

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

SCHEDULE TO

(Rule 13e-4)

TENDER OFFER STATEMENT UNDER SECTION 14(d)(1) OR 13(e)(1)
OF THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. 2)

MERCURY COMPUTER SYSTEMS, INC.

(Name of Subject Company (Issuer) and Filing Person (Offeror))

Options to Purchase Common Stock, Par Value \$.01 Per Share, of Mercury Computer Systems, Inc.

(Title of Class of Securities)

589378 10 8

(CUSIP Number of Class of Securities (Underlying Common Stock))

Craig Barrows, Esq.

Vice President and General Counsel

Mercury Computer Systems, Inc.

199 Riverneck Road

Chelmsford, Massachusetts 01824

(978) 256-1300

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications on Behalf of Filing Person)

Copies of all communications should be sent to:

Anthony J. Medaglia, Jr., P.C.

Goodwin Procter LLP

Exchange Place

Boston, Massachusetts 02109

(617) 570-1000

CALCULATION OF FILING FEE

Transaction Value*

\$15,311,708

Amount of Filing Fee**

\$ 1,638.36

* Calculated solely for purposes of determining the filing fee. This amount assumes that options to purchase 2,188,434 shares of common stock of Mercury Computer Systems, Inc., which options have an approximate aggregate value of \$15,311,708, will be exchanged pursuant to this offer. The aggregate value of such options was calculated based on the Black-Scholes option pricing model, as of July 31, 2006.

** The amount of the filing fee, calculated in accordance with Rule 0-11 under the Securities Exchange Act of 1934, as amended, equals \$107.00 per million dollars of the value of the transaction. The filing fee was previously paid on August 11, 2006 in connection with the initial filing of this Schedule TO.

Check the box if any part of the fee is offset as provided in Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: Not applicable

Filing Party: Not applicable

Form or Registration No.: Not applicable

Date Filed: Not applicable

Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- third party tender offer subject to Rule 14d-1.
- issuer tender offer subject to Rule 13e-4.
- Going-private transaction subject to Rule 13e-3.
- amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer:

Introductory Statement

This Amendment No. 2 to Schedule TO amends and supplements the Tender Offer Statement on Schedule TO filed by Mercury Computer Systems, Inc., a Massachusetts corporation (“Mercury”), with the Securities and Exchange Commission on August 11, 2006 (as amended by Amendment No. 1 thereto on August 11, 2006) in connection with Mercury’s offer to exchange certain outstanding eligible options to purchase shares of Mercury’s common stock, par value \$.01 per share, that were originally granted under Mercury’s 1997 Stock Option Plan for shares of restricted stock or phantom stock units that will be granted under Mercury’s 2005 Stock Incentive Plan, upon the terms and subject to the conditions set forth in the Offer to Exchange that was filed as Exhibit (a)(1)(A) to the Schedule TO.

This Amendment No. 2 amends and supplements the Schedule TO and the Offer to Exchange in order to:

- (i) clarify as appropriate throughout the Offer to Exchange that holders of eligible options who are domiciled in Canada are eligible to participate in the exchange program, and to add additional information in Appendix B addressing tax consequences of participation in the exchange program to eligible employees who are subject to taxation in Canada;
- (ii) clarify in Section 4 (“Procedures for Tendering Options for Exchange”) of the Offer to Exchange that Mercury’s determinations of questions regarding the number of shares subject to eligible options, and the validity, form, eligibility (including time of receipt) of submitted elections (including any changes to elections) and acceptance of any tender of options will be subject to remedies that may be available under applicable law;
- (iii) clarify in Section 5 (“Withdrawal Rights”) of the Offer to Exchange that Mercury’s determinations of questions as to the form and validity, including time of receipt, of notices of withdrawals will be subject to remedies that may be available under applicable law;
- (iv) revise the bullet points in Section 7 (“Conditions of the Exchange Program”) of the Offer to Exchange to:
 - (a) replace the phrase “our business, condition (financial or other), results of operations, assets, liabilities or prospects” with the phrase “our business, financial condition, results of operations, assets or liabilities;”
 - (b) replace the phrase “our business, condition (financial or other), results of operations, assets, liabilities, prospects or stock ownership” with the phrase “our business, financial condition, results of operations, assets or liabilities;” and
 - (c) clarify that Mercury’s determinations or judgments concerning the events described in Section 7 will be subject to remedies that may be available under applicable law;
- (v) clarify in Section 19 (“Forward-Looking Statements”) that Mercury’s disclaimer of any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is qualified to the extent any such obligation to update is required by applicable federal securities laws;
- (vi) file as Exhibit (a)(1)(A)(ii) an amended Offer to Exchange reflecting the above-described clarifications and revisions;
- (vii) file as Exhibit (a)(1)(P) an email notifying eligible employees of the availability of the amended Offer to Exchange on Mercury’s intranet; and
- (viii) file as Exhibit (d)(11) a form of Stock Option Agreement under Mercury’s 2005 Stock Incentive Plan.

ITEM 12. EXHIBITS.

The Exhibit Index included in this Amendment No. 2 to Schedule TO is incorporated herein by reference.

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

MERCURY COMPUTER SYSTEMS, INC.
(Registrant)

Date: September 1, 2006

By: /s/ Robert E. Hult

Robert E. Hult
Senior Vice President,
Chief Financial Officer

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Incorporated by Reference</u>				<u>Filed Herewith</u>
		<u>Form</u>	<u>File No.</u>	<u>Exhibit</u>	<u>Filing Date</u>	
(a)(1)(A)(i)	Offer to Exchange, dated August 11, 2006, including Transmittal Letter, form of Election to Participate and form of Notice of Withdrawal.	TO-I	005-52823	(a)(1)(A)	August 11, 2006	
(a)(1)(A)(ii)	Amended Offer to Exchange, dated September 1, 2006, including form of Election to Participate and form of Notice of Withdrawal.					X
(a)(1)(B)	Form of Personnel Grant Status.	TO-I	005-52823	(a)(1)(B)	August 11, 2006	
(a)(1)(C)	Email dated August 11, 2006 announcing the commencement of the election period for the exchange program.	TO-I	005-52823	(a)(1)(C)	August 11, 2006	
(a)(1)(D)	Form of email reminder of option exchange program expiration date.	TO-I	005-52823	(a)(1)(D)	August 11, 2006	
(a)(1)(E)	Preliminary Proxy Statement.	14A	000-23599	N/A	June 27, 2006	
(a)(1)(F)	Definitive Proxy Statement.	14A	000-23599	N/A	July 10, 2006	
(a)(1)(G)	Mercury's 2005 Stock Incentive Plan, amended and restated through August 7, 2006.	8-K	000-23599	10.1	August 8, 2006	
(a)(1)(H)	Form of Restricted Stock Award Agreement under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.3	November 16, 2005	
(a)(1)(I)	Form of Deferred Stock Award Agreement under Mercury's 2005 Stock Incentive Plan.	10-Q	000-23599	10.1	May 9, 2006	
(a)(1)(J)	French Guidelines for Stock Free Awards to employees and corporate officers of Mercury's French subsidiaries.	TO-I	005-52823	(a)(1)(J)	August 11, 2006	
(a)(1)(K)	Mercury's Annual Report on Form 10-K for the fiscal year ended June 30, 2005.	10-K	000-23599	N/A	September 13, 2005	
(a)(1)(L)	Mercury's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005.	10-Q	000-23599	N/A	November 9, 2005	
(a)(1)(M)	Mercury's Quarterly Report on Form 10-Q for the quarter ended December 31, 2005.	10-Q	000-23599	N/A	February 9, 2006	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
(a)(1)(N)	Mercury's Quarterly Report on Form 10-Q for the quarter ended March 31, 2006.	10-Q	000-23599	N/A	May 9, 2006	
(a)(1)(O)	PowerPoint Presentation Regarding the Exchange Program.	TO-I/A	005-52823	(a)(1)(O)	August 11, 2006	
(a)(1)(P)	Email notifying eligible employees of the availability of the amended Offer to Exchange on Mercury's intranet.					X
(b)	Not applicable.					
(d)(1)	Mercury's 1997 Stock Option Plan, as amended and restated.	8-K	000-23599	10.1	November 18, 2004	
(d)(2)	Form of Option Agreement under Mercury's 1997 Stock Option Plan.	10-Q	000-23599	10.1	November 1, 2004	
(d)(3)	Form of Restricted Stock Award Agreement under Mercury's 1997 Stock Option Plan.	8-K	000-23599	10.1	August 17, 2005	
(d)(4)	Form of Restricted Stock Award Agreement with James R. Bertelli under Mercury's 1997 Stock Option Plan.	10-K	000-23599	10.2.4	September 13, 2005	
(d)(5)	Form of Stock Option Agreement under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.2	November 16, 2005	
(d)(6)	Form of Restricted Stock Award Agreement under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.3	November 16, 2005	
(d)(7)	Form of Restricted Stock Award Agreement with James R. Bertelli under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.4	November 16, 2005	
(d)(8)	Form of Stock Option Agreement under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.1	June 2, 2006	
(d)(10)	Form of Change in Control Severance Agreement.	8-K	000-23599	10.1	February 23, 2006	
(d)(11)	Form of Stock Option Agreement under Mercury's 2005 Stock Incentive Plan.	8-K	000-23599	10.1	August 21, 2006	
(g)	Not applicable.					
(h)	Not applicable.					

MERCURY COMPUTER SYSTEMS, INC.

**199 Riverneck Road
Chelmsford, Massachusetts 01824**

**OFFER TO EXCHANGE
RESTRICTED STOCK OR PHANTOM STOCK UNITS
FOR
CERTAIN OUTSTANDING STOCK OPTIONS**

**August 11, 2006
As amended September 1, 2006**

[Table of Contents](#)

MERCURY COMPUTER SYSTEMS, INC.
199 Riverneck Road
Chelmsford, Massachusetts 01824
OFFER TO EXCHANGE
RESTRICTED STOCK OR PHANTOM STOCK UNITS
FOR
CERTAIN OUTSTANDING STOCK OPTIONS
August 11, 2006
As amended September 1, 2006

TABLE OF CONTENTS

	<u>Page</u>
Summary of Terms—Overview	1
Summary of Terms—Questions and Answers	4
How the Exchange Program Works	4
Background and Purpose of the Exchange Program	11
Duration of the Election Period	13
How to Elect to Participate	13
U.S. Federal Income Tax Considerations	14
How to Get More Information	15
Certain Risks of Participating in the Exchange Program	17
Economic Risks	17
Tax-Related Risks for U.S. Residents	18
Tax-Related Risks for Non-U.S. Residents	19
Business-Related Risks	19
The Exchange Program	20
1. Eligibility	20
2. Number of Restricted Stock Rights; Expiration Date	20
3. Purpose of the Exchange Program	22
4. Procedures for Tendering Options for Exchange	22
5. Withdrawal Rights	24
6. Acceptance of Options for Exchange and Issuance of Replacement Awards	25
7. Conditions of the Exchange Program	26
8. Price Range of Our Common Stock	27
9. Source and Amount of Consideration; Terms of Replacement Awards	28
10. Information About Mercury	31
11. Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Options	33
12. Status of Options Accepted by Us in the Exchange Program; Accounting Consequences of the Exchange Program	34
13. Legal Matters; Regulatory Approvals	35
14. Material U.S. Federal Income Tax Consequences	35
15. Considerations Specific to Eligible Employees Outside the United States	37
16. Extension of the Election Period; Termination; Amendment	37
17. Fees and Expenses	38
18. Additional Information	38
19. Forward-Looking Statements	39
Appendix A Information About the Directors and Executive Officers of Mercury Computer Systems, Inc.	A-1
Appendix B Guide to International Issues	B-1
Appendix C Election to Participate	C-1
Appendix D Notice of Withdrawal	D-1

This document constitutes part of the Section 10(a) Prospectus relating to the Mercury Computer Systems, Inc. 2005 Stock Incentive Plan.

SUMMARY OF TERMS—OVERVIEW

Mercury Computer Systems, Inc. is offering eligible employees the opportunity to exchange, on a grant-by-grant basis, their outstanding eligible options for shares of restricted stock or phantom stock units that we will grant under our 2005 Stock Incentive Plan. Eligible employees participating in the exchange program who are domiciled in the United States, the United Kingdom, Canada and Japan will receive restricted stock awards consisting of shares of restricted stock subject to vesting, while eligible employees participating in the exchange program who are domiciled in France or Germany will receive deferred stock awards consisting of phantom stock units that will represent the right to receive shares of our common stock upon vesting. In this document, except where it is necessary to differentiate between these two types of awards, we refer to both shares of restricted stock and phantom stock units collectively as “restricted stock rights,” and we refer to the restricted stock awards and deferred stock awards to be granted in the exchange program collectively as “replacement awards.”

Please note that the Summary of Terms that appears on pages 1 through 16 of this document is intended only to give you an overview of the exchange program. **You should read this document in its entirety, including the appendices, before deciding whether to participate in the exchange program.** Throughout the Summary of Terms, we have included cross-references to the relevant sections of the document where you can find a more complete description of the topics discussed herein.

References in this document to “Mercury,” the “Company,” “we,” “us” or “our” mean Mercury Computer Systems, Inc. References to the “offer to exchange” mean this document and its appendices. References to the “offer” or “exchange program” mean the stock option exchange program described in the offer to exchange. References to “tendering” options mean electing to exchange options in this exchange program in accordance with the procedures described in this offer to exchange.

- **Expiration Date.** THE PERIOD DURING WHICH YOU MAY ELECT TO PARTICIPATE IN THE EXCHANGE PROGRAM (THE “ELECTION PERIOD”) EXPIRES ON FRIDAY, SEPTEMBER 8, 2006 (THE “EXPIRATION DATE”) AT 12:00 MIDNIGHT, EASTERN TIME, UNLESS WE EXTEND IT. If we extend the election period, the term “expiration date” will refer to the latest date and time at which the election period expires.
- **Eligible Employees.** You are eligible to participate in the exchange program if (1) you hold eligible options, (2) you are employed by us or one of our subsidiaries on August 11, 2006, and (3) you remain an employee through the expiration date (currently September 8, 2006) and the date on which tendered options are cancelled and the replacement awards are granted. Members of our Board of Directors, and our five most highly compensated executive officers (including our chief executive officer) are not eligible to participate in the exchange program.
- **Eligible Options.** Options eligible for exchange in the exchange program are outstanding options granted under our 1997 Stock Option Plan that have exercise prices per share greater than a “threshold price,” which is the greater of (1) \$23.00 or (2) the closing price of our common stock reported on the Nasdaq Global Select Market on the expiration date.

For purposes of the exchange program, the term “option” means a particular option grant to purchase a specified number of shares of our common stock at a specified exercise price per share. You may tender for exchange any one or more of your eligible options or none at all. However, if you choose to tender an eligible option, you must tender the entire outstanding, unexercised portion of that option. We will not accept partial tenders of options.

- **Exchange Ratio.** The number of restricted stock rights to be granted in exchange for each eligible option tendered in the exchange program will be determined based upon a fixed 4-to-1 exchange ratio. As an example, if you elect to exchange an eligible option representing the right to purchase 1,000 shares of our common stock, you will receive a replacement award consisting of 250 restricted stock rights.

Table of Contents

- **Description of Replacement Awards.** Each share of restricted stock awarded in the exchange program is a share of our common stock that is issued to you on the date the award is granted, subject to vesting through your continued employment for a specified period. Until shares of restricted stock are vested, they remain subject to (1) forfeiture if your employment terminates and (2) restrictions on transfer. If and when the shares vest, they will be free of forfeiture conditions and restrictions on transfer, other than required tax withholding and compliance with applicable securities laws, Mercury's security trading policy and other legal requirements, and as otherwise specified in our 2005 Stock Incentive Plan.

Each phantom stock unit awarded in the exchange program represents the right to receive one share of our common stock upon vesting through your continued employment for a specified period. Until phantom stock units have vested, they remain subject to (1) forfeiture if your employment terminates and (2) restrictions on transfer. If and when the phantom stock units vest, the underlying shares of common stock will be issued to you free of forfeiture conditions and restrictions on transfer, other than required tax withholding and compliance with applicable securities laws, Mercury's security trading policy and other legal requirements, and as otherwise specified in our 2005 Stock Incentive Plan.

All replacement awards will be subject to the terms of our 2005 Stock Incentive Plan and an award agreement between you and us.

- **Vesting of Replacement Awards.** Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date. Notwithstanding the foregoing, restricted stock awards granted to participating executive officers, and all deferred stock awards granted in the exchange program will vest as to two-thirds of the underlying shares on the second anniversary of the date of grant, and as to the remaining one-third of the underlying shares on the third anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date.
- **Effect of Termination of Employment.** If you elect to participate in the exchange program and your employment with us or any of our subsidiaries is terminated for any reason on or before the date on which the tendered options are cancelled and the replacement awards are granted, or you have submitted or received a notice of termination of employment on or before such date, you will not receive a replacement award unless otherwise required by local law (see Section 1 of this offer to exchange). In such event you will retain your eligible options subject to their existing terms.
- **Other Terms and Conditions of the Exchange Program.** We are implementing the exchange program upon the terms and subject to the conditions described in this offer to exchange, including the appendices hereto, as the same may be amended from time to time. The exchange program is not conditioned upon a minimum number of option holders electing to participate or a minimum number of eligible options being exchanged, but is subject to other conditions described in Section 7 of this offer to exchange.
- **IMPORTANT: How to Participate in the Exchange Program.** Participation in the exchange program is voluntary, and there are no penalties for electing not to participate. If you wish to participate, you must complete, sign and deliver an election to participate (an "election") in the form attached to this offer to exchange as [Appendix C](#) in accordance with the instructions on page C-1, and ensure that your election is received by us no later than 12:00 midnight, Eastern Time, on the expiration date. If we do not receive your completed and signed election by 12:00 midnight, Eastern Time, on the expiration date, you will be deemed to have elected *not* to participate in the exchange program, in which event you will not receive a replacement award and your eligible options will remain outstanding and in effect in accordance with their existing terms. If you do participate, you do not need to return your existing stock option agreements with respect to tendered options as they will be automatically cancelled upon the granting of your replacement award.

* * *

[Table of Contents](#)

Although our Board of Directors has authorized the exchange program, neither we nor our Board of Directors makes any recommendation to you as to whether or not you should participate in the exchange program. Also, we have not authorized any person to make any recommendation on our behalf as to whether or not you should participate in the exchange program.

You must make your own decision as to whether or not to participate in the exchange program. In doing so, you should rely only on information contained in this offer to exchange and the appendices hereto, the materials referenced in Section 18 of this offer to exchange, any official question and answer session organized by our Human Resources Department, or any other authorized communications from us made generally available to eligible employees, as no other representations or information have been authorized by us. You should consult with your own advisors, including your tax, financial and legal advisors, before making any decisions regarding the exchange program.

Please note that in Japan and the United Kingdom, participation in the exchange program may give rise to an immediate tax charge. Please review Section 15 and [Appendix B](#) of this offer to exchange. You are advised to seek professional advice from your personal legal or tax advisor on the tax consequences related to your participation in the exchange program.

SUMMARY OF TERMS—QUESTIONS AND ANSWERS

The following should answer many of the questions that you may have about the exchange program; however, please read this offer to exchange in its entirety, including appendices, before deciding whether to tender your eligible options for exchange in the exchange program. Throughout these Questions and Answers, we have included references to the relevant sections of this offer to exchange where you can find more complete descriptions of the topics being discussed below.

HOW THE EXCHANGE PROGRAM WORKS

Q1. What is the exchange program?

We are offering eligible employees (described in response to Question 2) the opportunity to exchange eligible options (described in response to Question 5) for a lesser number of restricted stock rights (described in response to Question 11) in accordance with a 4-to-1 exchange ratio. If you are domiciled in the United States, the United Kingdom, Canada or Japan, your restricted stock rights will take the form of a restricted stock award (described in response to Question 11), and if you are domiciled in France or Germany, your restricted rights will take the form of a deferred stock award (described in response to Question 11). Restricted stock rights will be subject to a new vesting schedule (described in response to Question 15), regardless of whether the options tendered in the exchange program are vested or unvested and without regard to the current vesting schedule for such options.

Participation in the exchange program is voluntary, and there are no penalties for electing not to participate. If you choose not to participate in the exchange program, you will not receive a replacement award, and your outstanding options will remain outstanding and in effect in accordance with their existing terms.

Q2. Who can participate in the exchange program?

Only “eligible employees” may participate in the exchange program. Generally, you are eligible to participate if you are employed by us or one of our subsidiaries on August 11, 2006 and are still an employee (either on active status or on an approved leave of absence) on the date on which the tendered options are cancelled and the replacement awards are granted. An employee whose employment terminates for any reason on or before the date on which the replacement awards are granted will not be an eligible employee. Members of our Board of Directors and our five most highly compensated executive officers (including our chief executive officer) are not eligible to participate in the exchange program. (See [Appendix A](#) for a list of our executive officers and members of our Board of Directors and Section 1 of this offer to exchange for further details on eligibility.)

Q3. Are employees outside the United States eligible to participate?

Yes. Eligible employees employed outside the United States who hold eligible options may participate in the exchange program on the terms as described in this document. Eligible employees domiciled in France and Germany will receive deferred stock awards instead of restricted stock awards in exchange for their tendered options, and those replacement awards will be subject to a different vesting schedule than other eligible employees’ replacement awards. Please be sure to read Section 15 and [Appendix B](#), which discuss terms of the exchange program specific to eligible employees who are residing outside the United States.

Q4. What happens if my employment terminates before tendered options are cancelled?

If you tender eligible options in the exchange program, but before the tendered options are cancelled your employment with us or our subsidiaries terminates for any reason or you receive or submit a notice of termination, your tender will automatically be deemed to have been withdrawn and you will not participate in the exchange program. You will retain your outstanding options in accordance with their current terms and conditions, and depending on the circumstances of your termination of employment, you may be entitled to exercise them during a limited period of time following your termination date in accordance with their terms to

[Table of Contents](#)

the extent that they are vested. If you are currently considered an “at-will” employee, the exchange program does not change that status, and your employment may be terminated by us or by you at any time, including before the election period expires, for any reason, with or without cause.

Q5. Which options may I exchange?

Only “eligible options” may be tendered in the exchange program. Eligible options are outstanding options granted to eligible employees under our 1997 Stock Option Plan having per share exercise prices greater than the “threshold price.” The threshold price is the greater of (1) \$23.00 or (2) the closing price of our common stock reported on the Nasdaq Global Select Market on the date the election period expires. Any options that you previously tendered for exchange but which have an exercise price that is not greater than the threshold price will not be eligible for exchange and automatically will be excluded from the exchange program. You can view your stock option information by grant, including exercise price, at your online account at www.etrade.com. (See Section 2 of this offer to exchange.)

Q6. If I participate, what happens to my current options?

Eligible options you elect to tender under the exchange program will be cancelled promptly following the expiration of the election period, and you will no longer have those options available for exercise. Any options you do not tender for exchange, or which are not eligible options, will not be cancelled and will remain outstanding at their existing exercise prices and subject to their existing terms. (See Sections 6 and 12 of this offer to exchange.)

Q7. I have more than one eligible option. Do I have to exchange all of them in order to participate?

No. You may exchange one or more of your eligible options or none at all. However, if you elect to tender an eligible option for exchange, you must tender the entire, outstanding portion of that option. For purposes of this offer, the term “option” means a particular option grant to purchase a specified number of shares of our common stock at a specified exercise price per share. We will not accept partial tenders of options. If you attempt to tender for exchange less than the entire outstanding, unexercised portion of an eligible option, we will reject your tender of that particular option in its entirety. Any such rejection will not affect any other eligible option that you properly tender. (See Section 2 of this offer to exchange.)

Q8. May I tender unvested options?

Yes. Your eligible options do not need to be vested in order for you to participate in the exchange program. However, if you elect to tender a particular outstanding eligible option, you must tender the entire eligible option, both the vested and unvested portions.

Q9. May I tender an option that I have already exercised in full?

No. Only outstanding options are eligible for exchange under the exchange program. It does not apply in any way to shares you have already purchased, whether upon the exercise of options or otherwise, or whether or not you have vested in those shares. If you have exercised an option in its entirety, that option is no longer outstanding. If you have exercised an eligible option in part, the remaining unexercised portion of that option is outstanding and may be tendered for exchange. Options for which you have properly submitted an exercise notice prior to the date the election period expires will be considered exercised to that extent, whether or not you have received confirmation of exercise for the shares purchased.

Q10. What is a stock option?

A stock option is the right to purchase shares of stock at a specified price, regardless of the actual market price of the stock at the time the option is exercised. Typically, the specified, or “exercise,” price is the market

price of a share of the underlying stock on the date the option is granted. Due to subsequent fluctuations, at any given time following the grant of an option, the prevailing market price of the underlying stock may be greater than, equal to, or less than the specified exercise price of the option. When the market price of the underlying stock is greater than the exercise price of the option (otherwise known as an “in-the-money” option), the option holder receives value from exercising the option, because he or she is able to buy the underlying stock at less than its prevailing market price and then sell the purchased stock for the higher prevailing price. The holder of an option to purchase stock at an exercise price that is equal to or greater than the prevailing market price (otherwise known as an “out-of-the-money” option) generally would not exercise the stock option. The options eligible for exchange under the exchange program are, and have for some time been, “out-of-the-money.”

Q11. What are “restricted stock rights?”

In this offer to exchange, we refer to both shares of restricted stock and phantom stock units collectively as “restricted stock rights.” While the economic benefit of the exchange is intended to be substantially equivalent regardless of where an employee resides or works, the form of restricted stock rights is different for employees depending on where they are domiciled in order to avoid unintended income tax consequences to our employees in different jurisdictions. Eligible employees who are domiciled in the United States, the United Kingdom, Canada and Japan who participate in the exchange program will receive restricted stock awards in exchange for their surrendered eligible options, while eligible employees who are domiciled in France and Germany who participate in the exchange program will receive deferred stock awards in exchange for their surrendered eligible options.

Restricted stock awards consist of shares of our common stock that will be issued on the date the awards are granted. Restricted stock awards will be subject to vesting based on continued employment for a specified period. Until shares of restricted stock have vested, they remain subject to (1) forfeiture upon termination of employment and (2) restrictions on transfer. If and when the shares vest, they will no longer be “restricted,” and you will be free to hold, transfer or sell them, subject to required tax withholding and compliance with applicable securities laws, Mercury’s securities trading policies and any other legal requirements, and as otherwise specified in our 2005 Stock Incentive Plan.

Deferred stock awards consist of phantom stock units that are not actual shares of our common stock. Rather, they represent the right to receive shares of our common stock on a future date. Each phantom stock unit will be settled by the issuance of one share of our common stock on the date the unit vests. Phantom stock units are subject to (1) forfeiture upon termination of employment and (2) restrictions on transfer prior to vesting and the related issuance of our common stock. Shares you receive if and when your phantom stock units vest will no longer be “restricted,” and you will be free to hold, transfer or sell them, subject to required tax withholding and compliance with applicable securities laws, Mercury’s securities trading policies and other legal requirements, and as otherwise specified in our 2005 Stock Incentive Plan.

Participants in the exchange program will forfeit their unvested restricted stock rights if they cease to be employed by us and our subsidiaries for any reason, and participants may not sell, assign, transfer, pledge or otherwise encumber or dispose of unvested restricted stock rights. The vesting schedule for the replacement awards is described in response to Question 15. The forfeiture provisions, transfer restrictions and other terms of the replacement awards are set forth in our 2005 Stock Incentive Plan and the forms of award agreements included as exhibits to our Tender Offer Statement on Schedule TO filed with the Securities and Exchange Commission (to which this offer to exchange is also an exhibit). (See Section 9 of this offer to exchange.)

While the economic benefits of the restricted stock awards and the deferred stock awards to be granted in the exchange program are intended to be substantially equivalent (other than their differing vesting schedules), they do differ with regard to rights as a Mercury shareholder. Participants who are granted restricted stock awards will become Mercury shareholders on the date the restricted stock is issued to them, even though unvested, and will have all of the rights of a shareholder, including voting and dividend rights, subject to the restrictions contained in the applicable award agreement. On the other hand, participants who are granted

deferred stock awards will not be Mercury shareholders as a result of holding phantom stock units, and phantom stock units do not entitle their holders to vote at meetings of shareholders. You will not be paid for any dividends paid on our shares while you hold phantom stock units, although we do not currently pay dividends and have no current plan to do so. Once the phantom stock units have vested and the underlying shares of our common stock are issued to you, you will become and have all of the rights of a Mercury shareholder (including voting and dividend rights) with respect to those shares, and you may transfer or sell the shares, subject to required tax withholding and compliance with applicable securities laws, Mercury's securities trading policies and any other legal requirements, and as otherwise specified in our 2005 Stock Incentive Plan. (See Section 9 of this offer to exchange.)

Q12. What is the principal difference between stock options and restricted stock rights?

The rates of a stock option's appreciation and depreciation resulting from fluctuations in the prevailing market price of the underlying stock exceed those of restricted stock rights of equivalent value. Additionally, with respect to stock options, when the prevailing market price of the underlying stock declines below the applicable option exercise price, as it has in the case of the eligible options, the option has no realizable value. In contrast, restricted stock rights continue to have value even if the prevailing market price of the underlying stock has declined below its value at the time of grant. Essentially, the eligible options you hold (because their underlying shares are greater in number than the restricted stock rights for which they can be exchanged) may have greater potential value in the event that the price of our common stock increases significantly, but the restricted stock rights you would receive if you choose to participate in the exchange program (because they require no purchase price payment) will likely have greater value if our common stock does not increase significantly, provided you hold your restricted stock rights for the applicable vesting period.

Q13. Do I have to pay any money to receive the restricted stock awards or deferred stock awards, or the shares issued in settlement of deferred stock awards?

No. You will not be required to pay any money in connection with the granting of the restricted stock awards or deferred stock awards in connection with the exchange program, nor will you be required to pay any money to purchase the shares of our common stock to be issued in settlement of the deferred stock awards as they vest. However, you will be responsible for paying all applicable taxes in connection with the replacement awards and the sale of shares of our common stock. (See Questions 40 through 44 below and Sections 14 and 15 of this offer to exchange.)

Q14. If I participate, how many restricted stock rights will I receive?

All eligible options will be exchanged for restricted stock rights in accordance with a fixed 4-to-1 exchange ratio. As an example, if you elect to exchange an eligible option representing the right to purchase 1,000 shares of common stock, you will receive a replacement award consisting of 250 restricted stock rights. We will not issue any fractional restricted stock rights. Accordingly, if the sum of all restricted stock rights to be granted to you in exchange for your tendered eligible options includes a fractional share or unit, that fractional share/unit will be rounded (with 0.5 rounded up) to the nearest whole share/unit. (See Question 23 and Section 2 of this offer to exchange.)

Q15. When will my replacement award vest?

All replacement awards granted in the exchange program will be subject to a new vesting schedule that will commence on the date on which the replacement awards are granted. We will grant the replacement awards promptly following the expiration of the election period in exchange for properly tendered eligible options.

Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our

[Table of Contents](#)

subsidiaries as of each such date. Notwithstanding the foregoing, restricted stock awards granted to participating executive officers will vest as to two-thirds of the underlying shares on the second anniversary of the date of grant and as to the remaining one-third of the underlying shares on the third anniversary of the date of grant, provided that the executive remains employed by us or one of our subsidiaries as of each such date.

Deferred stock awards granted in the exchange program will vest as to two-thirds of the underlying units on the second anniversary of the date of grant and as to the remaining one-third of the underlying units on the third anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date.

Our 2005 Stock Incentive Plan provides that upon consummation of a change in control (as defined in our 2005 Stock Incentive Plan), 50% of the unvested awards of each grantee with a minimum of six months of service will automatically be fully vested. If such change in control is not approved by our Board of Directors, all of the outstanding awards will automatically become fully vested. If you have a written change in control severance agreement with us and you are employed by us upon the occurrence of a change in control (as defined in such agreement), then vesting of all your then outstanding stock options and other stock-based awards immediately accelerates and all such awards become exercisable and non-forfeitable. (See Section 9 of this offer to exchange.)

Q16. What will I receive when my replacement award vests?

If you are granted a restricted stock award, you will continue to hold the same shares of our common stock, but without forfeiture conditions or restrictions on transfer, once those shares have vested. If you are granted a deferred stock award, phantom stock units will be settled on a one-for-one basis in shares of our common stock on, or as soon as practicable following, their vesting dates. If you elect to satisfy the applicable tax withholding obligations that arise in connection with the vesting of your award through the share withholding procedure further described in response to Question 42, the number of shares you retain in the case of a restricted stock award, or the number of shares issued to you in the case of a deferred stock award, will be reduced by a number of whole shares whose value is equal to or less than the amount of the minimum tax withholding obligation. (See Question 42 and Sections 9, 14 and 15 of this offer to exchange.)

Q17. What is the source of the common stock that will be issued under my replacement award?

The replacement awards will be granted under our 2005 Stock Incentive Plan, and the shares of our common stock issuable in connection with such awards will be issued under that plan. As provided in our 2005 Stock Incentive Plan, all of the shares subject to eligible options that are tendered and cancelled in the exchange program will be added to the number of shares available for issuance under our 2005 Stock Incentive Plan. (See Sections 9 and 12 of this offer to exchange.)

Q18. What happens if my employment terminates before my replacement award has fully vested?

You will forfeit any portion of your replacement award that has not vested on the day you cease being employed by us and our subsidiaries for any reason. Any vested shares you hold under a restricted stock award or shares of common stock that you receive upon vesting of a deferred stock award while you are employed by us or one of our subsidiaries are yours to keep even after you leave Mercury. If you elect to keep (*i.e.*, not to tender) some or all of your eligible options, the provisions of our 1997 Stock Option Plan and your option agreements generally provide that you have a limited period of time after your final day of employment with us to exercise your stock options to the extent they are vested prior to your final day of employment. If you do not exercise them within that limited time period, you will forfeit all unexercised options, whether vested or unvested, and will not receive any compensation for such forfeited options.

If you intend to retire or otherwise voluntarily terminate your employment with us before your replacement award vests, you should carefully consider whether or not to participate in the exchange program. Your options currently may be fully or partially vested. If you do not exchange them, you may be able to exercise your

[Table of Contents](#)

currently vested options for a period of time after your employment ends (as specified in our 1997 Stock Option Plan and your option agreement). If you participate in the exchange program, the options you elect to exchange will be cancelled and you will forfeit any portion of your replacement award that has not vested at the time your employment ends. (See Section 9 of this offer to exchange.)

Q19. If I participate, when will I receive my award agreement?

Replacement awards will be granted promptly following the expiration of the election period for all properly tendered eligible options that we accept for cancellation and exchange. We will provide each recipient of a replacement award with a restricted stock award agreement or a deferred stock award agreement, as applicable, as soon as practicable following the grant date. If you are receiving a deferred stock award, you should note that receiving your deferred stock award agreement does not mean that you will be entitled to receive immediately the underlying shares of our common stock. Rather, you will not become entitled to receive shares of our common stock unless and until your award vests. (See Section 9 of this offer to exchange.)

Q20. Will my restricted stock rights ever expire?

Unlike stock options, restricted stock rights do not expire. Instead, if you receive a restricted stock award in the exchange program, a portion of the shares covered by such award will become vested on each vesting date if you are still employed by us or one of our subsidiaries on such date. Similarly, if you received a deferred stock award, a portion of the units covered by such award will become vested on each vesting date if you are still employed by us or one of our subsidiaries on such date, and you will automatically be entitled to receive shares of our common stock in settlement of such vested units. (See also Questions 15, 16 and 18.)

Q21. Are there risks that I should consider in deciding whether to participate in the exchange program?

Yes. Exchanging your eligible options does have some risks. You should carefully review the discussion of certain of these risks in this offer to exchange under the heading "Certain Risks of Participating in the Exchange Program".

Q22. What happens if our stock price increases during the election period?

If our stock price increases during the election period, you may want to exercise some of your options or even decide that you do not want to participate in the exchange program. If you want to exercise some of your eligible options and still participate in the exchange program with respect to other eligible options, you can do so by exercising them before you make an election to participate. After you have submitted an election to participate in the exchange program, you cannot exercise eligible options subject to that election unless you previously withdraw your previous election. If you withdraw and then exercise some of your eligible options and want to exchange the rest, you can do so by again following the procedures in Section 4 of this offer to exchange.

Q23. Why should I consider participating in the exchange program?

If you participate in the exchange program, you will surrender eligible options in exchange for a lesser number of restricted stock rights in accordance with a 4-to-1 exchange ratio.

Our objective in establishing a 4-to-1 exchange ratio is to ensure that the replacement awards granted in the exchange program will have an aggregate value no greater than the aggregate value of the stock options surrendered. We calculated the fair value of the eligible options using the Black-Scholes option valuation model, which is a valuation methodology that recognizes a number of factors in valuing stock options, including the relevant stock price and its volatility, the exercise price of the option, a risk-free interest rate and the remaining life of the option.

[Table of Contents](#)

The aggregate fair value (determined as of the commencement of the election period by the Black-Scholes method) of the eligible options is significantly greater than the assumed value (determined as of the commencement of the election period by the prevailing market price of our stock) of the replacement stock awards that you will receive if you participate in the exchange program. However, your eligible options might never be “in-the-money” (see Question 10) and, consequently, may never have any actual value to you. On the other hand, you should recognize that, while the replacement awards have a much greater likelihood of having value when (and if) you sell the underlying shares of our common stock, you will run a risk of not vesting in the replacement awards before you want to sell the underlying shares.

Consider the following examples:

- If you have a fully vested eligible option for 1,000 shares at an exercise price of \$25 per share, with a remaining contractual term of approximately five years, you could elect to surrender this option and receive 250 unvested restricted stock rights. In most cases you would not be able to sell any shares until the first anniversary of the grant date, when one-third of the covered shares would vest. At that time, if the market price of our common stock is, for example, \$15 per share, you could sell the vested shares for \$1,245 (*i.e.*, 83 shares x \$15). If the market price remains the same throughout the vesting period, you could sell the remaining two-thirds of the covered shares for an additional \$2,505 on the remaining annual vesting dates.
- If you chose to retain your option rather than exchange it for restricted stock rights under this scenario, you would not have been able to exercise the option for any value because, with an exercise price of \$25, it would have remained “out-of-the-money.” It is possible that the price of our common stock will never rise above \$25 for the life of the option. If that happens, you will not be able to exercise and sell the underlying shares at a profit. However, if at the end of the same three-year period used in the example above, the market price of our common stock increases to \$40, rather than \$15, your unexercised option would be worth \$15,000 (*i.e.*, 1,000 shares x (\$40 – \$25)). Assuming the same facts, if you exchanged this option for restricted stock rights at the 4-to-1 exchange ratio, and have not sold the covered shares, they would be worth only \$10,000 (*i.e.*, 250 shares x \$40) at the end of the three-year period.

The foregoing examples assume that you remain employed by us or one of our subsidiaries through the applicable vesting dates. In addition, none of the foregoing takes into account the tax effects of any of the transactions, which are described in the responses to Questions 40 through 44. Finally, the market prices for our common stock used in the above examples are for illustrative purposes only and are not meant to be indicative of the future market price of our common stock.

Again, you should keep in mind that, if you choose to participate in the exchange program, you will be exchanging stock options that are already vested in part or in full for restricted stock rights that will be completely unvested at the time they are granted and will not vest in full until three years following the date of grant. (See Question 15.)

To illustrate the significance of vesting on the replacement awards, consider the first example above in which the price of our common stock remains at \$15 per share throughout the three-year vesting period of the replacement award. As explained above, the replacement award would yield more than the stock options, since the options, with an exercise price of \$25 per share, would remain “out-of-the-money” for the entire period, while the shares covered by the replacement award could be sold for a total of \$3,750 (*i.e.*, 250 shares x \$15). However, now assume that the stock price rises to \$30 per share prior to the first vesting date following the exchange, and then declines to \$15 per share for the remainder of the three-year vesting period. Under those assumptions, you would have lost the opportunity to realize \$5,000 (1,000 shares x (\$30 – \$25)) for your stock options (assuming you exercised them and sold the stock at \$30 per share), in exchange for a replacement award that is only worth \$3,750 when fully vested. Moreover, if you cease to be employed by us and our subsidiaries prior to the time your replacement award vests in full, you will not realize any value from the unvested portion of the award, which you will forfeit.

[Table of Contents](#)

In evaluating the exchange program, you should keep in mind that the future performance of our common stock will depend upon, among other factors, the future overall economic environment, the performance of the overall stock market and companies in our sector, the performance of our own business and the risks and uncertainties set forth in our filings with the Securities and Exchange Commission (the "SEC"). You should read our Annual Report on Form 10-K for the fiscal year ended June 30, 2005, and our Quarterly Reports on Form 10-Q for the quarters ended September 30, 2005, December 31, 2005 and March 31, 2006, each of which has been filed with the SEC and is available at www.sec.gov, as well as all other documents incorporated by reference in our Tender Offer Statement on Schedule TO filed with the SEC (to which this offer to exchange is also an exhibit).

Q24. Are there conditions to the exchange program?

Yes. The exchange program is subject to a number of conditions that are described in Section 7 of this offer to exchange. The exchange program is not conditioned on a minimum number of options being tendered or upon a minimum number of option holders electing to participate. Participation in the exchange program is completely voluntary.

BACKGROUND AND PURPOSE OF THE EXCHANGE PROGRAM

Q25. Why is Mercury making the exchange program available at this time?

Our stock price has experienced a significant decline and volatility during the past several years as a result of a number of factors affecting our business, including most recently the cancellation of, or funding delays associated with, certain defense programs, relative weakness in the semiconductor industry, and slower than expected market adoption of 3D image processing and visualization technology in the life sciences market. As a result, many of our employees hold options with exercise prices significantly higher than the current market price of our common stock. In addition, since many of the eligible options have been "out-of-the-money" for extended periods of time, they have not been exercised by their holders and, when coupled with periodic grants of options and other equity-based awards to new and continuing employees, have increased the "overhang" of equity awards outstanding in relation to the aggregate number of shares of our common stock outstanding. The purpose of the exchange program is to promote the interests of shareholders by restoring for eligible employees an incentive to remain with us and contribute to the future growth and success of our business and at the same time to reduce the significant equity award "overhang" represented by outstanding options that have high exercise prices and are no longer effective as performance and retention incentives. (See Section 3 of this offer to exchange.)

Q26. Why did Mercury choose to exchange options for restricted stock rights instead of repricing options or granting new options?

The Compensation Committee of our Board of Directors considered a variety of alternatives to address the issues of the significant number of "out-of-the-money" options and the equity award "overhang." We also retained a compensation consulting firm to provide us with independent advice in this regard. Ultimately, the Compensation Committee recommended to the Board, and the Board determined, that some option holders may benefit from the opportunity to choose between what we believe is the more certain benefit associated with restricted stock rights and the potentially more valuable, though less certain, benefit those holders may realize by retaining their stock options. Additionally, by exchanging stock options according to the terms of the exchange program, we will reduce the number of shares of our common stock subject to equity awards, thereby reducing the equity award "overhang" and the potential dilution to our shareholders represented thereby.

Q27. How did Mercury determine what the exchange ratio would be?

We considered the potential benefits of a number of alternatives, as well as their related costs, and determined that the fixed 4-to-1 exchange ratio could provide value and incentives in a manner that we believe is

fair to our employees and will further the interests of our shareholders. We determined that a more favorable plan to employees would be inconsistent with one of the principal goals of our equity compensation programs, which is to align the interests of our employees with those of our shareholders. Similar to our option holders, many of our shareholders have suffered significant declines in the value of their shareholdings in Mercury, and there is no way to compensate them for their losses other than through rebuilding our stock price. We believe the exchange program provides our employees with incentives to accomplish this objective while keeping costs to the Company of doing so at what we believe to be an acceptable level.

Q28. Why are there new vesting requirements on the replacement awards when I already held my options through the required vesting periods?

Two of the principal purposes of our equity programs are to align the interests of our employees with those of our shareholders and to retain the services of our employees. We believe that anything shorter than a three-year vesting schedule would not adequately allow us to further these objectives. You should carefully consider the risks of exchanging vested options for unvested replacement awards. (See Questions 15 and 23.)

Q29. Will there be additional equity awards in the future?

Our practice has been to grant equity awards annually to a substantial portion of our employees. We believe that an equity stake in the success of the Company is a critical component of our compensation, incentive and retention programs. Our equity program will be evaluated periodically by the Compensation Committee of our Board of Directors, and future equity awards will be subject to the discretion of the Committee.

Q30. Is it likely that a similar exchange program will be adopted in the future?

While the Compensation Committee evaluates our compensation programs periodically, it has no current intention to implement any similar option exchange program in the future. Any such similar program would require the approval of our shareholders. As a result, it may be prudent to make your decision on the assumption that, if you do not tender your eligible options in accordance with the terms of this exchange program (including the deadlines stated in this offer to exchange), you will not have a similar opportunity in the future.

Q31. Does our Board of Directors have recommendation about the exchange program?

Our Board of Directors is not making a recommendation about the exchange program. Although our Board, based on the recommendation of the Compensation Committee, approved the exchange program, they recognize that the decision to participate or not participate in the exchange program is an individual one that should be based on a variety of factors, including your own personal circumstances and preferences. You should consult with your personal advisors if you have questions about your financial, legal or tax situation. Neither we, the Compensation Committee nor our Board of Directors are making a recommendation to employees as to whether or not to participate in the exchange program.

Q32. Is there any information regarding Mercury that I should be aware of?

Yes. Your decision whether to participate or not participate in the exchange program should take into account the factors described in this document, as well as the various risks and uncertainties inherent in our business. These risks include, but are not limited to, those risks set forth in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006, filed with the SEC on May 9, 2006. In addition, before making your decision to participate in the exchange program, you should carefully review the information about Mercury discussed in this offer to exchange under the heading "Certain Risks of Participating in the Exchange Program" and in Section 10 of this offer to exchange. See Section 18 for an explanation of where you can find additional important information about us.

DURATION OF THE ELECTION PERIOD

Q33. How long will the election period remain open? Can the election period be extended, and if so, how will I know if it has been extended?

The election period begins on August 11, 2006 and is scheduled to expire on September 8, 2006, at 12:00 midnight, Eastern Time. No exceptions will be made to this deadline, unless we extend it. Although we do not currently intend to do so, we may, in our sole discretion, extend the election period at any time. If we extend the election period, we will publicly announce the extension no later than 9:00 a.m., Eastern Time, on the next business day after the last previously scheduled or announced expiration date. (See Section 16 of this offer to exchange.)

Q34. If the election period is extended, how will the extension affect the date on which the replacement awards will be granted?

If we extend the election period and you elect to participate in the exchange program, you must properly tender any eligible option you wish to exchange before the expiration of the extended election period. Your properly tendered eligible options will be accepted and cancelled, and your replacement award will be granted, promptly following the extended expiration date.

HOW TO ELECT TO PARTICIPATE

Q35. What do I need to do to participate in the exchange program?

You will be required to timely submit your election to participate by completing, signing and delivering an election in the form attached to this document as [Appendix C](#) in accordance with the instructions on page C-1. Your election to participate in the exchange program will be effective only after you have properly submitted an election before the expiration of the election period. (See Section 4 of this offer to exchange.)

Q36. Do I have to return the election or any other document if I do not want to participate in the exchange program?

No. You do not have to return any documents to us if you do not wish to participate in the exchange program. If you do not submit an election, you will not participate in the exchange program. The exchange program is completely voluntary, and there are no penalties for electing not to participate in the exchange program.

Q37. If I elect to participate by submitting an election, can I change my mind?

Yes. If you decide to participate in the exchange program and then decide to withdraw or change some or all of the eligible options you tendered, you may do so at any time before the expiration date. If you submitted an election and you want to change that election, whether you decide to exchange additional eligible options, withdraw eligible options you previously elected to exchange, or substitute certain eligible options for others, you must submit a new election listing all of the eligible options you now wish to exchange in accordance with the instructions on page C-1. Your new election must be received by us before the expiration of the election period, and the latest election received by us in accordance with the above-referenced delivery instructions will supersede and replace all prior elections. (See Section 4 of this offer to exchange.)

You may withdraw all your tendered eligible options by submitting to us a notice of withdrawal in the form attached to this document as [Appendix D](#) in accordance with the instructions on page D-1. If you then decide to participate in the exchange program after all, you must complete and submit a new election to do so. Your notice of withdrawal must be received by us before the expiration of the election period. If we have not accepted your tendered eligible options by October 6, 2006, you will also have the right to withdraw them after that date until we accept your tendered eligible options. (See Section 5 of this offer to exchange.)

Q38. Will Mercury accept all eligible options tendered for exchange?

We will accept all eligible options that are properly tendered for exchange unless the exchange program is terminated. If we terminate the exchange program without accepting tendered eligible options for exchange, we will promptly communicate this to you, which communication may be made by written or electronic notice or by public announcement. (See Sections 6 and 16 of this offer to exchange.)

Q39. What happens to my options if I do not participate in the exchange program or if my options are not accepted for exchange?

Nothing. If you do not elect to participate in the exchange program, or if we do not accept options that have been tendered for exchange, you will keep all your current options, and will not receive a replacement award. The exchange program is not expected to result in any changes to the terms of your current options. (See Question 43 and Sections 4 and 14 of this offer to exchange.)

U.S. FEDERAL INCOME TAX CONSIDERATIONS

Q40. Will I have to pay U.S. federal income taxes at the time of the exchange if I participate in the exchange program?

We believe that our employees who are subject to U.S. income taxation will incur no immediate U.S. federal income tax consequences as a result of either electing to retain their eligible options or electing to exchange their eligible options for shares of restricted stock. However, see the response to Question 41 for the U.S. federal income tax consequences of your restricted stock award.

Q41. What are the U.S. federal income tax consequences of my restricted stock award?

Employees subject to U.S. federal income taxation will generally recognize no taxable income upon the receipt of shares of restricted stock (*i.e.*, shares that are subject to a substantial risk of forfeiture and are not transferable). You will, however, recognize ordinary income (like salary) at the time the shares vest in an amount equal to the fair market value of those shares, unless you file an election under Section 83(b) of the Internal Revenue Code no later than 30 days after the date of grant of the restricted stock award. If you file a Section 83(b) election within the 30-day period, you will recognize ordinary income in an amount equal to the fair market value of all the shares underlying the restricted stock award determined on the date of grant rather than on the date on which shares vest. We will determine the fair market value of the shares based on the closing price of our common stock as reported on the Nasdaq Global Select Market on the applicable date. The ordinary income resulting from the vesting of shares of restricted stock (or the acquisition of shares of restricted stock if a Section 83(b) election is properly filed) will be reflected in the Form W-2 reported to the Internal Revenue Service for the year of the vesting or acquisition of the shares, as the case may be. At the time you recognize ordinary income, you will have an income and employment withholding tax obligation with respect to that income, much like the obligation that arises when we pay you salary. (See Question 42 and Section 14 of this offer to exchange.)

The decision to make a Section 83(b) election is a highly technical one, and should include, among other considerations, the availability to you of cash sufficient to cover the tax withholding obligation before the date on which the shares will vest and you will be permitted to sell them, your assessment of the potential future market value changes in our common stock, and the risk that events may prevent your continued employment with us and corresponding vesting of your shares. If your shares of restricted stock never vest for any reason, you would have paid taxes on shares that are forfeited, and would not be entitled to a refund of, or an offsetting deduction for, the taxes you paid. You are advised to consult with your personal financial and tax advisors before making a Section 83(b) election. If you decide to make a Section 83(b) election, you must do so through an appropriate filing with the U.S. Internal Revenue Service no later than 30 days after the date of grant of your replacement award.

Upon a sale of shares acquired under a restricted stock award by employees subject to U.S. federal income taxation, any gain or loss, based on the difference between the sale price and the fair market value of the shares on their vesting date (or on their grant date if the employee properly filed a Section 83(b) election), will be taxed as a capital gain or loss. Such gain or loss will be long-term if the employee held the shares for more than one year following their vesting date (or their grant date if the employee properly filed a Section 83(b) election).

Q42. How will U.S. income and employment tax withholding be handled?

For our employees who are subject to U.S. taxation, as your shares of restricted stock vest over time (or on the date of grant if you properly file a Section 83(b) election as described in response to Question 41), you will be required to recognize taxable income. This means that we will have an obligation to withhold income and employment taxes, much like the obligation that arises when we pay your salary. Until you have satisfied these tax withholding requirements, we have no obligation to release the shares to you.

Pursuant to the terms of the award agreement for the replacement awards, you will be able to elect to have the required minimum tax withholding obligation satisfied, in whole or in part, by (1) authorizing us to withhold from the shares of stock that are vesting a number of shares with an aggregate fair market value (as of the date the withholding is effected) that would satisfy the withholding amount due, or (2) transferring to us shares of our common stock that you otherwise own with an aggregate fair market value (as of the date the withholding is effected) that would satisfy the withholding amount due. Otherwise, you may elect to pay the withholding amount due by delivering cash or a personal check to us. We will provide more detailed information about alternative methods of satisfying the tax withholding obligation reasonably in advance of the dates on which these amounts become due.

If you choose to file a Section 83(b) election with respect to your replacement award, you will be required to so certify to us and submit to us a copy of your Section 83(b) election filed with the Internal Revenue Service. At the time you file your Section 83(b) election, you will also be required to make a one-time payment (by cash or personal check) to us to cover the income and employment withholding tax due based on the fair market value of all of the shares subject to your replacement award.

Q43. If I have incentive stock options, what happens if I elect not to exchange them in the exchange program?

Based on our review of the Internal Revenue Code, we believe that it is unlikely that the exchange program will change any of the terms of your eligible incentive stock options if you elect not to surrender them in the exchange program. However, there is a possibility that the Internal Revenue Service may characterize the exchange program as a “modification” of those incentive stock options, even if you elect not to surrender them in the exchange program. A successful assertion by the Internal Revenue Service that the options are modified would extend the period of time that you are required to hold the shares purchased under those options to qualify for favorable tax treatment and could cause a portion of your incentive stock options to be treated as non-qualified stock options. However, any assertion by the Internal Revenue Service, even if successful, would not affect the exercise price or vesting schedule of your options. (See Section 14 of this offer to exchange.)

Q44. Are there other tax consequences to which I may be subject?

Depending on where you live, there may be additional state or local tax imposed on your replacement award. Residents of countries other than the United States who receive replacement awards will be subject to the tax laws of those countries. See Section 15 (“Considerations Specific to Eligible Employees Outside of the United States”) and [Appendix B](#) (“Guide to International Issues”) for additional information regarding the tax consequences of the exchange program to non-U.S. employees.

HOW TO GET MORE INFORMATION

Q45. Who can I contact if I have questions about the exchange program?

For additional information or assistance, you should send your request by email to MCSSStockOptionExchange@mc.com.

[Table of Contents](#)

In addition, we plan to implement a mechanism whereby you can submit questions which we will respond to in a frequently asked questions format. These communications will not be a solicitation or make any recommendation whatsoever with respect to the exchange program. For example, we will not be able to answer questions about your personal situation or otherwise provide an assessment of the merits of the exchange program. You should consult your personal advisors if you have questions about your financial or tax situation.

CERTAIN RISKS OF PARTICIPATING IN THE EXCHANGE PROGRAM

Participation in the exchange program involves a number of risks, including those described below. You should carefully consider the risks described below and the risk factors described under the heading “Factors That May Affect Future Results” in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006, filed with the SEC on May 9, 2006. You should consider these risks and are encouraged to speak with a financial and tax advisor as necessary before deciding whether or not to participate in the exchange program. In addition, you should read carefully this offer to purchase in its entirety, including the appendices and other documents to which we have referred you before deciding whether or not to participate in the exchange program.

ECONOMIC RISKS

The methodology used to validate the exchange ratio is based on the Black-Scholes option valuation model and does not necessarily reflect the actual value of the options.

Our objective in establishing a 4-to-1 exchange ratio is to ensure that the replacement awards granted in connection with the exchange program will have an aggregate value no greater than the aggregate value of the stock options surrendered. We calculated the fair value of the eligible options using the Black-Scholes option valuation model. The Black-Scholes model is a common method used for estimating the fair value of a stock option, and we use this model for determining stock-based compensation in our consolidated financial statements (although the assumptions used for purposes of validating the exchange ratio were different from those used for the preparation of our consolidated financial statements that are included in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006). For purposes of determining the fair value of an eligible option under the Black-Scholes model, the following assumptions were used: (a) the option’s exercise price; (b) an assumed value of \$17.78 per share of our common stock, which was the average closing price per share of our common stock as reported on the Nasdaq National Market over the period from January 3, 2006 to May 31, 2006; (c) an expected volatility of our common stock of 51%; (d) the remaining contractual life of the stock option; (e) a risk-free interest rate of 4.27%; and (f) no expected dividends. We then compared that value to an assumed \$17.78 per share value for each share of restricted stock to be issued in the exchange program, which was the average closing price per share of our common stock as reported on the Nasdaq National Market over the period from January 3, 2006 to May 31, 2006.

You should be aware that option valuation is not an exact science. Although the Black-Scholes model is a standard and accepted model for determining the value of options, the utilization of different assumptions in the Black-Scholes option pricing model can produce significantly different results for the ultimate value of an option.

If our stock price increases after the date your tendered options are cancelled, your cancelled options might have been worth more than the restricted stock rights that you receive in exchange for them.

We cannot predict the market price of our common stock. It is possible over time that options you tender for exchange would have a greater value or lesser value than the restricted stock rights you receive in the exchange program. We may engage in transactions in the future with business partners or other companies which could significantly change our structure, ownership, organization or management or the make-up of our Board of Directors, and which could significantly affect the price of our common stock.

Your replacement award will have a new vesting schedule.

Regardless of the vested status of the eligible options you tender for exchange in the exchange program, your replacement award will be subject to a new vesting schedule as described in this offer to exchange and the applicable award agreement. All replacement awards will be completely unvested upon grant. Therefore, subject to the terms of the applicable award agreement and the terms of the 2005 Stock Incentive Plan, if you cease to be employed by us and our subsidiaries for any reason following the date of grant of the replacement awards, either voluntarily or involuntarily, your replacement award may be completely forfeited or you may have a smaller

[Table of Contents](#)

vested interest in your replacement award at the time your employment is terminated as compared to your vested interest in the eligible options you exchanged and which were cancelled in the exchange program.

We will not grant a replacement award to you if we are prohibited by applicable laws and regulations.

Even if we accept your tendered options, we will not grant a replacement award to you if we are prohibited by applicable laws, rules, regulations or policies from doing so. Such a prohibition could result from, among other things, changes in U.S. laws, SEC rules, regulations or policies or Nasdaq Stock Market listing requirements or if you move to a jurisdiction in which we are prohibited or prevented from granting restricted stock rights. In any such case, your tender will be deemed to have been withdrawn, and you will retain such options subject to their existing terms.

TAX-RELATED RISKS FOR U.S. RESIDENTS

General

When the shares of our common stock granted to you under your restricted stock award vest, you will generally recognize ordinary income equal to the fair market value of the vested shares. Any excess of the proceeds on a subsequent sale of the shares over their fair market value on the vesting date will be a capital gain, although you will be eligible for favorable long-term capital gain treatment only if you have held the shares for more than 12 months from the vesting date.

Tax Withholding

In most cases, at the time the shares of restricted stock vest, you will be responsible for FICA taxes. This generally would mean that 1.45% of the fair market value of the restricted stock at the time of vesting would have to be withheld in payment of Medicare tax. While you are also potentially subject to the larger old age and survivor component of FICA, this is true only to the extent your salary does not exceed the Social Security taxable wage base for that year (\$94,200 for 2006). In addition, you will have an income tax withholding obligation with respect to ordinary income you must recognize on the shares' vesting date, much like the obligation that arises when we pay you your salary. You may satisfy these withholding obligations by one of the methods described in response to Question 42 and in Section 14 of this offer to exchange.

The income tax withholding may be insufficient to cover your final income tax liability with respect to the vesting of your shares. You should consult with your own tax advisor to determine whether you should make estimated tax payments for each year in which your shares vest.

Even if you elect not to participate in the exchange program, to the extent your eligible options are incentive stock options, those options may be affected.

You should note, if you are subject to taxation in the United States, that there is a risk that any eligible options you hold which are incentive stock options may be affected, even if you do not participate in the exchange program. We believe that you will not be subject to current U.S. federal income tax if you elect not to participate in the exchange program. We also believe that the exchange program will not change the U.S. federal income tax treatment of subsequent grants and exercises of your incentive stock options (and sales of shares acquired upon exercises of such options) if you do not participate in the exchange program.

However, the Internal Revenue Service may characterize the exchange program as a "modification" of those incentive stock options, even if you decline to participate. A successful assertion by the Internal Revenue Service of this position could, in some cases, cause an option to cease to qualify as an incentive stock option. In other cases, such a successful assertion by the Internal Revenue Service could extend the option's holding period necessary to qualify for favorable tax treatment. Accordingly, to the extent you dispose of shares you acquire by exercising an incentive stock option you do not surrender for exchange in the exchange program prior to the lapse of the new extended holding period, your incentive stock option could be taxed similarly to a non-qualified stock option.

[Table of Contents](#)

In 1991, the Internal Revenue Service issued a private letter ruling in which another company's option exchange program was characterized as a "modification" of the incentive stock options eligible for exchange. This does not necessarily mean that our exchange program will be viewed the same way. Private letter rulings issued by the Internal Revenue Service contain its opinion regarding only specific facts presented by a specific person or company. The person or company receiving the letter may rely on it, but no other person or company may rely on the letter ruling or assume the same opinion would apply to their situation, even if the facts at issue are similar. While such letters do not provide certainty, they may indicate how the Internal Revenue Service will view a similar situation. We, therefore, do not know if the Internal Revenue Service will assert the position that our exchange program constitutes a "modification" of incentive stock options that are eligible options.

You should review Section 14 of this offer to exchange carefully for a more detailed discussion of the potential consequences of participating in the exchange program. We recommend that you consult with your personal tax advisor before deciding whether or not to participate in the exchange program with respect to the tax consequences relating to your specific circumstances.

TAX-RELATED RISKS FOR NON-U.S. RESIDENTS

If you are an eligible employee who is not a resident of the United States for tax purposes, you should refer to Section 15 and [Appendix B](#) of this offer to exchange for a discussion of some of the tax and legal consequences that may apply to you. If you participate in the exchange program, you may be liable for tax and social insurance contributions on the restricted stock rights, or vesting or issuance of the shares underlying such rights. Subject to any modification required to comply with local law, we expect to satisfy our tax withholding obligations with respect to our international employees by using the procedures described in response to Question 42 and in Section 14 of this offer to exchange. In addition, you may have exchange control reporting obligations. General summaries of the tax and other legal implications of participating in the exchange program for employees outside the United States can be found in [Appendix B](#). However, these tax discussions are general in nature and are necessarily incomplete and may not apply to your specific circumstances. In addition, tax consequences change frequently and occasionally on a retroactive basis. We therefore recommend you consult with your personal tax advisor in your own country about the effect on your personal tax situation if you choose to participate in the exchange program.

If you are an eligible employee and you live or work in one country but are also subject to the tax laws in another country, you should be aware that there may be other tax and social insurance consequences which may apply to you. Again, you should consult your own tax advisor to discuss these consequences.

BUSINESS-RELATED RISKS

For a description of risks related to our business, operations and prospects, we direct you to the discussion under the heading "Factors That May Affect Future Results" in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006, filed with the SEC on May 9, 2006.

THE EXCHANGE PROGRAM

Section 1. Eligibility.

Employees are “eligible employees” if they are employed by us or one of our subsidiaries on the date the election period for the exchange program commences and on the date on which the tendered options are cancelled and the replacement awards are granted; provided, however, that members of our Board of Directors and our five most highly compensated executive officers (including our chief executive officer) are not eligible to participate in the exchange program. Employees who are on worker’s compensation, medical, maternity, paternity, military or other statutorily protected leave of absence or an approved personal leave of absence are eligible to participate in the exchange program. However, if you receive or submit a notice of termination at any time on or before the date on which the tendered options are cancelled and the replacement awards are granted, you will not be eligible to participate in the exchange program. If you are currently considered an “at-will” employee, the exchange program does not change that status, and your employment may be terminated by us or by you at any time, including before the election period expires, for any reason, with or without cause.

Section 2. Number of Restricted Stock Rights; Expiration Date.

We are offering to exchange restricted stock rights, which will result upon vesting in the release to participants of shares of Mercury’s common stock, par value \$.01 per share, for options to purchase our common stock held by eligible employees that were granted under our 1997 Stock Option Plan and that have exercise prices greater than a “threshold price.” We refer to such options as “eligible options.” The threshold price is the greater of (1) \$23.00 or (2) the closing price of our common stock reported on the Nasdaq Global Select Market on the date the election period expires. Any options that you previously tendered for exchange but which have an exercise price that is not greater than the threshold price will not be eligible for exchange and will be automatically excluded from the exchange program. The exchange program is subject to the terms and conditions described in this offer to exchange, including the appendices hereto.

Eligible employees participating in the exchange program who are domiciled in the United States, the United Kingdom, Canada and Japan will receive restricted stock awards consisting of shares of restricted stock, while eligible employees participating in the exchange offer who are domiciled in France and Germany will receive deferred stock awards consisting of phantom stock units. In this document, except where it is necessary to differentiate between these two types of awards, we refer to both shares of restricted stock and phantom stock units collectively as “restricted stock rights,” and we refer to the restricted stock awards and deferred stock awards to be granted in the exchange program as “replacement awards.”

Each share of restricted stock awarded in the exchange program is a share of our common stock that is issued to you on the date the award is granted, subject to vesting through your continued employment for a specified period. Until shares of restricted stock are vested, they remain subject to (1) forfeiture if your employment terminates and (2) restrictions on transfer.

Each phantom stock unit awarded in the exchange program represents the right to receive one share of our common stock upon vesting through your continued employment for a specified period. Until phantom stock units have vested, they remain (1) subject to forfeiture if your employment terminates and (2) restrictions on transfer.

As of July 31, 2006, options to purchase approximately 4,789,741 shares of our common stock were outstanding under all of our equity compensation plans. Of these, options to purchase 2,188,434 shares of common stock, having exercise prices ranging from \$23.03 to \$52.00, are potentially eligible for exchange in the exchange program. All such eligible options were issued under our 1997 Stock Option Plan. Assuming all such options remain eligible to participate in the exchange program following the determination of the closing price of our common stock on the date the election period expires and are properly surrendered for exchange, we will issue approximately 547,109 restricted stock rights in the exchange program.

[Table of Contents](#)

You may tender for exchange any or all of your eligible options. However, if you elect to tender an eligible option, you must tender for exchange the entire outstanding, unexercised portion of that option. For purposes of the exchange program, the term “option” means a particular option grant to purchase a specified number of shares of our common stock at a specified exercise price per share. In other words, you will not be permitted to exchange part but not all of any particular option grant. For example, if you have received two discrete option grants, both of which remain outstanding in their entirety, consisting of (1) an option to purchase 1,000 shares of common stock at an exercise price of \$27.00 and (2) an option to purchase 1,500 shares of common stock at an exercise price of \$30.00, you may elect to exchange *all* or *none* of the option to purchase 1,000 shares with the \$27.00 exercise price, and you may separately elect to exchange *all* or *none* of the option to purchase 1,500 shares with the \$30.00 exercise price. In this example, whichever option(s) you elect to exchange, you may not choose to exchange less than the total number of shares subject to either grant. In other words, you may not elect to exchange one-half of the option to purchase 1,000 shares of common stock (*i.e.*, 500 shares) having an exercise price of \$27.00 and keep the option to exercise the remaining 500 shares. We will not accept partial tenders of options. If you attempt to tender for exchange less than the entire outstanding, unexercised portion of an eligible option, we will reject your election to tender that particular option in its entirety. Any such rejection will not affect any other eligible option that you properly tender.

All eligible options will be exchanged for restricted stock rights in accordance with a fixed 4-to-1 exchange ratio. As an example, if you elect to exchange an eligible option representing the right to purchase 1,000 shares of common stock, you will receive a replacement award consisting of 250 restricted stock rights. We will not issue any fractional restricted stock rights. Accordingly, if the sum of all restricted stock rights to be granted to you in exchange for your tendered eligible options includes a fractional share or unit, that fractional share/unit will be rounded (with 0.5 rounded up) to the nearest whole share/unit. All replacement awards will be subject to the terms of our 2005 Stock Incentive Plan and an award agreement between you and us.

Our objective in establishing a 4-to-1 exchange ratio is to ensure that the replacement awards granted in the exchange program will have an aggregate value no greater than the aggregate value of the stock options surrendered. We calculated the fair value of the eligible options using the Black-Scholes option valuation model. The Black-Scholes model is a common method used for estimating the fair value of a stock option, and we use this model for determining stock-based compensation in our financial statements (although the assumptions used for purposes of validating the exchange ratio were different from those used for the preparation of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006). For purposes of determining the fair value of an eligible option under the Black-Scholes model, the following factors were used: (a) the option’s exercise price; (b) an assumed value of \$17.78 per share of our common stock, which was the average closing price per share on the Nasdaq National Market over the period from January 3, 2006 to May 31, 2006; (c) an expected volatility of our common stock price of 51%; (d) the remaining contractual life of the stock option; (e) a risk-free interest rate of 4.27%; and (f) no expected dividends. We then selected the 4-to-1 exchange ratio by assuming a \$17.78 per share value for each restricted stock right to be issued in the exchange program, which was the average closing price per share of our common stock on the Nasdaq National Market over the period from January 3, 2006 to May 31, 2006. According to these calculations, if all of the eligible options are exchanged for restricted stock rights in accordance with the 4-to-1 exchange ratio, options to purchase approximately 2,188,434 shares, having an aggregate fair value of approximately \$15,311,708, will be surrendered and cancelled in exchange for approximately 547,109 restricted stock rights having an assumed fair market value of approximately \$9,727,598 (based on the assumed per share value of \$17.78 described above).

Because option valuation is inherently speculative and imprecise, in addition to considering the relationship between the value of your eligible options and the value of the replacement award that you would receive in the exchange program, you should also consider the other matters discussed or referenced in this document as part of your overall determination of whether or not to participate in the exchange program.

The period during which you may elect to participate in the exchange program (the “election period”) will expire on the expiration date. The “expiration date” means 12:00 midnight, Eastern Time, on September 8, 2006,

[Table of Contents](#)

unless we, in our discretion, extend the election period. If we extend the election period, the term “expiration date” will mean the latest time and date at which the election period expires. See Section 16 of this offer to exchange for a description of our rights to extend, delay, terminate and amend the election period and the exchange program.

Section 3. Purpose of the Exchange Program.

We have granted stock options annually to a substantial portion of our employees. When the Compensation Committee approves the grant of a stock option, it establishes the exercise price that the employee must pay to purchase shares of common stock and the period over which the option vests. The per share exercise price is set at the market price of a share of our common stock on the date the option is granted. Thus, an employee receives value for an option grant only if the price of our common stock increases after the date of grant and after the option has vested so that he or she can exercise the option and sell the purchased shares at a price that exceeds the option’s exercise price. The granting of stock options is intended to align the interests of our employees with those of our shareholders in terms of increasing the value of our common stock.

Our stock price has experienced a significant decline and volatility during the past several years as a result of a number of factors affecting our business, including most recently the cancellation of, or funding delays associated with, certain defense programs, relative weakness in the semiconductor industry, and slower than expected market adoption of 3D image processing and visualization technology in the life sciences market. As a result, many of our employees hold options with exercise prices significantly higher than the current market price of our common stock. As of July 31, 2006, eligible employees held options for 2,188,434 shares with exercise prices ranging from \$23.03 to \$52.00 per share, while the closing price of our common stock on the Nasdaq Global Select Market on that date was \$13.44.

We believe that these “out-of-the-money” options are no longer effective as performance and retention incentives, and that to enhance long-term shareholder value we need to maintain competitive employee compensation, incentive and retention programs. An equity stake in the success of the Company is a critical component of these programs. We believe the exchange program will provide us with an opportunity to restore for eligible employees an incentive to remain with us and contribute to the future growth and success of our business.

Moreover, many of the eligible options have been out of the money for an extended period of time and, therefore, have not been exercised by our employees. Coupled with periodic grants of options and other equity-based awards to new and continuing employees, the number of shares subject to outstanding stock options and other unvested equity awards has steadily increased as a percentage of our total shares of common stock outstanding, creating a significant equity award “overhang.” The exchange program provides that participating employees will receive significantly fewer restricted stock rights than the number of shares subject to options tendered. Because participating employees will exchange a greater number of options for a lesser number of restricted stock rights, the number of shares of stock subject to all outstanding stock options and other unvested equity awards will be reduced, thereby reducing the equity award overhang. If all of the eligible options are exchanged for restricted stock rights in accordance with the 4-to-1 exchange ratio, eligible options for 2,188,434 shares will be surrendered and cancelled, while approximately 547,109 restricted stock rights will be granted, resulting in a net reduction in the equity award overhang by approximately 1,641,325 shares or approximately 7.8% of the number of shares of our common stock outstanding as of July 31, 2006. All eligible options that are not exchanged will remain outstanding and in effect in accordance with their existing terms.

Section 4. Procedures for Tendering Options for Exchange.

Proper Tender of Options.

To properly tender your options for exchange, you must properly complete, sign, date and deliver to us the election to participate attached as [Appendix C](#) hereto (“election”) in accordance with the instructions set forth on

[Table of Contents](#)

page C-1 thereto (you may request additional copies of the election using the contact information in this Section 4). Delivery of the election must be made by one of the following methods:

- regular or overnight mail to Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, Massachusetts 01824, Attn: Option Exchange
- by hand to the drop box labeled “Option Exchange” in the HR department at the foregoing address
- by fax to: 978-256-1746, Attn: Option Exchange
- by email, scanned as a Portable Document Format (PDF) file, to *MCSStockOptionExchange@mc.com*. Subject line of email must be “Option Exchange.”

Individual confirmations of receipt will not be sent. Please keep copies of the documents you send.

Changing Your Election.

If you submitted an election and you want to change that election, whether because you decide to exchange additional eligible options, withdraw eligible options you previously elected to exchange, or substitute certain eligible options for others, **you must submit a new election listing all of the eligible options you now wish to exchange.** For example, if you initially submit an election indicating you want to exchange your eligible options A and B, and then decide that you do not want to exchange eligible option B but want to exchange eligible option C, you must submit a new election that lists A and C as the eligible options you want to exchange. **The latest election received by us in accordance with the delivery instructions above will supersede and replace all prior elections, so you should be sure to follow the foregoing instructions carefully.** As discussed in Section 1, you may exchange eligible options only on a whole grant-by-grant basis.

The method of delivery of all documents, including the election, is at your election and risk. Delivery of your election will be effective only upon receipt. If delivery is by mail, we recommend that you use certified mail with return receipt requested. In all cases, you should allow sufficient time to ensure we receive your election in time. Your eligible options will not be considered properly tendered unless we receive the necessary documentation prior to the expiration of the election period.

Determination of Validity; Rejection of Options; Waiver of Defects; No Obligation to Give Notice of Defects.

We will determine, in our discretion, all questions as to the number of shares subject to eligible options, and the validity, form, eligibility (including time of receipt) of submitted elections (including any changes of elections) and acceptance of any tender of options. Our determination of these matters will be final and binding on all parties, subject to remedies that may be available under applicable law. We may reject any submitted elections or any options tendered for exchange to the extent that we determine they are not properly completed or to the extent that we determine it is unlawful to accept the options for exchange. We may waive any defect or irregularity in a submitted election. No eligible options will be properly tendered for exchange until all defects or irregularities have been cured by the option holder or waived by us. Neither we nor any other person is obligated to give notice of any defects or irregularities in any submitted election, and no one will be liable for failing to give notice of any defects or irregularities.

Your Choosing to Participate and Our Accepting Your Options Constitute an Agreement.

If you elect to exchange your options by submitting an election in accordance with the procedures described above, you will have accepted the terms and conditions of the exchange program. If we accept the eligible options that you properly tendered for exchange, there will be a binding agreement between us and you on the terms and subject to the conditions of the exchange program. Subject to our rights to extend, terminate and amend the exchange program, we currently expect that we will accept promptly after the expiration of the election period all properly tendered eligible options that have not been validly withdrawn.

Effect of Exchange of Options.

If you elect to exchange your eligible options and we accept such options for exchange, effective upon our acceptance, the eligible options you tendered for exchange will be cancelled and the stock option agreement(s) evidencing them will be deemed null and void. You will be required to enter into an award agreement governing the terms of your replacement award. If you do not elect to exchange your eligible options, you properly withdraw a previously submitted election or any of the options you tender for exchange are not eligible for any reason (*e.g.*, their exercise price is not greater than the threshold price, or the exchange is prohibited by applicable law), you will not participate in the exchange program with respect to such options, and you will retain your options at their current exercise price(s) and subject to their current terms.

Questions About the Exchange Program.

You can ask questions about the exchange program or request assistance, additional copies of this document and copies of the form of election by sending an email to MCSSStockOptionExchange@mc.com.

Section 5. Withdrawal Rights.

You may only withdraw your options tendered for exchange in accordance with the provisions of this Section 5. **This Section 5 applies only if you want to completely withdraw your participation in the exchange program as to all of your eligible options that you have previously tendered for exchange.** If you still intend to participate in the exchange program but want to change your previous election (whether to exchange additional eligible options, withdraw eligible options you previously elected to exchange, or substitute certain eligible options for others) you must follow the instructions under the heading “Changing Your Election” in Section 4 above, rather than the instructions in this Section 5.

The following examples are designed to assist you in determining whether to submit a notice of withdrawal in accordance with Section 5 or a new election in accordance with Section 4.

Example 1: You hold eligible options A and B. You submit an election to exchange eligible options A and B. Later, you decide you do not want to exchange eligible option B. You must follow the procedures set forth in Section 4 under the heading “Changing Your Election” and submit a new election listing only eligible option A as the option you wish to exchange. This new election will replace and supersede any previous election you submitted.

Example 2: You hold eligible options A and B. You submit an election to exchange eligible option A. Later, you decide you do not want to exchange eligible option A, and you still do not want to exchange eligible option B either. Since you no longer wish to participate in the exchange program at all, you must submit a notice of withdrawal according to the procedures described below in this Section 5, which will terminate your participation in the exchange program with respect to all of your eligible options that you previously submitted for exchange. **You should only submit a notice of withdrawal if you have decided not to exchange any of your previously tendered eligible options for exchange.**

You may withdraw the eligible options you tendered for exchange at any time before 12:00 midnight, Eastern Time, on September 8, 2006, the currently scheduled expiration date of the election period. If the election period is extended by us beyond that time, you may withdraw your tendered options at any time until the expiration of the extended election period. In addition, if we have not accepted your tendered options for exchange before 12:00 midnight, Eastern Time, on October 6, 2006, the 40th business day following the commencement of the election period, you may withdraw your options at any time thereafter.

To withdraw your options tendered for exchange, you must properly complete, sign, date and deliver to us the notice of withdrawal attached as [Appendix D](#) hereto in accordance with the instructions set forth on page D-1

[Table of Contents](#)

thereto (you may request additional copies of the notice of withdrawal using the contact information in this Section 4). Delivery of the notice of withdrawal must be made by one of the following methods:

- regular or overnight mail to Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, Massachusetts 01824, Attn: Option Exchange
- by hand to the drop box labeled "Option Exchange" in the HR department at the foregoing address
- by fax to: 978-256-1746, Attn: Option Exchange
- by email, scanned as a Portable Document Format (PDF) file, to *MCSStockOptionExchange@mc.com*. Subject line of email must be "Option Exchange."

Individual confirmations of receipt will not be sent. Please keep copies of the documents you send.

Eligible options you withdraw will thereafter be deemed not properly tendered for purposes of the exchange program, unless you properly re-tender those options prior to the expiration of the election period by following the procedures described in Section 4 above.

Neither we nor any other person is obligated to give you notice of any defects or irregularities in any notice of withdrawal, nor will anyone incur any liability for failure to give you any such notice. We will determine, in our discretion, all questions as to the form and validity, including time of receipt of notices of withdrawal. Our determination of these matters will be final and binding, subject to remedies that may be available under applicable law.

The method of delivery of your notice of withdrawal is at your election and risk. Delivery of your notice of withdrawal will be effective only upon receipt. If delivery is by mail, we recommend that you use certified mail with return receipt requested. In all cases, you should allow sufficient time to ensure we receive your notice of withdrawal in time. Your properly tendered eligible options will not be considered withdrawn unless we receive the necessary documentation prior to the expiration of the election period.

Section 6. Acceptance of Options for Exchange and Issuance of Replacement Awards.

Upon the terms and subject to the conditions of the exchange program and promptly following the expiration date, we will accept for exchange all eligible options properly tendered and not validly withdrawn before the expiration of the election period. All options accepted by us pursuant to the exchange program will be cancelled as of the date of acceptance, and you will no longer have any rights under those options. Replacement awards will be granted as of the date of our acceptance. If we accept and cancel options properly tendered for exchange after September 8, 2006, or if we extend the date by which we must accept and cancel options properly tendered for exchange, the time in which the replacement awards will be granted will be similarly delayed.

We will not accept partial tender of an eligible option. However, you may tender the remaining portion of an eligible option that you have partially exercised.

For purposes of the exchange program, we will be deemed to have accepted for exchange eligible options that are validly tendered and not validly withdrawn when we give notice to option holders of our acceptance. We will give notice of our acceptance, which may be by email, facsimile or press release, promptly following the expiration date.

All replacement awards will be granted under our 2005 Stock Incentive Plan and will be subject to the terms and conditions of an award agreement between you and us. As promptly as practicable after the grant date, we will send you an award agreement (in the appropriate form filed as an exhibit to our Tender Offer Statement on Schedule TO but with all the blanks filled in). The agreement will be effective from and as of the grant date.

If your employment with us and our subsidiaries is terminated for any reason on or before the date on which the tendered options are cancelled and the replacement awards are granted, or you have submitted

or received a notice of termination of employment on or before such date, your election to participate in the exchange program will automatically be deemed to have been withdrawn and you will retain your eligible options subject to their existing terms.

Section 7. Conditions of the Exchange Program.

If one or more of the conditions described below occur, we will not be required to accept any eligible options that you have tendered for exchange. We may terminate the exchange program, or postpone our acceptance and cancellation of any eligible options that you elect to exchange, in each case, at any time on or after the commencement of the election period, and by the expiration of the election period, we determine that any condition described below has occurred that, in our reasonable judgment, makes it inadvisable for us to proceed with the exchange program or to accept and cancel eligible options that you elect to exchange. These conditions are as follows:

- if any action or proceeding by any government agency, authority or tribunal or any other person, domestic or foreign, is threatened or pending before any court, authority, agency or tribunal that directly or indirectly challenges the making of this offer to exchange eligible options, the acquisition of some or all of the tendered eligible options, the granting of the replacement awards, or otherwise relates to the exchange program or that, in our reasonable judgment, could materially and adversely affect our business, financial condition, results of operations, assets or liabilities;
- if any action is pending or taken, or any approval is withheld, or any statute, rule, regulation, judgment, order or injunction is proposed, sought, promulgated, enacted, entered, amended, enforced or deemed to be applicable to the exchange program or us or any of our subsidiaries, by any court or any authority, agency or tribunal, domestic or foreign, that, in our reasonable judgment, would:
 - make the acceptance for exchange of, or the issuance of restricted stock rights for, some or all of the options illegal or otherwise restrict or prohibit the exchange program;
 - delay or restrict our ability, or render us unable, to accept for exchange, or issue replacement awards for, some or all of the tendered options; or
 - materially and adversely affect our business, financial condition, results of operations, assets or liabilities, or otherwise materially impair in any way the contemplated future conduct of our business;
- if there is:
 - any general suspension of trading in, or limitation on prices for, securities on any national securities exchange or in the over-the-counter market; or
 - the declaration of a banking moratorium or any suspension of payments in respect of banks in the United States, whether or not mandatory;
- if another person publicly makes or proposes to make a tender or exchange offer for some or all of our common stock, or an offer to merge with or acquire us;
- if any change or changes occur which, in our reasonable judgment, result in a material adverse change in our business, financial condition, results of operations, assets or liabilities, including but not limited to the following:
 - litigation or other proceedings are instituted against us, or any of our officers or members of our Board of Directors in their capacities as such, before or by any federal, state or local court, commission, regulatory body, administrative agency or other governmental or legislative body, domestic or foreign, in which an unfavorable ruling, decision, action, order, decree or finding resulting from such litigation or proceeding would materially and adversely affect Mercury;
 - a material loss or interference in our business or properties from fire, explosion, flood or other casualty, whether or not covered by insurance;

[Table of Contents](#)

- the suspension of trading in our common stock by the SEC or the Nasdaq Stock Market; or
- a material change in the prospects for our business resulting from any number of factors such as a material adverse change in the financial or securities markets in the United States or elsewhere, or in political, financial or economic conditions in the United States or elsewhere, or any outbreak or material escalation of foreign or domestic hostilities or other calamity or crisis that would, in our reasonable judgment, have a material adverse effect on our business, financial condition, results of operations, assets or liabilities, or on the trading of our common stock.
- if we are required to extend the expiration date more than two weeks beyond September 8, 2006 as a result of action or determination by the SEC or other regulatory authority; or
- if a change occurs or circumstances arise that frustrates or materially impairs our purpose in implementing the exchange program, as described in Section 3 above, or materially impairs or may materially impair the benefits, or materially increase the burden, of the exchange program to us.

These conditions are for our benefit. We may assert any of these conditions at our discretion prior to the expiration date. We may waive them, in whole or in part, at any time and from time to time prior to the expiration date, in our discretion, whether or not we waive any other conditions to the exchange program. Our failure at any time prior to the expiration date to exercise any of these rights will not be deemed to be a waiver of any rights. The waiver of any of these rights with respect to particular facts and circumstances will not be deemed to be a waiver with respect to any other facts and circumstances. Any determination or judgment we make concerning the events described in this section will be final and binding upon all persons, subject to remedies that may be available under applicable law.

Section 8: Price Range of Our Common Stock.

There is no established market for the eligible options. The securities underlying the eligible options are shares of our common stock, which is quoted on the Nasdaq Global Select Market under the trading symbol "MRCY." The following table sets forth, for the periods indicated, the high and low closing sales prices per share of our common stock as reported by the National Global Select Market (and prior to July 1, 2006, the Nasdaq National Market).

	<u>High</u>	<u>Low</u>
<i>Fiscal 2007:</i>		
First Quarter (through July 31, 2006)	\$15.41	\$13.01
<i>Fiscal 2006:</i>		
Fourth Quarter	\$19.06	\$14.75
Third Quarter	\$21.03	\$15.94
Second Quarter	\$26.73	\$17.53
First Quarter	\$29.70	\$24.97
<i>Fiscal 2005:</i>		
Fourth Quarter	\$29.77	\$23.92
Third Quarter	\$31.95	\$26.32
Second Quarter	\$32.40	\$24.20
First Quarter	\$28.68	\$21.22
<i>Fiscal 2004:</i>		
Fourth Quarter	\$26.37	\$21.44
Third Quarter	\$32.40	\$24.64
Second Quarter	\$25.29	\$21.02
First Quarter	\$23.50	\$18.29

On July 31, 2006, the closing sale price per share of our common stock as reported by the Nasdaq Global Select Market was \$13.44.

[Table of Contents](#)

Our stock price has experienced, and may continue in the future to experience, significant volatility. The trading price of our common stock has fluctuated significantly in the past and is expected to continue to do so in the future, as a result of a number of factors, some of which are outside our control. In addition, the stock market has experienced significant price and volume fluctuations that have affected the market price of many technology companies, and that have often been unrelated or disproportionate to the operating performance of these companies.

We recommend that you obtain the current market price of our common stock before deciding whether to participate in the exchange program.

Section 9. Source and Amount of Consideration; Terms of Replacement Awards.

Consideration. All eligible options will be exchanged for restricted stock rights in accordance with a fixed 4-to-1 exchange ratio. As an example, if you elect to exchange an eligible option representing the right to purchase 1,000 shares of common stock, you will receive a replacement award consisting of 250 restricted stock rights. We will not issue any fractional restricted stock rights. Accordingly, if the sum of all restricted stock rights to be granted to you in exchange for your tendered eligible options includes a fractional share or unit, that fractional share/unit will be rounded (with 0.5 rounded up) to the nearest whole share/unit.

All replacement awards will be granted under our 2005 Stock Incentive Plan, and the shares of our common stock issuable in connection with such awards will be issued under that plan. As provided in our 2005 Stock Incentive Plan, all of the shares subject to the eligible options that are tendered and cancelled in the exchange program will be added to the number of shares available for issuance under our 2005 Stock Incentive Plan.

As of July 31, 2006, options to purchase approximately 4,789,741 shares of our common stock were outstanding under all of our equity compensation plans. Of these, options to purchase 2,188,434 shares of common stock, having exercise prices ranging from \$23.03 to \$52.00, are held by eligible employees and are eligible for exchange in the exchange program. If all of the eligible options are exchanged for restricted stock rights in accordance with the 4-to-1 exchange ratio, eligible options for 2,188,434 shares will be surrendered and cancelled, while approximately 547,109 restricted stock rights will be granted, representing approximately 7.8% of the total number of our shares outstanding as of July 31, 2006.

Terms of the Replacement Awards. All replacement awards will be subject to the terms of our 2005 Stock Incentive Plan and an award agreement between you and us. As promptly as practicable after the grant date, we will send to each recipient of a replacement award a restricted stock award agreement or a deferred stock award agreement, as applicable. The terms of the replacement awards will vary from the terms of the options tendered for exchange. You must sign and return the replacement award agreement to be entitled to your replacement award. This agreement will be effective from and as of the grant date. The following description of the replacement awards to be granted under our 2005 Stock Incentive Plan, or 2005 Plan, is a summary of the material terms of these awards.

Important Note: The description below of the 2005 Plan and the replacement awards to be granted in the exchange program is intended to be a summary only. Any statements are subject to, and are qualified in their entirety by reference to, all provisions of the 2005 Plan and the applicable form of agreement evidencing the replacement awards. These documents have been included as exhibits to our Tender Offer Statement on Schedule TO filed with the SEC (of which this offer to exchange is also an exhibit).

- **General.** The 2005 Plan was adopted by our Board of Directors on September 14, 2005, and became effective upon receiving approval of our shareholders on November 14, 2005. On June 1, 2006, our Board of Directors adopted an amendment to the 2005 Plan to allow the exchange program, subject to shareholder approval, which was obtained on August 7, 2006. As of July 31, 2006, there were approximately 949,687 shares of our common stock available for future grants under the 2005 Plan. As provided in the 2005 Plan, all of the shares subject to the eligible options that are tendered and cancelled

in the exchange program will be added to the number of shares available for issuance under the 2005 Plan. The 2005 Plan permits the Compensation Committee to grant a variety of equity-based awards, including the restricted stock awards and the deferred stock awards to be granted in the exchange program.

- **Plan Administration.** The 2005 Plan is generally administered by the Compensation Committee of our Board of Directors. The Compensation Committee has full power to select, from among individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2005 Plan. The Compensation Committee may delegate to the chief executive officer or any other executive officers the authority to grant awards at fair market value to employees who are not subject to the reporting and other provisions of Section 16 of the Securities Exchange Act of 1934.
- **Restricted Stock Awards.** Each restricted stock award consists of shares of our common stock that will be issued to you at the time the award is granted. The 2005 Plan permits, and the award agreement will provide, that the shares of restricted stock will be issued and held by our transfer agent in book entry form, and your name will be entered as the shareholder of record on our books. The book entry for the shares of restricted stock will bear an appropriate legend to the effect that such shares are subject to restrictions as set forth in the award agreement and in the 2005 Plan. At such time as the shares vest, if at all, the restrictions will lapse and thereafter such vested shares will be delivered to you. During the period in which the shares of restricted stock remain unvested, you will nevertheless have certain rights of a Mercury shareholder, including the right to vote the shares and receive any dividends we may pay. Between the date on which the restricted stock award is granted and the date on which the shares subject to the award vest, the value of the award will fluctuate based on the prevailing market price of our common stock, although you will have no right to sell or otherwise transfer such shares until they have vested. No monetary payment (other than applicable tax withholding, if any) will be required as a condition to being granted a restricted stock award or having the shares subject thereto delivered to you upon vesting.
- **Deferred Stock Awards.** Each deferred stock award consists of phantom stock units that represent the right to receive shares of our common stock at a time specified in the award agreement. You should be aware that phantom stock units are merely bookkeeping entries, so that no actual shares of our common stock are issued when the deferred stock award is granted. Under the terms of the deferred stock awards to be granted in the exchange program, shares of our common stock will be issued when the corresponding phantom stock units vest, if at all. Between the date on which the deferred stock award is granted and the date on which the phantom stock units subject to the award vest, the value of the award will fluctuate based on the prevailing market price of our common stock. However, you will have no rights as a Mercury shareholder by virtue of having been granted a deferred stock award until the actual shares of our common stock are issued to you. No monetary payment (other than applicable tax withholding, if any) will be required as a condition to being granted a deferred stock award or being issued shares of our common stock in settlement of such award.
- **Detrimental Activity.** The Compensation Committee may cancel, rescind, suspend or otherwise limit any award under the 2005 Plan to a participant if the participant engages in detrimental activities, including rendering services to one of our competitors, disclosing confidential information without permission, refusing to assign inventions to us, soliciting our employees or customers, engaging in an activity that results in a termination for cause, materially violating any of our internal policies, or being convicted of, or pleading guilty to, a crime.
- **Vesting.** All replacement awards granted in the exchange program will be subject to a new vesting schedule that will commence on the date on which the replacement awards are granted. We will grant the replacement awards promptly following the expiration of the election period in exchange for properly tendered eligible options.

Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date. Notwithstanding the foregoing, restricted stock awards granted to participating executive officers will vest as to two-thirds of the underlying shares on the second anniversary of the date of grant and as to the remaining one-third of the underlying shares on the third anniversary of the date of grant, provided that the executive remains employed by us or one of our subsidiaries as of each such date.

Deferred stock awards granted in the exchange program will vest as to two-thirds of the underlying units on the second anniversary of the date of grant and as to the remaining one-third of the underlying units on the third anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date.

- **Delivery of Shares of Our Common Stock.** Upon vesting, shares of restricted stock previously issued to you in book-entry form will be delivered to you, and phantom stock units will be settled, on a one-for-one basis, by issuing shares of our common stock to you.
- **Termination of Employment.** You will forfeit any portion of your replacement award that has not vested on the day you cease being employed by us and our subsidiaries for any reason.
- **Transfer Restrictions.** Until they have vested (and in the case of phantom stock units, have been settled in shares of our common stock), your restricted stock rights may not be sold, assigned, transferred, pledged or otherwise disposed of or encumbered.
- **Voting and Dividend Rights.** If you are granted a restricted stock award, you will have the right to vote and receive any dividends we may pay with respect to the shares of restricted stock subject to such award. If you are granted a deferred stock award, you will have no voting rights and no rights to receive dividends paid with respect to our shares of common stock prior to the date on which the shares underlying your phantom stock units are issued to you in settlement of your award.
- **Adjustments Upon Certain Events.** If our capital structure changes, because of a stock dividend, a reorganization or similar event, the Compensation Committee will make an appropriate and proportionate adjustment in the number and kind of shares or other securities subject to any then outstanding awards under the 2005 Plan.
- **Change in Control Provisions.** The 2005 Plan provides that upon consummation of a change in control (as defined in the 2005 Plan), 50% of the unvested awards of each grantee with a minimum of six months of service will automatically be fully vested. If such change in control is not approved by our Board of Directors, all of the outstanding awards will automatically become fully vested. If you have a written change in control severance agreement with us and you are employed by us upon the occurrence of a change in control (as defined in such agreement), then vesting of all your then outstanding stock options and other stock-based awards immediately accelerates and all such awards become exercisable and non-forfeitable.
- **Amendments and Termination.** Our Board of Directors may at any time amend or discontinue the 2005 Plan and the Compensation Committee may at any time amend or cancel any outstanding award for the purpose of satisfying changes in the law or for any other lawful purpose. However, no such action may adversely affect any rights under any outstanding award without the holder's consent.
- **Registration of Shares.** The shares of our common stock underlying the replacement awards have been registered under the Securities Act of 1933 on a registration statement on Form S-8 filed with the SEC. Unless you are considered an "affiliate" of Mercury, you will generally be able to sell the vested shares you receive pursuant to your replacement award free of any transfer restrictions under applicable United States securities laws.
- **Tax Consequences.** If you are subject to U.S. taxation, you should refer to Section 14 for a discussion of the material U.S. federal tax consequences of the acquisition, holding and vesting of shares of restricted

[Table of Contents](#)

stock in the exchange program. If you are an employee outside the United States, you should refer to Section 15 and [Appendix B](#) of this offer to exchange for a discussion of certain tax consequences for employees in certain non-U.S. countries of the acquisition, holding and vesting of restricted stock rights, as well as the consequences of accepting restricted stock rights in the exchange program. We recommend that you consult with your own tax advisor to determine the tax and social insurance consequences of the exchange program under the laws of the country in which you live and work.

Section 10. Information About Mercury.

General. Mercury Computer Systems, Inc. is incorporated in the Commonwealth of Massachusetts. Our principal executive offices are located at 199 Riverneck Road, Chelmsford, Massachusetts 01824, and our telephone number at that address is (978) 256-1300.

We design, manufacture and market high-performance embedded computer systems and software. Our primary areas of business are defense electronics, which includes radar, signals intelligence, sonar, smart weapons, and imagery applications; commercial imaging and visualization systems used in life sciences (medical diagnostic imaging and biotechnology), geosciences (oil and gas exploration), simulation applications, semiconductor wafer inspection, reticle inspection, mask writing, and telecommunications applications.

Certain Financial Information. Set forth below is a summary of our financial information. This information is derived from and qualified by reference to our publicly available consolidated financial statements and should be read in conjunction with the financial statements, related notes and other financial information included in Item 8 on pages 44 through 76 of our Annual Report on Form 10-K for the fiscal year ended June 30, 2005, and Item 1 on pages 3 through 20 of our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2006, which are incorporated herein by reference.

Summary Consolidated Balance Sheet Data (in thousands)

	March 31, 2006	June 30,	
	(unaudited)	2005	2004
		(audited)	
Current assets	\$ 196,896	\$ 241,970	\$ 265,437
Non-current assets	184,610	135,156	104,301
Total assets	381,506	377,126	369,738
Current liabilities	59,953	42,867	50,979
Non-current liabilities	128,151	136,433	137,902
Total liabilities	188,104	179,300	188,881
Total shareholders' equity	193,402	197,826	180,857
Total liabilities and shareholders' equity	381,506	377,126	369,738

Summary Consolidated Statements of Operations Data
(in thousands, except per share data)

	Nine Months Ended March 31,		Years Ended June 30,	
	2006	2005	2005	2004
	(unaudited)		(audited)	
Net revenues	\$ 173,879	\$ 178,659	\$ 250,172	\$ 185,595
(Loss) income from operations	(19,569)	28,686	42,539	31,605
Net (loss) income	(9,827)	20,100	30,186	22,885
Net (loss) income per share:				
Basic	\$ (0.47)	\$ 0.95	\$ 1.44	\$ 1.08
Diluted	\$ (0.47)	\$ 0.84	\$ 1.25	\$ 1.03
Weighted average shares outstanding				
Basic	20,974	21,054	21,028	21,122
Diluted	20,974	26,017	25,970	22,520

Ratio of Earnings to Fixed Charges

	Nine Months Ended March 31,		Years Ended June 30,	
	2006	2005	2005	2004
	(unaudited)		(audited)	
Ratio of earnings to fixed charges	(3.9)	9.1	10.1	18.8

The ratio of earnings to fixed charges is calculated by dividing (a) earnings before taxes and fixed charges by (b) fixed charges. Fixed charges include interest expense under operating leases we deem a reasonable approximation of the interest factor.

Mercury's book value per share as of March 31, 2006 was \$9.22. Book value per share is computed by dividing shareholders' equity by the number of shares of our common stock outstanding at March 31, 2006.

On July 27, 2006, we announced the following unaudited results for our fourth quarter ended June 30, 2006: net revenues of \$62.2 million; operating income of \$0.1 million; net losses of \$6.3 million; and diluted losses per share of \$0.30. We also announced the following unaudited results for the fiscal year ended June 30, 2006: net revenues of \$236.1 million; operating losses of \$19.4 million; net losses of \$16.2 million; and diluted losses per share of \$0.77.

Other. Except as otherwise disclosed in this offer to exchange or in our filings with the SEC, we presently have no plans or proposals and are not engaged in negotiations that relate or would result in:

- any extraordinary transaction, such as a merger, reorganization or liquidation, involving us or any of our subsidiaries;
- any purchase, sale or transfer of a material amount of our assets or the assets of any of our subsidiaries;
- any material change in our present dividend rate or policy, our indebtedness or capitalization;
- any change in our present Board of Directors or management, including a change in the number or the term of directors or to fill any existing board vacancies or to change any material term of the employment contract of any executive officer;
- any other material change in our corporate structure or business;
- our shares being delisted from the Nasdaq Global Select Market;

[Table of Contents](#)

- our shares becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934;
- the suspension of our obligation to file reports pursuant to Section 15(d) of the Securities Exchange Act of 1934;
- the acquisition by any person of any of our securities or the disposition of any of our securities; or
- any change in our articles of organization or bylaws or other actions which may impede the acquisition of control of us by any person.

We cannot assure you that we will not plan, propose or engage in negotiations with respect to the above-noted matters during the election period or after consummation of the exchange program.

Section 11. Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Options.

A list of our executive officers and members of our Board of Directors is attached to this offer to exchange as [Appendix A](#). Members of our Board of Directors and our five most highly compensated executive officers (including our chief executive officer) are not eligible to participate in the exchange program.

For information with respect to the beneficial ownership of our common stock by members of our Board of Directors, our five most highly compensated executive officers (including our chief executive officer), and all of our executive officers as a group, please refer to our definitive proxy statement for our special meeting of shareholders held on August 7, 2006, filed with the SEC on July 10, 2006.

Set forth below is information regarding those of our executive officers who are eligible to participate in the exchange program.

<u>Name</u>	<u>Eligible Options</u>	
	<u>Number</u>	<u>Exercise Price</u>
Craig Barrows	30,000	\$ 25.80
Alex N. Braverman	25,000	\$ 26.30
Douglas F. Flood	13,500	\$ 23.438
	10,000	\$ 23.46
	2,810	\$ 25.55
	10,500	\$ 30.063
	10,000	\$ 37.15
Joseph M. Hartnett	15,000	\$ 23.46
Craig A. Saline	40,000	\$ 26.96
Mark F. Skalabrin	9,000	\$ 23.438
	20,000	\$ 23.46
	1,300	\$ 25.55
	15,000	\$ 30.063
	15,000	\$ 37.15

[Table of Contents](#)

Other than as described below and other than transactions in our securities in the ordinary course under our equity plans with persons who are neither executive officers or directors of Mercury, neither we nor any of our subsidiaries nor, to the best of our knowledge, our executive officers, directors or affiliates have effected transactions in options to purchase our common stock or in shares of our common stock during the 60 days prior to August 11, 2006, except as follows:

On June 15, 2006, Douglas F. Flood acquired 5,000 shares of our common stock upon exercise of a stock option at a price of \$8.625 per share. On the same day he sold all 5,000 of these shares on the open market for \$15.008 per share.

On June 30, 2006, the following executive officers acquired shares of our common stock under our 1997 Employee Stock Purchase Plan at a purchase price of \$13.082 per share: Douglas F. Flood (158 shares); Marcelo G. Lima (271 shares); and Mark F. Skalabrin (807 shares).

On July 13, 2006, Mark F. Skalabrin acquired 11,680 shares of our common stock upon exercise of stock option at a price of \$2.00 per share.

On August 7, 2006, James R. Bertelli acquired 78,794 shares of our common stock upon exercise of a stock option at a price of \$4.00 per share, and 7,182 shares of our common stock upon exercise of a stock option at a price of \$2.00 per share.

Except as described in this offer to exchange and in our Annual Report on Form 10-K for the fiscal year ended June 30, 2005 filed with the SEC, and other than outstanding options and other awards granted from time to time to certain of our employees (including our executive officers) and our directors under our compensation and incentive plans, and margin account arrangements with brokers under customary terms in the industry, neither we nor, to our knowledge, any of our directors or executive officers, is a party to any contract, arrangement, understanding or relationship with any other person with respect to any of our securities (including any contract, arrangement, understanding or relationship concerning the transfer or voting of securities, joint ventures, loan or option arrangements, puts or calls, guarantees of loans, guarantees against loss, or the giving or withholding of proxies, consents or authorizations).

Section 12. Status of Options Accepted by Us in the Exchange Program; Accounting Consequences of the Exchange Program.

Properly tendered eligible options that are accepted by us in the exchange program will be cancelled, and all of the shares subject to such options (approximately 2,188,434 shares if all eligible options are exchanged) will be added to the pool of shares available for the replacement awards and for future grants of equity-based awards under our 2005 Stock Incentive Plan. Under the terms of our 2005 Stock Incentive Plan, the grant of restricted stock rights reduces the number of shares of common stock available for issuance under the plan by one and three-quarters (1.75) shares of common stock for each such restricted stock right subject to an award. Assuming all of the eligible options are exchanged for restricted stock rights in the exchange program, a net of approximately 1,230,993 shares would be added to pool of shares available for future grants under our 2005 Stock Incentive Plan following the grant of the replacement awards.

We expect to recognize the incremental compensation cost of the replacement awards granted in the exchange program. The incremental compensation cost will be measured as the excess, if any, of the fair value of each replacement award granted to employees in exchange for surrendered stock options, measured as of the date such awards are granted, over the fair value of the original stock option grants exchanged for such awards, measured immediately before the exchange. The incremental and remaining compensation expense associated with the exchange program will be recognized over the three-year service period of such awards. If any portion of the replacement awards is forfeited prior to completion of the service condition due to termination of employment, the compensation cost for the forfeited portion of the replacement award will be reversed and will not be recognized.

Section 13. Legal Matters; Regulatory Approvals.

We are not aware of any license or regulatory permit that appears to be material to our business that might be adversely affected by the exchange program, or of any approval or other action by any government or regulatory authority or agency that is required for the acquisition or ownership of the options or restricted stock rights described in this document. If any other approval or action should be required, we presently intend to seek that approval or take that action. This could require us to delay the acceptance of options exchanged for exchange. We cannot assure you that we would be able to obtain any required approval or take any other required action. Our failure to obtain any required approval or take any required action might result in harm to our business. Our obligation under the exchange program to accept options tendered for exchange or to issue replacement awards is subject to the conditions described in Section 7 of this offer to exchange.

Section 14. Material U.S. Federal Income Tax Consequences.

The following is a description of the material U.S. federal tax consequences of the exchange program. This discussion is based on the Internal Revenue Code of 1986, as amended, its legislative history, Treasury Regulations thereunder and administrative and judicial interpretations thereof, as of the date of this offer to exchange, all of which are subject to change (possibly on a retroactive basis). This description does not discuss all the tax consequences that may be relevant to you in light of your particular circumstances and it is not intended to be applicable in all respects to all categories of option holders.

If you are living or working in the United States, but are also subject to the tax laws in another country, you should be aware that there may be other tax and social insurance consequences which may apply to you. You should consult your own tax advisor to discuss the consequences to you of participating in the exchange program.

You should consult your own tax advisor with respect to the consequences of participating in the exchange program under state, local and non-U.S. tax laws, as well as any federal tax consequences arising from your particular personal circumstances.

Option Exchange and Grant of Restricted Stock. We believe that you will not be subject to current U.S. federal income taxation if you elect to keep your eligible options. We do not believe that there will be any immediate U.S. federal income tax consequences of receiving a restricted stock award in exchange for your eligible options if you are subject to U.S. income taxation, unless you elect to file an election under Section 83(b) of the Internal Revenue Code, as described below.

Vesting of Restricted Stock. When shares of restricted stock granted to you vest, you will generally recognize ordinary income equal to the fair market value of the shares that become vested. We will determine the fair market value of the shares based on the closing price of our common stock as reported on the Nasdaq Global Select Market on the applicable vesting date, or if not reported on such date, on the last day such closing price was reported. Generally, we will be entitled to a tax deduction equal to the amount recognized as ordinary income by you with respect to your vested restricted stock.

Election under Section 83(b). You may elect to be taxed at the time that shares of restricted stock are awarded to you as if the shares were not subject to vesting conditions by filing an election with the Internal Revenue Service under Section 83(b) of the Internal Revenue Code no later than 30 days after the date of grant of the award. If you properly file a Section 83(b) election, you will generally recognize ordinary income equal to the fair market value of the shares determined on the date of grant.

Subsequent Sale of Shares. Your tax basis in the shares granted to you will be equal to the fair market value on the date of vesting (that is, equal to the amount of ordinary income you recognize), and the capital gain holding period will commence upon the day following the date on which the shares vested. However, if you filed a Section 83(b) election, your tax basis will be equal to the fair market value of the shares on the date they were awarded to you, and the capital gain holding period will commence on the date of grant. Your subsequent

[Table of Contents](#)

disposition of the stock will ordinarily result in a capital gain or loss in an amount equal to the difference between the amount you realize on the disposition and your tax basis in the shares that are disposed of. If you dispose of shares of common stock after you have held the shares for more than one year from the date of vesting or the date of grant if a Section 83(b) election was filed, such capital gain or loss will be long-term capital gain or loss. Long-term capital gains recognized by individuals are subject to a more favorable rate of tax (currently, a maximum rate of 15%) than ordinary income. There are limitations imposed on the ability of individuals to deduct capital losses against their ordinary income.

Tax Withholding. At the time you recognize ordinary income, we will have an income and employment tax (*e.g.*, FICA) withholding obligation with respect to that income, much like the obligation that arises when we pay you your salary. This ordinary income resulting from the vesting of your restricted stock (or the granting of your restricted stock award if you file a Section 83(b) election) will be reflected on your year-end W-2 reported to the Internal Revenue Service. The income tax withholding may be insufficient to cover your final income tax liability with respect to the shares issued to you. You should consult with your own tax advisor to determine whether you should make estimated tax payments for the year in which you recognize ordinary income under your restricted stock award.

As a condition to our delivering vested shares of common stock to you, you must make arrangements with us to satisfy your income and employment tax obligations.

Pursuant to the terms of the restricted stock award agreement for the replacement awards, you will be able to elect to have the required minimum tax withholding obligation satisfied, in whole or in part, by (1) authorizing us to withhold from the shares of stock that are vesting a number of shares with an aggregate fair market value (as of the date the withholding is effected) that would satisfy the withholding amount due, or (2) transferring to us shares of our common stock that you otherwise own with an aggregate fair market value (as of the date the withholding is effected) that would satisfy the withholding amount due. Otherwise, you may elect to pay the withholding amount due by delivering cash or a personal check to us. We will provide more detailed information about alternative methods of satisfying the tax withholding obligation reasonably in advance of the dates on which these amounts become due.

If you choose to file a Section 83(b) election with respect to your restricted stock award, you will be required to so certify to us and submit to us a copy of your Section 83(b) election filed with the Internal Revenue Service. At the time you file your Section 83(b) election, you will also be required to make a one-time payment (by cash or personal check) to us to cover the income and employment withholding tax due based on the fair market value of all of the shares subject to your restricted stock award.

Considerations With Respect to Incentive Stock Options. You should note that there is a risk that any eligible options you hold which are incentive stock options may be affected, even if you do not participate in the exchange program. We believe that you will not be subject to current U.S. federal income tax if you elect not to participate in the exchange program. We also believe that the exchange program will not change the U.S. federal income tax treatment of subsequent grants and exercises of your incentive stock options (and sales of shares acquired upon exercises of such options) if you do not participate in the exchange program.

However, the Internal Revenue Service may characterize the exchange program as a “modification” of those incentive stock options, even if you decline to participate. In 1991, the Internal Revenue Service issued a private letter ruling in which another company’s option exchange program was characterized as a “modification” of the incentive stock options eligible for exchange. This does not necessarily mean that our exchange program will be viewed the same way. Private letter rulings issued by the Internal Revenue Service contain its opinion regarding only specific facts presented by a specific person or company. The person or company receiving the letter may rely on it, but no other person or company may rely on the letter ruling or assume the same opinion would apply to their situation, even if the facts at issue are similar. While such letters do not provide certainty, they may indicate how the Internal Revenue Service will view a similar situation. We, therefore, do not know if the

[Table of Contents](#)

Internal Revenue Service will assert the position that our exchange program constitutes a “modification” of incentive stock options that are eligible options. A successful assertion by the Internal Revenue Service of this position could, in some cases, cause an option to cease to qualify as an incentive stock option. In other cases, such a successful assertion by the Internal Revenue Service could extend the option’s holding period necessary to qualify for favorable tax treatment. Accordingly, to the extent you dispose of shares you acquire by exercising an incentive stock option you do not surrender for exchange in the exchange program prior to the lapse of the new extended holding period, your incentive stock option could be taxed similarly to a non-qualified stock option.

Section 15. Considerations Specific to Eligible Employees Outside of the United States.

If you are an eligible employee residing outside the United States who holds eligible options, you are subject to the terms of the exchange program described in this document. You should refer to [Appendix B](#) of this offer to exchange entitled “Guide to International Issues” for a discussion of the tax and other consequences related to participation in the exchange program. [Appendix B](#) is a general summary of the foreign tax and other consequences of the exchange of eligible options in the exchange program and may not apply to your specific circumstances. In addition, tax consequences change frequently and occasionally on a retroactive basis. We therefore recommend you consult with your personal tax advisor in your own country about the effect on your personal tax situation if you elect to participate in the exchange program.

If you are an eligible employee and you live or work in one country, but are also subject to the tax laws in another country, you should be aware that there may be tax and social insurance contribution consequences which may apply to you. Again, you should consult with your own tax advisor to discuss these consequences.

Section 16. Extension of the Election Period; Termination; Amendment.

We may, at any time prior to the expiration date, extend the election period and delay accepting any tendered eligible options by announcing the extension and giving oral or written notice of the extension to eligible employees.

We may, at any time prior to the expiration date, terminate, postpone or amend the exchange program. To postpone acceptance or cancellation of eligible options, we must announce the postponement and give oral or written notice of the postponement to eligible employees. Notwithstanding the foregoing, we will pay the consideration offered or return tendered eligible options promptly after termination or withdrawal of the exchange program.

Subject to applicable law, we further reserve the right, in our discretion, and regardless of whether any event set forth in Section 7 of this offer to exchange has occurred or is deemed by us to have occurred, to amend the terms of the exchange program in any respect.

Amendments to the terms of the exchange program may be made at any time and from time to time. In the case of any extension, the amendment will be announced no later than 9:00 a.m., Eastern Time, on the next business day after the last previously scheduled or announced expiration date. Any amendment of the terms of the exchange program will be disseminated promptly in a manner reasonably designed to inform eligible employees of the change. Without limiting the manner in which we may choose to disseminate any amendment of the terms of the exchange program, except as required by law, we have no obligation to publish, advertise, or otherwise communicate any dissemination.

If we materially change the terms of the exchange program or the information about the exchange program, or if we waive a material condition of the exchange program, we will extend the election period. Except for a change in the amount of consideration or change in the percentage of securities sought, the amount of time by which we will extend the election period following a material change in the terms of the exchange program or information about the exchange program will depend on the facts and circumstances, including the relative

[Table of Contents](#)

materiality of the information. If we decide to take any of the following actions, we will notify you and extend the expiration date to the tenth business day after the date of the notice (unless the expiration date as originally scheduled is already on or after the tenth business day):

- we increase or decrease the per share exchange value of the options (*i.e.*, we increase or decrease what we will give you for your options);
- we change the type of options eligible to be exchanged; or
- we increase the number of eligible options such that the common shares underlying the increased number of eligible options exceed 2% of the common shares issuable upon exercise of the eligible options immediately prior to the increase.

A “*business day*” means any day other than a Saturday, Sunday or federal holiday and consists of the period from 12:01 a.m. through 12:00 midnight, Eastern Time.

Section 17. Fees and Expenses.

We will not pay any fees or commissions to any broker, dealer or other person for asking eligible employees to exchange eligible options in the exchange program.

Section 18. Additional Information.

We have filed with the SEC a Tender Offer Statement on Schedule TO, of which this offer to exchange is a part, with respect to the exchange program. This offer to exchange does not contain all of the information contained in the Schedule TO and the exhibits to the Schedule TO. We recommend that you review the Schedule TO, including its exhibits, before deciding whether or not to participate in the exchange program.

In addition, we are subject to the informational filing requirements of the Securities Exchange Act of 1934 and, in accordance with that act, are obliged to file reports, proxy statements and other information with the SEC relating to our business, financial condition and other matters. Such reports, proxy statements and other information include the following:

- our Annual Report on Form 10-K for the fiscal year ended June 30, 2005, filed with the SEC on September 13, 2005;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended September 30, 2005, December 31, 2005 and March 31, 2006, filed with the SEC on November 9, 2005, February 9, 2006 and May 9, 2006, respectively;
- our Current Reports on Form 8-K filed with the SEC on July 15, 2005, August 17, 2005, September 6, 2005, October 5, 2005, November 16, 2005, December 15, 2005, December 28, 2005, January 18, 2006, February 13, 2006, February 23, 2006, March 15, 2006, June 2, 2006 and June 27, 2006;
- our definitive proxy statement for our special meeting in lieu of annual meeting of shareholders held on November 14, 2005, filed with the SEC on October 14, 2005;
- our definitive proxy statement for our special meeting of shareholders held on August 7, 2006, filed with the SEC on July 10, 2006;
- a description of our common stock contained in our registration statement on Form S-1, Registration No. 333-41139, filed with the SEC on November 26, 1997, including any amendment or report filed for the purpose of updating such description; and
- a description of our preferred stock purchase rights contained in our registration statement on Form 8-A, filed with the SEC on December 15, 2005, including any amendment or report for the purpose of updating such description.

[Table of Contents](#)

The Schedule TO and other filings listed above, our other annual, quarterly and current reports and proxy statements, and our other SEC filings may be examined at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549, or on the Internet at www.sec.gov. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) 732-0330.

We will also provide without charge to each person to whom this document is delivered, upon the written or oral request of such person, a copy of any or all documents to which we have referred above, other than exhibits to such documents (unless such exhibits are specifically incorporated by reference into such documents). Requests should be directed to:

Investor Relations
Mercury Computer Systems, Inc.
199 Riverneck Road
Chelmsford, MA 01824
Phone: (978) 256-1300

As you read the documents listed in this Section 18, you may find some inconsistencies from one document to another. Should you find any inconsistencies between those documents, or between one of those documents and this offer to exchange, you should rely on the statements made in the most recent document. The information contained in this offer to exchange about Mercury should be read together with the information contained in those other documents to which we have referred you.

Section 19. Forward-Looking Statements.

This offer to exchange and the other documents referred to above include forward-looking statements. You can identify these statements by our use of the words "may," "will," "should," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. Such risks and uncertainties include, but are not limited to, the effects of the exchange program on employee incentives and retention, general economic and business conditions, including unforeseen weakness in our 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 our products, shortages of 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. These risks and uncertainties also include such additional risk factors as are discussed in our recent filings with the SEC, including our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006, filed with the SEC on May 9, 2006. You should not place undue reliance upon any such forward-looking statements, which speak only as of the date made. We do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, except as otherwise required by applicable federal securities laws.

APPENDIX A
INFORMATION ABOUT THE DIRECTORS AND EXECUTIVE OFFICERS OF
MERCURY COMPUTER SYSTEMS, INC.

The directors and executive officers of Mercury Computer Systems, Inc., and their positions and offices as of August 11, 2006, are set forth in the following table:

<i>Name</i>	<i>Positions and Offices Held</i>
James R. Bertelli*	Chairman, President and Chief Executive Officer, Director
Robert E. Hult*	Senior Vice President, Operations and Finance, Chief Financial Officer and Treasurer
Craig A. Saline	Senior Vice President, Organization Development and Human Resources
Didier M.C. Thibaud*	Senior Vice President, Defense and Commercial Businesses
Craig Barrows	Vice President, General Counsel and Assistant Secretary
Alex N. Braverman	Vice President, Controller and Chief Accounting Officer
Douglas F. Flood	Vice President, Corporate Development
Joseph M. Hartnett	Vice President, Finance
Marcelo G. Lima*	Vice President and General Manager, Commercial Imaging and Visualization Business
Craig Lund*	Vice President and Chief Technology Officer
Mark F. Skalabrin	Vice President and General Manager, Advanced Solutions Business
Dr. Gordon B. Baty*	Director
Dr. Albert P. Belle Isle*	Director
George W. Chamillard*	Director
Russell K. Johnsen*	Director
Sherman N. Mullin*	Director
Lee C. Steele*	Director
Dr. Richard P. Wishner*	Director

* Indicates members of our Board of Directors and our five most highly compensated executive officers, who are not eligible to participate in the exchange program.

The address of each director and executive officer is c/o Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, MA 01824. The telephone number for each director and executive officer is (978) 256-1300.

APPENDIX B
GUIDE TO INTERNATIONAL ISSUES

The following Appendix contains summaries of the tax consequences of the cancellation of eligible options in exchange for the grant of replacement awards for individuals subject to tax in France, Germany, Japan and the United Kingdom. The summaries are general in nature and do not discuss all of the legal or tax consequences that may be relevant to you in light of your particular circumstances, nor are they intended to be applicable in all respects to all categories of option holders. **This supplement is based on the laws in effect in those countries as of August 2006. Such laws often are complex and change frequently and occasionally on a retroactive basis. As a result, the information contained in the supplement may be out of date at the time your awards vest or you sell shares of stock underlying your awards.** If you are a citizen or resident of a country other than that where you are subject to tax, the information contained in the relevant country tax summary may not be applicable to you. Each summary also includes other country specific requirements that may affect your participation in the exchange program. You are advised to seek appropriate professional legal and tax advice as to how the tax and other laws in your country apply to your specific situation.

By electing to participate in the exchange program, you agree to and acknowledge the following information:

Nature of the exchange program. (1) The exchange program is established voluntarily by us, it is discretionary in nature and it may be extended, modified, suspended or terminated by us at any time, as provided in this offer to exchange; (2) the grant of the right to receive replacement awards on the grant date, subject to conditions stated in this offer to exchange, is voluntary and occasional and does not create any contractual or other right to receive future benefits; (3) decisions with respect to future option grants under any Mercury employee stock plan, if any, will be at our sole discretion; (4) your participation in the exchange program shall not create a right to employment or be interpreted to form an employment agreement with us and/or any of our subsidiaries and shall not interfere with the ability of your current employer to terminate your employment relationship at any time with or without cause (subject to the terms of employment contract, if any); (5) you are voluntarily participating in the exchange program; (6) the right to receive replacement awards from us on the grant date, subject to the conditions stated in this offer to exchange, is an extraordinary item and is not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments; (7) the future value of our common stock is unknown and cannot be predicted; (8) you will not be granted replacement awards or any compensation in lieu of replacement awards if you terminate employment or are terminated from employment with us and our subsidiaries prior to the grant date.

Responsibility for Taxes. In Canada, Japan and the United Kingdom you may be subject to tax as result of the exchange of an eligible option for the grant of a replacement award under the exchange program. Please see individual country summaries for further information. You are advised to seek professional advice from your personal legal or tax advisor on the tax consequences related to your participation in the exchange program. If you are subject to tax as a result of your participation in the exchange program, the following terms will apply to you:

Regardless of any action that we or any of our subsidiaries takes with respect to any or all income tax, social insurance, wage tax or other tax-related withholding related to the exchange, including the cancellation of eligible options and the grant of replacement awards (“applicable withholdings”), you acknowledge that the ultimate liability for all applicable withholdings is and remains your sole responsibility. In that regard, you authorize us and/or our subsidiaries to withhold all applicable withholdings legally payable by you from your wages or other cash payment paid to you by us and/or our subsidiaries or ultimately from proceeds of the sale of

[Table of Contents](#)

shares. Finally, you agree to pay to us and/or our subsidiaries any amount of applicable withholdings that we and/or our subsidiaries may be required to withhold as a result of your participation in the exchange program if we and/or our subsidiaries do not satisfy the applicable withholding through other means.

Data Privacy. You hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this document by and among, as applicable, your employer (“employer”) and Mercury and its subsidiaries for the exclusive purpose of implementing, administering and managing your participation in the exchange program.

You understand that we and your employer hold certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock held in Mercury, details of all options or any other entitlement to shares of stock awarded, cancelled, exercised, vested, unvested or outstanding in your favor, for the purpose of implementing, administering and managing the exchange program and our 2005 Stock Incentive Plan (“data”). You understand that data may be transferred to any third parties assisting in the implementation, administration and management of the exchange program and our 2005 Stock Incentive Plan, that these recipients may be located in your country or elsewhere, and that the recipient’s country may have different data privacy laws and degrees of protections than your country. You understand that you may request a list with the names and addresses of any potential recipients of the data by contacting your local human resources representative. You authorize the recipients to receive, possess, use, retain and transfer the data in electronic or other form, for the purposes of implementing, administering and managing your participation in the exchange program and our 2005 Stock Incentive Plan, including any requisite transfer of such data as may be required to a broker or other third party with whom you may deposit any shares of stock acquired under the replacement award (if granted). You understand that data will be held only as long as is necessary to implement, administer and manage your participation in the exchange program and our 2005 Stock Incentive Plan. You understand that you may, at any time, view data, request additional information about the storage and processing of data, require any necessary amendments to data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing local human resources representative. You understand, however, that refusing or withdrawing your consent may affect your ability to participate in the exchange program or our 2005 Stock Incentive Plan. For more information on the consequences of your refusal to consent or withdrawal of consent, you understand that you may contact your local human resources representative.

Mercury Computer Systems, Inc.
Exchange Program: A Guide to Issues in Canada

This supplement has been prepared to provide employees subject to tax in Canada with a summary of the tax consequences of the exchange program; that is, the voluntary surrender and cancellation of eligible options to purchase shares of our common stock by eligible employees in exchange for the grant to eligible employees of restricted stock awards. This summary is general in nature and does not discuss all of the tax consequences that may be relevant to employees in light of their particular circumstances. This supplement is based on Canadian law in effect as of August 2006. Please note that tax laws change frequently and occasionally they change on a retroactive basis. As the applicable tax regime may vary depending on the date on which the taxable event takes place (*i.e.*, the grant date and the vesting dates of the restricted stock award and the date on which shares are sold), the information below may be out of date on the date of each of the aforementioned taxable events. **You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares underlying the restricted stock awards.**

If you are a citizen or resident of another country for local law purposes or work in another country during the life of the restricted stock award or the period before you sell any shares of our common stock underlying such award after they have vested, the information contained in this summary may not be applicable to you. You are advised to seek appropriate professional advice as to how the tax laws of your country apply to your specific situation.

Option Exchange and Grant of Restricted Stock Award

The exchange of an eligible option for a restricted stock award will be regarded as a taxable event in Canada. You will be required to include in income the fair market value of the restricted stock award on the date of grant. The determination of the fair market value will have to take into account the fact that the restricted shares are not freely tradable at the date of grant.

You may be entitled to a deduction of one-half of the benefit provided certain conditions prescribed in the *Income Tax Act* (Canada) were met at the time the exchanged eligible options were originally granted. You should obtain advice from your own tax advisors as to whether the deduction would be available in this circumstance.

If all or any portion of your restricted stock award does not vest for any reason (*e.g.*, due to forfeiture resulting from the termination of your employment with Mercury), you will have a resulting capital loss in an amount equal to the adjusted cost base of the restricted shares that are forfeited. In this case your adjusted cost base in the forfeited shares is equal to the fair market value of the restricted shares on the date of grant. Capital losses can only be utilized by you to offset capital gains.

Vesting of Restricted Stock Award

Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date. The vesting of your restricted stock award will not be a taxable event in Canada.

Sale of Shares

Vested shares will have an adjusted cost base (tax cost) equal to the fair market value of the restricted stock award on the date of grant. On a subsequent disposition of the shares, you will realize a capital gain or a capital loss equal to the difference between the proceeds of disposition and the adjusted cost base of the shares.

Mercury Computer Systems, Inc.
Exchange Program: A Guide to Issues in France

This supplement has been prepared to provide employees subject to tax in France with a summary of the tax consequences of the exchange program; that is, the voluntary surrender and cancellation of eligible options to purchase shares of our common stock by eligible employees in exchange for the grant to eligible employees of deferred stock awards consisting of phantom stock units. This summary is general in nature and does not discuss all of the tax consequences that may be relevant to employees in light of their particular circumstances. This supplement is based on French law in effect as of August 2006. Please note that tax laws change frequently and occasionally they change on a retroactive basis. As the applicable tax regime may vary depending on the date on which the taxable event takes place (*i.e.*, the grant date and the vesting dates of the deferred stock award and the date on which shares are sold), the information below may be out of date on the date of each of the aforementioned taxable events. **You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares resulting from the deferred stock awards.**

If you are a citizen or resident of another country for local law purposes or work in another country during the life of the deferred stock award or the period before you sell any shares of our common stock underlying such award after they have vested, the information contained in this summary may not be applicable to you. You are advised to seek appropriate professional advice as to how the tax laws of your country apply to your specific situation.

Option Exchange and Grant of Deferred Stock Award

Provided that the stock options have not been exercised as at the date of their cancellation, the cancellation of these stock options will not trigger any taxation in France. The granting of deferred stock awards consisting of phantom stock units will not be subject to French taxation as at the date on which the grant takes place.

Vesting of the Deferred Stock Award

The phantom stock units subject to each deferred stock award will vest as follows:

- $\frac{2}{3}$ of the shares underlying the phantom stock units will be vested on the second anniversary of the date of grant of the deferred stock award, provided that you remain employed by us or one of our subsidiaries as of such date, and
- $\frac{1}{3}$ of the shares underlying the phantom stock units will be vested on the third anniversary of the date of grant of the deferred stock award, provided that you remain employed by us or one of our subsidiaries as of such date.

The foregoing vesting schedule is intended to allow employees subject to tax in France to benefit from the French preferential tax and social regime applicable to the deferred stock awards granted under our 2005 Stock Incentive Plan.

As these deferred stock awards are granted under our 2005 Incentive Stock Plan, and are also governed by the terms of guidelines applicable to deferred stock awards under such plan to employees and corporate officers of our French subsidiaries that have been approved by our Board of Directors and therefore qualify for the French preferential tax and social regime of freely allotted shares, you will not be liable for French taxation upon expiry of each vesting period. A copy of these guidelines is included as an exhibit to our Tender Offer Statement on Schedule TO filed with the SEC (to which this offer to exchange is also an exhibit).

Holding of the Shares

- To benefit from the French preferential tax and social regime of the freely allotted shares, the shares that are freely allotted upon expiry of each vesting period must be kept for a minimum two-year holding period as from the expiry of each vesting period.
- If you receive dividends from these shares during this holding period, such dividends will be subject to French personal income tax at the progressive rate.
- The taxable basis of these dividends will be equal to 60% of the gross amount of the dividend, reduced by a fixed abatement of €1,525 or €3,050 (depending whether you are single or married) and you will benefit from a tax credit amounting to €115 or €230 (depending whether you are single or married).
- If you sell all or part of these shares before the expiry of this holding period, you will be subject to French personal income tax at the progressive rate. The taxed benefit is equal to the value of the shares on the vesting date of the freely allotted shares (hereafter the “benefit”).

In addition, the benefit should be subject to (i) social surtaxes amounting to 8%¹ and (ii) social security contributions (employee part which amounts to approximately 20%) which will be both collected from you and paid by your employer on your behalf.

Sale of the Shares

- Provided that you comply with the two-year holding period with respect to each freely allotted share, the benefit will be subject, on the date of sale of the shares, to an overall tax rate of 41% (i.e. a rate of 30% plus social surtaxes amounting to 11%²).
You can, however, opt for the benefit to be taxed under the wages and salary regime. In this scenario, the benefit will be subject to French personal income tax at the progressive rate³ and the social surtaxes amounting to 11% will still be due.
- The capital gain (i.e., the difference between the sale price and the benefit) resulting from the sale of the freely allotted shares will be subject to French taxation at the overall rate of 27% (i.e., a rate of 16% increased by social surtaxes amounting to 11%⁴), provided that the amount of the sales during one calendar year exceeds €15,000.

¹ Social surtaxes include CSG (*Contribution Sociale Généralisée*) at a rate of 7.5% and CRDS (*Contribution au Remboursement de la Dette Sociale*) at a rate of 0.5%.

² Social surtaxes include: CSG (*Contribution Sociale Généralisée*) at a rate of 8.2%, CRDS (*Contribution au Remboursement de la Dette Sociale*) at a rate of 0.5%, social levy (*Prélèvement social*) at a rate of 2% and additional contribution to the social levy (*Contribution additionnelle au prélèvement social de 2%*) at a rate of 0.3%.

³ The marginal rate is 40% for the calendar year 2006.

⁴ Social surtaxes include: CSG (*Contribution Sociale Généralisée*) at a rate of 8.2%, CRDS (*Contribution au Remboursement de la Dette Sociale*) at a rate of 0.5%, social levy (*Prélèvement social*) at a rate of 2% and additional contribution to the social levy (*Contribution additionnelle au prélèvement social de 2%*) at a rate of 0.3%.

Mercury Computer Systems, Inc.
Exchange Program: A Guide to Issues in Germany

This supplement has been prepared to provide employees subject to tax in Germany with a summary of the tax consequences of the exchange program; that is, the voluntary surrender and cancellation of eligible options to purchase shares of our common stock by eligible employees in exchange for the grant to eligible employees of deferred stock awards consisting of phantom stock units. This summary is general in nature and does not discuss all of the tax consequences that may be relevant to employees in light of their particular circumstances. This supplement is based on German law in effect as of August 2006. Please note that tax laws change frequently and occasionally they change on a retroactive basis. As the applicable tax regime may vary depending on the date on which the taxable event takes place (*i.e.*, the grant date and the vesting dates of the deferred stock award and the date on which shares are sold), the information below may be out of date on the date of each of the aforementioned taxable events. **You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares resulting from the deferred stock awards.**

If you are a citizen or resident of another country for local law purposes or work in another country during the life of the deferred stock award or the period before you sell any shares of our common stock underlying such award after they have vested, the information contained in this summary may not be applicable to you. You are advised to seek appropriate professional advice as to how the tax laws of your country apply to your specific situation.

Option Exchange and Grant of Deferred Stock Award

You should not be subject to tax as a result of the exchange of an eligible option for a deferred stock award consisting of phantom stock units.

Vesting of Deferred Stock Awards

The phantom stock units subject to each deferred stock award will vest as follows:

- $\frac{2}{3}$ of the shares underlying the phantom stock units will be vested on the second anniversary of the date of grant of the deferred stock award, provided that you remain employed by us or one of our subsidiaries as of such date, and
- $\frac{1}{3}$ of the shares underlying the phantom stock units will be vested on the third anniversary of the date of grant of the deferred stock award, provided that you remain employed by us or one of our subsidiaries as of such date.

You will be subject to income tax, solidarity surcharge, church tax (if applicable), and social security at the earliest after vesting of the deferral period, with the issued shares.

Withholding and Reporting

Even in the case where the deferred stock award is granted by us to you as an employee of one of our German subsidiaries, your employer is required to withhold wage tax, solidarity surcharge, church tax (if applicable), and social security contributions for the month in which the shares underlying the deferred stock award are issued to you upon vesting on the vesting date. According to the provisions set out in our 2005 Stock Incentive Plan, you will either have to pay to your employer an amount equal to such wage tax to be withheld or we will withhold a number of shares having a fair market value that corresponds to the due amount of withholding tax. Your employer must also report the benefits in kind in the individual and collective wage tax reports and on your wage tax certificate provided to the tax authorities. If you are required to file a personal income tax return annually, you have to include income from employee share plans (as part of the employment

[Table of Contents](#)

income shown in your personal wage tax certificate). Generally, the tax return must be filed until 31 May of the year following the taxable event. The individual income tax rates under the German income tax system vary within a range from 15% up to 42% for the year 2006 depending on the amount of income. In addition, a solidarity surcharge on the amount of the personal income tax will be levied at a rate of 5.5% and church tax, if any, at a rate of 8% to 9% (depending on the German federal state (*Bundesland*) where you are resident). Withholding tax and solidarity surcharge withheld are credited as prepayments against your tax liability calculated in your annual tax assessment. If the amount withheld exceeds the overall tax liability, you will be entitled to a refund, based to an assessment to tax. If the amount withheld is not sufficient to cover your actual tax liability, you will be responsible for paying the difference.

Sale of Shares

If you sell the shares underlying your deferred stock award more than twelve months after the shares are issued to you upon vesting, you will not be subject to capital gains tax upon the sale of your shares. For the avoidance of doubt, the twelve-month period starts at the date the shares were transferred to you after vesting of your deferred stock award.

If you sell the shares underlying your deferred stock award within one year after the shares are issued to you upon vesting, you will in principle be subject to capital gains tax on the difference between the sales proceeds and what you paid for the shares (*i.e.*, the fair market value of the received common stock on the vesting date that has been subject to withholding tax) less any incidental costs associated with the sale. However, under the half-income procedure (*Halbeinkünfteverfahren*) half of the sales proceeds is tax exempt and the other half of the sales proceeds is included in your income tax assessment basis. In return for the half-income tax exemption for the sales proceeds, half of your acquisition costs (*i.e.*, the fair market value of the received common stock on the vesting date that has been subject to withholding tax) and the incidental costs and expenses are not tax deductible. However, your capital gains subject to tax are tax exempt if the overall annual capital gains realized in the respective calendar year from sales of private investments do not exceed a threshold of €512 (*Freigrenze*). If this threshold is exceeded by only €1, the whole amount of capital gains will be subject to tax. A taxable capital gain will be taxed with your personal income tax rate (for the year 2006 the income tax rates range between 15% and 42%) that depends on your overall taxable income.

Mercury Computer Systems, Inc.
Exchange Program: A Guide to Issues in Japan

This supplement has been prepared to provide employees subject to tax in Japan with a summary of the tax consequences of the exchange program; that is, the voluntary surrender and cancellation of eligible options to purchase shares of our common stock by eligible employees in exchange for the grant to eligible employees of restricted stock awards. This summary is general in nature and does not discuss all of the tax consequences that may be relevant to employees in light of their particular circumstances. This supplement is based on Japanese law in effect as of August 2006. Please note that tax laws change frequently and occasionally they change on a retroactive basis. As the applicable tax regime may vary depending on the date on which the taxable event takes place (*i.e.*, the grant date and the vesting dates of the restricted stock award and the date on which shares are sold), the information below may be out of date on the date of each of the aforementioned taxable events. **You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares underlying the restricted stock awards.**

If you are a citizen or resident of another country for local law purposes or work in another country during the life of the restricted stock award or the period before you sell any shares of our common stock underlying such award after they have vested, the information contained in this summary may not be applicable to you. You are advised to seek appropriate professional advice as to how the tax laws of your country apply to your specific situation.

Option Exchange and Grant of Restricted Stock Award

You arguably will not be subject to income tax as a result of the exchange of an eligible option for the grant of a restricted stock award, although this result is unsettled. Please consult your legal or tax advisor.

Vesting of Restricted Stock Award

Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date.

You will be subject to income tax at the time your restricted stock award vests. The amount subject to income tax will be the fair market value of the underlying shares on the vesting shares on the date. Your share plan income is not subject to social security in Japan.

We are not required to withhold income tax at the time of vesting of restricted shares. You will be required to file a personal income tax return annually to report your income including the income at vesting of the restricted shares. The return must be filed by March 15 of each year.

Sale of Shares

When you sell your vested shares, you will be subject to capital gains tax upon the sale of your shares on the difference between the sale proceeds and the fair market value of the shares on their vesting date.

Mercury Computer Systems, Inc.
Exchange Program: A Guide to Issues in the United Kingdom

This supplement has been prepared to provide employees subject to tax in the United Kingdom with a summary of the tax consequences of the exchange program; that is, the voluntary surrender and cancellation of eligible options to purchase shares of our common stock by eligible employees in exchange for the grant to eligible employees of restricted stock awards. This summary is general in nature and does not discuss all of the tax consequences that may be relevant to employees in light of their particular circumstances. This supplement is based on UK law in effect as of August 2006. Please note that tax laws change frequently and occasionally they change on a retroactive basis. As the applicable tax regime may vary depending on the date on which the taxable event takes place (*i.e.*, the grant date and the vesting dates of the restricted stock award and the date on which shares are sold), the information below may be out of date on the date of each of the aforementioned taxable events. **You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares underlying the restricted stock awards.**

If you are a citizen or resident of another country for local law purposes or work in another country during the life of the restricted stock award or the period before you sell any shares of our common stock underlying such award after they have vested, the information contained in this summary may not be applicable to you. You are advised to seek appropriate professional advice as to how the tax laws of your country apply to your specific situation.

Option Exchange and Grant of Restricted Stock Award

The exchange of an eligible option for a restricted stock award will be regarded as a taxable event in the UK. The legislation governing options states that a chargeable event arises where an employee receives securities in connection with an option even if there is no exercise of the option.

Income tax and National Insurance Contributions (“NICs”) will be payable on the market value of the shares over any price paid for the exchange. You can either:

- make a joint election with your employer under section 431 of Income Tax (Earnings & Pensions) Act 2003 (“Election”) to pay income tax on exercise through self assessment on the excess of the unrestricted market value of the shares acquired on the date of the exchange over any amount paid for them; or
- make no Election and pay income tax through self-assessment on the restricted market value of the shares acquired on the date of the exchange over any amount paid for them.

If you make no Election, you will be taxed again on the expiry of the vesting period.

The restricted market value takes account of restrictions on the shares such as the vesting period and it is likely therefore that the restricted value will be lower than the unrestricted market value of the shares. If the share price continues to rise and you are eligible for capital gains tax exemptions and reliefs (see section on “Sale of Shares” below) you should pay less tax in total if you make an Election. On the other hand, if you make an Election and the share price falls, there will be no repayment of any extra income tax paid because of the Election.

Vesting of Restricted Stock Award

Restricted stock awards granted in the exchange program will vest in three equal annual installments commencing on the first anniversary of the date of grant, provided that you remain employed by us or one of our subsidiaries as of each such date.

[Table of Contents](#)

If you do not enter into an Election at the date of the exchange, a further charge to income tax will arise when the vesting period for the shares expires on a proportion of the value of the shares which was not taxed at the date of exchange. This charge will be calculated using a complex formula set out in the legislation. NICs will also be payable.

If you do enter into an Election at the date of the exchange, no further income tax charge will arise in respect of the shares on vesting of an award.

Sale of Shares

Capital gains tax may be payable if and when you dispose of your shares. Capital gains tax will be chargeable at the appropriate rate on the excess of the sale proceeds over the sum of the exercise price paid plus any amounts in respect of which you have paid income tax, subject to the availability of any exemptions or reliefs. In particular, your annual exemption (£8,800 for the 2006/2007 tax year) may be available so that you may realize gains up to this amount without paying capital gains tax. In addition, taper relief may also be available to reduce any capital gains tax liability.

The rules relating to CGT and shares are very complex and you should discuss your personal situation with your tax or financial advisor before you take any action.

APPENDIX C

INSTRUCTION SHEET TO ELECTION TO PARTICIPATE

Instructions if you wish to participate in the exchange program by tendering your eligible options for exchange:

1. Complete this election to participate (the “election”) and sign ALL SIGNATURE PAGES (pages C-2 and C-4) of the election and deliver pages C-2 through C-4 by one of the following methods:
 - regular or overnight mail to Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, Massachusetts 01824, Attn: Option Exchange
 - by hand to the drop box labeled “Option Exchange” in the HR department at the foregoing address
 - by fax to: 978-256-1746, Attn: Option Exchange
 - by email, scanned as a Portable Document Format (PDF) file, to *MCSStockOptionExchange@mc.com*. Subject line of email must be “Option Exchange.”

Individual confirmations of receipt will not be sent. Please keep copies of the documents you send. This election must be received by Mercury as specified above before 12:00 midnight, Eastern Time, on September 8, 2006, unless the election period is extended by Mercury, in which case this election must be received by the extended expiration date. Your eligible options will not be considered tendered for exchange unless a properly completed and signed copy of this election is timely received by Mercury as specified above. The method of delivery is at your own option and risk. You are responsible for making sure that this election is timely received as specified above. You must allow for delivery time based on the method of delivery that you choose to ensure that we receive your election on time.

2. You must designate the eligible options you wish to exchange by filling in the grant number(s) on page C-3 of the election. The grant number is identified on your personnel grant status as a four-digit number under the first column on the left entitled “Number.” The grant number is also listed at your online account at *www.etrade.com* under the column heading “Number,” and may be preceded by “0000.” You do *not* have to provide the number of shares subject to the options you are electing to exchange.
3. Except as described in the following sentence, this election must be signed by the eligible employee who holds the eligible options to be tendered for exchange exactly as such person’s name appears on the notice of grant for such options previously delivered to such person. If the signature is by an attorney-in-fact or another person acting in a fiduciary or representative capacity, the signer’s full title and proper evidence of the authority of such person to act in such capacity must be identified on this election.

You must follow the foregoing instructions if you are changing your election in accordance with Section 4 of the offer to exchange (see the heading “Changing Your Election”). If you wish to withdraw from participation in the exchange program as to all of your eligible options that you have previously tendered for exchange, you must fill out and submit a notice of withdrawal in accordance with the instructions on page D-1.

**Mercury Computer Systems, Inc.
ELECTION TO PARTICIPATE
in Stock Option Exchange Program**

Note: This election to participate is a part of, and must be read in conjunction with, the offer to exchange dated August 11, 2006, including the appendices thereto.

Name: _____
(Name of eligible employee – please print)

I have received the offer to exchange dated August 11, 2006 (as amended or supplemented from time to time, the “offer to exchange”) relating to the offer being made by Mercury Computer Systems, Inc. (“Mercury”) to eligible employees to tender their outstanding options to purchase shares of Mercury’s common stock having a exercise price per share greater than the greater of (1) \$23.00 or (2) the closing sale price of Mercury’s common stock on the date the election period expires (“eligible options”), in exchange for certain awards of restricted stock rights, as described in the offer to exchange (“replacement awards”), that will be granted under Mercury’s 2005 Stock Incentive Plan (the “exchange program”).

Mercury has informed me that I am eligible to tender eligible options in the exchange program only if I am actively employed by Mercury or one of its subsidiaries or on an approved leave of absence as of August 11, 2006 and through the date the tendered eligible options are cancelled and the replacement awards are granted, which will be promptly following the expiration of the election period.

Mercury has informed me that I may tender for exchange in the exchange program only eligible options, and that if I choose to tender an eligible option, I must tender the entire outstanding, unexercised portion of that option. Mercury has informed me that if I have more than one eligible option, I may tender for exchange one eligible option and choose not to tender another eligible option.

Mercury has informed me that, upon the terms and subject to the conditions of the exchange program, in exchange for those eligible options that I properly tender and which are accepted and cancelled, Mercury will grant me a replacement award consisting of a number of restricted stock rights determined in accordance with a 4-to-1 exchange ratio; *i.e.*, every four shares underlying an eligible option which is accepted and cancelled will be exchanged for one restricted stock right. Mercury has informed me that the number of restricted stock rights subject to each replacement award will be rounded to the nearest whole share/unit (with 0.5 rounded up). Accordingly, replacement awards will not be granted for fractional shares/units.

ELIGIBLE OPTIONS TENDERED FOR EXCHANGE

Note: Please refer to your personnel grant status form or your online account at www.etrade.com to obtain the grant number(s) for your eligible option(s) (see instructions).

I hereby tender the following eligible options for exchange pursuant to the terms of the offer to exchange, including the appendices thereto:

Grant number:	Grant number:
Grant number:	Grant number:
Grant number:	Grant number:

Signed:

[Signature of Eligible Employee]

[Table of Contents](#)

Mercury has informed me that I may change my election shown above (whether to add, subtract or substitute eligible options) by submitting a new election in accordance with the instructions on page C-1 and that the latest election I properly and timely submit in accordance with such instructions will supersede and replace any and all elections I previously submitted. Mercury has further informed me that if I wish to withdraw my participation in the exchange program as to all of my eligible options previously tendered, I must submit a notice of withdrawal in accordance with the instructions on page D-1 of the offer to exchange.

Mercury has informed me that the replacement awards will be granted under, and will be subject to the terms and conditions of, Mercury's 2005 Stock Incentive Plan and an award agreement between that will be provided to me as promptly as practicable after the grant date.

Mercury has informed me that the replacement award will be unvested as of its grant date and will have a new vesting schedule. Mercury has further informed me that I must continue to provide service to Mercury or one of its subsidiaries through the required vesting periods to become entitled to receive or retain the underlying shares of common stock vesting at the end of each vesting period.

Mercury has informed me that, under certain circumstances described in the offer to exchange, Mercury may terminate or amend the exchange program, or postpone its acceptance and cancellation of any options tendered for exchange. Mercury has further informed me that, in any such event, the options tendered for exchange but not accepted will remain in effect without change.

I acknowledge that: (1) the exchange program is a discretionary program established by Mercury and may be suspended, modified or terminated by Mercury at any time, as provided in the offer to exchange; (2) the replacement awards to be granted under the exchange program are discretionary in nature and such grant does not create any contractual or other right to receive future equity or cash compensation, payments or benefits; (3) participation in the exchange program shall not create a right to continued employment or additional severance payments in the event of termination of service; (4) I am voluntarily participating in the exchange program; (5) I authorize Mercury and/or its subsidiaries to withhold all income tax, social insurance, payroll tax or other tax-related withholding related to the exchange legally payable by me from my wages or other cash payment paid to me by Mercury and/or its subsidiaries or from proceeds of the sale of shares; and (6) I have read the offer to exchange carefully, including the sections regarding legal and tax consequences of participating in the exchange program.

In addition, I hereby consent to the collection, use, transfer and management in electronic or other form, of my personal data, which may include my name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, and other details of my employment or compensation by and among, as applicable, Mercury, its direct and indirect wholly-owned subsidiaries and third parties assisting in the implementation, administration and management of the exchange program and the 2005 Stock Incentive Plan (these recipients may be located in the United States or elsewhere), for the exclusive purpose of implementing, administering and managing my participation in the exchange program and the 2005 Stock Incentive Plan. I understand that Mercury may review or modify my data at any time but understand that refusing or withdrawing my consent may affect my ability to participate in the exchange program or the 2005 Stock Incentive Plan.

Mercury has informed me that in order to tender eligible options for exchange in the exchange program, I must sign and complete this election, including listing in the spaces indicated the grant number(s) of the eligible options I wish to tender for exchange, and timely deliver this completed election to Mercury as specified in the instructions on page C-1.

[Table of Contents](#)

Effective as of the grant date of the replacement awards, I hereby give up my entire right, title and interest in and to the eligible options which I have tendered pursuant to this election and which are accepted by Mercury for exchange and cancellation, pursuant to the exchange program. Mercury has informed me, and I acknowledge and agree that all such eligible options that I tender and which are accepted by Mercury for exchange and cancellation pursuant to the exchange program, and any notices, agreements, certificates or other documentation evidencing such option(s), will automatically become null and void as of the grant date of the replacement awards. I acknowledge that this election to tender eligible options for exchange is entirely voluntary and that I may withdraw this election using the notice of withdrawal that has been provided to me at any time until 12:00 midnight, Eastern Time on the expiration date, which is currently expected to be September 8, 2006. **I also acknowledge that, except as otherwise stated in the offer to exchange, this election will be irrevocable from and after the expiration date.**

Upon the terms and subject to the conditions of the exchange program, I hereby tender for exchange and cancellation the eligible options listed on page C-2. I represent that I have full power and authority to tender such options so specified for exchange and cancellation.

Employee's Signature

Date

Employee's Name (please print or type)

Employee's Social Security Number

APPENDIX D

INSTRUCTION SHEET TO NOTICE OF WITHDRAWAL

1. If you previously submitted an election to tender for exchange and cancellation some or all of your eligible options pursuant to the offer to exchange dated August 11, 2006 (as amended or supplemented from time to time, the “offer to exchange”), and you wish to withdraw your tender of all of such eligible options, you must complete and sign the attached notice of withdrawal and deliver it by one of the following methods:
 - regular or overnight mail to Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, Massachusetts 01824, Attn: Option Exchange
 - by hand to the drop box labeled “Option Exchange” in the HR department at the foregoing address
 - by fax to: 978-256-1746, Attn: Option Exchange
 - by email, scanned as a Portable Document Format (PDF) file, to *MCSStockOptionExchange@mc.com*. Subject line of email must be “Option Exchange.”

Individual confirmations of receipt will not be sent. Please keep copies of any documents you send. This notice of withdrawal must be received by Mercury as specified above before 12:00 midnight, Eastern Time, on September 8, 2006, unless the election period is extended by Mercury, in which case this notice of withdrawal must be received by the extended expiration date. Your tendered options will not be considered withdrawn unless a properly completed and signed copy of this notice of withdrawal is timely received by Mercury as specified above. The method of delivery is at your own option and risk. You are responsible for making sure that this notice of withdrawal is timely received as specified above. You must allow for delivery time based on the method of delivery that you choose to ensure that we receive your notice of withdrawal on time.

PLEASE NOTE: *If you intend to participate in the exchange program and simply wish to change your election (whether to add, subtract or substitute eligible options), you should not fill out and submit this notice of withdrawal.* Instead, you must fill out and submit a new election in accordance with Section 4 of the offer to exchange (see the heading “*Changing Your Election*”) and the instructions on page C-1 of the offer to exchange.

2. Except as described in the following sentence, this notice of withdrawal must be signed by the eligible employee who holds the eligible options to be withdrawn exactly as such person’s name appears in the notice of grant for such options previously delivered to such person. If the signature is by an attorney-in-fact or another person acting in a fiduciary or representative capacity, the signer’s full title and proper evidence of the authority of such person to act in such capacity must be identified on this notice of withdrawal.

Mercury Computer Systems, Inc.
NOTICE OF WITHDRAWAL
Of Tender of Eligible Options pursuant to the Stock Option Exchange Program

Note: This notice of withdrawal is a part of, and must be read in conjunction with, the offer to exchange dated August 11, 2006, including the appendices thereto.

To Mercury Computer Systems, Inc.:

I previously received a copy of the offer to exchange dated August 11, 2006 (as amended or supplemented from time to time, the “offer to exchange”) and the related election to participate (“election”). I signed and returned one or more election(s) whereby I tendered for exchange certain eligible options pursuant to the offer to exchange. I now wish to withdraw my tender with respect to all such eligible options.

Mercury has informed me, and I acknowledge that by withdrawing my previously tendered eligible options, I will not be granted any replacement awards in exchange for such previously tendered options and I will retain such eligible options with their existing exercise price(s), term(s), vesting schedule(s) and other terms and conditions. Mercury has also informed me, and I acknowledge that all such options will continue to be governed by the terms of Mercury’s 1997 Stock Option Plan and the form(s) of option agreement(s) previously provided to me in connection with the grant of such options.

I hereby withdraw all of the eligible options which I previously tendered for exchange and cancellation pursuant to the exchange program. I have therefore completed this notice of withdrawal in accordance with the instructions on page D-1 and have signed exactly as my name appears on the notice of stock option award for such options previously delivered to me.

Employee’s Signature

Date

Employee’s Name (please print or type)

Employee’s Social Security Number

PLEASE NOTE: *If you intend to participate in the exchange program and simply wish to change your election (whether to add, subtract or substitute eligible options), you should not fill out and submit this notice of withdrawal.* Instead, you must fill out and submit a new election in accordance with Section 4 of the offer to exchange (see the heading “*Changing Your Election*”) and the instructions on page C-1 of the offer to exchange.

Subject: Option Exchange Program: Amended Offer to Exchange

In response to comments we received from the Securities and Exchange Commission and to provide additional information to eligible associates who are subject to taxation in Canada, we have amended the Offer the Exchange. Copies of the amended Offer to Exchange are available on the Source at <http://hr.mc.com/optionexchange>.

The Offer to Exchange was amended in order to:

- (i) clarify as appropriate throughout the Offer to Exchange that holders of eligible options who are domiciled in Canada are eligible to participate in the exchange program, and to add additional information in Appendix B addressing tax consequences of participation in the exchange program to eligible employees who are subject to taxation in Canada;
- (ii) clarify in Section 4 (“Procedures for Tendering Options for Exchange”) of the Offer to Exchange that Mercury’s determinations of questions regarding the number of shares subject to eligible options, and the validity, form, eligibility (including time of receipt) of submitted elections (including any changes to elections) and acceptance of any tender of options will be subject to remedies that may be available under applicable law;
- (iii) clarify in Section 5 (“Withdrawal Rights”) of the Offer to Exchange that Mercury’s determinations of questions as to the form and validity, including time of receipt, of notices of withdrawals will be subject to remedies that may be available under applicable law;
- (iv) revise the bullet points in Section 7 (“Conditions of the Exchange Program”) of the Offer to Exchange to:
 - (a) replace the phrase “our business, condition (financial or other), results of operations, assets, liabilities or prospects” with the phrase “our business, financial condition, results of operations, assets or liabilities;”
 - (b) replace the phrase “our business, condition (financial or other), results of operations, assets, liabilities, prospects or stock ownership” with the phrase “our business, financial condition, results of operations, assets or liabilities;” and
 - (c) clarify that Mercury’s determinations or judgments concerning the events described in Section 7 will be subject to remedies that may be available under applicable law; and
- (v) clarify in Section 19 (“Forward-Looking Statements”) that Mercury’s disclaimer of any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is qualified to the extent any such obligation to update is required by applicable federal securities laws.

Important Notice to Associates Who Are Subject to Taxation in Canada

You should carefully review the amended Offer to Exchange and the other documents to which the Offer to Exchange refers you (including the Guide to Issues in Canada in Appendix B, as amended) before making a decision on whether to participate in the exchange program.

You are strongly advised to obtain advice from your own tax and financial advisors prior to electing to participate in the exchange program, or disposal of the shares underlying restricted stock awards.

For additional information or assistance, you should send your request by email to MCSSStockOptionExchange@mc.com.



Craig Barrows
Vice President, General Counsel

September 1, 2006

VIA EDGAR

Celeste M. Murphy
Office of Mergers & Acquisitions
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-3628

Re: Mercury Computer Systems, Inc.
Schedule TO-I filed August 11, 2006
File No. 005-52823

Dear Ms. Murphy:

This letter is submitted on behalf of Mercury Computer Systems, Inc. (the "Company") in response to the comments of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") raised in your letter of August 24, 2006 to Anthony J. Medaglia, Jr., Secretary of the Company (the "Comment Letter"). For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. Concurrently herewith, the Company is filing an amendment to its Schedule TO-I in response to the Staff's comments in the Comment Letter.

Schedule TO-I
Withdrawal Rights, page 24

1. We note your statement that your "determination of these matters will be final and binding." Please revise this sentence to more precisely define its scope. It appears that your interpretation of the terms of the tender offer may not necessarily be final and binding on all parties. And in the context of conditions, as addressed below, for example, while you may assert an offer condition when it is triggered, when parties contest asserted conditions, the judgments of courts of law are generally considered final and binding in such matters. Please make corresponding revisions throughout your

document, including, but not limited to, the last sentence of your section entitled “Conditions of the Tender Offer.”

Response 1:

In response to the Staff’s comment, the Company has revised the disclosure in Section 5 (Withdrawal Rights) of the Offer to Exchange by replacing the sentence noted in the Staff’s comment with the following (which adds the phrase “subject to remedies that may be available under applicable law” to the end of such sentence):

“Our determination of these matters will be final and binding, *subject to remedies that may be available under applicable law.*”

The Company has similarly revised the disclosure in Section 4 (Procedures for Tendering Options for Exchange—Determination of Validity; Rejection of Options; Waiver of Defects; No Obligation to Give Notice of Defects) and Section 7 (Conditions of the Exchange Program) of the Offer to Exchange to add the phrase “subject to remedies that may be available under applicable law” to the end of the relevant sentence of each such section.

Conditions of the Tender Offer, page 23

- In the first paragraph you state that you may terminate this offer if one of the listed events occurs and you determine in your reasonable judgment that the occurrence of the event makes it inadvisable to proceed with the offer. You have the right to decide whether to terminate or proceed with your offer if a listed offer condition is “triggered.” However, if you go forward with the offer despite the occurrence of one of the listed events, you must waive the applicable condition. Waiver of an offer condition may require extension of the offer and dissemination of additional offer materials. You may not use the language in the first paragraph of this section to tacitly waive an offer condition by failing to assert it. Please confirm your understanding in a supplemental response.*

Response 2:

In response to the Staff’s request for a supplemental confirmation, the Company understands and acknowledges that if a condition is triggered and the Company decides to proceed with the offer, such action will constitute a waiver of the triggered condition. If a condition is waived, the Company understands and acknowledges that, to the extent required by applicable rules and regulations of

the Commission, it may be required to extend the offer and/or disseminate additional offer materials.

3. *We note your first, sixth, eleventh, and fifteenth bulleted offer conditions regarding any event or events occurring that “in [your] reasonable judgment, could materially and adversely affect [your] business, condition (financial or otherwise), income, operations or prospects...” Please revise to specify or generally describe the prospects to which you refer and clarify what you mean by conditions other than financial, so that security holders will have the ability to objectively determine whether each condition has been triggered.*

Response 3:

In response to the Staff’s comment, the Company has revised the disclosure in Section 7 (Conditions of the Exchange Program) of the Offer to Exchange by replacing the references to “condition (financial or other)” with “financial condition” in the offer conditions noted by the Staff, and by deleting the references to “prospects” in those same conditions.

4. *We reference the eleventh bulleted offer condition. Describe what you mean by any change occurring or threatened in your “stock ownership” that is contemplated. Please revise this condition to specify or generally describe what you mean so that security holders will have the ability to objectively determine whether the condition has been triggered.*

Response 4:

In response to the Staff’s comment, the Company has revised the disclosure in Section 7 (Conditions of the Exchange Program) of the Offer to Exchange by deleting the reference to “stock ownership” in the bulleted offer condition noted by the Staff, but retaining the third sub-bullet regarding the suspension of trading in the Company’s common stock by the Commission or the Nasdaq Stock Market.

Forward-Looking Statements, page 39

5. *Your statement that you undertake “no...obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made.” appears to be inconsistent with Rule 13e-4(3). Please revise accordingly.*

Response 5:

In response to the Staff's comment, the Company has revised the disclosure in Section 19 (Forward-Looking Statements) of the Offer to Exchange by replacing the last sentence of such section with the following (which adds the phrase "except as otherwise required by applicable federal securities laws" to the end of such sentence):

"We do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, *except as otherwise required by applicable federal securities laws.*"

As requested in the Comment Letter, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to Staff comments in the filings reviewed by the Staff do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you should have any questions concerning the enclosed matters, please contact the undersigned at (978) 256-1300.

Sincerely,

/s/ Craig Barrows

Craig Barrows
Vice President, General Counsel

cc: Anthony J. Medaglia, Jr., P.C.
Goodwin Procter LLP