

February 2, 2017

Via EDGAR

Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attention: Martin James, Senior Assistant Chief Accountant
Office of Electronics and Machinery

Re: Mercury Systems, Inc.
Form 10-K for the Fiscal Year Ended June 30, 2016
Filed August 16, 2016
File No. 000-23599

Dear Mr. James:

This letter is submitted by Mercury Systems, Inc. (the “Company,” “Mercury,” “we” or “our”) in response to the supplemental comment from the staff (the “Staff”) of the Division of Corporation Finance of the U.S. Securities and Exchange Commission (the “Commission”) as set forth in your follow-up comment letter dated January 24, 2017 (the “Comment Letter”) to Gerald M. Haines II. For ease of reference, the text of the Staff’s comment contained in the Comment Letter is printed below in bold and is followed by the Company’s response.

Form 10-K for the Fiscal Year Ended June 30, 2016

Item 8. Financial Statements

Note P – Operating Segment, page 74

1. **We note from your response to comment 3 that your CEO has been identified as your CODM and that your CEO has eight direct reports including your Chief Operating Officer (“COO”). Additionally, we note that in May 2016 your CODM began using consolidated financial information to assess performance and allocate resources. To help us better understand the determination of your CODM, please address the following:**
 - **Explain how your CODM ensures resources are allocated in the most effective manner to drive the most shareholder value.**
 - **Explain what the CODM allocates between when resources are limited, and describe any information used to make those allocations.**
 - **Explain how the CODM’s role differs from his reportees in assessing performance and allocating resources and what ability the reportees have to make operating decisions affecting other reportees.**
 - **Explain the responsibilities of your COO to your business, including any role in allocating resources and assessing the performance of your business. Explain how this role, as it relates to allocating resources and assessing performance, differs from your CODM.**
 - **Tell us the other senior managers that attend the EB meeting and describe their roles.**
 - **Explain the financial information discussed in the EB meetings and the extent to which information is discussed about MCE, MDS, and the Carve-Out business reporting units.**

Mercury's Response to Comment 1: In response to the Staff's comment, the Company confirms that our Chief Executive Officer ("CEO") is our chief operating decision maker ("CODM"). During fiscal 2016, we completed a series of important internal organizational changes in order to integrate, align and scale ourselves into a single, unified business. In addition, over the past several years, we have completed several acquisitions, culminating with the Carve-Out business acquisition from Microsemi ("Carve-Out business") on May 2, 2016 to support our strategy of creating a better alternative for affordable, secure processing subsystems. These strategic acquisitions and the associated operational and managerial changes finalized the transformation of the way the Company's executive management team, including the CEO as the CODM, manage, evaluate and review the business, including how he allocates resources and assesses performance. This also led to significant changes in the way we present financial information relating to the business.

Our CEO has eight direct reports, comprised of an executive assistant and seven operational executives including our Chief Financial Officer ("CFO"), Chief Operating Officer ("COO"), General Counsel, Chief Information and Integration Officer, Chief Human Resources Officer, Chief Marketing Officer, and Senior Vice President of Strategy and Corporate Development. Additionally, in May 2016, based on the significant changes to and reorganization of the underlying business, our CODM began using only consolidated financial information to assess performance and allocate resources.

Additionally we have addressed the following sub-comments from the Staff to help you better understand Mercury's determination of our CODM:

- **Explain how your CODM ensures resources are allocated in the most effective manner to drive the most shareholder value.**

It is the role and responsibility of the Company's CEO (CODM) to allocate Company resources at a corporate level to ensure that our strategic, financial and operational objectives are met. Our strategy is based upon growth, both organically and through acquisitions as targets become available, as well as achieving our target business model. Our target business model is premised upon realizing operational excellence, including but not limited to the operational integration of acquired businesses, and is fundamentally dependent upon careful allocation of limited resources across various elements, functions, key projects and programs within the business. These resource allocation decisions are made by our CEO, typically in the context of his weekly staff meetings, monthly Executive Board ("EB") meetings, or as part of our semi-annual strategic planning process. Once these decisions are made, the CEO regularly reviews project and program-level updates provided by his direct reports on the progress, timing, and operational and financial impacts of these initiatives. The CEO also reviews overall progress against the Company's target business model, financial forecasts, external financial guidance, and various measures of operational profitability and cash flows for the business as a whole. These factors guide his decision-making process and provide a basis for evaluating the success of those decisions.

The CODM assesses the Company's overall performance relative to internal and external expectations and measurements. The Company's financial performance is measured against its internal budget and forecast, Strategic Operating Plan ("SOP"), internal financial forecasts, external financial guidance, securities analysts' estimates, peer group performance and the Spade Defense Index. Additionally, the CODM studies market and industry data and subscribes to market studies in order to determine areas of market growth, product directions, and potential areas of expansion (or contraction) of investments to support his decision making process.

- **Explain what the CODM allocates between when resources are limited, and describe any information used to make those allocations.**

As a growth company seeking to deliver results that exceed those of our peers, all resources are considered limited. The CEO (CODM) determines the allocation and balance of resources among and across different functions, product technologies, projects, programs, key initiatives and locations across the entire company, making critical decisions

regarding the establishment, relative priority, timing and funding, and the associated trade-offs between these factors. This also includes decision making about investment in, and prioritization of, activities within and across centralized functions such as information technology, human resources, marketing, finance, financial planning, accounting, legal, and corporate development (mergers & acquisitions). These functions are centralized, providing support across the operations of the entire business, rather than being aligned with or reporting to any operational element or location within the business.

Examples of resource allocation and prioritization decisions that are made by the CEO (CODM) include overall personnel hiring and compensation plans, material capital expenditure projects and the associated funding, whether for business integration activities or for operational improvements or expansions, capital expenditures for facility upgrades and/or consolidations, changes in manufacturing strategy, significant research and development or new product initiatives, information technology (“IT”) initiatives, human resource initiatives such as investment in a new HRIS (Human Resource Information System), and implementation of our strategic account management sales strategy.

The CODM also uses internal financial data in deciding the allocation of resources to meet strategic, operational and financial performance objectives. This financial data, contained in the EB deck, includes consolidated revenue, bookings and design win forecasts as well as consolidated profit and loss statements and operating metrics. The CODM also periodically reviews separate project updates relating to key internal initiatives across all business operations to evaluate progress, cost, timing, and the predicted operational and financial impacts of such projects.

As mentioned in our previous response, the Company’s “One Mercury” go-to-market strategy has resulted in the ability to provide a variety of product capabilities to our customers, often integrated together into a single subsystem for which elements are provided by different product technologies and locations within the Company but under different general managers. As a result, the Company has placed a greater emphasis on key programs and customers. Therefore, the CODM also evaluates the status of these key programs and their impact on consolidated forecasts and financial and operational results when determining how to allocate resources.

- **Explain how the CODM’s role differs from his reportees in assessing performance and allocating resources and what ability the reportees have to make operating decisions affecting other reportees.**

The CODM’s role differs from his direct reports (“reportees”) in assessing performance and allocating resources in numerous ways. The CEO (CODM) is ultimately responsible to our Board of Directors and our shareholders. He has ultimate decision making authority over all material objectives relating to strategic, operational and financial imperatives as well as the timing, priority, funding and overall resource allocations to such matters. Only the CEO (CODM) has the authority and ability to make operating decisions that affect multiple reportees. The CEO also evaluates the performance of each function and each of his reportees against specific performance objectives set out in the Company’s SOP. In comparison, his reportees are responsible for discrete areas or functions and assess the performance of only those managers who report directly to them, without any authority to make decisions affecting other reportees of the CEO or their operational areas.

The CEO (CODM) provides the strategic objectives to and defines the priorities of his reportees, with specific directives on where resources are to be deployed and utilized, and those reportees are responsible for execution against these objectives and priorities. The reportees have the ability and authority to make the tactical operating decisions, within their specific area or function, subject to certain limitations, to ensure that resource allocations and project execution are carried out to meet the strategic directives handed down to them within their established authority. In the case of conflicts, the CEO is the ultimate decision maker.

The tactical decisions of reportees are communicated through the next layer of reportees (directors and managers), who implement the decisions made within their respective roles and functions. This process is cascaded downward throughout the Company.

- **Explain the responsibilities of your COO to your business, including any role in allocating resources and assessing the performance of your business. Explain how this role, as it relates to allocating resources and assessing performance, differs from your CODM.**

The COO is primarily responsible for managing the engineering, manufacturing and sales functions of the Company in support of the Company's individual product technologies. The COO executes engineering and manufacturing resource allocations to support the CODM's strategic initiatives and participates in strategic account management, business development (strategic sales), and other sales related strategies and tactics. The COO is responsible for executing certain tactical initiatives in support of strategic objectives and operational initiatives defined by the CEO (CODM), but the COO does not dictate what the strategic objectives or operational initiatives are. The COO also does not make operational or financial decisions regarding various functions that support the entire Company, such as information technology, facilities, human resources, marketing, finance, financial planning, accounting, legal, and corporate development.

The CEO (CODM) is responsible for creating the overall strategy and operational priorities of the Company, which are in turn executed by his reportees including but not limited to the COO. The CEO (CODM) also assesses the resources needed to support the overall Company's growth strategy, the absolute and relative financial performance and achievement of its target business model, and the necessary functions, priorities and commitments to ensure that this strategy and associated operational objectives are being carried out.

Where the COO differs from the CODM is that the COO is not responsible for the overall assessment of how the Company is performing relative to its strategic, operational and financial objectives across all functions, and how resources are allocated and performance is evaluated in functions other than engineering, manufacturing and sales.

- **Tell us the other senior managers that attend the EB meeting and describe their roles.**

The senior managers that attend the EB meeting, and their roles, are as follows:

Executive Vice President, Chief Financial Officer: reports directly to the CEO and is responsible for the corporate finance, financial planning and analysis, accounting, tax, treasury and global order services, as well as the Company's facilities management, security program and various compliance and risk management functions. His presentation at the EB meeting includes reporting on consolidated financial results, forecasts, and periodic performance against budget, prior forecasts, external guidance, and analysts' consensus estimates. He also reports on key financial issues and initiatives on a consolidated basis across all of the operations of the business.

Executive Vice President, Chief Operating Officer: reports directly to the CEO and is responsible for engineering, manufacturing and sales. His presentation at the EB includes quarterly sales, product and program updates, end market and customer relationship trends and improvements, and status of key programs.

Senior Vice President, Strategy & Corporate Development: reports directly to the CEO and is responsible for the Company's corporate development activities, including strategy, planning and mergers and acquisitions ("M&A"). His presentation at the EB meeting includes key issues and initiatives within the corporate development organization including progress on any active M&A projects.

Senior Vice President, General Counsel: reports directly to the CEO and is responsible for the direction and management of the Company's legal affairs, including transactional support for mergers, acquisitions, and corporate

finance; litigation, contracts and employment matters. His presentation at the EB meeting includes key issues and initiatives within the legal organization and function.

Chief Human Resources Officer: reports directly to the CEO and is responsible for driving the Company's human resources strategy and partnering with senior leadership to design and execute a long-term human capital approach in support of Company operating goals. Her presentation at the EB meeting includes key issues, programs, and HRIS initiatives within the human resources organization and function.

Vice President, Chief Marketing Officer: reports directly to the CEO and is responsible for overseeing the development and execution of the Company's marketing initiatives. His presentation at the EB meeting includes key issues and initiatives within the corporate marketing organization and function, including the Company's external website, the One Mercury internal website, marketing collateral materials, interaction with industry organizations and trade shows, press releases and other forms of internal and external marketing communications.

Vice President, Chief Information and Integration Officer: reports directly to the CEO and is responsible for the Company's full range of information technology ("IT") initiatives and global business integration activities. In the EB meeting, he addresses questions regarding IT initiatives and the status of various Company-wide business integration efforts.

Vice President, Sales: reports to the COO and is responsible for growing and managing global revenue for the Company. His presentation at the EB meeting includes reporting of the worldwide sales forecast, design wins, and sales pipeline.

Vice President, Controller, Chief Accounting Officer: reports directly to the CFO and manages the day to day activities within the Company's accounting operations, external financial reporting, tax and treasury. He supports the CFO's presentation and is also in attendance to answer any questions regarding accounting, financial reporting, tax or treasury matters.

Senior Director, Corporate Financial Planning & Analysis: reports directly to the CFO and manages the day to day activities within the Company's centralized corporate financial planning and financial analysis ("FP&A") function, with responsibility for coordinating and consolidating business financial planning, analytics and budgeting and forecasting across all operations of the Company. His presentation at the EB meeting includes updates to the consolidated business forecast, financial trends and analytics.

Director, Internal Audit: reports directly to the Audit Committee Chair and manages the Company's compliance with Sarbanes-Oxley and coordination of internal audit and Enterprise Risk Management activities. His attendance at the EB meeting relates primarily to his role in the Company's Enterprise Risk Management process.

In addition, three product technology General Managers attend the EB meetings. These product technology General Managers' report directly to the COO, and manage day to day activity within their product technologies including managing research and development spend, inventory positioning, program investments, design, quality, manufacturing operations and on time customer delivery requirements. They do not make a presentation at the EB meetings, but are there to take direction from the CODM on strategic objectives.

- **Explain the financial information discussed in the EB meetings and the extent to which information is discussed about MCE, MDS, and the Carve-Out business reporting units.**

The financial information discussed in the EB meeting includes only: consolidated actual results, consolidated financial guidance, consolidated balance sheet trends, consolidated profit and loss trends, and consolidated cash flows; and sales forecasts by program, and revenue and bookings broken out by: customer, program, product

technology, market, platform and sensor chain. The financial information in the EB meeting also includes inventory turns and capital expenditures by manufacturing site. For a limited period of time after the change to a single reporting and operating segment, the presentation prepared for EB meetings did include partial information limited to accounts receivable, deferred revenue and other cost of goods sold for the Mercury Commercial Electronics (“MCE”) and Mercury Defense Systems (“MDS”) business components. This information was presented for administrative ease when initially compiling the EB presentation after the change to one segment occurred. Such accounts were viewed in the aggregate by the CODM when assessing the Company’s performance against its recent business objectives, for example lowering days sales outstanding as much as possible at each reporting period, and reducing other cost of goods sold. The EB presentation no longer includes the break out of this information at this level.

The only other non-consolidated financial information discussed are the discrete summary financial results of recently acquired businesses (no longer including the Carve-Out business), which are separated so the CODM can monitor organic company performance against budget, guidance and analysts’ expectations that were set prior to, and therefore without considering the impact of, those acquired businesses. Limited financial results of a newly acquired business are compared to pre-acquisition forecasts to determine performance against those expectations while the business is undergoing operational consolidation into Mercury, typically for a period of one to two quarters.

- 2. From your response, it appears that you have segment managers who are held accountable for MCE, MDS, and the Carve-Out business. Please identify and describe the role of each of your segment managers and explain to us the title and role of the person to whom your segment managers report.**

Mercury’s Response to Comment 2: The COO, who reports directly to the CEO (CODM), is the segment manager who is held accountable for MCE, MDS and Carve-Out business reporting units. Although discrete financial information for these reporting units is compiled, it is not prepared for, presented, or reviewed in the EB meeting, and is not used by the CODM in assessing performance and allocating resources. Again, the CODM uses only consolidated total Mercury-wide results to make business decisions in the EB meeting and other decision making forums.

For purposes of goodwill impairment testing, each of the three aforementioned business components meets the definition of a reporting unit under ASC 350, *Intangibles – Goodwill and Other*, because: (i) discrete financial information is available, and (ii) the segment manager (COO) reviews the three components’ operating results. Additionally, ASC 280-10-50-7 states that “a segment manager...is directly accountable to and maintains regular contact with the chief operating decision maker to discuss operating activities, financial results, forecasts, or plans for the segment.” At Mercury, our CEO (CODM) reviews the results of our one operating segment, while our segment manager (COO) reviews the results of the three reporting units.

It is important to note that, while the COO reviews the results of the three reporting units individually, the COO is held accountable by the CEO (CODM) for the business components in the aggregate. The COO’s review of the discrete financial information of the individual reporting units is performed to carry out the strategic directives of the CEO (CODM). It is also important to note that the COO’s accountability is limited to the engineering, manufacturing and sales functions. All other functions, as noted above, are managed by the CEO’s (CODM’s) other direct reports. The COO’s role also includes the execution of certain tactical initiatives in support of strategic objectives and operational initiatives defined by the CEO (CODM), but the COO does not dictate the strategic objectives or operational initiatives of the Company.

- 3. With respect to your budgets, please explain how budgets are prepared, who approves the budget at each step of the process, the level of detail discussed at each step, and the level at which the CODM**

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makes changes to the budget. Also describe the level of detail communicated to the CODM when actual results differ from budgets and who is involved in meetings with the CODM to discuss budget-to-actual variances.

Mercury's Response to Comment 3: Budget preparation starts with a top-down total Company set of objectives for growth and profitability set by the CEO (CODM), followed by a bottom-up bookings and revenue plan by customer and secondarily by program, which is led by the corporate sales function in coordination with the corporate FP&A function under the CFO, with input from the customer strategic account managers and product technology general managers. The bookings plan is then translated into a revenue plan by customer and program. The bookings and revenue plans are reviewed and discussed initially between the COO and sales management, and product technology lines determine the direct margin by program and other cost of goods sold by plant. Product technology GM's review their plans with the COO. Operating expense budgets are based on the Company's high level target business model objectives, which are translated into targets by product technology line and by function with inputs from the executive leader of each functional area. These elements are then combined into a preliminary total Company revenue and cost plan that is reviewed with the CFO and the COO. These initial results are then presented to the CEO (CODM) where the final high level total Company target revenue, gross margin and profitability objectives are determined by the CEO (CODM) in the context of the Company's high-level target business model, and re-allocation of resources and funding may result. Based on these determinations, all subsequent product technology, corporate and departmental spending is then driven down into functional areas.

The final budget, within the financial and operational directives determined by our CEO (CODM) is submitted for approval by our board of directors ("BOD"). The end-to-end process described above may go through multiple iterations before the final SOP or budget is presented to and approved by the BOD.

Budget-to-actual variances are communicated to the CEO (CODM) at the monthly EB meetings on a total Company basis. These consolidated budget-to-actual variances include bookings, revenue, gross margin, operating expenses by line item and taxes. Variances, both negative and positive, are used by the CEO (CODM) to adjust priorities, spending and resource allocations for the total Company throughout the year, and such adjustments are administered by the functional executives.

The Company hereby acknowledges the following:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- the Staff comments or changes to disclosure in response to Staff comments 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 the Staff has any questions, additional comments or wishes to discuss the responses provided above at any time, please do not hesitate to contact me at (978) 967-1990, or Charles A. Speicher, Vice President, Controller and Chief Accounting Officer at (978) 967-1737.

/s/ Gerald M. Haines II

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Gerald M. Haines II
Executive Vice President, Chief Financial Officer

Cc: Eric Atallah, *U.S. Securities and Exchange Commission*
Kate Tillan, *Assistant Chief Accountant, U.S. Securities and Exchange Commission*
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