

**26TH ANNUAL  
AEROSPACE & DEFENSE  
CONFERENCE  
SEPTEMBER 10, 2020**

<b>-Market Price-</b>				
<b><u>Company</u></b>	<b><u>Ticker</u></b>	<b><u>Exchange</u></b>	<b><u>9/10/2020</u></b>	<b><u>9/10/2019</u></b>
AAR Corp.	AIR	NYSE	\$ 18.20	\$ 44.46
Aerojet Rocketdyne	AJRD	"	39.83	48.76
AeroVironment	AVAV	NASDAQ	64.43	59.65
Astronics	ATRO	"	7.92	28.37
Avio SpA	AVIO.MI	Milan	€ 15.22	€ 11.92
CPI Aerostructures	CVU	NYSE	\$ 2.49	\$ 7.83
Crane Co.	CR	"	53.94	79.05
Ducommun Inc.	DCO	"	35.06	42.29
Elbit Systems	ESLT	NASDAQ	121.77	153.38
HEICO Corp.	HEI	NYSE	107.20	127.31
Kaman Corp.	KAMN	"	41.81	59.23
Kratos Defense & Security Solutions	KTOS	NASDAQ	19.47	18.83
Mercury Systems	MRCY	"	67.04	76.87
Moog	MOG-A	NYSE	59.26	85.81
Park Aerospace	PKE	"	11.09	15.77
Textron	TXT	"	38.52	50.10
Woodward	WWD	NASDAQ	80.90	106.28
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\*Tony Bancroft is an analyst for affiliate GAMCO Investors, Inc.

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**- Please Refer Too Important Disclosures On The Last Page Of This Report-**

## **26th Annual Aerospace & Defense Conference**

Our team hosted the 26<sup>th</sup> Annual Aerospace & Defense Conference on September 10, 2020 where a number of aerospace & defense suppliers presented their company outlooks and reactions to the current macro environment.



Lieutenant Colonel Tony Bancroft, USMCR joined GAMCO in 2009 as a research analyst covering companies in the aerospace sectors and environmental services, focusing on suppliers to the commercial, military and regional aircraft industry and waste services. He hosts two annual conferences for the firm: the Aerospace & Defense Conference, and the Environmental Services Symposium. Tony graduated with distinction from the United States Naval Academy with a B.S. in Systems Engineering and an M.B.A. in Finance and Economics from Columbia Business School. Previously, Tony served in the United States Marine Corps as an F/A-18 pilot.

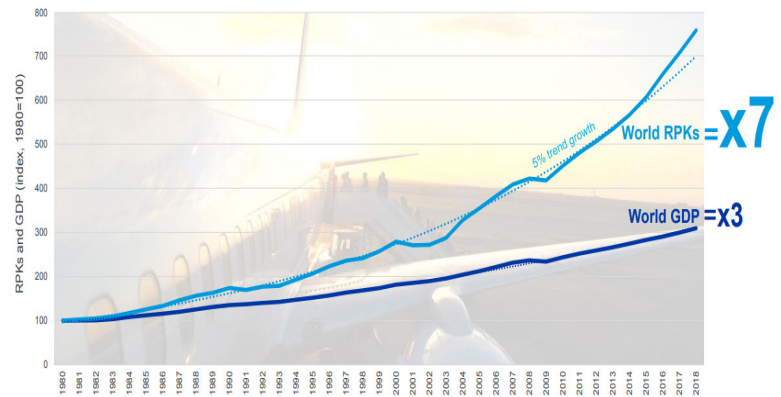


Justin Bergner, CFA rejoined g.research in June 2013 as a research analyst covering Diversified Industrials, Electrical and Transport companies. He began his investment career at Gabelli & Company in 2005 as a metals and mining analyst, and subsequently spent five years at Axiom International Investors as a senior analyst focused on industrial and healthcare stocks. Prior to entering the investment profession, Justin worked in management consulting at Bain & Company and Dean & Company. Justin graduated cum laude from Yale University with a B.A. in Economics & Mathematics and received an M.B.A. in Finance and Accounting from Wharton Business School.

## Introduction

At our 26<sup>th</sup> Annual Aerospace & Defense Conference, the commercial aerospace presenters, amid the COVID-19 pandemic, reaffirmed our view that the commercial aerospace market, over the long-term, will return to a healthy state. Although the International Air Transport Association (IATA) expects world air travel to be down by 55% in 2020, passenger traffic had grown at about 5% CAGR since 1980 pre-COVID19 (Exhibit 1). This steady growth is driving long term demand for repair and overhaul services and replacement parts, albeit potentially in a new normal where airlines use more salvaged parts from retired aircraft.

## Exhibit 1 World Air Travel - 5% CAGR Since 1980



Source: Boeing CMO 2019

Given Revenue Passenger Kilometers (RPK) are not expected to return to 2019 levels until 2024, Boeing has delayed its 2020 Commercial Market Outlook (CMO). However, the industry continues to believe the fundamentals that have driven air travel for the past five decades and doubled air traffic over the past two decades remain intact. In its 2019 CMO, Boeing projected delivery of 44,040 new airplanes for replacement and growth (Table 1) over the next 20 years. Narrow body aircraft will make up approximately 74% of the demand or 32,420 airplanes. Wide body airplanes make up 19% or 8,340 aircraft and regional jets make up 5%, or 2,240 jets. The demand for these airplanes is driven, in part, by global economic growth and the two billion new passengers since 2005 who are willing to spend on travel and tourism. In addition, industry deregulation that facilitates low cost carriers' expansion into new markets and the removal of visa restrictions increase the ease of global travel.

Table 1

### New Aircraft Deliveries 2019-2038

	Airplanes	Percent
Single aisle	32,420	74%
Widebody	8,340	19
Regional Jet	2,240	5
<u>Freighter</u>	1,040	2
<b>Total</b>	<b>44,040</b>	<b>100%</b>

Source: Boeing CMO 2019

Table 2 Boeing & Airbus Production  
2019A-2022

Year	Boeing	Airbus	Total
2019A	792	876	1,668
2020	251	685	936
2021	246	578	824
2022	570	576	1,146

Source: Company Reports and Gabelli Funds estimates

Excluding regional jets from new airplane requirements, the remaining need of 41,800 jets are large passenger transports and freighters that average out to 2,090 new airplanes a year. Our combined production forecast for Boeing and Airbus are below this average annual rate (Table 2) suggesting that the commercial aerospace market, post-2024, could remain healthy for some time.

Further, Boeing and Airbus have strong backlogs of 5,160 and 6,977 airplanes, respectively, or 7 and 8 years of current production (Table 3). In spite of COVID-19 and the Boeing 737 MAX grounding, the unprecedented backlogs support continued top-line growth for the OEMs and suppliers.

**Table 3** **Boeing & Airbus Backlog**  
**August 2020**

Year	Boeing	Airbus
August 2020	5,160	6,977
2022 Production	570	576
Years of Production	9	8

Source: Company Reports

The demand for narrow body aircraft is heavily driven, by the replacement of older, less efficient jets with new, fuel-efficient aircraft including the Boeing 737 MAX, Airbus A320neo, A220, Embraer E Jets and the COMAC C919. All of the commercial aerospace companies presenting at the conference have content on these re-engined aircrafts that should help them drive original equipment and aftermarket growth as the commercial aerospace industry returns to growth.

The impact of COVID-19 on Commercial OEM and AM was the key topic at this year's conference. Most presenters see recovery reliant on therapeutics and eventually a vaccine becoming available. Most companies expect three years for the market to recover with AM recovering first, as increased flight hours require replacement parts, followed by OEM suppliers starting to burn down inventory as Airbus and Boeing produce and deliver more aircraft. While companies are adjusting to the temporary new normal, few are altering strategy.

## Defense

Irrespective of the election outcome, the U.S. defense budget is expected to level out after six consecutive years of growth. Going forward, the budget is projected to modestly increase from here, as illustrated in Exhibit 3. We believe this presents an appealing investment opportunity, which was reiterated by presenters at the conference. Programs like the JSF, B-21, THAAD, GBSB and GMD are driving growth for many suppliers across the industry. Congress passed a CR through December 11, 2020, so the FY21 budget appears on hold until after the elections.

**Table 4** **Global Defense Spending**  
**(USD Billions)**

	2009	2019
US	\$706	\$732
China	106	261
Russia	52	65

Source: SIPRI (Stockholm International Peace Research Institute)

But, faster foreign growth combined with sequestration has reduced the United States' share of global military spending to ~36% versus 43% in 2010. Meanwhile, over the last decade, contentious countries like China and Russia have increased their investment in defense spending, as illustrated in Table 4. While the U.S. footprint in Afghanistan and Iraq has decreased significantly, geopolitical instability has continued to grow. Tensions continue to soar with Iran in the Middle East. Korea's nuclear weapons program remains opaque. In addition, China has carried out repeated military exercises in South China Sea near the Paracel Islands and continues to assert claim on Spratly Islands.

## M&A

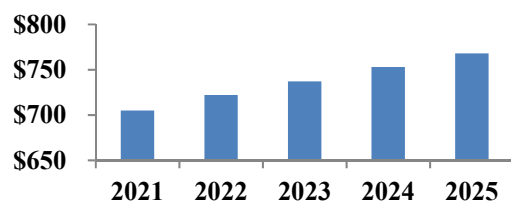
A number of companies, such as AAR Corp and Woodward, are keeping their ears open for bolt on M&A opportunities in commercial aerospace as demand recovers off the bottom of the cycle. At the same time, the underlying uncertainty in commercial aerospace makes larger M&A less likely, with the termination of the Woodward Hexcel deal an indication of valuation challenges overwhelming industrial logic.

## Business Jets

Business jet usage is showing signs of strength in recent months, mainly in leisure travel, but with an opportunity for a strong sustained recovery when business travel resumes. While business jet orders may lag a recovery in departures by a few quarters, the limited supply of used aircraft insures that the downturn should be neither as deep nor as impactful to pricing as was the case following the Great Recession.

**Exhibit 2**

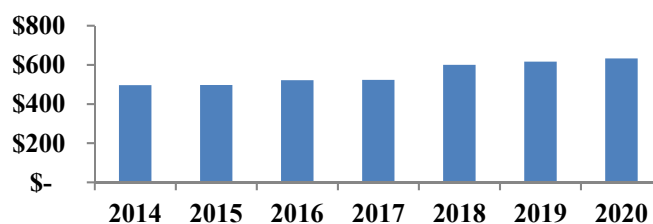
**U.S. Defense Budget Forecast FYE**  
**9/30**  
**(\$USD Billions)**



Source: Department of Defense, Office of the Under Secretary of Defense, CFO, February 2019

**Exhibit 3**

**U.S. Defense Base Budget FYE 9/30**  
**(\$USD Billions)**



## AAR Corp (AIR - \$19.55 - NYSE)

NR

Year	EPS <sup>(a)</sup>	P/E	
2021P	\$0.61	32.0x	Dividend: \$0.30    Current Return: 1.6%
2020E	2.15	9.1	Shares O/S: 35.2 million
2019A	2.44	8.0	52-Week Range: \$52.78 - \$8.56
2018A	1.73	11.3	

a) Thomson One consensus estimates

## COMPANY OVERVIEW

AAR Corp., headquartered in Wood Dale, Illinois, provides products and services to commercial aviation, government, and defense markets worldwide. The company operates in two segments, Aviation Services and Expeditionary Services. The Aviation Services segment offers aftermarket support and services; inventory management and distribution services; and maintenance, repair, and overhaul, as well as engineering services. This segment also sells and leases new, overhauled, and repaired engine and airframe parts, and components; and provides inventory and repair programs, warranty claim management, and outsourcing programs for engine and airframe parts and components, as well as performance-based supply chain logistics programs in support of the U.S. Department of Defense and foreign governments. In addition, it offers airframe inspection, maintenance, repair and overhaul, painting, line maintenance, airframe modification, structural repair, avionics and installation, exterior and interior refurbishment, and engineering and support services; and repairs and overhauls landing gears, wheels, and brakes. The Expeditionary Services segment provides products and services supporting the movement of equipment and personnel by the U.S. and foreign governments, and non-governmental organizations. The company serves commercial, defense, and governmental aircraft fleet operators; original equipment manufacturers; and independent service providers.

## HIGHLIGHTS

The following are takeaways from our discussion with CEO John Holmes at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- AAR Corp entered the COVID-19 downturn with a strong balance sheet and a good portfolio mix, which positions the company for good growth as the industry recovers. AAR has a greater defense mix versus five years ago and exposure to commercial cargo. Its balance sheet allows for opportunistic M&A and used parts inventory build. In response to the downturn, AAR has leaned out the company, consolidated facilities, reduced overhead costs, and exited underperforming contracts and businesses, including its composite business.
- Used Serviceable Material (USM) presents a large opportunity presented by the cycle, as many aircraft will be retired. In the past few years the growth constraint was USM supply. Demand for USM versus new parts or PMA parts, for example turbine blades, should be strengthened by airlines' need to control costs. AAR is seeing inquiries from Asian customers not previously interested in USM. Much of the industry is seeing meaningful maintenance deferral, which will need to catch up when airlines resume flying, driving USM demand.
- AAR is the largest provider of outsourced heavy maintenance in the US and the third-largest worldwide after HAECO and ST Aero. AAR believes airlines will reexamine their maintenance strategies to drive cost savings which will lead to more outsourcing. Overhaul contracts with the large engine providers also provide visibility for the company to shrewdly deploy its balance sheet for USM. Strategically, the maintenance business is a lower margin business that positions AAR for lucrative inventory management and distribution services work.
- AAR's business model lends itself to extensions, such as the distribution of new parts for OEMs. In some cases it can pick up parts from airlines whose planes it maintains in return for maintenance credits. AAR has a small international maintenance footprint, but can service international aircraft in US shops. It has component shops and parts warehouses abroad. The USM/parts trading businesses plays globally.
- AAR is eyeing potential M&A and organic investments with an intent towards introducing more IP into its portfolio. Digital investments have allowed online sales to grow to \$40mm in two years, nearly all incremental.
- Defense remains a focus, aided by AAR becoming a prime contractor five years back. Winning and delivering on contracts is very much a multi-year process, with good ROIs albeit lower margin than parts businesses.

**Capitalization (\$ in millions)**

Balance Sheet as of	5/31/2020
Shares Outstanding	35.2
Market Price	<b>\$19.55</b>
Market Value	687.3
Plus: Debt	600.0
Minus: Cash & Equivalents	(404.7)
Net Debt	195.3
<b>Total Capitalization</b>	<b>\$882.6</b>

**AAR Corporation  
Price Performance**

Source: reuters.com

**AAR Corporation**

(\$ Millions - Percent Change)

FYE May 31	2018	2019	2020	2021E
Revenue	\$ 1,748.3	\$ 2,052.0	\$ 2,072.0	\$ 1,727.7
% Growth		17.4%	1.0%	-16.6%
EBITDA	\$ 146.3	\$ 171.6	\$ 155.9	\$ 94.4
% Margin	8.4%	8.4%	7.5%	5.5%
EPS	\$ 1.73	\$ 2.44	\$ 2.15	\$ 0.61
% Growth		41.0%	-11.9%	-71.6%
EBITDA Multiple	6.0	5.1	5.7	9.3
P/E Multiple	11.3	8.0	9.1	32.0

Source: Public data and consensus estimates

I, **Justin Bergner** the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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Analysts' ratings are largely (but not always) determined by our "private market value," or PMV methodology. Our basic goal is to understand in absolute terms what a rational, strategic buyer would pay for an asset in an open, arms-length transaction. At the same time, analysts also look for underlying catalysts that could encourage those private market values to surface.

A **Buy** rated stock is one that in our view is trading at a meaningful discount to our estimated PMV. We could expect a more modest private market value to increase at an accelerated pace, the discount of the public stock price to PMV to narrow through the emergence of a catalyst, or some combination of the two to occur.

A **Hold** is a stock that may be trading at or near our estimated private market value. We may not anticipate a large increase in the PMV, or see some other factors at work.

A **Sell** is a stock that may be trading at or above our estimated PMV. There may be little upside to the value, or limited opportunity to realize the value. Economic or sector risk could also be increasing.

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## Aerojet Rocketdyne (AJRD - \$41.63 - NYSE)

## Well Diversified Portfolio -NR

Year	EPS <sup>(a)</sup>	P/E	Dividend: None	Current Return: Nil
2020P	\$2.02	20.6x	Shares O/S: 88.6 million	
2020E	1.79	23.3	52-Week Range: \$57.27 - \$34.01	
2019A	1.59	26.2		
2018A	1.97	21.1		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Aerojet Rocketdyne Holdings operates in two segments, Aerospace and Defense, Inc. and Real Estate. Aerojet Rocketdyne, Inc., a wholly-owned subsidiary, manufactures aerospace and defense products and systems. The subsidiary is a provider of propulsion systems for defense and space applications as well as armament systems for precision tactical systems and munitions, serving the U.S. Army, Missile Defense Agency and NASA. Customers also include major aerospace and defense prime contractors as well as portions of the commercial sector. The subsidiary is considered the market leader in propulsion systems in the United States as it is the only provider of all four propulsion types (liquid, solid, air-breathing and electric). Aerojet Rocketdyne also is part of the United Launch Alliance (ULA), a joint venture with The Boeing Company and Lockheed Martin Corp which provides spacecraft launch services to the U.S. government.

Real Estate includes Easton Development Company, a wholly-owned subsidiary with activities related to the re-zoning, entitlement, and sale and leasing of AJRD's excess real estate assets.

### HIGHLIGHTS

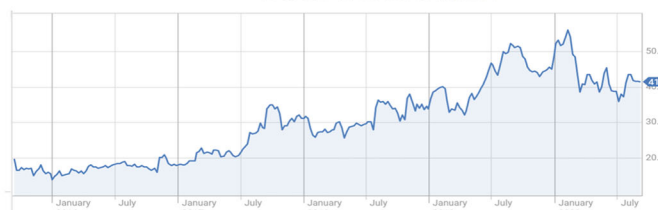
The following are key takeaways from Aerojet's Chief Executive Officer Eileen Drake at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- AJRD's CEO Eileen Drake expects the company to grow mid-single digit top line over the long term, although growth may be front-loaded due to near-term tailwinds from existing and new programs. The company has seen margin improvement from initiatives such as the Competitive Improvement Program helping boost margins from 12.8% in 2017 to 14% in 2020, but noted there may be some near-term margin pressure as higher-margin programs roll off, replaced by lower-margin cost-type programs
- The company has the largest domestic portfolio of space propulsion and power systems with an array of products ranging from 0.2 pounds of thrust satellite thrusters to 650,000 pounds of thrust rocket engines. AJRD has partnered with NASA for the Space Launch System (SLS) that will once again launch humans into deep space flying to Mars in the 2030 timeframe. The SLS alone will take four of the company's RS-25 main engines used on the Shuttle. AJRD has over 30 propulsion systems on the SLS which has \$2.5 billion in the 2020 budget.
- The company ended 2Q20 with a \$6.8 billion backlog, up \$1.9 billion from year-end 2019. The main drivers of the backlog are the THAAD and Standard Missile weapon systems orders from Saudi Arabia and Raytheon as well as the RS-25 follow-on order for eighteen engines. The U.S. Air Force recently selected AJRD's RL-10 upper stage engine for the ULA Vulcan rocket to provide 60% of the launches for the National Security Space Launch contract.
- The CEO is confident AJRD can execute on next generation capabilities such as Hypersonics, missile defense systems and Ground Based Strategic Deterrent (GBSD) in order to address the growing threats from China, Russia, Iran, and North Korea. The company recently announced it would provide a large solid rocket motor and post-boost propulsion for the GBSD. The company also stated it is competing for the Next Generation interceptor (NGI) booster and kill vehicle for the Ground-based Midcourse Defense System (GMD).
- The company remains a strong cash-generator with over \$1 billion in cash at the end of 2Q20 and expects to invest in its Camden, AK facility for the GBSD program as well as its Los Angeles facility for SLS. The company is focused on M&A and the \$100 million share repurchase program remains in effect.



**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	90.3
Market Price	<b>\$41.63</b>
Market Value	3,759.2
Plus: Debt	331.6
Minus: Cash & Equivalents	(1,003.9)
Net Debt	(672.3)
<b>Total Capitalization</b>	<b>\$3,086.9</b>

**Aerojet Rocketdyne  
Price Performance**

Source: reuters.com

**Aerojet Rocketdyne**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 1,895.6	\$ 1,981.5	\$ 2,059.5	\$ 2,175.2
% Growth		4.5%	3.9%	5.6%
EBITDA	\$ 304.9	\$ 271.7	\$ 284.6	\$ 312.3
% Margin	16.1%	13.7%	13.8%	14.4%
EPS	\$ 1.97	\$ 1.59	\$ 1.79	\$ 2.02
% Growth		-19.3%	12.6%	12.8%
EBITDA Multiple	10.1	11.4	10.8	9.9
P/E Multiple	21.1	26.2	23.3	20.6

Source: Public data and consensus estimates

Note: EBITDA &amp; EPS adjusted for restructuring and other expenses

**Other Companies Mentioned:**

Boeing (BA – NYSE) Lockheed Martin (LMT – NYSE)

*\*Tony Bancroft is an analyst for affiliate GAMCO Investors, Inc.*

I, **Tony Bancroft** the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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As of August 31, 2020, our affiliates beneficially own on behalf of their investment advisory clients or otherwise 7.84% of Aerojet Rocketdyne and less than 1% of Boeing and Lockheed Martin. Because the portfolio managers at our affiliates make individual investment decisions with respect to the client accounts they manage, these accounts may have transactions inconsistent with the recommendations in this report. One of our affiliates serves as an investment adviser to Aerojet Rocketdyne or an affiliated entity and has received compensation within the past 12 months for these non-investment banking securities-related services. These portfolio managers may know the substance of our research reports prior to their publication as a result of joint participation in research meetings or otherwise. No part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. The analyst, who wrote this report, or members of his household, owns no shares of the above mentioned companies.



## Astronics Corporation (ATRO - \$7.87 - NASDAQ) Power and Connectivity -NR

Year	EPS <sup>(a)</sup>	P/E	Dividend: None	Current Return: Nil
2019P	\$2.25	NM	Shares O/S: 30.8 million	
2018E	1.70	NM	52-Week Range: \$33.24 - \$6.99	
2017A	0.72	4.9x		
2016A	1.61	5.5		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Astronics is a leading provider of advanced technologies to the global aerospace, defense, electronics and semiconductor industries. The company's products and services include advanced, high-performance electrical power generation, distribution and motion systems, lighting & safety systems, avionics products, aircraft structures, systems certification and automated test systems.

The company's Aerospace segment designs and manufactures products for the global aerospace industry whose customers are airframe manufacturers that build aircraft for the commercial, military and general aviation markets, suppliers to those OEMs, airlines, and the U.S. Department of Defense.

The company's Test Systems segment designs, develops, manufactures and maintains automated test systems that support the aerospace, communications, and weapons test systems as well as training and simulation devices for both commercial and military applications.

### HIGHLIGHTS

The following are key takeaways from CEO Peter Gundermann at our 26<sup>th</sup> Aerospace & Defense Conference:

- As of 2Q20, the aerospace segment was \$573 million of sales and test systems was \$83 million. The company sold the semiconductor test business in 2019 for \$104 million. Commercial transport is 61% of sales, business jet is 11%, military is 11% and test is 13%. By way of product line, sales are 41% electrical power and motion, 23% lighting, 15% avionics, 4% structures, and 13% test.
- Power and Motion, the company's In-Seat Power Supply (ISPS) business now powers one million plus seats on over 280 airlines worldwide. ATRO is the in-flight entertainment (IFE) power supplier to Thales, Panasonic, and Zodiac. The company's ASP is \$350-850 per seat and has 90% plus of the global market share in the growing seat power market. Aircraft market penetration is 80% in wide body and 25% in narrow body. For seat market penetration is 60% wide body, 20% narrow body.
- In Airframe Power, ATRO builds intelligent systems for power generation, distribution and conversion which offer increased reliability, reduced weight, automation and flexibility along with lower life cycle costs reductions in pilot workload. The company has won contracts on the DAHER TBM 900, Bell 505, 525 and V280, Pilatus PC-24 and Cessna Denali.
- In Connectivity & Data, ATRO acquired Telephonix in December 2017 for \$104 million. Telephonix is a leader in cord reels and provides connectivity hardware, wireless access points, and servers and controls. The company is an in-flight entertainment connectivity hardware solution providing hardware, installation design and integration engineering as well as certification services.
- In Lighting & Safety, the company believes there is \$635K in potential content on wide bodies, \$258K on narrow bodies and \$53K to \$73K on business jets.

**Capitalization (\$ in millions)**

Balance Sheet as of:	6/27/2020
Class A (1/10 vote)	23.6
Class B (1 vote)	7.2
Shares Outstanding	30.8
Market Price	<b>\$7.87</b>
Market Value	242.0
Plus: Debt	173.0
Minus: Cash	(46.6)
Net Debt	126.4
<b>Total Capitalization</b>	<b>\$461.7</b>

**Astronics Corporation  
Price Performance**

Source: reuters.com

**Astronics Corporation**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 803.3	\$ 772.7	\$ 506.3	\$ 517.1
% Growth		-3.8%	-34.5%	2.1%
EBITDA	\$ 98.7	\$ 45.8	\$ 30.0	\$ 38.2
% Margin	12.3%	5.9%	5.9%	7.4%
EPS	\$ 1.42	\$ 1.60	\$ (3.34)	\$ (0.06)
% Growth		12.7%	NM	NM
EBITDA Multiple	4.7	10.1	15.4	12.1
P/E Multiple	5.5	4.9	(2.4)	NM

Source: Public data and consensus estimates

*\*Tony Bancroft is an analyst for affiliate GAMCO Investors, Inc.*

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**Ratings**

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## Avio SpA (AVIO - €13.36 - Milan)

## European Space Gateway - NR

Year	EPS <sup>(a)</sup>	P/E	
2021P	€1.04	12.8x	Dividend: None Current Return: Nil
2020E	0.80	16.7	Shares O/S: 26.4 million
2019A	0.96	13.9	52-Week Range: €16.64 - €9.57
2018A	0.90	14.8	

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Avio S.p.A., based in Rome, Italy, through its subsidiaries, engages in the solid, liquid, and cryogenic and tactical propulsion activities in Italy. The company offers space launchers under the VEGA and ARIANE names. It also provides propulsion components, such as boosters and sustainers; guidance components, including TVC products; and aerodynamics components comprising fins.

### HIGHLIGHTS

The following are key takeaways from Avio's Head of Investor Relations at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- Avio has 50 years of expertise in space technologies with a consistent track record in a \$6.2 billion, or 354 ton launch industry with global competition limited to a few operators and governmental demand playing a major role.
- Avio sees stable launch demand in MEO–GEO (+3% and -1% CAGR respectively) and strong growth in LEO (+14% CAGR) for the next decade in order to support end user demand in new services such as earth observation, internet/data connectivity, Internet of Things, and military airfield monitoring.
- Avio is a pure-play space launch company with three Vega launches expected in 2021, plus a Vega C debut midyear. The Ariane 6, also expected to launch in 2021, will be the European heavy launcher with 10.5 tons in Geostationary Transfer Orbit where Avio will be the partner and supplier for the strap-on boosters. The Vega C will be the European light launcher with 1.5 tons in Low Earth Orbit where Avio will be the developer, manufacturer, and launcher system integrator.
- The recent VV16 Vega mission successfully deployed 53 satellites from 21 customers in 13 countries with each satellite, weighing between 1 and 150 kg, released in both different orbits and altitudes. The company stated it is receiving demand and orders for its next scheduled mission in 2021, with the Vega C featuring an even higher capacity. The industry expects the number of satellites launched will grow 330% over the next decade.
- Avio has developed revolutionary automation, advanced materials, and streamlined processes for its main stage P120 engine used in the Vega C, Ariane 62 and Ariane 64. P120 full volume production should commence in 2023. The company expects to have five of its products (Vega C light, Space Rider, Vega C+, Vega E, and Ariane 6 EVO) to have high engine commonality (Z40 and P120) by 2025 providing more operating leverage.
- Management expects further growth opportunities beyond 2020 with Vega light in 2021 carrying 300 kg to LEO, Space Rider in 2022 carrying 800 kg to-and-from LEO and Vega E in 2025 carrying 2,800 kg to LEO. Vega C will be a dedicated launch service for smallsats using 2<sup>nd</sup> and 3<sup>rd</sup> stages of Vega C and being capable of rapid deployment. Space Rider will be a re-entry vehicle used for space debris removal and sub-orbital experiments. Vega E will have a lower cost/kg than Vega C and have increased in-orbit flexibility.
- Avio expects to launch VV17 in November 2021 and VV18 in January 2021. Vega C ground qualification review should complete by the end of 2020 setting up a launch sometime in 2021. Ariane 5 VA254 expects to launch in December 2020.

**Capitalization (€ in millions)**

Balance Sheet as of	12/31/2019
Shares Outstanding	26.4
Market Price	€ <b>13.36</b>
Market Value	352.2
Plus: Debt	70.7
Minus: Cash & Equivalents	(144.0)
Net Debt	(73.3)
<b>Total Capitalization</b>	<b>€ 278.86</b>

### Avio SpA Price Performance



Source: reuters.com

**Avio SpA**

(€ Millions - Percent Change)

FYE Dec 31	2018	2019	2020E	2021P
Revenue	€ 389.0	€ 440.0	€ 391.0	€ 430.0
% Growth		13.1%	-11.1%	10.0%
EBITDA	€ 42.6	€ 43.0	€ 40.6	€ 48.6
% Margin	10.9%	9.8%	10.4%	11.3%
EPS	€ 0.90	€ 0.96	€ 0.80	€ 1.04
% Growth		6.7%	-16.7%	30.0%
EBITDA Multiple	6.6	6.5	6.9	5.7
P/E Multiple	14.8	13.9	16.7	12.8

Source: Public data and consensus estimates

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## CPI Aerostructures (CVU - \$2.85 - NASDAQ)

## Defense-Centric Strategy - NR

Year	EPS <sup>(a)</sup>	P/E		
2020P	\$0.80	3.6x	Dividend: None	Current Return: Nil
2019E	NM	NM	Shares O/S: 11.8 million	
2018A	0.23	12.4	52-Week Range: \$8.55 - \$1.29	
2017A	0.63	14.5		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

CPI Aerostructures, Inc., headquartered in Edgewood, New York, engages in the contract production of structural aircraft parts for fixed wing aircraft and helicopters in the commercial and defense markets. The company also offers aero systems, such as reconnaissance pod structures and fuel panel systems; and supplies parts for maintenance, repair, and overhaul (MRO), as well as kitting contracts. In addition, it operates as a subcontractor for defense contractors and commercial contractors, as well as a contractor for the United States Department of Defense. Further, the company offers engineering, program management, supply chain management, kitting, and MRO services. Additionally, it offers welding services and metal fabrications; and electromechanical systems, harness and cable assemblies, electronic equipment, and printed circuit boards, as well as manufactures radio frequency interference/electro-magnetic interference for electronic components.

### HIGHLIGHTS

The following are key takeaways from CEO Doug McCrosson's presentation at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- CEO McCrosson stated the company offers a broad mix of products and services in order to provide a diverse set of capabilities to customers such as Lockheed Martin, Northrop Grumman, Raytheon Technologies, Boeing, and Embraer.
- As a contract manufacturer of aircraft structures and systems, CPI currently has a defense skew, with about 79% of revenue and 88% of backlog tied to defense versus commercial markets. Past exposure has been more balanced but CPI has gravitated towards defense given its competencies, competitive dynamics, and contract structures. The company operates out of a 170,000 square foot facility in Eastern Long Island with about 250 employees.
- CPI's role is as an integrator and final assembler, making it a Tier 1 supplier and in some cases a prime contractor. It does not build individual components. Its largest program to date is as the structural supplier (+\$200 million) for the next generation Jammer Mid-Band with Raytheon Technologies that goes to 2030.
- CPI sees a double-digit 3-year growth outlook for its three core product areas: aerostructures, aerosystems, and Kitting/Supply Chain Management (SCM). While aerostructures is about one-half of the company's \$75mm of 2018 revenue, it accounts for about one-fourth of backlog, which is weighted to aerosystems and Kitting/SCM.
- CPI has a \$562 million backlog across the remaining periods of performance for its programs, providing revenue visibility beyond 2022. CPI sees EW/ISR, hypersonics, unmanned aerial systems, and space systems as long-term opportunities for adjacent growth.
- Overall, CEO McCrosson sees a stable near-term business with meaningful, long-term growth opportunities. The company maintains durable relationships with top Tier 1 OEM customers with a defense market focus which yields a large, diversified, and growing backlog. CVU expects to grow revenue, improve margins and be cash flow positive for 2020.

**Capitalization (\$ in millions)**

Balance Sheet as of	12/31/2019
Shares Outstanding	11.8
Market Price	<b>\$2.85</b>
Market Value	33.7
Plus: Debt	31.0
Minus: Cash & Equivalents	(4.1)
Net Debt	26.9
<b>Total Capitalization</b>	<b>\$60.6</b>

**CPI Aerostructures  
Price Performance**

Source: reuters.com

**CPI Aerostructures**

(\$ Millions - Percent Change)

Year	2017	2018	2019	2020E
Revenue	\$ 81.3	\$ 70.4	\$ 87.5	\$ 115.0
% Growth		-13.4%	24.3%	31.4%
EBITDA	\$ 10.8	\$ 9.4	nm	\$ 14.8
% Margin	13.3%	13.3%	"	12.9%
EPS	\$ 0.63	\$ 0.23	nm	\$ 0.80
% Growth		NM	"	
EBITDA Multiple	5.6	6.5	nm	4.1
P/E Multiple	4.5	12.4	"	3.6

Source: Public data and consensus estimates

**Other Companies Mentioned:**

Boeing	(BA – NYSE)
Embraer	(ERJ – NYSE)
Lockheed Martin	(LTM – NYSE)
Northrop Grumman	(NOC – NYSE)
Raytheon Technologies	(RTN – NYSE)

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## Crane Co. (CR - \$49.62 - NYSE)

Year	EPS <sup>(a)</sup>	P/E	
2021P	\$4.98	10.0x	Dividend: \$1.72    Current Return: 3.4%
2020E	3.74	13.3	Shares O/S: 58.0 million
2019A	6.02	8.2	52-Week Range: \$89.54 - \$36.77
2018A	5.99	8.3	

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Crane Co. is a diversified manufacturer of engineered products including brake control systems, electronics, fiberglass panels, vending machines, coin changers, pumps, valves and regulators. The Aerospace & Electronics segment has two groups: Aerospace and Electronics.

In the Aerospace group, there are four units. The Landing Systems group manufactures aircraft brake control, anti-skid systems, embedded software, control valves, sensors and fuel pumps to the commercial transport, business, regional, general aviation, repair and overhaul markets.

Sensing and Utility Systems produces custom position indicators, proximity and pressure sensors, flow meters and power conversion systems. Fluid Management supplies lubrication and fuel pumps for aircraft and radar cooling systems, as well as fuel boost and transfer pumps for commuter and business aircraft. The Cabin Systems unit provides motion control products for airline seating.

In the Electronics group, Crane has three units: Power Solutions, Microwave Systems and Microelectronics. The Microwave Systems products include sophisticated electronic radio frequency components and subsystems that are used in defense electronics applications including radar, electronic warfare, communication systems and data links. Microelectronics manufactures custom miniature electronic circuits for applications in commercial, space and military aerospace, fiber optics and medical industries.

### HIGHLIGHTS

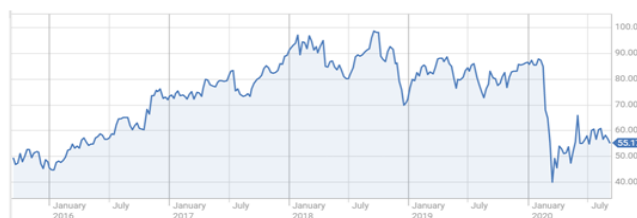
The following are key takeaways from Aerospace & Electronics President, Steve Zimmerman's presentation from our 26<sup>th</sup> Aerospace & Defense Conference:

- Aerospace & Electronics are approximately 24% of Crane's \$3.3 billion revenue. Within the A&E segment, 64% is commercial and 36% defense while 72% is OEM and 28% aftermarket. The segment operates in the Commercial Aviation, Defense and Space markets, providing solutions for Sensing, Fluid, Landing, Cabin, Electrical Power Solutions, and Microwave. Fluid products range from lubrication pumps to liquid cooling systems. Power solutions span the spectrum, from 50 MW (deep space) to 5KW (commercial/military).
- Aftermarket spans provisioning, spares and repairs, and aftermarket support, across mature and in production aircraft. The commercial and military installed base allows for modernization and upgrade opportunities as well.
- The defense business is having an outstanding 2020, which should continue into 2021. Crane's defense outlook after 2021 becomes more sensitive to the broader military budget, as its presence cuts across most key programs.
- With long development cycles, often in excess of ten years, Crane invests meaningfully and early alongside its customers, including during system architecture and technology development. Internal R&D is expected to remain a healthy 5-7% of sales. Electric and automation is an important focus area, including motors, power conversion, sensors, and fluid measurement systems. Smart, wireless, and integrated components are also important. A focus on Power-to-Weight ratio and IP in power electronics creates further opportunities
- Crane saw aftermarket recovery starting in 3Q. OE should recover, albeit with a lag to aftermarket, given demand trends tied to an increasing standard of living and a desire to travel. For the 737max, Crane is working with Boeing to make sure Crane's factories are in cadence with Boeing's needs, and with smaller suppliers, to help smooth out the demand ramp for them.



**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	58.0
Market Price	<u>\$49.62</u>
Market Value	2,879.2
Plus: Debt	1,427.8
Minus: Cash & Equivalents	(592.1)
Net Debt	835.7
<b>Total Capitalization</b>	<b><u>\$3,714.9</u></b>

**Crane Co.  
Price Performance**

Source: reuters.com

**Crane Co.**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 3,345.5	\$ 3,283.1	\$ 2,886.8	\$ 3,080.0
% Growth		-1.9%	-12.1%	6.7%
EBITDA	\$ 588.3	\$ 607.3	\$ 443.7	\$ 566.0
% Margin	17.6%	18.5%	15.4%	18.4%
EPS	\$ 5.99	\$ 6.02	\$ 3.74	\$ 4.98
% Growth		0.5%	-37.9%	33.2%
EBITDA Multiple	6.3	6.1	8.4	6.6
P/E Multiple	8.3	8.2	13.3	10.0

Source: Public data and consensus estimates

**Other Companies Mentioned:**

Boeing (BA – NYSE)

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## Ducommun Inc. (DCO - \$33.14 - NYSE)

## Focus on Defense - NR

Year	EPS <sup>(a)</sup>	P/E	Dividend: None	Current Return: Nil
2021P	\$2.52	13.2x	Shares O/S: 11.7 million	
2020E	2.16	15.3	52-Week Range: \$57.84 - \$16.27	
2019A	2.80	11.8		
2018A	1.99	16.7		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Ducommun, headquartered in Santa Ana, California, provides engineering and manufacturing products and services primarily to the aerospace, defense, industrial, natural resources, medical, and other industries in the United States. The company operates through two segments, Electronic Systems and Structural Systems. The Electronic Systems segment offers cable assemblies and interconnect systems; printed circuit board assemblies; high-level electronic, electromechanical, and mechanical components and assemblies, as well as lightning diversion systems; and radar enclosures, aircraft avionics racks, shipboard communications and control enclosures, wire harnesses, surge suppressors, conformal shields, and other assemblies. It also supplies engineered products, including illuminated pushbutton switches and panels for aviation and test systems; microwave and millimeter switches and filters for radio frequency systems and test instrumentation; and motors and resolvers for motion control. In addition, this segment provides engineering expertise for aerospace system design, development, integration, and testing. The Structural Systems segment designs, engineers, and manufactures contoured aluminum, titanium, and Inconel aero structure components; structural assembly products, such as winglets, engine components, and fuselage structural panels; and metal and composite bonded structures and assemblies comprising aircraft wing spoilers, large fuselage skins, rotor blades on rotary-wing aircraft and components, flight control surfaces, and engine components. The company serves commercial aircraft, military fixed-wing aircraft, military and commercial rotary-wing aircraft and space programs, as well as industrial, medical, and other end-use markets.

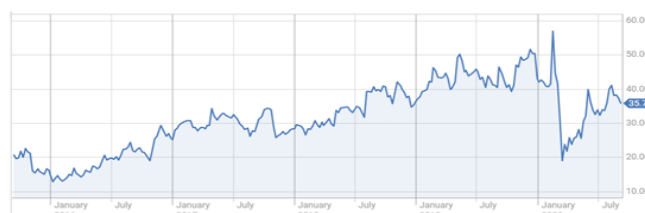
### HIGHLIGHTS

The following are key takeaways from CEO Steve Oswald's presentation from our 26<sup>th</sup> Virtual Aerospace & Defense Conference:

- Ducommun manufactures complex electronics and structural systems for commercial aerospace and military, defense and space programs with extensive offerings on commercial and military fixed wing aircraft, diverse content on key land, sea, and air missile platforms as well as an expansive footprint for commercial and military rotary aircraft. Customers include Boeing, Airbus, Spirit, Raytheon, Northrop Grumman, and Lockheed Martin.
- CEO Oswald has done a good job balancing the defense and commercial aerospace businesses transforming DCO into a higher margin solutions provider. The company maintains a defensible niche with a unique, highly sought-after range of capabilities with established large OEMs, on strategically positioned key commercial and defense platforms.
- As of 2Q20, company revenue was \$688 million of which 53% was Military & Space and 40% Commercial Aerospace. The Electronic Systems segment was 55% of revenue and the Structural Systems was 45%. The backlog was approximately \$830 million with 61% Military & Space, 37% Commercial Aerospace, and 2% Industrial. About 53% of the backlog is in Electronic Systems segment and 47% in Structural Systems.
- Defense Macro Trends also look to be positive with a revitalization of military readiness driving an increasing defense budget, particularly on missile programs. Weapon Systems are getting platform upgrades especially fixed wing and rotary wing aircraft, and military ground vehicles are getting upgrades globally, while Foreign Military Sales (FMS) expect to continue seeing growth as well as more on-shoring of defense production.
- Regarding M&A, the Nobles acquisition integration is going very well and the company is finding ways to grow the business where it operates as the market leader in defense ammunition loading systems. The company remains active looking to be aggressive by going after deals they like successfully closing transactions over the last couple of years. The team has brought in a business development head with a lot of experience from Raytheon Technologies and KKR.

**Capitalization (\$ in millions)**

Balance Sheet as of	6/27/2020
Shares Outstanding	11.7
Market Price	<b>\$33.14</b>
Market Value	387.1
Plus: Debt	349.0
Minus: Cash & Equivalents	(70.8)
Net Debt	278.2
<b>Total Capitalization</b>	<b>\$665.2</b>

**Ducommun Incorporated  
Price Performance**

Source: reuters.com

**Ducommun Incorporated**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 629.3	\$ 721.1	\$ 628.0	\$ 646.7
% Growth		14.6%	-12.9%	3.0%
EBITDA	\$ 70.8	\$ 92.3	\$ 84.9	\$ 89.3
% Margin	11.2%	12.8%	13.5%	13.8%
EPS	\$ 1.99	\$ 2.80	\$ 2.16	\$ 2.52
% Growth		40.7%	-22.9%	16.7%
EBITDA Multiple	9.4	7.2	7.8	7.5
P/E Multiple	16.7	11.8	15.3	13.2

Source: Public data and consensus estimates

**Other Companies Mentioned:**

Airbus (AIR.PA)	Boeing (BA – NYSE)
Lockheed Martin (LTM – NYSE)	Northrop Grumman (NOC – NYSE)
Raytheon Technologies (RTN – NYSE)	Spirit Airlines (SAVE – NASDAQ)

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## Elbit Systems (ESLT - \$120.72)

## International Defense - NR

Year	EPS <sup>(a)</sup>	P/E	
2021P	\$7.57	15.9x	Dividend: \$1.41 Current Return: 1.2%
2020E	7.03	17.2	Shares O/S: 44.2 million
2019A	5.20	23.2	52-Week Range: \$167.75 - \$110.00
2018A	4.83	25.0	

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Elbit Systems Ltd. is an international high technology company engaged in a wide range of defense, homeland security and commercial programs throughout the world. The company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems, command, control, communications, computers, intelligence surveillance and reconnaissance ("C4ISR"), unmanned aircraft systems, advanced electro-optics, electro-optic space systems, EW suites, signal intelligence systems, data links and communications systems, radios, cyber-based systems and munitions. The company also focuses on the upgrading of existing platforms, developing new technologies for defense, homeland security and commercial applications and providing a range of support services, including training and simulation systems.

### HIGHLIGHTS

The following are key takeaways from Elbit's Head of Investor Relations at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- Elbit has an internationally diversified presence and client base with a broad range of market leading products and technologies. Of the company's LTM revenue of \$4.6 billion, 31% were N.A., 24% Israel, 18% Europe, 21% APAC and 3% LATAM. As of 2Q20, the backlog stood at \$10.8 billion
- Elbit's revenue by product is 35% airborne, 27% land, 25% C4ISR, and 10% electro-optical.
- In the U.S., Elbit focuses on missile warning systems, air launched effects, guided-munitions, and night-vision/augmented reality/target acquisition systems. Elbit has a high investment in R&D with 8% of sales, of which 7% is self-funded.
- Elbit was selected by Boeing to provide avionics and training capabilities for the T-7 Air Force trainer and believes militaries around the world are looking to expand their simulator and training to provide more realistic training to expose their personnel to a wide range of scenarios at a lower cost.
- Elbit is the largest defense company in Israel providing products and services for all the country's defense forces and security services in all domains including underwater and space. The government is currently suffering from high levels of political uncertainty with current government possibly disintegrating soon. But longer term trends are continued geopolitical risks that should drive growth in defense budgets and growth and demand for advanced solutions which plays to Elbit's strengths.
- Outside of the U.S. and Israel, Asia Pacific continues to have increased defense spending as well as India with the common theme being adversaries of China. Europe has more uncertainty as governments try to address COVID-19. LATAM has been weak for some time.

**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	44.2
Market Price	<b>\$120.72</b>
Market Value	5,335.6
Plus: Debt	791.5
Minus: Cash & Equivalents	(339.1)
Net Debt	452.4
<b>Total Capitalization</b>	<b>\$5,788.0</b>

**Elbit Systems  
Price Performance**

Source: reuters.com

**Elbit Systems**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 3,683.0	\$ 4,508.0	\$ 4,691.0	\$ 4,924.0
% Growth		22.4%	4.1%	5.0%
EBITDA	\$ 365.0	\$ 425.0	\$ 555.0	\$ 565.0
% Margin	9.9%	NM	11.8%	11.5%
EPS	\$ 4.83	\$ 5.20	\$ 7.03	\$ 7.57
% Growth		7.7%	35.2%	7.7%
EBITDA Multiple	15.9	13.6	10.4	10.2
P/E Multiple	25.0	23.2	17.2	15.9

Source: Public data and consensus estimates

**Other Companies Mentioned:**

Boeing (BA – NYSE)

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## Kaman Corporation (KAMN - \$38.41 - NYSE)

## Diversified Portfolio - NR

Year	EPS <sup>(a)</sup>	P/E	Dividend: \$0.80	Current Return: 2.1%
2021P	\$2.41	15.9x	Shares O/S: 27.7 million	
2020E	2.04	18.8	52-Week Range: \$68.24 - \$29.38	
2019A	1.63	23.6		
2018A	1.38	27.8		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Kaman Corporation, headquartered in Bloomfield, Connecticut, produces and markets aircraft bearings and components; super precision miniature ball bearings for the medical, industrial, and aerospace markets; and metallic and composite aero structures for commercial, military, and general aviation fixed and rotary wing aircraft. It also provides safe and arming solutions for missile and bomb systems for the U.S. and allied militaries; undertakes helicopter subcontract works; restores, modifies, and supports its SH-2G Super Seasprite maritime helicopters; and manufactures and supports K-MAX manned and unmanned medium-to-heavy lift helicopters. The company operates in North America, Europe, the Middle East, Asia, Oceania, and other countries.

The company's aerospace division unit generated \$761 million in sales in 2019. The segment's Fuzing & Precision products group is the world's leading provider of bomb fuzes as the sole supplier of the U.S. Air Force's Joint Programmable Fuze. KAMN also manufactures aero structures such as the fixed trailing edge on the B 777 and B 767 as well as the cockpit of Sikorsky's BLACK HAWK helicopter. The company recently restarted production of its K-MAX helicopter, a heavy-lift utility aircraft.

### HIGHLIGHTS

The following are key takeaways from Chairman Neil Keating's presentation at our 26<sup>th</sup> Virtual Aerospace & Defense Conference:

- Year-to-date sales are up 12.9% to \$385 million and organic sales are up 1 %. The company has focused on diversifying the business with defense now 54% of revenue, commercial aerospace 29%, medical 9% and industrial 8%. Within commercial, business & general aerospace, Boeing and Airbus are 43% of sales while business jet and general aviation are 57%.
- In the defense business, performance is on pace with expectations and sales are expect to increase in the 2H. Defense exposure has provided stability and growth opportunities while gaining market share on key programs such as F/A-18, JSF and UH-60. Commercial aerospace continues to see headwinds due to COVID-19, but partially offset by growth in business and general aviation. Elective procedures deferrals continue to affect the Medical business but offset by increasing biopharma capital budgets and strong technical advances and product development pipelines. Industrials are experiencing an increasing number of robotics applications as well as amount of maintenance and replacement of equipment.
- Following the sale of the distribution business, Kaman acquired Bal Seal in January 2020 for \$330 million in cash. Bal Seal is a leader in precision springs, seals, and contacts serving the medical, aerospace & defense, and industrial markets with more than 240 patents and has a presence in U.S., Europe, and Asia strengthening Kaman's defense and medical exposure.
- In Q2, the company delivered 12,000 JPF fuzes split about 60/40 between US government and DCS orders. The company expects to deliver between 45,000 and 50,000 fuzes for the full year with a backlog of \$305 million. The Air Force awarded USG Option 15 for \$57 million and still awaiting finalization of Option 16.
- K-MAX helicopter received one new order in 3Q2020 and Kaman is actively negotiating new orders which include multi-aircraft opportunities. K-MAX has already received five Next Generation Unmanned Systems orders in 2019. There are currently 36 aircraft in operation and expecting to be 40 by 2021.

**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	27.7
Market Price	<b>\$38.41</b>
Market Value	1,062.5
Plus: Debt	184.6
Plus: Convertible Debt	200.0
Total Debt	384.6
Minus: Cash & Equivalents	(235.6)
Net Debt	149.0
<b>Total Capitalization</b>	<b>\$1,211.5</b>

**Kaman Corporation  
Price Performance**

Source: reuters.com

**Kaman Corporation**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 736.0	\$ 761.6	\$ 784.3	\$ 817.8
% Growth		3.5%	3.0%	4.3%
EBITDA	\$ 100.1	\$ 99.3	\$ 117.0	\$ 131.3
% Margin	13.6%	13.0%	14.9%	16.1%
EPS	\$ 1.38	\$ 1.63	\$ 2.04	\$ 2.41
% Growth		18.1%	25.2%	18.1%
EBITDA Multiple	12.1	12.2	10.4	9.2
P/E Multiple	27.8	23.6	18.8	15.9

Source: Public data and consensus estimates

**Other Companies Mentioned**

Airbus (AIR.PA)

Boeing (BA – NYSE)

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## Kratos Defense (KTOS - \$19.03 - NASDAQ)

## Unmanned Systems - NR

Year	EPS <sup>(a)</sup>	P/E		
2021P	\$0.51	37.3x	Dividend: None	Current Return: Nil
2020E	0.38	50.1	Shares O/S: 122.7 million	
2019A	0.34	56.0	52-Week Range: \$22.26 - \$5.00	
2018A	0.24	79.3		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Kratos is a mid-size government contractor at the forefront of the DoD's Third Offset Strategy. The company is a leading technology, intellectual property and proprietary product and solutions company focused on the U.S. and its allies' national security. KTOS is the industry leader in high performance, jet powered, unmanned aerial drone target systems used to test weapons systems and to train the warfighter, and a provider of high performance unmanned combat aerial systems for force multiplication and amplification. The company is also an industry leader in satellite communications, microwave electronics, cyber security/warfare, missile defense and combat and training systems.

### HIGHLIGHTS

The following are key takeaways from CEO Eric DeMarco's presentation from our 26<sup>th</sup> Aerospace & Defense Conference:

- Kratos' primary focus areas are towards high-performance unmanned aerial drone systems, satellite C3, microwave electronics, ballistic missile defense, and training systems.
- Kratos builds internally funded investments owning the intellectual property in its core product and technology areas where it focuses on sole source, designed in positions on programs, increased barriers to entry, and multiyear/multi decade programs. The primary R&D focus areas are satellite communications, unmanned systems, and microwave electronics. Kratos believes it differentiates itself by rapidly developing and demonstrating field leading technology systems at an affordable cost.
- Kratos sees defense budgets increasing globally with a recapitalization of strategic weapons to address peer and near peer threats particularly in unmanned systems, AI, satellite systems, space segment, EW, missile and RADAR warning systems, missile defense, operational readiness, and the Strategic Triad.
- After years of consolidation in the defense industry, Kratos believes it excels where there are significant opportunities for companies that can rapidly develop and field high technology systems at an affordable cost.
- In the Unmanned Aerial Drone space, Kratos is the industry leader in Turbo Jet and Turbo Fan Powered Performance Unmanned Aircraft with Strike Fighter performance. Kratos' target drones are runway independent launched via a rail and recovered via a parachute on land and water. The drones are vertically integrated and are affordable from \$250K to \$3 million. The tactical drones such as Valkryie, Gremlin, and Mako, augment and support manned strike aircraft, are force multipliers, can act as loyal wingmen to the manned strike aircraft, and can be produced in quantities at an affordable cost.
- Kratos is the leader in Satellite C3 Systems where it provides ground and terrestrial equipment. Kratos owns and operates a global signal monitoring and interference geolocation business supporting 85% of U.S. space missions and 75% of global space missions. Russian and Chinese threats are driving increased funding for this space. The growth in small, cube, and nano satellites are building a demand for a new generation of satellite C3 equipment. Increasing missile threats are driving demand for U.S. space based surveillance. Finally, overall global demand for satellite bandwidth is calling for more C3 related equipment.

**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	122.7
Market Price	<b>\$19.03</b>
Market Value	2,335.3
Plus: Debt	295.9
Minus: Cash & Equivalents	(397.2)
Net Debt	(101.3)
<b>Total Capitalization</b>	<b>\$2,234.0</b>

**Kratos Defense & Security Solutions  
Price Performance**

Source: reuters.com

**Kratos Defense & Security Solutions**

(\$ Millions - Percent Change)

FYE Sep 30	2018	2019	2020E	2021P
Revenue	\$ 618.0	\$ 717.5	\$ 761.1	\$ 870.7
% Growth		16.1%	6.1%	14.4%
EBITDA	\$ 60.5	\$ 77.3	\$ 75.4	\$ 97.1
% Margin	9.8%	10.8%	9.9%	11.1%
EPS	\$ 0.24	\$ 0.34	\$ 0.38	\$ 0.51
% Growth		41.7%	11.8%	34.2%
EBITDA Multiple	36.9	28.9	29.6	23.0
P/E Multiple	79.3	56.0	50.1	37.3

Source: Public data and consensus estimates

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## Mercury Systems Inc. (MRCY - \$77.86 – NASDAQ) Secure Mission-Critical - NR

<u>FYE 6/30</u>	<u>EPS<sup>(a)</sup></u>	<u>P/E</u>		
2022P	\$2.61	29.8x	Dividend: None	Current Return: Nil
2021P	2.27	34.3	Shares O/S: 48.1 million	
2020E	2.30	33.9	52-Week Range: \$96.29 - \$52.24	
2019A	1.84	42.3		

(a) Thomson One consensus estimates

### COMPANY OVERVIEW

Mercury Systems Inc. is a commercial provider of U.S. manufactured secure processing subsystems for the defense industry. The company's capabilities include open architecture embedded processing modules and subsystems, radio frequency and microwave multi-function assemblies as well as subsystems and RF and microwave components. These assemblies and components are sold commercially to defense customers who then integrate them into key programs such as Aegis, Patriot, Surface Electronic Warfare Improvement Program (SEWIP), Predator, F-35, and more.

### HIGHLIGHTS

The following are key takeaways from our discussion with CFO Michael Ruppert at our 26<sup>th</sup> Annual Aerospace & Defense Conference:

- Mercury Systems aims to continue to deliver high single-digit to low double-digit revenue growth as it capitalizes on the outsourcing of major defense primes. The company's ability to fully integrate and customize subsystems and processing offers a unique value proposition for customers. In the past, prime contractors spent a great deal of time and money integrating components on their own. As the government increasingly prefers fixed-price contracts vs. cost-plus, Mercury is able to provide a better, tailored solution at a more attractive price.
- The company believes it has the highest performance embedded processing capabilities in the industry which are ruggedized so they can be used for military platforms. The company has invested at a rate 4-5x the industry average in the necessary technologies to optimize the size, weight, power and cooling, producing some of the most advanced open middleware and allowing customers to integrate their software with these new technologies, which are entering the fourth generation of embedded security.
- In order to expand its addressable market, Mercury recently acquired APC. The acquisition, made late last year for \$100 million, has allowed MRCY to expand into platform management/Mission Systems, and Vectronics. APC is a leading provider of large area displays deployed on platforms such as Abrams battle tank, F-35, F-15, F-16, and F/A-18.
- The company stands to benefit both from new platforms and the modernization of older platforms. Mercury generates revenues from Lockheed's Joint Strike Fighter, as it provides processing and radio frequency/microwave (RFM) technologies as the plane is manufactured. MRCY will also generate significant revenue from technology upgrades on the JSF in the future, as it is currently generating revenue from technology upgrades to platforms like the F-16 and Predator/Reaper.
- Mercury continues to spend low-double digit percent of revenue on internally funded research and development. This allows MRCY to go to market with the most cutting edge technology. Because the technologies it develops are considered proprietary intellectual property, Mercury is also able to mix and match its components across platforms in order to create tailored solutions for customers.

**Capitalization (\$ in millions)**

Balance Sheet as of	7/3/2020
Shares Outstanding	55.4
Market Price	<b>\$77.86</b>
Market Value	4,315.5
Plus: Debt	-
Minus: Cash & Equivalents	(226.8)
Net Debt	(226.8)
<b>Total Capitalization</b>	<b>\$4,088.7</b>

**Mercury Systems Inc.  
Price Performance**

Source: reuters.com

**Mercury Systems Inc.**

(\$ Millions - Percent Change)

FYE July 3	2019	2020	2021E	2022P
Revenue	\$ 654.7	\$ 796.6	\$ 879.1	\$ 969.4
% Growth		21.7%	10.4%	10.3%
EBITDA	\$ 145.3	\$ 176.2	\$ 196.2	\$ 221.6
% Margin	22.2%	22.1%	22.3%	22.9%
EPS	\$ 1.84	\$ 2.30	\$ 2.27	\$ 2.61
% Growth				15.0%
EBITDA Multiple	28.1	23.2	20.8	18.5
P/E Multiple	42.3	33.9	34.3	29.8

Source: Public data and consensus estimates

\*Tony Bancroft is an analyst for affiliate GAMCO Investors, Inc.

I, **Tony Bancroft**, the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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## Textron (TXT - \$35.27 - NYSE)

## Business Jet Green Shoots – NR

Year	EPS <sup>(a)</sup>	P/E	Dividend: \$0.08	Current Return: 0.2%
2021P	\$2.56	13.8x	Shares O/S: 228.0 million	
2020E	1.62	21.8	52-Week Range: \$51.53 - \$20.26	
2019A	3.74	9.4		
2018A	3.34	10.6		

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Textron, Inc., headquartered in Providence, Rhode Island, operates in the aircraft, defense, industrial, and finance businesses worldwide. Textron is organized across five segments: Textron Aviation, Bell, Textron Systems, Industrial, and Finance.

Textron Aviation, a leader in general aviation, manufactures, sells, and services Cessna business jets, Beechcraft turboprop, and Beechcraft piston engine aircraft in addition to servicing the Hawker brand of business jets. The segment provides both aircraft sales and aftermarket services. Bell Helicopter is a leading supplier of military and commercial helicopters, tiltrotor aircraft, and related spare parts and services globally. In the United States, Bell's primary programs are the V-22, H-1, and V-280 Valor (developmental). Textron Systems provides unmanned aircraft systems, marine and land systems, and simulation, training and other defense and aviation mission support products and services. TXT's Industrial segment designs and manufactures fuel systems and functional components, and specialized vehicles and equipment. Finally, the Finance group provides financing primarily to purchasers of new and pre-owned Textron Aviation aircraft and Bell helicopters.

### HIGHLIGHTS

The following are key takeaways from CEO Scott Donnelly's fireside chat at our 26<sup>th</sup> Aerospace & Defense Conference:

- Textron's strategy has not changed due to the COVID-19 recession. Donnelly noted different impacts across different businesses, but an unchanged focus around investing in new products and services across commercial and military offerings. The only financial shift is suspending buybacks in favor of paying down debt.
- Donnelly presented a glass half full view of the recovery in business jet flying behavior that corroborated comments from Signature Aviation on their recent earnings call. Specifically, US business jet flying hours in August are down less than 20% y/y, with European flying hours actually up vs pre-COVID levels. Leisure demand is driving the recovery. It explains the improvement from US June flying hours down 30%+. At the same time, it suggests there is significant room for further recovery when business demand recovers. Small jets and turboprops are seeing a sharper recovery as new passengers enter the market via fractional offerings.
- It may take a few months to a few quarters for the recovery in business jet flying hours to translate into orders for new aircraft, especially given uncertainty around the election. Positively, the level of used aircraft available for sale is quite low, in contrast to the used overhang following the Great Recession. New product is helping demand and making less relevant certain used aircraft. Limited used aircraft is also keeping pricing rational.
- The Longitude is flying great 12 months post-certification, with 22 in service, and good performance around reliability, durability, and experience (quietness, comfort). Longitude demand is more corporate capex driven, so order recovery may not be immediate. Reviews are great and the Netjets relationship bodes well for the future.
- Bell commercial demand is challenged, although oil and gas exposure is immaterial versus markets like EMS and law enforcement. The 525 is proceeding towards certification albeit with a moderated pace.
- Textron is very enthusiastic about the V-280 Valor and Future Vertical Lift program, even with potential military budgetary pressure on the horizon. Budget concerns are unlikely to affect the program's size or timeline, as it is number three in the military modification budget. V-280 performance is excellent in terms of maneuverability, speed, and risk mitigation. Textron has enjoyed a number of recent smaller defense wins looking into 2021.
- Demand for specialized vehicles is robust between golf-facing products, ATVs, and side by sides, with aviation ground support equipment the exception. Global auto builds are ramping off the trough as it relates to Kautex.

**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	228.0
Market Price	<u>\$35.27</u>
Market Value	8,041.6
Plus: Debt	4,062.0
Minus: Cash & Equivalents	(2,176.0)
Net Debt	1,886.0
<b>Total Capitalization</b>	<b>\$9,927.6</b>

**Texttron Inc.  
Price Performance**

Source: reuters.com

**Texttron Inc.**

(\$ Millions - Percent Change)

Year	2018	2019	2020E	2021P
Revenue	\$ 13,972.0	\$ 13,630.0	\$ 11,563.9	\$ 12,638.8
% Growth		-2.4%	-15.2%	9.3%
EBITDA	\$ 1,704.0	\$ 1,686.0	\$ 943.1	\$ 1,267.0
% Margin	12.2%	12.4%	8.2%	10.0%
EPS	\$ 3.34	\$ 3.74	\$ 1.62	\$ 2.56
% Growth		12.0%	-56.7%	58.0%
EBITDA Multiple	5.8	5.9	10.5	7.8
P/E Multiple	10.6	9.4	21.8	13.8

Source: Public data and consensus estimates

I, **Justin Bergner, CFA** the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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## Woodward (WWD - \$76.03 - NYSE)

NR

Year	EPS <sup>(a)</sup>	P/E	
2021P	\$3.24	25.4x	Dividend: \$0.325      Current Return: 0.4%
2020E	3.74	22.0	Shares O/S: 62.4 million
2019A	4.88	16.9	52-Week Range: \$129.06 - \$46.51
2018A	3.85	21.4	

a) Thomson One consensus estimates

### COMPANY OVERVIEW

Woodward is one of the largest manufacturers and service providers of energy control and optimization solutions for reciprocating engine, aircraft and industrial turbines and electrical power system equipment. Worldwide demand for fuel efficient, low emission, high performance energy systems drives WWD's business. The company's energy control and optimization solutions accurately and precisely control energy by integrating their components into systems that improve the emissions performance, reliability and fuel efficiency of engines.

In the Aerospace segment, the company provides high-performance cockpit, electromechanical and hydraulic motion control systems, and mission-critical actuation systems for weapons, aircraft, turbine engines and combat vehicles. In May of 2015, Woodward announced a joint venture with GE Aviation to design, develop, source, supply and services the fuel system for the GE90, GENx, GE9X and all future large commercial engines developed by GE Aviation.

In the Energy segment, WWD manufactures electronics, actuators, valves, fuel systems and combustion systems for gas and diesel engines, steam turbines and also sells these products to distributors for use in the power generation, marine, transportation and process industries. In addition, the group produces electrical power systems used in generators and wind turbines, as well as integrated control systems and components for the industrial power market.

### HIGHLIGHTS

The following are key takeaways from our fireside chat with Don Guzzardo, Director of Investor Relations, Treasury, and Risk Management, at our 26<sup>th</sup> Aerospace & Defense Conference:

- The aerospace world changed with COVID-19, with a spillover effect of upending the merger of equals with Hexcel, given the effect of changing markets and production rates on company valuations, along with OE/AM splits. Each company needed to focus on adapting to a changing environment versus consummating a merger.
- The Hexcel deal reflected Woodward's view that the future of commercial aerospace will continue to shift towards carbon fiber on account of light-weighting. Woodward viewed Hexcel as a very well-run company and one of two technology leaders in carbon fiber. None of those views have changed since the deal was called off.
- Woodward's standalone strategy remains driving operational efficiency in its aerospace and industrial markets and benefitting from outgrowth tied to good content and share gains on new narrowbody platforms. Woodward is actively investing in R&D and expects to emerge from the current downturn stronger. M&A, dividend, and repurchases are free cash flow priorities. M&A opportunities may present themselves in the current downturn.
- The aftermarket opportunity on new narrow bodies will follow current OE content, even if it ramps late 2020s versus mid-2020s. With the OE content gains primarily on the engine side, the opportunity should be large. Shorter-term, the aftermarket should recover quicker than OE and mix positive in aerospace
- The current trajectory is largely a function of the company's revamp over the last two decades after it lost the fuel control program on the CFM-7 engine (737ng) to Honeywell due to lack of customer focus, despite having a stronger product. The company pivoted towards partnerships with the likes of GE and others, while ensuring technology expertise and quality of execution. Woodward has not lost a program with GE since then.
- Defense may hit some budget headwinds post-election. Guided munitions programs may see tapering, but fixed wing aircraft and the F-35 should grow. Aftermarket is currently strong driven by military readiness initiatives.
- Mid-term margin targets of 20%+ in aerospace and 16% in industrial remain in tack. The timing will depend on the trajectory of the recovery as well as mix.



**Capitalization (\$ in millions)**

Balance Sheet as of	6/30/2020
Shares Outstanding	62.4
Market Price	<b>\$76.03</b>
Market Value	4,743.0
Plus: Debt	929.5
Minus: Cash & Equivalents	(101.5)
Net Debt	827.9
<b>Total Capitalization</b>	<b>\$5,570.9</b>

**Woodward  
Price Performance**

Source: reuters.com

**Woodward**

(\$ Millions - Percent Change)

FYE Sept. 30	2018	2019	2020E	2021P
Revenue	\$ 2,325.9	\$ 2,900.2	\$ 2,485.6	\$ 2,388.7
% Growth		24.7%	-14.3%	-3.9%
EBITDA	\$ 432.0	\$ 544.9	\$ 461.8	\$ 399.9
% Margin	18.6%	18.8%	18.6%	16.7%
EPS	\$ 3.85	\$ 4.88	\$ 3.74	\$ 3.24
% Growth			-23.4%	-13.4%
EBITDA Multiple	12.9	10.2	12.1	13.9
P/E Multiple	19.7	15.6	20.3	23.5

Source: Public data and consensus estimates

**Other Companies Mentioned:**

General Electric	(GE – NYSE)
Hexcel Corporation	(HXL – NYSE)

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