As filed with the Securities and Exchange Commission on June 6, 2022

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MERCURY SYSTEMS, INC. (Exact Name of Registrant as Specified in its Charter)

Massachusetts (State of Incorporation) 04-2741391 (I.R.S. Employer Identification Number)

50 Minuteman Road Andover, Massachusetts 01810 (978) 256-1300 (Address of Principal Executive Offices)

Mercury Employees Retirement Investment Trust (Full Title of the Plan)

Christopher C. Cambria Executive Vice President, General Counsel, and Secretary Mercury Systems, Inc. 50 Minuteman Road Andover, Massachusetts 01810 (978) 256-1300 (Name, Address and Telephone Number, Including Area Code, of Agent for Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [X]

Non-accelerated filer [_]

Emerging growth company [_]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

Accelerated filer [_]

Smaller reporting company [_]

Registration No. 333-

EXPLANATORY NOTE

This Registration Statement is being filed solely for the purpose of registering 450,000 shares of common stock, par value \$0.01 per share ("Common Stock"), of Mercury Systems, Inc. (the "Company") for matching contributions to participants under the Mercury Employees Retirement Investment Trust (the "401(k) Plan").

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

ITEMS 1 AND 2.

The documents containing the information for the 401(k) Plan specified by Part I of this Registration Statement will be sent or given to the employees as specified by Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act"). Such documents need not be filed with the Commission either as a part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. Such documents and the documents incorporated by reference pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus for this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents are incorporated herein by reference:

- (a) The Company's Annual Report on Form 10-K for the fiscal year ended July 2, 2021, as filed with the Commission on August 17, 2021;
- (b) The Company's Definitive Proxy Statement on Schedule 14A, as filed with the Commission on September 9, 2021, as amended by the Revised Definitive Proxy Soliciting Materials on Schedule DEFR 14A filed with the Commission on September 14, 2021, to the extent specifically incorporated by reference into the Company's Annual Report on Form 10-K for the fiscal year ended July 2, 2021;
- (c) The Company's Quarterly Reports on Form 10-Q for the fiscal quarter ended October 1, 2021, as filed with the Commission on November 9, 2021, for the fiscal quarter ended December 31, as 2021 filed with the Commission on February 8, 2022, and for the fiscal quarter ended April 1, 2022, as filed with the Commission on May 10, 2022;
- (d) The Company's Current Reports on Form 8-K filed with the Commission on August 3, 2021 (Items 2.05 and 5.02 only), November 1, 2021, December 29, 2021, and February 28, 2022;
- (e) The description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A dated January 7, 1998, as updated by Exhibit 4.2 to the Company's Annual Report on Form 10-K for the fiscal year ended July 3, 2020, as filed with the Commission on August 18, 2020; and
- (f) The description of the Company's preferred stock purchase rights contained in the Company's Current Report on Form 8-K filed with the Commission on December 29, 2021.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Securities Exchange Act of 1934, as amended, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of the filing of such documents.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

The validity of the Common Stock offered under this Registration Statement will be passed upon for the Company by Morgan, Lewis & Bockius LLP, Boston, Massachusetts. Morgan, Lewis & Bockius LLP does not have a substantial interest, direct or indirect, in the Company.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 2.02(b)(4) of Chapter 156D of the Massachusetts General Laws allows a corporation to eliminate or limit the personal liability of a director of a corporation to the corporation or its shareholders for monetary damages for a breach of fiduciary duty as a director notwithstanding any provision of law imposing such liability, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of an improper distribution or obtained an improper personal benefit. The Company has included a similar provision in its articles of organization.

Section 8.51(a) of Chapter 156D of the Massachusetts General Laws provides that a corporation may indemnify its directors against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement reasonably incurred in connection with any litigation or other legal proceeding brought against any director by virtue of his position as a director of the corporation unless he is deemed to have not acted in good faith in the reasonable belief that his action was in the best interest of the corporation. As noted below, the Company has provided for director indemnification in its articles of organization and bylaws.

Section 8.52 of Chapter 156D of the Massachusetts General Laws provides that a corporation must indemnify a director who is wholly successful, on the merits or otherwise, in the defense of any proceeding to which the director was a party because he was a director of the corporation against reasonable expenses incurred by him in connection with the proceeding.

Section 8.56(a) of Chapter 156D of the Massachusetts General Laws ("Section 8.56") provides that a corporation may indemnify its officers to the same extent as its directors and, for officers that are not directors, to the extent provided by (i) the articles of organization, (ii) the bylaws, (iii) a resolution of the board of directors or (iv) a contract. In all instances, the extent to which a corporation provides indemnification to its officers under Section 8.56 is optional. As noted below, the Company has provided for officer indemnification in its bylaws.

The Company's bylaws, as amended, provide that the Company shall indemnify its directors and the officers that have been appointed by the Board of Directors to the fullest extent permitted by law.

The Company maintains directors' and officers' liability insurance.

The Company has entered into indemnification agreements with its directors. The indemnification agreements require, among other matters, that the Company indemnify its directors to the fullest extent provided by law and advance to directors certain expenses, subject to reimbursement if it is subsequently determined that indemnification is not permitted.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

None.

ITEM 8. EXHIBITS.

See the Exhibit Index attached hereto.

ITEM 9. UNDERTAKINGS.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent posteffective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to that information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the registration statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Andover, the Commonwealth of Massachusetts on this 6th day of June, 2022.

MERCURY SYSTEMS, INC.

By: <u>/s/ Michael D. Ruppert</u> Michael D. Ruppert Executive Vice President, Chief Financial Officer, and Treasurer

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below constitutes and appoints Mark Aslett, Christopher C. Cambria, and Michael D. Ruppert as his or her true and lawful attorneys-in-fact and agents, each acting alone, with full powers of substitution and resubstitution, for him or her or in his or her name, place and stead, in any and all capacities to sign any and all amendments or post-effective amendments to this Registration Statement (or any Registration Statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Mark Aslett</u> Mark Aslett	President, Chief Executive Officer, and Director (Principal Executive Officer)	June 6, 2022
<u>/s/ Michael D. Ruppert</u> Michael D. Ruppert	Executive Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)	June 6, 2022
<u>/s/ Michelle M. McCarthy</u> Michelle M. McCarthy	Vice President, Chief Accounting Officer (Principal Accounting Officer)	June 6, 2022
<u>/s/ William K. O'Brien</u> William K. O'Brien	Chairman of the Board of Directors	June 6, 2022
<u>/s/ James K. Bass</u> James K. Bass	Director	June 6, 2022
<u>/s/ Orlando P. Carvalho</u> Orlando P. Carvalho	Director	June 6, 2022
<u>/s/ Michael A. Daniels</u> Michael A. Daniels	Director	June 6, 2022
<u>/s/ Lisa S. Disbrow</u> Lisa S. Disbrow	Director	June 6, 2022
<u>/s/ Mary Louise Krakauer</u> Mary Louise Krakauer	Director	June 6, 2022
<u>/s/ Barry R. Nearhos</u> Barry R. Nearhos	Director	June 6, 2022
<u>/s/ Debora A. Plunkett</u> Debora A. Plunkett	Director	June 6, 2022

Exhibit Index

Exhibit	Description
4.1	Articles of Organization (incorporated herein by reference to Exhibit 3.1.1 of the Company's Annual Report on Form 10- K for the fiscal year ended June 30, 2009)
4.2	Articles of Amendment (incorporated herein by reference to Exhibit 3.1.2 of the Company's Annual Report on Form 10- K for the fiscal year ended June 30, 2010)
4.3	Articles of Amendment (incorporated herein by reference to Exhibit 1 of the Company's Registration Statement on Form 8-A filed with the Commission on December 15, 2005)
4.4	Articles of Amendment (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Commission on November 13, 2012)
4.5	Articles of Amendment (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Commission on June 30, 2015)
4.6	Articles of Amendment (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Commission on December 29, 2021)
4.7	By-laws, amended and restated effective July 28, 2020 (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the Commission on July 31, 2020)
4.8	<u>Rights Agreement, dated as of December 27, 2021, between the Company and Computershare Trust Company, N.A.</u> (incorporated herein by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed with the Commission on December 29, 2021)
5.1*	Opinion of Morgan, Lewis & Bockius LLP
23.1*	Consent of KPMG LLP
23.2	Consent of Morgan, Lewis & Bockius LLP (contained in the opinion filed as Exhibit 5.1 to this Registration Statement)
24.1	Power of Attorney (included in signature page to this Registration Statement)
107*	Calculation of Filing Fee Table
*	Filed herewith

Calculation of Filing Fee Tables

FORM S-8

Registration Statement Under the Securities Act of 1933 (Form Type)

Mercury Systems, Inc. (Exact Name of the Registrant as Specified in its Charter)

Table 1: Newly Registered Securities									
Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Share(2)	Maximum aggregate offering price	Fee Rate	Amount of registration fee		
Equity	Common stock, par value \$0.01 per share	457(c) and 457(h)	450,000	\$60.75	\$27,337,500	0.0000927	\$2,534.19		
Total Offeri	Total Offering Amounts				\$27,337,500		\$2,534.19		
Total Fee Offsets						\$0.00			
Net Fee Due							\$2,534.19		

(1) This registration statement also covers preferred stock purchase rights (the "Rights") which are presently attached to and trade with the registrant's common stock. Any value attributed to the Rights is reflected in the market price of the common stock.

(2) Calculated in accordance with Rule 457(c) and (h) under the Securities Act solely for the purpose of determining the amount of the registration fee, based on the average of the high and low prices of our Common Stock on the Nasdaq Global Select Market on June 1, 2022.

Morgan Lewis

Mercury Systems, Inc. 50 Minuteman Road Andover, Massachusetts 01810

Re: <u>Registration Statement on Form S-8</u>

Ladies and Gentlemen:

This opinion is furnished in connection with the registration, pursuant to a Registration Statement on Form S-8 under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), to be filed with the Securities and Exchange Commission on or about June 6, 2022 (the "<u>Registration Statement</u>"), of 450,000 shares (the "<u>Shares</u>") of common stock, par value \$0.01 per share of Mercury Systems, Inc., a Massachusetts corporation (the "<u>Company</u>"), which are or will be issuable under the Mercury Employee Retirement Investment Trust (the "<u>Plan</u>").

We have acted as counsel to the Company in connection with the foregoing registration of the Shares. We have examined and relied upon originals or copies of such records, instruments, certificates, memoranda, and other documents as we have deemed necessary or advisable for purposes of this opinion and have assumed, without independent inquiry, the accuracy of those documents. In that examination, we have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies and the authenticity and completeness of all original documents reviewed by us in original or copy form. We have further assumed that all Shares issued or to be issued pursuant to the Plan were or will be validly issued in accordance with the terms of the Plan.

This opinion is limited solely to the substantive laws of the Commonwealth of Massachusetts.

Based upon and subject to the foregoing, we are of the opinion that, upon the issuance and the delivery of the Shares in accordance with the terms of the Plan, the Shares will be validly issued, fully paid, and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder. In rendering the opinions set forth above, we are opining only to the specific legal issues expressly set forth therein, and no opinion shall be inferred as to any other matter or matters.

Very truly yours,

/s/ MORGAN, LEWIS & BOCKIUS LLP

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated August 17, 2021, with respect to the consolidated financial statements and financial statement schedule II of Mercury Systems, Inc. and subsidiaries, and the effectiveness of internal control over financial reporting, incorporated herein by reference.

/s/ KPMG LLP

Boston, Massachusetts June 6, 2022