenue run rate
- 85 employees based in Fuerth, Germany
- Expected to close in 3Q CY05

Software competence

- Image understanding (algorithm)
- Visualization solution: 2D and 3D

Immediate applications

- Strengthen presence in Medical Diagnostic Imaging (MDI)
- Open new market in geosciences
- Open opportunities in biotechnology, simulation, geosciences

Technology leadership

- Extend current expertise
 - » From 2D to 4D





IVS Growth Drivers

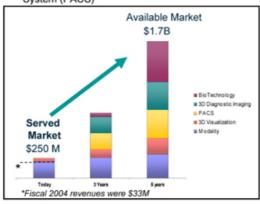


. Growing need for intensive computing capabilities

- Increased volume of data
- Enhanced image accuracy
- Real-time 3D: interventional

Market opportunities

- Diagnostic Medical Imaging
- Biotechnology
- Geosciences
- Picture Archiving and Communication System (PACS)



\$1.7 Billion Market Opportunity



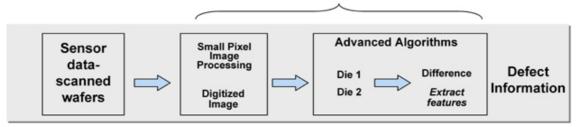


Wafer Inspection Example



Mercury enables wafer inspection systems that search for defects on silicon wafers

Image Correction & Defect Detection



Mercury solutions solve the hardest problems

- Gigabytes per second of streaming I/O and interconnect bandwidth
- Software-programmable solutions scalable to Teraflops

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OSG Markets



Delivering specialized processing solutions for demanding commercial OEM applications

Semiconductor capital equipment market

- Wafer and reticle inspection
 - Systems that process streaming data to find defects
- Mask writing
 - Systems that generate patterns to write to semiconductor and flat-panel masks

Communications computing market

- Wireless infrastructure
 - Next-generation packet and signal processing solutions

OSG Growth Drivers

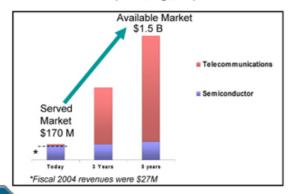


Semiconductor capital equipment solutions

- Processing needs outpace mainstream computing as data rates and algorithm complexity increase
- Strong market demand for process control equipment
- Design wins moving into production

New market opportunities in telecommunications

- Industry emerging from downturn
- Equipment makers rely more on external innovation
- New standards will replace proprietary implementations in data and user plane, e.g., RapidIO[®]



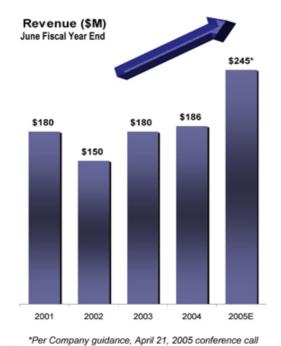


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William Blair & Co. 25th Annual Growth Stock Conference 6/22/2005

Value Creation: Growth





er Company guidance, April 21, 2005 conference call

Revenue growth has begun

- Q3 FY05 record revenue, \$64.3M
- Backlog increased to \$110.4M

Projected 2005 revenue growth 32%

- Growth projected in all three business units
- Objective: sustained 25%+ longterm revenue growth rate

2005 Guidance



	Fiscal Year Ending June 30, 2005*
Revenues	\$245 M
Gross Margin Percent	~66%
Operating Income	~17%
EPS	\$1.21

Figures in millions, except percent and per share data which includes adjustment for contingent convertibles

*Per Company guidance, April 21, 2005 conference call

Strong Balance Sheet



Historically strong balance sheet

Assets augmented by \$125 million convertible debt financing

Supports open innovation growth agenda

22 . (.)	
(Quarter ended March 31, 2005)	
Cash and Equivalents	\$226
Total Current Assets	\$247
Total Assets	\$367
Total Debt	\$137
Total Liabilities	\$180
Stockholders' Equity	\$187

Growth through Open Innovation



Extend Mercury's capabilities with partnerships, alliances, and acquisitions

- Focused on Intellectual Property (IP), technology "fit"
- Accretive within first year
- Consider the size of the deal
- Integrate into the company

momentum COMPUTER

visual concepts

Four recent acquisitions

TGS Group, Advanced Radio Corporation,
 Momentum Computer, Inc., SOHARD AG (pending)



Expanding list of alliances/partners

 NVIDIA Corporation, RADIN Group, Ziehm Imaging, Massachusetts General Hospital (MGH)





Timeless Business Model



	FY03	FY04	Guidance FY05	Timeless Business Model
Revenue	100%	100%	100%	100%
Gross Margin	66%	67%	~66%	66-67%
SG&A	30%	30%		29-30%
R&D	21%	21%		20-21%
Income from Operations	14%	17%	~17%	16-18%

MRCY Summary



- Strong competitive position in attractive and growing markets
- Diversified revenue base defense and commercial
- Straightforward operating model and financial structure
- Strong balance sheet, operating cash flow with significant financing flexibility
- Open innovation strategy through partnerships and acquisitions to enhance capability to deliver solutions across target markets

Sustain a 25% or better long-term revenue growth rate



www.mc.com

NASDAQ: MRCY