KippsDeSanto&Co.

MarketView
Summer 2019

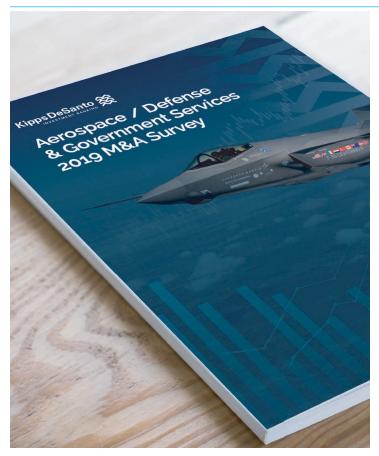
Aerospace/Defense & Government Services

Kipps DeSanto
INVESTMENT BANKING



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KippsDeSanto's Aerospace / Defense & Government Services 2019 M&A Survey

KippsDeSanto is pleased to share its second annual survey of merger and acquisition ("M&A") activity and sentiment in the Aerospace / Defense and Government Services sectors.

In this study, we asked key dealmakers from relevant sectors to share their predictions about M&A deal activity and valuations over the next year. We also asked them to share their insights on strategic drivers of M&A activity, including government elections and predictions on the 2019 credit market.

Respondents are optimistic about the overall economy and M&A activity in the near-to medium-term. They expect M&A volume and valuations to remain strong, similar to 2018 levels, due in part to robust defense spending and economic confidence.

About KippsDeSanto & Co.

KippsDeSanto & Co. is the largest independent investment banking firm exclusively focused on serving leading, growth-oriented Aerospace / Defense & Government Services companies. We are focused on delivering exceptional M&A and Financing transaction results to our clients via leveraging our scale, creativity, and industry experience. We help market leaders realize their full strategic value. Having advised on over 100 industry transactions, KippsDeSanto is recognized for our analytical rigor, market insight, and broad industry relationships.

There is no substitute for experience.

For more information, visit us at <u>www.kippsdesanto.com</u>.



KippsDeSanto's Recent Advised Transactions







































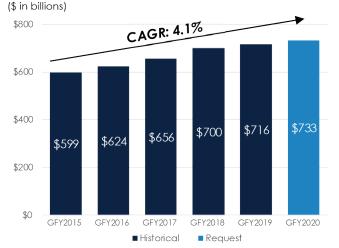




Operational / Funding Environment

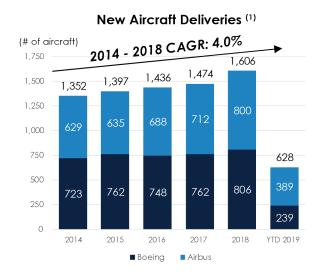
In late-June 2019, the U.S. Senate advanced the 2020 National Defense Authorization Act ("NDAA"), at \$750 billion, approximately \$17 billion larger than the \$733 billion figure the House of Representatives has targeted for GFY2020. In an 86-8 vote, the Senate passed the bill, which includes a 3.1% pay raise authorization for troops, an additional 6,200 service members, an allocation of \$300 million in funding for military housing, and full funding of Pentagon nuclear modernization programs. The bill passed with ease despite concerns regarding the U.S.' nuclear capabilities and the overall size of the budget. Proponents tout the bill's passage as a continuing effort to expand and modernize the military to counter growing geopolitical threats. The NDAA will now move to the House of Representatives for a vote in late-July. While the House voiced comfort with a military pay raise and parameters regarding the new Space Corps within the Air Force, it is anticipated that there will be resistance regarding the budget's top-line figure, specifically the level of funding allocated to the nuclear

GFY2020 Defense to Continue Growth over Prior Years



arsenal as well as the proposed southern border wall. Inter-chamber negotiations to reconcile the House and Senate's respective versions of the bill are expected to commence immediately following the House's advancement of the bill. Congress must reach an agreement by October 1, 2019 to avoid risking a partial government shutdown.

In commercial aerospace, Airbus continued its positive momentum at this year's Paris Air Show, capturing new orders or letters of intent for over 595 aircraft, outpacing Boeing's new orders for 234 planes. Collectively, 938 new planes were ordered at this year's air show. While this figure is slightly lower than the new orders placed at the 2017 and 2018 air shows, it surpasses analysts' expectations. Moreover, Airbus has also outperformed Boeing in year-todate ("YTD") deliveries, reporting 389 new aircraft deliveries through 1H19, compared to Boeing's 239. Boeing's topline figure is driven by 113 737 jet deliveries, accounting for nearly one-half of its net total, to 65 different customers, with only China Eastern Airlines, Base Defense Squadron ("BDS") United States Air Force ("USAF") Tanker, Delta Air Lines, and United Airlines receiving 10 or more aircraft. Meanwhile, Airbus' 389 YTD deliveries are slightly below 2018's pace. The Company's 800 deliveries in 2018 represented a 12% increase over 2017's 712 deliveries, and marked the 16th straight year that deliveries increased.



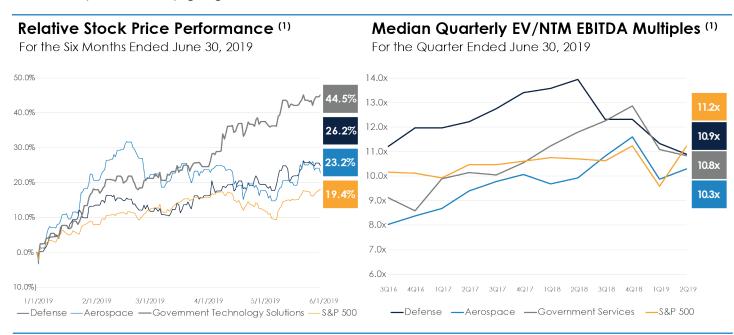
Airbus' overall backlog remains strong at 7,276 aircraft, which is a slight decrease from 1Q19's 7,357 aircraft. With respect to net orders, Boeing fell from 91 through 1Q19 to -119 YTD in the aftermath of the two fatal crashes of its 737 MAX jets as total orders canceled numbered 227. Airbus reported positive net orders, with its 88 count marking an improvement on 1Q19's -58 net orders in 1Q19 as the orders of 94 A320 Neos and 57 A231 Neos drove performance. Robust passenger growth should continue to drive a strong aerospace market, as passenger traffic and capacity have been up year-over-year ("YoY") for each of the past five years.

While federal budgets remain strong, IT and cybersecurity have become key budgetary focus areas. In particular, the Department of Defense ("DoD") has cited cybersecurity as a major challenge and as a result it has become one of the fastest growing areas of the budget. For example, the Naval Cybersecurity and IT budget is projected to grow from \$1.6 billion in GFY19 to \$1.8 billion in GFY2020^[2], as the Navy is looking to enhance legacy IT systems and network security measures. As part of this growth, the Navy recently awarded a \$6.2 billion, seven-year, multi-award, cybersecurity-focused indefinite delivery / indefinite quantity ("IDIQ") called Systems Center Pacific Cyberspace Science, Research, Engineering, and Technology Integration. Awardees were BAE Systems, Booz Allen Hamilton, ICF, Leidos, Northrop Grumman, Parsons, Perspecta, SAIC, and Scientific Research Corp, each with ceiling values ranging from ~\$600 million to ~\$800 million. In addition, the Army has several training contracts and cyber innovation challenges in place and is currently shaping a new \$1 billion single-award contract, the Persistent Cyber Training Environment, which is expected to be awarded by GFY2021.



Capital Markets and Public Market Valuation Trends

Strong performances throughout 2Q19 led to increases for aerospace, defense, and government services indices. The aerospace index continued to climb finishing at 23.2%, which exceeded 1Q19's growth of 22.7%. Despite the broader aerospace index's strong performance, Boeing shares continued to drop in the wake of the groundings of the 737 MAX 8, falling by 7.0% this quarter as it was announced a previously unknown software problem had been discovered, pushing the return of the 737 MAX 8 until at least October. However, in response to Boeing's groundings, Heico shares have increased 76.2% YTD as the demand for current airplane parts has increased as fewer new planes are deployed. This trend has also buoyed Transdigm's stock as shares increased 42.2% YTD. Airbus has also benefited from Boeing's groundings as shares increased 7.4% in 2Q19 and 48.4% this year. The median aerospace enterprise value ("EV") / EBITDA multiple was steady, going from 10.3x to 10.2x.



The defense index continued its strong year, ending 2Q19 up 10.1% on the quarter and 25.6% YTD as gains were made throughout the industry. L3 Technologies, Inc. had a strong quarter, as its stock rose 19.6% in reaction to its merger with Harris Corporation, as well as continued growth in revenue and margins. As tensions have continued to rise between the U.S. and Iran, defense companies stand to benefit, including Lockheed Martin and Northrop Grumman, whose stocks rose 19.5% and 17.9%, respectively. Northrop benefited from a number of announced awards, including an agreement to team with Raytheon Co. on hypersonic weaponry as well as a \$958 million deal to produce radar units for the Marine Corps. Meanwhile, Lockheed owns a record backlog of \$133.5 billion boosted by the continued expansion of the F-35 program. Defense spending is set for another record budget between \$733 billion and \$750 billion, which should allow for further growth across the industry. Defense multiples also had a steady quarter, with the index's EV / EBITDA multiple improving slightly from 10.9x to 11.1x. This marks a rebound from a down first quarter compared to the 11.5x multiple the defense industry posted in 4Q18.

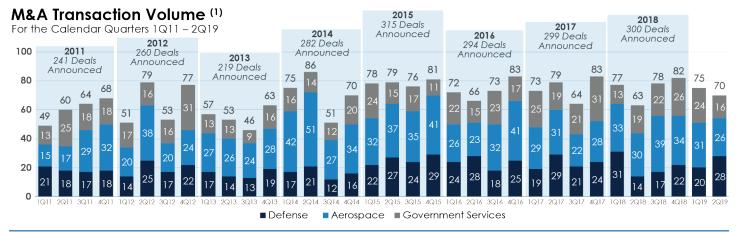
The government services experienced strong stock price appreciation in 2Q19, marking the second consecutive quarter of strong stock gains driven by broader market upswings and budgetary tailwinds. The sector has posted a 44.5% gain since January 1st, significantly exceeding the S&P 500's gain of 19.4%, driven in large part by outsized returns from Vectrus and Leidos. Vectrus was up 47.8% in 2Q19 after winning a desired spot on the \$84 billion Logistics Civil Augmentation Program ("LOGCAP") V IDIQ contract in April, which provides support services for the U.S. military worldwide. Vectrus' stock immediately reacted to the contract award, having approached its all-time historic high of \$40 / share, a level which the company's share price has sustained through the end of the quarter, while also ending the quarter up 83.9% YTD. Similarly, Leidos' shares rose 23.1% this quarter and 53.4% YTD, following ~5% higher than expected revenue growth during 1Q19. In addition, Leidos' adjusted EBITDA margin rose to over 10% for the quarter, which partially reflects the company's successful execution of integrating Lockheed's Information Systems & Global Solutions business. Furthermore, favorable budgetary conditions and elevated stock prices have enabled industry median EV / NTM EBITDA valuations to remain at recent highs of more than 12.0x. Thus, the expectation of continued strong federal funding and continued strong company performance across government services businesses is driving above average market performance.



M&A Trends & Activity

A total of 70 aerospace, defense, and government services M&A transactions were announced in 2Q19, which remains in line with quarterly transaction levels throughout the same periods from 2014 – 2018. Aerospace and defense deal flow remains strong, collectively boasting 54 transactions in 2Q19, which is in line with the 51 deals announced in 1Q19. 2Q19 has seen a notable 16% increase in defense deals as a total of the combined aerospace and defense M&A market relative to the previous year. The 28 defense deals represent the highest total number of defense transactions since 1Q18 and mark the first time since 2Q11 that total defense deals have outnumbered total aerospace deals within a single quarter. Though down from the 19 announced transactions in 2Q18, government services deal volume remains strong with 16 announced transactions in 2Q19, totaling 40 YTD.

Although the 26 announced aerospace deals in the quarter are lower than recent quarters' activity, 2Q19 witnessed several high-profile transactions as strategic buyers sought scale to strengthen respective supply chains and expand offerings. This phenomenon is most apparent in the anticipated merger between United Technologies, Inc. and Raytheon Co. This deal will create the second largest U.S. aerospace and defense company by revenue, while potentially saving more than \$1 billion in costs and substantially expanding the combined entity's product line. The new company will have a wide variety of offerings including: Patriot missile launchers, space suits, navigation systems, and flight controls. Another high-profile transaction was Parker Hannifin Corporation's agreement to acquire LORD Corporation for approximately \$3.7 billion. Through implementation of initiatives in the supply chain and lean productivity, the transaction is expected to create substantial cost synergies. LORD's brand name and distributor channels will also expand the addressable market for Parker's products.



The defense electronics sector continues to be a key focus area within the defense industry. In April, Elbit Systems, Ltd. agreed to acquire the night vision business of Harris Corp. for an estimated \$350 million. The sale of the business unit was a condition to receive regulatory approval for the Harris Corp. merger with L3 Technologies, Inc., which also produces night vision equipment. This provided Elbit Systems with an opportunity to expand into a new market and continue to widen its product base. Additionally, BAE Systems, Inc. acquired Riptide Autonomous Solutions, LLC, a provider of unmanned underwater vehicle technology ("UUV"). This acquisition allows BAE to combine its expertise in communications with Riptide's UUV platform, which will position BAE to offer solutions in a growing market segment.

In 2Q19, there were 16 government services transactions announced. Driven by continued desires for increased scale and access to vehicles, customers, and in-demand capabilities, sector participants remain heavily focused on M&A as part of their growth strategies. In particular, financial sponsors remain extremely active given the attractive lending environment and the availability of well positioned assets. Sponsors represented 40% of quarterly deal activity. Of private equity transactions, four were new platform investments, including CM Equity's acquisition of JANUS Research Group, Enlightenment Capital's acquisition of Trowbridge & Trowbridge, and Arlington Capital Partners' acquisition of Octo Consulting. In each instance, the operational expertise and financial resources provided by the buyer are expected to accelerate inorganic growth strategies. Sponsors' desires to invest in the sector continue to be driven by predictable cash flows from long-term contracts, strong management teams, and attractive debt financing. Additionally, private equity-backed portfolio companies have also been active acquirers and represented four of the transactions in 2Q19. Representative transactions include Veritas-backed Peraton's acquisition of Solers and Sagewind-backed ByLight Professional Services' acquisition of Metova Federal. Strategic firms also made some meaningful acquisitions. These include DLH's acquisition of Social & Scientific Systems and Jacobs' \$815 million acquisition of KeyW.



Aerospace Update

Select Aerospace Transactions LTM with EV over \$1 Billion



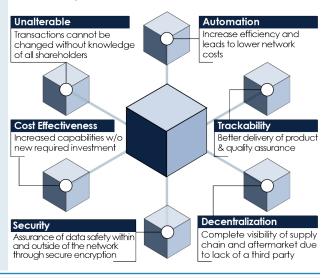
INDUSTRY CONSOLIDATION HITS PEAK WITH UTC-RAYTHEON MERGER

Iln June, United Technologies Corp. and Raytheon Co. announced an all-stock transaction to be structured as a merger of equals between the two companies. With this merger, the combined company, Raytheon Technologies Corp., is expected to create the 2nd largest aerospace and defense company. This deal emphasizes an industry-wide trend of companies seeking to achieve scale and streamline supply chains through large scale consolidation, allowing for substantial cost synergies and consumer base expansion. UTC and Raytheon's announced merger marks the fourth aerospace transaction over the last twelve months ("LTM") with an EV of more than \$1 billion, highlighting major industry players' propensity to leverage M&A as a tool for growth.

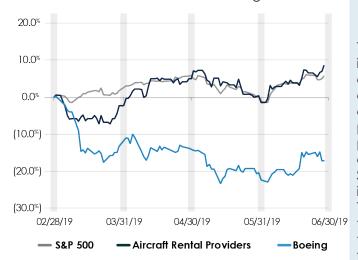
HONEYWELL BLOCKCHAIN MARKET SEEKS TO REVOLUTIONIZE AFTERMARKET AIRCRAFT PARTS

Honeywell is using blockchain technology to expedite transactions for aftermarket aircraft component sales. Blockchain technology is a decentralized system that creates and shares a digital ledger of transactions, allowing for more efficient and secure transactions. This technology facilitates a buyer's ability to verify the certification and origin of a given part and has to date been used for automation to increase efficiency and reduce costs. Earlier this year, Honeywell's Aerospace unit introduced an online marketplace based on blockchain that lets more than 800 global vendors trade aerospace parts in real-time. The marketplace, called GoDirect Trade, has accumulated more than ~\$2 million in sales to date, and Honeywell Aerospace projects sales of approximately \$10 million by year-end. Current participants include Dassault Falcon Jet Corporation and StandardAero Aviation. Honeywell intends for blockchain to eventually facilitate the sale of whole used aircraft.

Advantages of Blockchain for A&D Companies(1)



Aircraft Rental Provider Index vs Boeing & S&P 500(2)



RENTAL AIRCRAFT BUSINESS BENEFITS AS 737 MAX 8 GROUNDINGS FORCE AIRLINES TO ADJUST SCHEDULES

The grounding of Boeing's 737 MAX 8 aircraft has significantly increased demand for aircraft rental services. Full-service aircraft rental providers have experienced increased activity as airlines attempt to patch their disrupted flight schedules caused by the 737 MAX 8's suspension. These rental providers, which provide all essential components of flying a plane, generally charge by the hour, with the cost of a single-aisle plane ranging up to several thousand dollars per hour. Since the 737 MAX 8's grounding, monthly lease rates have increased more than 30% for narrow-body aircraft rentals. The recent discovery of additional software problems relating to the 737 MAX 8 has amplified the uncertainty around the timeline for the aircraft's return, fueling continued demand for rental aircraft in the foreseeable future.

⁽¹⁾ Accenture Blockchain In Aerospace And Defense

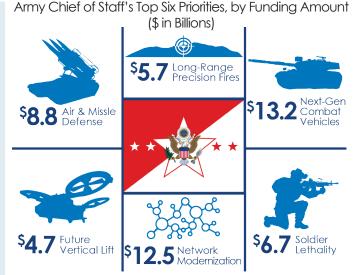
⁽²⁾ Index Consists Of AerCap Holdings, Fly Leasing Limited, BOC Aviation, and Air Lease Corp.



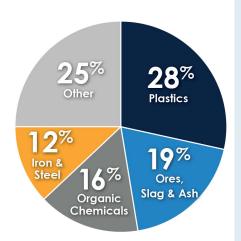
Defense Update

PENTAGON REQUESTS \$12.5B IN EFFORT TO MODERNIZE ARMY

According to the Pentagon's latest budget request, the Army has outlined its top six modernization funding priorities over the next five years. These priorities will better help the Army to engage with adversaries, while readying the service to be "multidomain" capable. Network modernization is the second-largest funding priority outlined by the Army's chief of staff, representing ~24% of the overall modernization effort. A significant portion of this money will support purchasing and developing handheld manpacks and small form fit radios. The need for resilient communications as a response to sophisticated jamming techniques is becoming more apparent, as the Army has asked for more than \$500 million for radios in GFY2020 and approximately \$3 billion over the next five years.



Iran's Top Five Non-Oil Exports(1)



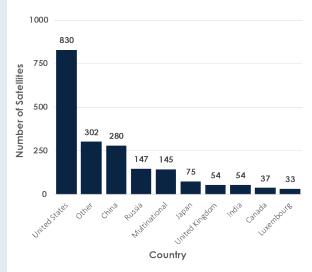
U.S. IMPOSES SANCTIONS IN RESPONSE TO POTENTIAL IRANIAN NUCLEAR ESCALATION

Following Iran's announcement that it would restart parts of its nuclear program, the U.S. imposed significant sanctions against Iran's industrial-metals sector. The sanctions target the country's iron, steel, aluminum, and copper industries, which directly affect more than \$5 billion of Iran's non-oil exports or about 10% of its yearly non-oil exports. Iran recently stated it would relinquish limits on stockpiling nuclear materials if European countries supported its struggling economy as tensions with the U.S. continue to rise. Nevertheless, if key European countries such as France, the United Kingdom, and Germany refuse to help Iran circumvent U.S. sanctions, Iran has threatened to escalate its nuclear program, which would involve re-opening its plutonium reactor complex and increasing production of enriched uranium. These European countries have yet to signal their respective decisions, as they have thus far sought to defuse the tension between the two countries and move forward with continued negotiations, as of the end of 2Q19.

POTENTIAL SPACE FORCE SET TO COST TWICE AS MUCH AS INITIALLY ESTIMATED

An independent report released from the Congressional Budget Office ("CBO") estimated President Trump's proposed Space Force could cost as much as \$4.7 billion to launch. This estimate is more than double the Trump Administration's previous estimate of \$2 billion to establish the Space Force over a five year period. The primary assumption driving this disparity is the Administration's optimism around the Space Force's ability to leverage existing Air Force infrastructure to remain efficient and suppress costs, especially given the U.S.' strong satellite foundation. Furthermore, uncertainty surrounding who will fill the position of Secretary of Defense, after President Trump's initial nominee - Patrick Shanahan - withdrew his name, has created additional cost and implementation concerns. The Administration's GFY2020 budget request included \$72 million to begin the launch of the Space Force, which is expected to require 600+ personnel for operations in the coming year, most of whom would transfer from other military space organizations such as the National Space Defense Center.

Number of Active Government Satellites by Country⁽²⁾





Government Services Update

Jacobs' Acquisition Expands Capabilities in Key Growth Areas



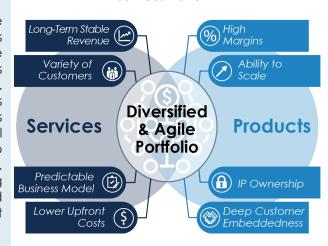
JACOBS' ACQUISITION OF KEYW

The acquisition of KeyW in June of 2019 further positions Jacobs in the government services space and bolsters its presence in high-demand areas, including intelligence, cyber, and counterterrorism. KeyW CEO Bill Weber said, "[t] his transaction will propel KeyW's capabilities further and create new opportunities for research and development our customers need to enhance their national security and intelligence capabilities." KeyW will significantly add to Jacobs' expertise in command, control, communications, and computers ISR, as well as advanced technology and analytics capabilities, giving it a larger footprint in highgrowth sectors. The Dallas-based Jacobs' \$815 million deal is in line with the efforts seen from other engineering firms, like Parsons, Huntington Ingalls, and KBR, to augment their position in the government services sector via M&A.

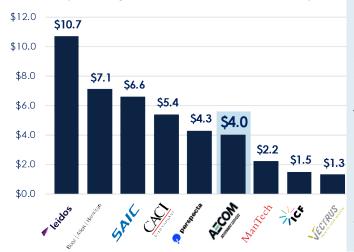
COMBINING PRODUCT AND SERVICES OFFERINGS VIA M&A

Recently, certain government services companies have looked at augmenting services offerings with products and intellectual property ("IP"). Products can provide additional customer "stickiness" and barriers to entry, and as a result drive long-term and high-margin revenue streams. Examples of companies looking to increase product offerings include CACI, which recently acquired LGS Innovations and Mastodon, providers of well established cyber, signal intelligence ("SIGINT"), and electronic warfare products to the DoD and Intelligence Community ("IC"). Additionally, Leidos' CEO Jim Reagan recently stated that "the thing we're looking for to build the company inorganically would be the kind of company with both the services and a product differentiator."

Attractive Option to Create Combined Product / Services Platform



Government Services Companies by Revenue in Billions, 2019 (Including AECOM Government Services)⁽¹⁾



AECOM TO SPIN-OFF GOVERNMENT SERVICES UNIT

In a divergence from the current market-wide consolidation of government services companies, AECOM announced a plan to spin-off its management services segment into a standalone government services company, which will allow AECOM to focus on its infrastructure professional services business. Upon release of this news, AECOM's share price jumped ~5%. This new company will provide intelligence, cyber, and IT services to the DoD, Department of Energy ("DoE"), and the IC. The new company will have ~\$4 billion of revenue and \$20 billion of backlog, affording it significant revenue visibility. The existing management team is expected to continue to lead the new company once the transaction is completed. Once fully separated, the company will be the sixth largest government services contractor by revenue. The transaction is currently expected to be completed in the second half of AECOM's fiscal 2020.



Public Company Trading Analysis⁽¹⁾ (\$ in millions, except per share amounts)

Comparable Company Analysis

AAR Corp.

Aircraft and Engine OEMs	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	CY2019E EBITDA	EV / C	CY2020P EBITDA
Boeing	\$365.33	81.9%	\$205,546	\$213,732	\$98,138	\$13,158	13.4%	\$120,671	\$19,237	15.9%	2.18x	16.2x	1.77x	11.1x
Airbus SE	143.74	99.7%	111,768	113,579	79,257	10,542	13.3%	83,880	12,203	14.5%	1.43x	10.8x	1.35x	9.3x
General Electric Co	10.37	73.7%	90,435	206,523	115,962	11,704	10.1%	115,024	14,640	12.7%	1.78x	17.6x	1.80x	14.1x
Safran SA	145.56	96.5%	62,942	67,546	26,156	4,870	18.6%	27,745	5,496	19.8%	2.58x	13.9x	2.43x	12.3x
MTU Aero Engines AG	242.15	99.5%	12,503	12,270	5,419	1,018	18.8%	5,830	1,116	19.1%	2.26x	12.1x	2.10x	11.0x
Median		96.5%	\$90,435	\$113,579	\$79,257	\$10,542	13.4%	\$83,880	\$12,203	15.9%	2.18x	13.9x	1.80x	11.1x
<u>Aerostructures</u>	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / 0	CY2019E EBITDA	EV / C	CY2020P EBITDA
Spirit AeroSystems	75.66	75.4%	7,827	8,898	7,925	1,240	15.6%	8,268	1,335	16.1%	1.12x	7.2x	1.08x	6.7x
Hexcel	81.36	99.2%	6,906	8,094	2,428	581	23.9%	2,564	624	24.3%	3.33x	13.9x	3.16x	13.0x
Triumph Group	23.28	89.5%	1,162	2,558	2,979	270	9.1%	2,851	339	11.9%	0.86x	9.5x	0.90x	7.5×
Senior plc	2.71	64.0%	1,125	1,320	1,391	189	13.6%	1,442	207	14.4%	0.95x	7.0x	0.92x	6.4x
Median		89.5%	\$1,162	\$2,558	\$2,428	\$270	13.6%	\$2,564	\$339	14.4%	0.95x	9.5x	0.92x	7.5x
Aerospace Suppliers	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / 0 Rev.	CY2019E EBITDA	EV / C	CY2020P EBITDA
Arconic	26.00	98.5%	11,664	17,055	14,364	2,199	15.3%	14,902	2,340	15.7%	1.19x	7.8x	1.14x	7.3x
Curtiss-Wright	127.12	90.0%	5,437	6,203	2,534	519	20.5%	2,631	542	20.6%	2.45x	12.0x	2.36x	11.4x
Meggitt PLC	6.82	93.0%	5,261	6,630	2,756	628	22.8%	2,885	674	23.4%	2.41x	10.6x	2.30x	9.8x
RBC Bearings	164.16	95.7%	4,020	4,034	741	192	25.9%	789	206	26.1%	5.44x	21.0x	5.11x	19.6x
Moog Inc.	94.06	95.5%	3,271	3,984	2,891	377	13.0%	3,029	411	13.6%	1.38x	10.6x	1.32x	9.7x
Astronics	38.99	87.9%	1,273	1,373	784	113	14.4%	823	132	16.1%	1.75x	12.1x	1.67x	10.4x
Héroux-Devtek	15.34	99.5%	558	727	436	68	15.5%	466	73	15.7%	1.67x	10.7x	1.56x	9.9x
Ducommun	44.99	86.5%	517	765	686	83	12.1%	715	87	12.2%	1.12x	9.2x	1.07x	8.7x
Median		94.2%	\$3,645	\$4,009	\$1,659	\$284	15.4%	\$1,727	\$309	15.9%	1.71x	10.7x	1.61x	9.9x
Aftermarket / MRO	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	CY2019E EBITDA	EV / C	CY2020P EBITDA
TransDigm Group	498.06	99.4%	26,487	41,393	5,988	2,473	41.3%	6,779	2,729	40.3%	6.91x	16.7x	6.11x	15.2x
HEICO	136.01	98.0%	15,849	16,608	2,052	546	26.6%	2,214	584	26.4%	8.09x	30.4x	7.50x	28.4x
Singapore Technologies Engineerinç	3.16	99.8%	9,850	10,206	5,650	692	12.2%	6,241	791	12.7%	1.81x	14.8x	1.64x	12.9x
BBA Aviation	3.54	79.6%	3,646	4,982	2,736	651	23.8%	2,816	606	21.5%	1.82x	7.7x	1.77x	8.2x
SIA Engineering	2.05	86.3%	2,291	1,946	755	81	10.7%	764	82	10.7%	2.58x	24.0x	2.55x	23.8x

41.31

80.2%

92.2%

1,420

1,541

\$7,594

2,107

\$2,421

172

\$598

8.1%

2,202

\$2,515

192

\$595

8.7% 0.73x

17.1% 2.20x

9.0x 0.70x

15.7x 2.16x

8.0x

14.0x



Public Company Trading Analysis, cont.(1) (\$ in millions, except per share amounts)

Comparable Company Analysis

Defense Primes	Stock Price	% of 52	Market	Enterprise Value	Day	CY2019E EBITDA	A4 mumim	Boy	CY2020P EBITDA	AA aurain		Y2019E		CY2020P
	07/12/19	Week High			Rev.		Margin	Rev.	-	Margin	Rev.	EBITDA	Rev.	EBITDA
Boeing	\$365.33		\$205,546	\$213,732	\$98,138	\$13,158		\$120,671	\$19,237		2.18x		1.77x	11.1x
Lockheed Martin	369.45	99.0%	104,384	117,371	58,053	9,468	16.3%	61,127	11,365	18.6%	2.02x	12.4x	1.92x	10.3x
Northrop Grumman	329.53	100.0%	55,954	71,683	33,969	4,717	13.9%	36,132	5,187	14.4%	2.11x	15.2x	1.98x	13.8x
General Dynamics	185.84	89.5%	53,556	67,815	38,889	5,393	13.9%	40,890	5,778	14.1%	1.74x	12.6x	1.66x	11.7x
Raytheon	179.14	84.9%	49,898	53,945	28,886	5,362	18.6%	30,730	5,761	18.7%	1.87x	10.1x	1.76x	9.4x
BAE Systems	6.34	74.1%	20,288	21,654	24,786	2,916	11.8%	25,986	3,100	11.9%	0.87x	7.4x	0.83x	7.0x
Median		87.2%	\$54,755	\$69,749	\$36,429	\$5,378	13. 9 %	\$38,511	\$5,769	15.1%	1. 94 x	12.5x	1.76x	10.7x
Defense Systems	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	CY2019E EBITDA	EV / C	CY2020P EBITDA
									-					
Safran	145.56	96.5%	62,942	67,546	26,156	4,870	18.6%	27,745	5,496	19.8%	2.58x	13.9x		12.3x
L3Harris Technologies	195.72	97.5%	43,335	46,533	16,562	3,000	18.1%	19,010	3,513	18.5%	2.81x	15.5x	2.45x	13.2x
Huntington Ingalls Industries	234.67	89.5%	9,751	11,380	8,617	1,021	11.8%	8,800	1,121	12.7%	1.32x	11.1x	1.29x	10.1x
FLIR	54.91	86.0%	7,436	7,955	1,930	473	24.5%	2,039	535	26.2%	4.12x	16.8x	3.90x	14.9x
Cobham	1.48	88.9%	3,523	3,511	2,439	383	15.7%	2,512	419	16.7%	1.44x	9.2x	1.40x	8.4x
Kongsberg Gruppen	13.60	63.8%	2,447	1,929	2,539	182	7.2%	3,129	272	8.7%	0.76x	10.6x	0.62x	7.1x
Cubic	67.44	87.2%	2,101	2,526	1,468	158	10.7%	1,627	198	12.2%	1.72x	16.0x	1.55x	12.8x
AeroVironment	55.85	46.0%	1,325	1,001	348	50	14.3%	373	63	16.9%	2.88x	NM	2.69x	15.9x
Median		88.0%	\$5,479	\$5,733	\$2,489	\$428	15.0%	\$2,821	\$477	16.8%	2.15x	13.9x	1.99x	12.5x
Median		88.0%	\$5,479	\$5,733	\$2,489	\$428	15.0%	\$2,821	\$477	16.8%	2.15x	13.9x	1.99x	12.5x
	Stock Price	% of 52	Market	Enterprise		CY2019E			CY2020P		EV / C	CY2019E	EV / C	CY2020P
Defense Electronics / Comm.	07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	CY2019E EBITDA	EV / C	CY2020P EBITDA
Defense Electronics / Comm. Teledyne	07/12/19 278.05	% of 52 Week High 99.6%	Market Cap	Enterprise Value	Rev. 3,105	CY2019E EBITDA 576	Margin 18.6%	Rev. 3,239	CY2020P EBITDA 623	<u>Margin</u> 19.2%	EV / C Rev.	CY2019E EBITDA 19.0x	EV / C Rev. 3.39x	CY2020P EBITDA 17.6x
<u>Defense Electronics / Comm.</u> Teledyne Viasat	07/12/19 278.05 84.21	% of 52 <u>Week High</u> 99.6% 86.5%	Market Cap 10,076 5,103	Enterprise Value 10,970 6,262	Rev. 3,105 2,213	CY2019E EBITDA 576 429	Margin 18.6% 19.4%	Rev. 3,239 2,417	CY2020P EBITDA 623 553	Margin 19.2% 22.9%	EV / C Rev. 3.53x 2.83x	2Y2019E EBITDA 19.0x 14.6x	EV / C Rev. 3.39x 2.59x	EY2020P EBITDA 17.6x 11.3x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems	07/12/19 278.05 84.21 72.22	% of 52 Week High 99.6% 86.5% 90.5%	Market Cap 10,076 5,103 3,997	Enterprise Value 10,970 6,262 4,164	Rev. 3,105 2,213 685	CY2019E EBITDA 576 429	Margin 18.6% 19.4% 22.1%	Rev. 3,239 2,417 761	CY2020P EBITDA 623 553 177	Margin 19.2% 22.9% 23.3%	EV / C Rev. 3.53x 2.83x 6.08x	272019E EBITDA 19.0x 14.6x 27.6x	EV / C Rev. 3.39x 2.59x 5.47x	17.6x 11.3x 23.5x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions	07/12/19 278.05 84.21 72.22 24.06	% of 52 Week High 99.6% 86.5% 90.5% 99.1%	Market Cap 10,076 5,103 3,997 2,548	Enterprise Value 10,970 6,262 4,164 2,724	Rev. 3,105 2,213 685 740	CY2019E EBITDA 576 429 151 76	Margin 18.6% 19.4% 22.1% 10.3%	Rev. 3,239 2,417 761 857	CY2020P EBITDA 623 553 177 96	Margin 19.2% 22.9% 23.3% 11.3%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x	19.0x 14.6x 27.6x 35.8x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x	17.6x 11.3x 23.5x 28.2x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics	07/12/19 278.05 84.21 72.22 24.06 21.83	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6%	Market Cap 10,076 5,103 3,997 2,548 1,541	Enterprise Value 10,970 6,262 4,164 2,724 1,742	Rev. 3,105 2,213 685 740 984	CY2019E EBITDA 576 429 151 76 162	Margin 18.6% 19.4% 22.1% 10.3% 16.5%	Rev. 3,239 2,417 761 857 1,021	CY2020P EBITDA 623 553 177 96 168	Margin 19.2% 22.9% 23.3% 11.3% 16.5%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x	19.0x 14.6x 27.6x 35.8x 10.7x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x	17.6x 11.3x 23.5x 28.2x 10.4x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions	07/12/19 278.05 84.21 72.22 24.06	% of 52 Week High 99.6% 86.5% 90.5% 99.1%	Market Cap 10,076 5,103 3,997 2,548	Enterprise Value 10,970 6,262 4,164 2,724	Rev. 3,105 2,213 685 740	CY2019E EBITDA 576 429 151 76	Margin 18.6% 19.4% 22.1% 10.3%	Rev. 3,239 2,417 761 857	CY2020P EBITDA 623 553 177 96	Margin 19.2% 22.9% 23.3% 11.3%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x	19.0x 14.6x 27.6x 35.8x 10.7x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x	17.6x 11.3x 23.5x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics	07/12/19 278.05 84.21 72.22 24.06 21.83	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6%	Market Cap 10,076 5,103 3,997 2,548 1,541	Enterprise Value 10,970 6,262 4,164 2,724 1,742	Rev. 3,105 2,213 685 740 984	CY2019E EBITDA 576 429 151 76 162	Margin 18.6% 19.4% 22.1% 10.3% 16.5%	Rev. 3,239 2,417 761 857 1,021	CY2020P EBITDA 623 553 177 96 168	Margin 19.2% 22.9% 23.3% 11.3% 16.5%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x	19.0x 14.6x 27.6x 35.8x 10.7x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x	17.6x 11.3x 23.5x 28.2x 10.4x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications	07/12/19 278.05 84.21 72.22 24.06 21.83	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1%	Market Cap 10,076 5,103 3,997 2,548 1,541 678	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808	Rev. 3,105 2,213 685 740 984 660	CY2019E EBITDA 576 429 151 76 162 88	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3%	Rev. 3,239 2,417 761 857 1,021 716	CY2020P EBITDA 623 553 177 96 168 101	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x	2Y2020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications	07/12/19 278.05 84.21 72.22 24.06 21.83	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1%	Market Cap 10,076 5,103 3,997 2,548 1,541 678	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808	Rev. 3,105 2,213 685 740 984 660	CY2019E EBITDA 576 429 151 76 162 88	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3%	Rev. 3,239 2,417 761 857 1,021 716	CY2020P EBITDA 623 553 177 96 168 101	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x	2Y2020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444	Rev. 3,105 2,213 685 740 984 660	CY2019E EBITDA 576 429 151 76 162 88	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3%	Rev. 3,239 2,417 761 857 1,021 716	CY2020P EBITDA 623 553 177 96 168 101 \$173	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x	17.6x 11.3x 23.5x 28.2x 10.4x 8.0x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise	Rev. 3,105 2,213 685 740 984 660 \$862	CY2019E EBITDA 576 429 151 76 162 88 \$157	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3%	Rev. 3,239 2,417 761 857 1,021 716 \$939	CY2020P EBITDA 623 553 177 96 168 101 \$173	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median Homeland Security	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10 Stock Price 07/12/19	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5% % of 52 Week High	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise Value	Rev. 3,105 2,213 685 740 984 660 \$862	CY2019E EBITDA 576 429 151 76 162 88 \$157 CY2019E EBITDA	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3% 17.5%	Rev. 3,239 2,417 761 857 1,021 716 \$939	CY2020P EBITDA 623 553 177 96 168 101 \$173 CY2020P EBITDA	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x EV / C Rev.	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x EV / C Rev.	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x 272020P EBITDA
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median Homeland Security Smiths Group	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10 Stock Price 07/12/19 20.00	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5% % of 52 Week High 90.8%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273 Market Cap 7,920	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise Value 9,175	Rev. 3,105 2,213 685 740 984 660 \$862	CY2019E EBITDA 576 429 151 76 162 88 \$157 CY2019E EBITDA	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3% 17.5% Margin 19.6%	Rev. 3,239 2,417 761 857 1,021 716 \$939 Rev. 4,493	CY2020P EBITDA 623 553 177 96 168 101 \$173 CY2020P EBITDA	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9% Margin 19.8% 21.1%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x EV / C Rev. 2.11x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x 272019E EBITDA	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x EV / C Rev.	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x 272020P EBITDA
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median Homeland Security Smiths Group MSA Safety Incorporated	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10 Stock Price 07/12/19 20.00 106.67	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5% % of 52 Week High 90.8% 94.3%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273 Market Cap 7,920 4,127	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise Value 9,175 4,384	Rev. 3,105 2,213 685 740 984 660 \$862 Rev. 4,347	CY2019E EBITDA 576 429 151 76 162 88 \$157 CY2019E EBITDA 854 291	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3% 17.5% Margin 19.6% 20.6%	Rev. 3,239 2,417 761 857 1,021 716 \$939 Rev. 4,493 1,480	CY2020P EBITDA 623 553 177 96 168 101 \$173 CY2020P EBITDA 889 312	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9% Margin 19.8% 21.1%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x EV / C Rev. 2.11x 3.10x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x CY2019E EBITDA 10.7x 15.0x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x EV / C Rev.	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x 272020P EBITDA 10.3x 14.0x
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median Homeland Security Smiths Group MSA Safety Incorporated Axon	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10 Stock Price 07/12/19 20.00 106.67 64.50	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5% % of 52 Week High 90.8% 94.3% 84.4%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273 Market Cap 7,920 4,127 3,814	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise Value 9,175 4,384 3,498	Rev. 3,105 2,213 685 740 984 660 \$862 Rev. 4,347 1,415 492	CY2019E EBITDA 576 429 151 76 162 88 \$157 CY2019E EBITDA 854 291 82	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3% 17.5% Margin 19.6% 20.6% 16.6%	Rev. 3,239 2,417 761 857 1,021 716 \$939 Rev. 4,493 1,480 577	CY2020P EBITDA 623 553 177 96 168 101 \$173 CY2020P EBITDA 889 312 111	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9% Margin 19.8% 21.1% 19.3%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x EV / C Rev. 2.11x 3.10x 7.11x	272019E EBITDA 19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x 272019E EBITDA 10.7x 15.0x NM	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x EV / C Rev. 2.04x 2.96x 6.06x	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x 272020P EBITDA 10.3x 14.0x NM
Defense Electronics / Comm. Teledyne Viasat Mercury Systems Kratos Defense & Security Solutions Ultra Electronics Comtech Telecommunications Median Homeland Security Smiths Group MSA Safety Incorporated Axon OSI Systems, Inc.	07/12/19 278.05 84.21 72.22 24.06 21.83 28.10 Stock Price 07/12/19 20.00 106.67 64.50 115.04	% of 52 Week High 99.6% 86.5% 90.5% 99.1% 98.6% 76.1% 94.5% % of 52 Week High 90.8% 94.3% 84.4% 98.1%	Market Cap 10,076 5,103 3,997 2,548 1,541 678 \$3,273 Market Cap 7,920 4,127 3,814 2,083	Enterprise Value 10,970 6,262 4,164 2,724 1,742 808 \$3,444 Enterprise Value 9,175 4,384 3,498 2,356	Rev. 3,105 2,213 685 740 984 660 \$862 Rev. 4,347 1,415 492 1,190	CY2019E EBITDA 576 429 151 76 162 88 \$157 CY2019E EBITDA 854 291 82 193	Margin 18.6% 19.4% 22.1% 10.3% 16.5% 13.3% 17.5% Margin 19.6% 20.6% 16.6% 16.2%	Rev. 3,239 2,417 761 857 1,021 716 \$939 Rev. 4,493 1,480 577 1,267	CY2020P EBITDA 623 553 177 96 168 101 \$173 CY2020P EBITDA 889 312 111 213	Margin 19.2% 22.9% 23.3% 11.3% 16.5% 14.1% 17.9% Margin 19.8% 21.1% 19.3% 16.8%	EV / C Rev. 3.53x 2.83x 6.08x 3.68x 1.77x 1.22x 3.18x EV / C Rev. 2.11x 3.10x 7.11x 1.98x	19.0x 14.6x 27.6x 35.8x 10.7x 9.2x 16.8x 10.7x 15.0x NM 12.2x	EV / C Rev. 3.39x 2.59x 5.47x 3.18x 1.71x 1.13x 2.88x EV / C Rev. 2.04x 2.96x 6.06x 1.86x	272020P EBITDA 17.6x 11.3x 23.5x 28.2x 10.4x 8.0x 14.5x 272020P EBITDA 10.3x 14.0x NM 11.0x



Public Company Trading Analysis, cont.(1) (\$ in millions, except per share amounts)

Comparable Company Analysis

Government Services	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	CY2019E EBITDA	EV / C	CY2020P EBITDA
Leidos Holdings	\$82.43	99.9%	\$11,838	\$14,841	\$10,725	\$1,076	10.0%	\$11,244	\$1,145	10.2%	1.38x	13.8x	1.32x	13.0x
Booz Allen Hamilton	68.82	99.9%	9,638	11,198	7,090	690	9.7%	7,588	770	10.1%	1.58x	16.2x	1.48x	14.5x
CACI International	213.43	99.1%	5,308	6,972	5,393	512	9.5%	5,739	601	10.5%	1.29x	13.6x	1.21x	11.6x
SAIC	87.31	93.6%	5,051	7,070	6,572	544	8.3%	6,797	587	8.6%	1.08x	13.0x	1.04x	12.0x
Perspecta Inc.	23.97	90.0%	3,898	6,518	4,367	771	17.6%	4,528	790	17.4%	1.49x	8.5x	1.44x	8.3x
ManTech International	66.70	97.9%	2,660	2,767	2,175	180	8.3%	2,352	199	8.5%	1.27x	15.4x	1.18x	13.9x
ICF International	81.14	98.7%	1,528	1,897	1,475	141	9.6%	1,567	153	9.8%	1.29x	13.4x	1.21x	12.4x
Vectrus, Inc.	41.96	90.2%	479	524	1,322	58	4.4%	1,503	67	4.5%	0.40x	9.1x	0.35x	7.8x
VSE Corporation	26.02	51.4%	284	589	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Median		97.9%	\$3,898	\$6,518	\$4,880	\$528	9.5%	\$5,133	\$594	10.0%	1.29x	13.5x	1.21x	12.2x

Engineering & Construction	Stock Price 07/12/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / C	EBITDA	EV / C	CY2020P EBITDA
Jacobs Engineering	85.21	99.7%	11,640	13,897	12,608	1,045	8.3%	13,386	1,137	8.5%	1.10x	13.3x	1.04x	12.2x
AECOM	37.37	97.8%	5,880	9,140	20,636	988	4.8%	20,928	1,183	5.7%	0.44x	9.3x	0.44x	7.7x
Tetra Tech	83.87	99.2%	4,602	4,745	2,462	273	11.1%	2,570	287	11.2%	1.93x	17.4x	1.85x	16.5x
KBR	25.32	99.6%	3,582	4,420	5,560	428	7.7%	6,035	479	7.9%	0.79x	10.3x	0.73x	9.2x
Babcock International	5.49	53.7%	2,775	4,280	6,167	801	13.0%	6,050	808	13.4%	0.69x	5.3x	0.71x	5.3x
Median		99.2%	\$4,602	\$4,745	\$6,167	\$801	8.3%	\$6,050	\$808	8.5%	0.79x	10.3x	0.73x	9.2x



Select Recent Aerospace / Defense M&A, cont.(1) (\$ in millions)

Announce	•						EBITDA -	EV / L	.TM
Date	Buyer / Investor	Target	Target Description	EV	Revenue	EBITDA	Margin	Rev.	EBITDA
06/26/19	Mitsubishi Heavy Industries Ltd.	CRJ regional jetliner program of Bombardier, Inc.	Provides maintenance, support, refurbishment, marketing, and sales activities for the Bombardier CRJ Series aircraft	\$570.0	ND	ND	ND	ND	ND
06/25/19	Novaria Group	Acra Aerospace, LLC	Provides design, development, and manufacture of complex engine components	ND	ND	ND	ND	ND	ND
06/25/19	A erSale, Inc.	Qwest Air Parts, Inc.	Provides aircraft dismantlement and the refurbishment and resale of used serviceable material	ND	ND	ND	ND	ND	ND
06/25/19	Bromford Industries Limited	Accrofab Limited	Provides complex fabricated and machined engine bracketry for the global aerospace industry	ND	ND	ND	ND	ND	ND
	Saudi Arabian Military Industries	Advanced Electronic Company	Provides design, development, manufacture, maintenance, and repair of advanced commercial and military electronic systems, devices, and equipment	ND	ND	ND	ND	ND	ND
06/17/19	Sekisui Chemical Co. Ltd.	AIM Aerospace, Inc.	Provides thermoplastic technology and advanced composite structures, systems, and components for the global aerospace industry	510.0	178.5	ND	ND	2.86×	ND
06/14/19	Boeing Co.	EnCore Group	Provides the design, certification, and production of airplane galleys and seats while also supplying products and components to Boeing	ND	ND	ND	ND	ND	ND
06/11/19	AeroVironment, Inc.	Pulse A erospace, LLC	Provides small vertical take-off and landing ("VTOL") unmanned aircraft system ("UAS") technology	25.7	ND	ND	ND	ND	ND
06/10/19	EMCORE Corp.	Systron Donner Inertial Systems, Inc.	Provides quartz microelectromechanical systems ("QMEMS") used in inertial sensing products that provide precision guidance, navigation and locational systems	25.8	\$28.0	ND	ND	0.92×	ND
06/10/19	United Technologies Corp	Raytheon Co.	Provides premier systems with advanced technologies to address rapidly growing segments within aerospace and defense	ND	ND	ND	ND	ND	ND
06/10/19	Hanwha Aerospace	EDAC Technologies Corp	Provides precision components for aircraft engines and airframes	297.2	150.0	ND	ND	1.98×	ND
06/10/19	Héroux-Devtek, Inc.	Alta Precision	Provides high-precision landing gear components	17.3	13.6	ND	ND	1.27×	ND
Pending	Gaurdian Capital Partners	TraumaFX Solutions, Inc.	Provides proprietary medical training simulators that improve human and K9 survivability following trauma related incidents to the U.S. military, clinical, and international markets	ND	ND	ND	ND	ND	ND
06/06/19	Patria Oyj	Belgium Engine Center SPRL	Provides military jet engine maintenance, repair, and overhaul, mainly servicing the Pratt & Whitney F100 engine which powers F- 15 and F-16 aircraft	ND	ND	ND	ND	ND	ND
06/04/19	Angeles Equity Partners, LLC	APCT, Inc.	Provides reliable, quick-tum printed circuit board ("PCB") prototypes with global production management capabilities	ND	ND	ND	ND	ND	ND
06/04/19	Consolidated Precision Products Corp.	Cast Products business of Allegheny Technologies, Inc.	Provides tilanium investment castings that are primarily used by aerospace & defense OEMs in the production of commercial jet airframes and engines	ND	ND	ND	ND	ND	ND
06/04/19	BAE Systems, Inc.	Riptide Autonomous Solutions, LLC	Provides innovative, affordable UUV technology and solutions	ND	ND	ND	ND	ND	ND
06/03/19	Wynnchurch Capital, Ltd	Two Industrial Forging Operations From Allegheny Technologies, Inc.	Provides carbons teel forged products for use in the aerospace and industrial end-markets	37.0	ND	ND	ND	0.43×	ND
06/03/19	Daher Group	KVE Composites Repair B.V.	Provides the design, manufacture, and assembly of high- performance thermoplastic composite components	ND	ND	ND	ND	ND	ND
05/29/19	Applied Energetics, Inc.	Applied Optical Sciences, Inc.	Provides technologies related to the application of optical physics in a broad range of areas, including photonics and advanced ultrashort pulse ("USP") laser development	ND	ND	ND	ND	ND	ND
05/23/19	Serco, Inc.	Alion Science & Technology Corp's Naval Systems Business Unit	Provides ship and systems design, including naval architecture, marine structural / systems engineering, and naval fleet support / weapon platform services	225.0	336.0	ND	ND	0.67×	ND
05/22/19	Park-Ohio Holdings Corporation	Erie Press Systems	Provides advanced forging presses, hydraulic and mechanical presses, and metal stretch-forming and carbon extrusion machines for aerospace and defense markets	ND	20.0	ND	ND	ND	ND
05/20/19	CapitalWorks, LLC	Libra Industries, Inc.	Provides engineered printed circuit board assemblies, electromechanical assemblies, and electronic control solutions, serving original equipment manufacturers ("OEMs")	ND	ND	ND	ND	ND	ND
05/15/19	Acorn Growth Companies	DIMO Corp	Provides the value-added distribution of operationally critical parts and higher-level assemblies for power, electromechanical, life support and mission-specific aircraft systems	ND	ND	ND	ND	ND	ND
05/14/19	A eromax Industries	Dar-Ken	Provides elastomer products for helicopters, whose product line includes custom seals, sleeves, ducts, and gaskets	ND	ND	ND	ND	ND	ND



Select Recent Aerospace / Defense M&A, cont.(1) (\$ in millions)

Announc	e						EBITDA —	EV / LTA	Λ
Date	Buyer / Investor	Target	Target Description	EV	Revenue	EBITDA	Margin		BITDA
05/13/19	BlackBern Partners, LLC	Zentech Manufacturing, Inc.	Provides the design and manufacture of highly complex electronic and RF circuit cards and assemblies	ND	ND	ND	ND	ND	ND
05/10/19	Amplitech Group, Inc.	Business Assets of Specialty Microwave Corp. (SMW)	Provides microwave components, subsystems and specialized electronics, and services	\$2.0	\$1.8	ND	ND	1.13×	ND
05/09/19	AirBoss of America Corporation	Critical Solutions International, Inc.	Provides testing, development, and production of various mine-detection vehicles and systems to the United States Army	ND	ND	ND	ND	ND	ND
05/09/19	AEA Investors LP	APITechnologies Inc.	Provides high-performance components and subsystems for demanding RF / microwave and electromagnetic spectrum management applications	ND	ND	ND	ND	ND	NC
05/08/19	CLM Equity Partners	Zircon Precision Products, Inc.	Provides precision aerospace machining business supporting both commercial and military applications	ND	ND	ND	ND	ND	NE
05/02/19	TexTech Industries, Inc.	Coating Business and U.S. defense-related operations of Highland Industries, Inc.	Provides coated and laminated products for the aerospace & defense end markets	ND	ND	ND	ND	ND	NE
05/01/19	II-VI Incorporated		Provides opto-mechanical subsystems, specializing in the design and fabrication of cryogenic systems, beam directors, and high- precision pointing gimballed mechanisms to both NASA and DoD	30.0	ND	ND	ND	ND	NE
05/01/19	AE Industrial Partners, LLC	Alpine Air Express	Provides logistics and transportation platform providing regional air cargo services	ND	ND	ND	ND	ND	NE
04/29/19	Parker Hannifin Corporation	LORD Corp.	Provides a broad array of advanced adhesives, coatings, and specially materials as well as vibration and motion control technologies	3,675.0	1,100.0	\$223.0	20.3%	3.34×	16.5×
04/25/19	MRO Holdings, Inc.	North State Aviation Holdings	Provides heavy maintenance, modification, and repair capabilitie and is a certified FAR 145 Repair Station	∗s ND	ND	ND	ND	ND	ND
04/23/19	Graco Supply Company	E.V. Roberts	Provides engineered materials, specializing in the distribution, manufacturing, packaging, and dispensing of adhesives, sealants, and surface treatments for the aerospace industry	ND	ND	ND	ND	ND	NE
04/18/19	Mercury Systems, Inc.	Syntonic Microwave, LLC	Provides advanced synthesizers, wideband phase coherent tuners and microwave converters used for signals and electronic intelligence applications	46.0	ND	ND	ND	ND	NE
04/17/19	RENK, AG	Hortsman Holdings Limited	Provides global armor and tracked vehicle mobility markets, known for its hydraulic and hydropneumatics suspension systems	ND	ND	ND	ND	ND	NE
04/16/19	Group of Investors	SolAero Technologies Corporation	Provides solar cells and solar panels to satellite and spacecraft OEMs	ND	ND	ND	ND	ND	NE
04/15/19	MW Industries, Inc.	Marox Corp. and Sussex Wire, Inc.	Provides tight-tolerance, mission-critical components used for medical, aerospace, and industrial applications	ND	ND	ND	ND	ND	NE
04/12/19	Hensoldt Holding GmbH	Test, mission, management, and power conversion business of NEXEYA	Provides the design, manufacture, integration for the areas of test and integration solutions, space systems, mission management systems, power conversion, and customer support	ND	107.4	ND	ND	ND	ND
04/10/19	FLIR Systems, Inc.	DroneBase, Inc.	Provides global drone operations for unmanned aerial surveillance pilot networks	ND	ND	ND	ND	ND	ND
04/10/19	Qorvo, Inc.	Active-Semi International, Inc.	Provides programmable analog power solutions	ND	ND	ND	ND	ND	NE
04/05/19	Elbit Systems, Ltd.	Night Vision Business of Harris Corp.	Provides development, production and supply of night vision technology for the U.S. and allied military and security forces and federal homeland security market	350.0	ND	ND	ND	ND	NE
04/05/19	Global Ordnance LLC	Chemring Military Products, Inc.	Provides U.Sstandard and non-standard ammunition and weapons systems	ND	ND	ND	ND	ND	ND
04/02/19	BJG Electronics, Inc.	ConnectorTech, LLC	Provides high-reliability electronic interconnect products serving a variety of harsh environment applications in the industrial, aerospace, and military markets	ND	ND	ND	ND	ND	NE
04,/01/19	The Jordan Company	ARCH Global Precision	Provides consumable cutting tools, medical implants/ instruments, and high-precision components for aerospace and defense markets	ND	190.0	ND	ND	ND	NE
04/01/19	Aernnova Aerospace S.A.	Structural Integrity Engineering	Provides aircraft component certification, structural design and analysis, and materials testing	ND	ND	ND	ND	ND	NE
04,/01/19	Firan Technology Group Corp.	U.S. Based Circuit Board Company	Provides manufacturing capacity for standard technology product for aerospace and defense applications	3.0	6.0	ND	ND	0.50×	NE
04/01/19	SED Systems, Inc.	SatService GmBH	Provides services and tumkey solutions in the field of satellite- based communication technologies	7.2	7.5	ND	ND	0.96×	NC



Select Recent Government Services M&A(1) (\$ in millions)

Announce Date	Buyer / Investor	Target	Target Description	EV	Revenue	ЕВПОА	EBITDA - Margin	EV / L1	TM EBITDA
	Accenture plc	BCT Solutions	Provides technology consultancy that specializes in command and control, cybersecurity, cyber defense services and expertise	ND	ND	ND	ND -	ND	NC
06/24/19	METIS Solutions, LLC	Pluribus International Corp.	Provides counterintelligence, allsource analysis, critical infrastructure protection, and other mission-focused services to clients across the IC	ND	ND	ND	ND	ND	NE
06/17/19	Peraton, Inc.	Solers, Inc.	Provides software development and systems integration for space situational awareness, satellite ground systems, cybersecurity and enterprise cloud systems	ND	ND	ND	ND	ND	N
06/17/19	CM Equity Partners	JANUS Research Group, Inc	Provides leading command, control, communications, compute intelligence, surveillance, and reconnaissance ("C4ISR") combat and acquisition solutions	ers, ND	ND	ND	ND	ND	N
06/11/19	IIA Technologies Corp.	KeyLogic Systems, Inc.	Provides enterprise solutions, business intelligence, data analysis, research and development program management, software and system engineering, and biometric solutions	ND	ND	ND	ND	ND	NI
06/10/19	DLH Holdings Corp.	Social & Scientific Systems	Provides health technology-enabled business process outsourcing and program management solutions supporting large-scale Federal health and human services initiatives	\$70.0	\$65.0	ND	ND	1.08×	NI
05/23/19	Serco, Inc.	Navy Systems Business of Alion Science & Technology	Provides high end systems engineering and design services as well as production support and in-service sustainment	225.0	0.886	\$21.6	6.4%	0.67×	10.4
05/16/19	By Light Professional IT Services, Inc.	Metova Federal, LLC	Provides cyber range and cyber training services to the U.S. Government	ND	ND	ND	ND	ND	NE
05/07/19	Envistacom, LLC	Fast Fit Technologies, LLC	Provides open-source communication waveform and data analytics virtualization	ND	ND	ND	ND	ND	NE
04/22/19	Jacobs Engineering Group	KeyW Holding Corporation	Provides national security solutions to the intelligence, cyber, and counterterrorism communities in the United States	815.0	494.9	38.7	7.8%	1.65×	21.1>
04/22/19	Enlightenment Capital	Trowbridge & Trowbridge	Provides cloud engineering, cybersecurity, II engineering, application development, and network engineering solutions to the federal government	ND	ND	ND	ND	ND	NE
04/19/19	Mercury Systems, Inc.	The Athena Group, LLC	Provides cryptographic and countermeasure IP vital to securing defense computing systems	ND	ND	ND	ND	ND	NE
04/10/19	EverWatch Corporation	Northwood Global Solutions, LLC	Provides software, systems, and network engineering support to various customers in the Federal Government	ND	ND	ND	ND	ND	NE
04/04/19	Arlington Capital Partners	Octo Consulting Group, Inc.	Provides agile software development, user experience design, and cloud engineering services to government	ND	ND	ND	ND	ND	NE
04/03/19	Tetra Tech, Inc.	eGlobalTech	Provides management, $\ensuremath{\mathbb{I}}$, and cybersecurity consulting services	ND	ND	ND	ND	ND	NE
04/01/19	NTT Data Services	Healthcare IT Consulting Division of Cognosante, LLC	Provides IT strategy, planning, quality assurance and project management for state HHS agencies	ND	ND	ND	ND	ND	N
03/25/19	By Light Professional IT Services, Inc.	Phacil, Inc.	Provides a range of mission-focused solutions in software services, systems engineering, integration, & operations ("SE&O"), cybersecurity, and service desk operations	ND	ND	ND	ND	ND	NE
03/18/19	Gryphon Technologies, Inc.	Schafer Intermediate Holding, LLC	Provides scientific, advanced engineering, and technical advisory services specializing in protecting against national security threats	ND	ND	ND	ND	ND	NE
03/15/19	DFW Capital Partners	Sev1Tech	Provides cloud computing, IT, and cybersecurity services and solutions to commercial entities and government agencies	ND	ND	ND	ND	ND	NE
03/05/19	Tyto Athene, LLC	Island IT Consultants	Provides information and communications technology support services to the intelligence community and other United States government agencies	ND	ND	ND	ND	ND	NE
03/01/19	ManTech International Corporation	Kforce Government Solutions, Inc.	Provides technology solutions, transformation management, data management, and analytics in support of federal health and defense missions	115.0	98.0	9.2	9.4%	1.17×	12.5
02/25/19	Hexagon AB	Thermopylae Sciences and Technology, LLC	Provides geocentric web and mobile-based software products that work together to create user-focused, collaborative solutions for common problems	ND	ND	ND	ND	ND	NE
02/13/19	Applied Insight, LLC	Stratus Solutions, Inc.	Provides security, infrastructure, and development operations solutions and services to government and commercial customers	ND	ND	ND	ND	ND	NE
02/13/19	Applied Insight, LLC	Applied Technology Group	Provides actionable intelligence to government customers in real time, enabling them to work at pace in securing the nation	ND	ND	ND	ND	ND	NE
02/05/19	Logistics Management Institute, Inc.	The Tauri Group, LLC	Provides homeland security, technology, aerospace, arms control, public health, and government contracting services	ND	ND	ND	ND	ND	NE



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