

October 20, 2017

Mercury Systems, Inc: MRCY
 Nicholas Matzelevich

Sector: Technology
Industry: Computer Peripherals
Current Price: \$52.28
Target Price: \$59.47

Company Description: Mercury Systems, Inc. is a leading commercial provider of secure sensor and safety critical mission processing subsystems for the United States and International defense industries. The company is a pioneer in the next generation defense electronics business model and contracts their products to various large defense contractors for implementation into military products such as missiles, radar, and fighter jets.

BUY

Current Price: \$52.28
 Target Price: \$59.47
 Market Cap: \$2.41B
 ROIC: 6.20%
 1yr Revenue Growth: 52.24%

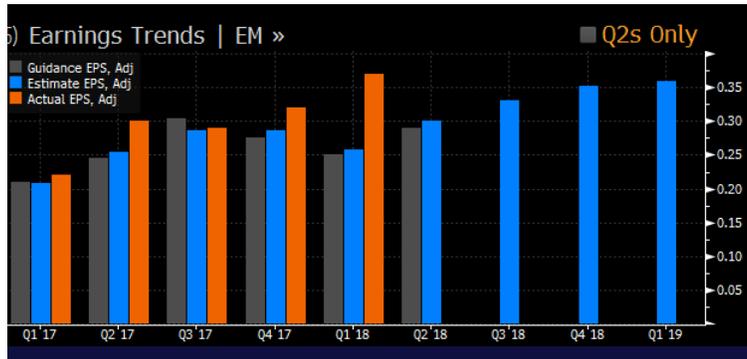


Thesis: Mercury Systems, Inc. is an industry leader in defense security electronics. The company is poised for significant growth in the near future based on their numerous orders from large defense contractors, further solidifying their concrete customer base. Additionally, Mercury Systems, Inc. has developed a cutting-edge business model that will further their customer base and revenues within the defense sector.

Catalysts: Forward looking projections that call for positive/negative outlook that will strengthen your thesis. Example:

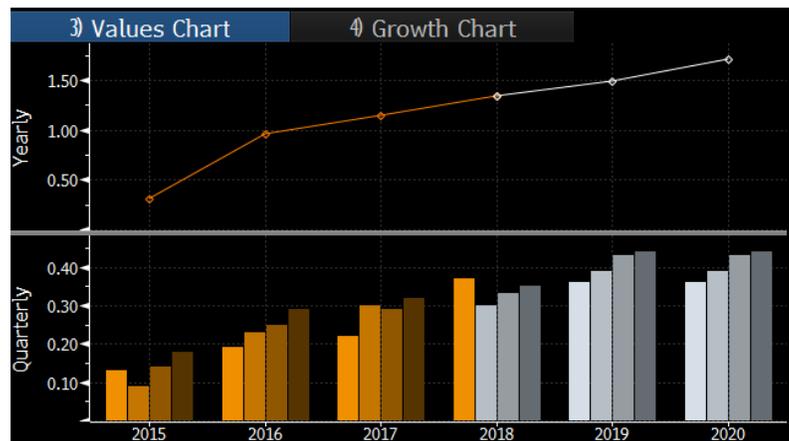
- Short Term (within the year): Numerous orders in Q2 2018 from leading defense contractors.
- Mid Term (1-2 years): Continued customer relationships with leading defense contractors.
- Long Term (3+): Continued implementation of Mercury Systems, Inc.'s new business model.

Earnings Performance:



Mercury Systems, Inc. has impressively beaten all their estimates over the past eight quarters. Most recently, the company beat their estimated EPS of 0.2556 by approximately 0.12 for a total of 0.37. This significant beat in EPS is in part due to the acquisition of Richland Technologies LLC, an

integrated hardware, software, and certifications services company for the defense, aerospace, automotive, medical, and industrial industries. Richland Technologies was acquired for \$6,000 through a membership purchasing agreement. Mercury Systems also brought in a net income of \$17.95M for Q1 2018, a large increase from \$3.8M in Q1 2017 one year ago. This trend of beating quarterly EPS is expected to continue in the near future, as shown through Mercury Systems' historical significant increases in revenue, as shown in the graph below.



Business Description:

Mercury Systems, Inc. is a leading commercial provider of sensor and safety electronic equipment for the defense and aerospace industry. The company manufactures a variety of electronic products, including software, processing equipment, memory devices, mission computing, and many more. Many of these affordable and innovative products are currently in use in military defense systems such as the Predator UAV drone, E2D Hawkeye Reconnaissance Aircraft, and F-35 fighter jet.

We are deployed on 300+ programs with 25+ Primes

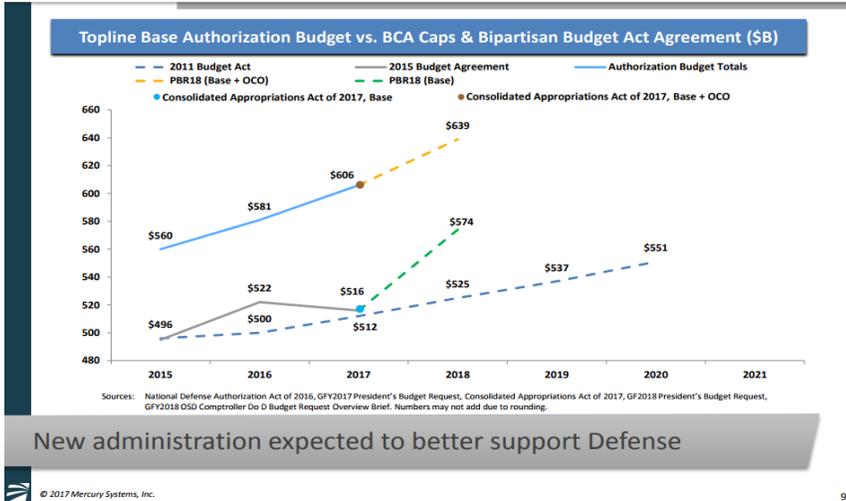


Mercury Systems customer base is not the U.S. or foreign governments and militaries. Instead, the company receives most of its revenue from outsourcing by large defense companies such as Lockheed Martin, Raytheon, and Northrup Grumman. These large defense corporations will then use Mercury Systems' products in their radar systems, fighter jets, or any other product they develop for numerous militaries in the world. Mercury Systems' largest custo-2017mers, Lockheed Martin, Raytheon, and Northrup Grumman, typically account for 10% of revenue. However, from 2015-2017, these three companies accounted for 44%, 51%, and 61% of revenue respectively for the years mentioned. These revenue sales are spread across multiple platforms. For example, Mercury will sell several different products, such as software or microchips, to be implemented in multiple products manufactured by their customers. This large revenue segment by Mercury Systems' top three customers is viewed as a commitment to a long and prosperous relationship between the two companies that is expected to continue into the foreseeable future. Indeed,

Industry Outlook:

Mercury Systems operates in the defense and aerospace industry. Recently, this industry has experienced a surge in growth due to rising global tensions. The three most active defense markets are the Middle East, India, and the United States. The United States is of particular interest due to most of Mercury Systems' clients provide products for the U.S. military.

Defense budget outlook improved



After years of defense budget cuts, President Trump is expected to grow the defense budget in response to increased military threats, such as ISIS and Russia. In the U.S. defense budget is expected to increase anywhere from \$551B-\$639B. However, the defense industry still faces overall challenges. Political dysfunction in Congress has driven the Department of Defense to numerous budget cuts, causing the industry to spend less on R&D expenses. This has led to increased dividends and stock buybacks from various defense corporations.

Overall, the defense industry is a highly competitive market, which is characterized by rapidly changing technology, frequent product performance improvements, speed of deployment of systems to align with customer needs, and evolving industry standards from the U.S. Department of Defense (DoD).

Business Model:

As mentioned in the business description, Mercury Systems has implemented a revolutionary business model in the defense electronics industry, which it implemented at the beginning of 2017. Traditionally, most defense companies have invested around 2%-3% of their revenues into R&D. This has led to several problems in the defense industry, such as fewer engineers, an aging workforce, and aging military platforms requiring increased O&M costs. Seeing the need for newer and faster development, Mercury Systems has adopted the commercial electronics industry's standard of investing 12%-15% of their annual revenue into R&D costs. This has led to a time to market of around 12 months for their products. Compared to their competitors' time to market of 36+ months, this presents a significant comparative advantage for Mercury Systems. Furthermore, this adopted strategy of investing more revenues into R&D has paid off significantly for Mercury Systems, as they have one of the highest ROICs among their competitors.

Name	Mkt Cap↑ (USD)	Rev - 1 Yr Gr:Y	P/E	ROIC LF
Median	2.48B	14.19%	42.59	1.86%
100) MERCURY SYSTEMS INC	2.48B	51.24%	65.88	6.20%
101) CRAY INC	792.59M	-13.09%	--	1.48%
102) SUPER MICRO COMPUTER...	984.82M	14.19%	15.04	7.93%
103) PURE STORAGE INC - CL...	3.49B	65.32%	--	-51.60%
104) BROCADE COMMUNICATIO...	5.16B	3.63%	42.59	1.86%

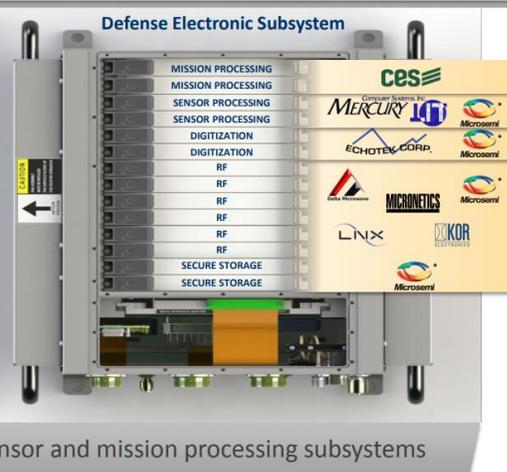
Another significant differentiator in Mercury Systems' business model is their use of company acquisitions and investment. Over the past several years, Mercury Systems has acquired several commercial technology companies with the expressed purpose of applying their own technologies to their acquired company's products. Ultimately, Mercury System's goal is to build technologies that fit the specific needs of the DoD, but through leveraging commercially developed technologies and integrating them directly into the

projects and products required by Mercury Systems’ customers, such as Lockheed Martin, Raytheon, and Northrop Grumman.

Recent Acquisitions:

Acquisitions have transformed Mercury into a commercial...

- Acquired capabilities significantly expand addressable market
- Moved up the value chain
- Model facilitates greater customer outsourcing
- Accelerates customer supply chain consolidation
- Disintermediate traditional product competitors
- Low-risk, high-growth content expansion organic growth
- Future M&A opportunities



...provider of secure sensor and mission processing subsystems

* Represents carve-out acquisition from Microsemi Corp.

As previously mentioned, part of Mercury Systems’ new business plan is to acquire commercial electronics companies and apply their technology to meet the needs of the DoD and Mercury Systems’ customers. Over the past several years, Mercury Systems has been achieving this goal with resounding success. Since FYE 2015, the company has acquired five companies, they are outlined in detail below:

Lewis Innovative Technologies LLC (LIT):

Bought in December 2015, LIT is an embedded systems security company. Embedded systems security has become an increasingly important in an increasingly technological world. Mercury Systems has combined LIT’s technology with their own Intel server-class product line in order to meet customer needs. Financially, this acquisition was funded entirely through cash. Mercury Systems paid \$9.8M for LIT and it is continuing to be integrated into Mercury Systems’ product lines.

Microsemi Carve-Out Business:

In May 2016, Mercury Systems bought Microsemi Corporation’s custom microelectronics, RF and microwave solutions, and embedded security systems divisions. These divisions have been designated “the Carve-Out Business” by Mercury Systems, and were bought primarily for the customer relationships and technology. This acquisition cost \$300M for Mercury Systems, and was funded \$200M through a term loan and \$100M through Mercury System’s existing cash reserves.

Creative Electronic Systems (CES):

Mercury Systems bough CES in November 2016. Based in Geneva, Switzerland, CES produces embedded security systems for the military and aerospace mission critical computing applications. This acquisition will substantially expand Mercury Systems’ customer base into the aerospace industry and international military markets. Financially, Mercury Systems paid \$38.8M in cash from their reserves for CES.

Delta Microwave LLC:

In April 2017, Mercury Systems acquired Delta for \$40.5M, all paid in cash from their reserves. Delta is a leading manufacturer in RF, microwave, and millimeter wave subassemblies that are currently used in the F-35 fighter jet, Paveway laser-guided bomb, and MALD decoy missile. Furthermore, the acquisition of Delta provides a market expansion opportunity into commercial and military satellite programs.

Richland Technologies LLC (RTL):

Mercury Systems most recent acquisition, RTL, was acquired in July 2017 for \$6,000, barely making a dent in FYE 2017 Revenue. RTL specializes in critical safety and high integrity systems, software, and hardware development for mission-critical applications. Mercury Systems bought RTL with the goal to leverage RTL's presence in the U.S. safety-critical avionics market.

While Mercury Systems has acquired five companies since FYE 2015, they do not have any debt as of FYE 2017, save a \$400M revolving line of credit that has not been drawn upon. This is due to the fact that most of the acquisitions have been paid for using their cash reserves. The one exception to this is the Carve-Out Business acquisition, which was paid in-part using a \$200M loan. This caused Mercury Systems to end FYE 2016 with \$182.3M in long term debt. However, to repay their loan, the company issued a follow on offering in 2017, issuing 6.9M shares at \$33.00 per share. This follow on offer generated \$215.7M in cash, \$11.3M of which was left over after a single repayment of the long term debt.

Overall, Mercury Systems is successfully carrying out their revolutionary business model by acquiring numerous companies to adopt their technologies for Mercury Systems' customers' needs. These revenue streams will eventually lead to significant organic revenue growth in the near future.

Revenue Growth:

Over the last 12 months, Mercury Systems has experienced 52.24% revenue growth, making it one of the leaders among its competitors. From FYE 2013- FYE 2017, Mercury Systems has experienced significant revenue growth, as evidenced by their CAGR of 20%, or from \$194.2M-\$408.6M in the same time period. While most of this can be attributed to inorganic growth from company acquisitions, the inorganic growth will become organic growth after four fiscal quarters, according to Mercury Systems' 10-K. This means that CES, the Carve-Out Business, and LIT are now considered organic growth by the company.

	Name	Mkt Cap (USD)	Last Px	Rev - 1 Yr ↓
	Median	2.47B	19.13	14.19%
100)	MERCURY SYSTEMS INC	2.47B	51.12	51.24%
101)	PURE STORAGE INC - CL...	3.49B	16.49	65.32%
102)	SUPER MICRO COMPUTER...	986.03M	20.25	14.19%
103)	BROCADE COMMUNICATIO...	5.10B	12.34	3.63%
104)	CRAY INC	773.38M	19.13	-13.09%

Quarterly, Mercury System's Q1 2018 results of \$106.1M have increased by \$18.6M from their Q1 2017 revenue of \$87.6M. Q1 2018 revenue is mostly attributed to ground based radar system sales, sold under the ProVision product line. Additionally, international sales revenue was \$66.9M (19%) of Q1 2018 revenue. This is an increase from Q1 2017 international revenue, which was \$49.9M (16%). This increase shows that

Mercury System's acquisitions and penetration into international markets is growing and should continue to grow in the future.

Despite the budget cuts by the DoD and Congress, Mercury Systems can continue to grow their revenue. Organically, the company can continue to grow their revenue by improving sensors, electronic protection and attack, and on-board exploitation for onboard processing systems, as there has been a greater demand for these units recently. Mercury Systems can also upgrade their subsystems with security for export to expand their growing international market.

The growth strategies put in place by Mercury Systems are working, as shown by the numerous orders placed in the past couple months by defense firms. Most recently, Mercury Systems announced the sale of \$4.7M in orders for airborne radio frequency subsystems. Additionally, the company announced \$3.2M in sales for memory devices to a leading defense prime contractor and a \$6.2M order from a leading defense contractor for advanced RF subsystems. All of these sales will help contribute to the \$115.3M projected revenue for Q2 2018, an increase from Q1 2018.

Conclusion:

Mercury Systems, Inc. is a well-managed company with a revolutionary business model for the defense industry. Their adoption of the commercial technology sector's standard of 12%-15% R&D, coupled with their multiple acquisitions have allowed them to gain a competitive edge in the defense industry. This internal R&D is used to adopt commercial electronics for the defense market, which has led to inorganic growth that turns into organic growth, shown by the 20% CAGR from FYE 2013-FYE 2017 and their one-year revenue growth rate of 52.24%. Furthermore, Mercury Systems has one of the highest ROICs among their competitors at 6.20%. If Mercury Systems can continue to follow their business model, the company should expect significant growth in the near future.

Mercury Systems, Inc. (mrcy)

CENTER FOR GLOBAL FINANCIAL STUDIES

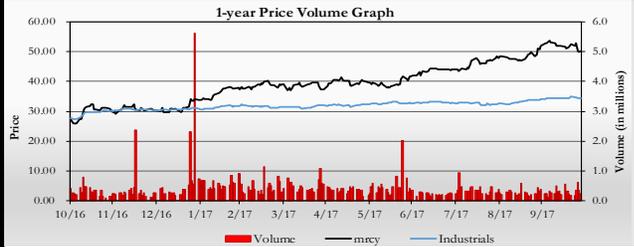
NEUTRAL

Analysis by Nick Matzelevich
11/3/2017

Current Price: **\$50.47**
Dividend Yield: **0.0%**

Intrinsic Value: **\$52.28**
Target Price: **\$59.47**

Target 1 year Return: **17.83%**
Probability of Price Increase: **97.5%**



Description
Mercury Systems, Inc. provides sensor and safety critical mission processing subsystems for various critical defense and intelligence programs in the United States.

General Information

Sector	Industrials
Industry	Aerospace and Defense
Last Guidance	November 3, 2015
Next earnings date	January 25, 2018
Estimated Country Risk Premium	7.39%
Effective Tax rate	24%
Effective Operating Tax rate	24%

Market Data

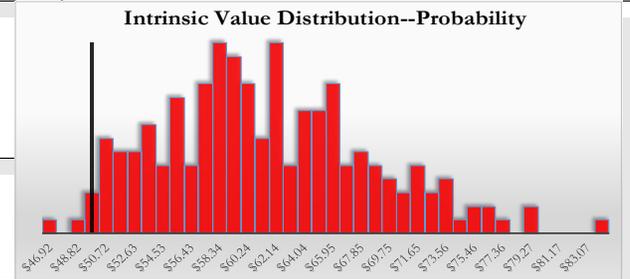
Market Capitalization	\$2,427.87
Daily volume (mil)	0.31
Shares outstanding (mil)	48.11
Diluted shares outstanding (mil)	44.92
% shares held by institutions	116%
% shares held by investments Managers	90%
% shares held by hedge funds	3%
% shares held by insiders	3.46%
Short interest	4.54%
Days to cover short interest	6.85
52 week high	\$54.49
52-week low	\$25.69
Volatility	32.87%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
9/30/2016	2.81%	-22.84%
12/31/2016	5.27%	-9.19%
3/31/2017	1.94%	-13.72%
6/30/2017	1.01%	-10.12%
9/30/2017	0.79%	-10.81%
Mean	2.36%	-13.34%
Standard error	0.8%	2.5%

Peers

Kratos Defense & Security Solutions, Inc.
The KEYW Holding Corporation
Rockwell Collins, Inc.
Astronics Corporation
Ducommun Incorporated
AeroVironment, Inc.
Spartan Corporation
L3 Technologies, Inc.

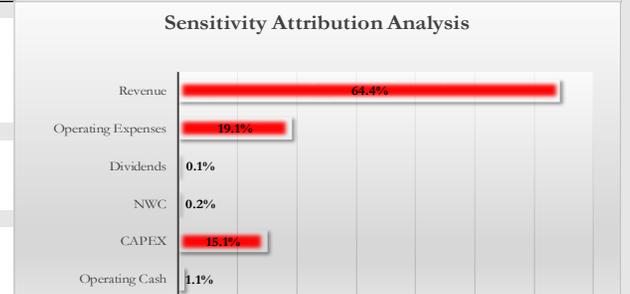


Management

Management	Position
Aslett, Mark	President, CEO & Director
Haines, Gerald	Executive VP, CFO & Treasure
Thibaud, Didier	Executive VP & COO
Speicher, Charles	VP, Controller, Chief Account
Cambria, Christopher	Executive VP, General Counsel
Ryan, Jamie	Chief Information Officer an

Total return to shareholders

Company	Total return to shareholders
Kratos Defense & Security Solutions, Inc.	-6.61% per annum over 6y
The KEYW Holding Corporation	-6.61% per annum over 6y
Rockwell Collins, Inc.	-6.61% per annum over 6y
Astronics Corporation	-6.61% per annum over 6y
Ducommun Incorporated	N/M
AeroVironment, Inc.	N/M
Spartan Corporation	N/M
L3 Technologies, Inc.	N/M



Profitability

Metric	mrcy (LTM)	mrcy (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	8.5%	-1.34%	4.07%
Operating Margin	15%	-0.15%	4.35%
Revenue/Capital (GAAP)	0.57	9.04	0.94
ROE (GAAP)	7.7%	3.7%	5.8%
Net margin	11.1%	7.1%	6.6%
Revenue/Book Value (GAAP)	0.69	0.52	0.87

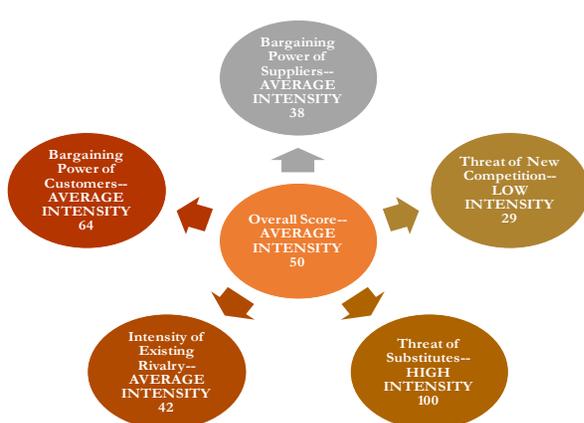
Invested Funds

Metric	mrcy (LTM)	mrcy (5 years historical average)	Peers' Median (LTM)
Cash/Capital	3.3%	15.7%	19.2%
NWC/Capital	13.8%	18.1%	17.3%
Operating Assets/Capital	42.5%	35.8%	45.0%
Goodwill/Capital	40.4%	30.4%	18.5%

Capital Structure

Metric	mrcy (LTM)	mrcy (5 years historical average)	Peers' Median (LTM)
Total Debt/Market Capitalization	0.02	0.07	0.20
Cost of Existing Debt	5.2%	5.2%	5.1%
CGFS Rating (F-score, Z-score, and default Probability)	A	BBB	B
WACC	10.0%	10.8%	10.4%

Porter's 5 forces (scores are out of 100)



Revenue Growth Forecast

Period	Revenue Growth Forecast
Base Year	43%
9/30/2018	13%
9/30/2019	10%
9/30/2020	11%
9/30/2021	9%
9/30/2022	9%
9/30/2023	8%
9/30/2024	8%
9/30/2025	8%
9/30/2026	8%
9/30/2027	8%
Continuing Period	8%

Valuation

Forecast	Valuation	Revenue to Capital Forecast
Base Year	19.1%	0.44
9/30/2018	12.0%	0.44
9/30/2019	13.7%	0.44
9/30/2020	14.7%	0.46
9/30/2021	15.3%	0.46
9/30/2022	15.8%	0.46
9/30/2023	16.3%	0.46
9/30/2024	16.9%	0.45
9/30/2025	23.8%	0.45
9/30/2026	23.9%	0.43
9/30/2027	24.0%	0.42
Continuing Period	24.2%	0.41

Return on Capital Forecast

Period	Return on Capital Forecast
Base Year	8.3%
9/30/2018	5.3%
9/30/2019	6.1%
9/30/2020	6.7%
9/30/2021	7.0%
9/30/2022	7.2%
9/30/2023	7.4%
9/30/2024	7.7%
9/30/2025	10.7%
9/30/2026	10.4%
9/30/2027	10.1%
Continuing Period	9.8%

WACC Forecast

Forecast	WACC Forecast	Price per share Forecast
Base Year	10.0%	\$52.88
9/30/2018	10.0%	\$59.89
9/30/2019	10.0%	\$66.14
9/30/2020	10.0%	\$72.79
9/30/2021	10.0%	\$79.85
9/30/2022	10.0%	\$87.30
9/30/2023	10.0%	\$95.15
9/30/2024	10.0%	\$103.44
9/30/2025	10.0%	\$112.21
9/30/2026	10.0%	\$121.46
9/30/2027	10.0%	\$131.20
Continuing Period	11.3%	