

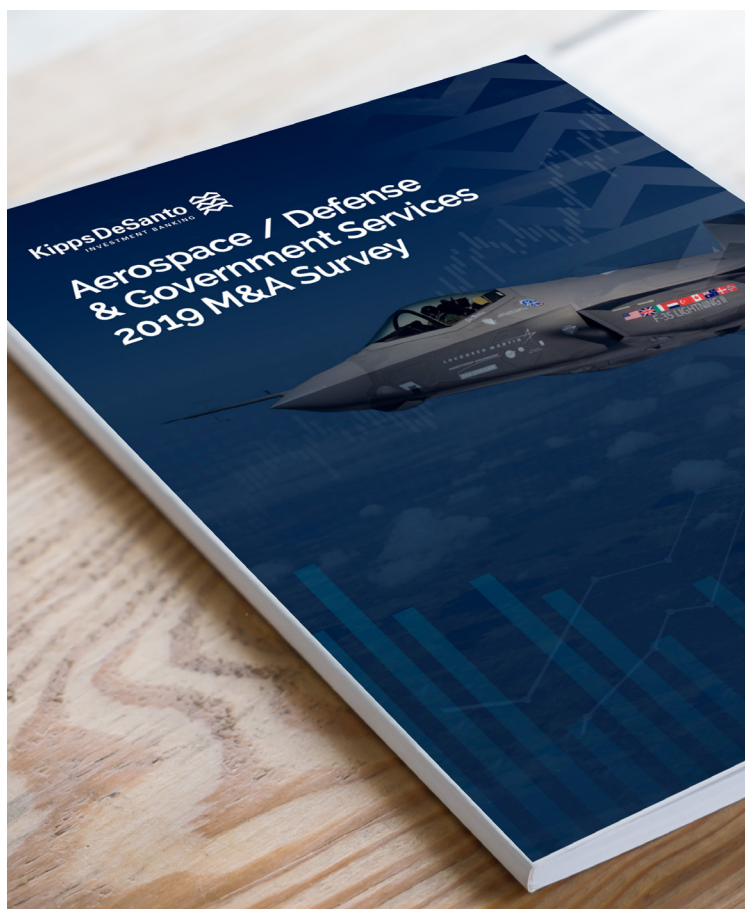


KippsDeSanto & Co. **MarketView** Spring 2019

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 U.S. midterm 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.



Click [here](#) to access KippsDeSanto's 2019 Aerospace / Defense & Government Services M&A Survey

About KippsDeSanto & Co. KippsDeSanto & Co. is the largest independent investment banking firm exclusively focused on serving leading, growth-oriented Aerospace / Defense, Government Services, and Technology 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's no substitute for experience.

For more information, visit www.kippsdesanto.com.

KippsDeSanto's Recent Advised Transactions

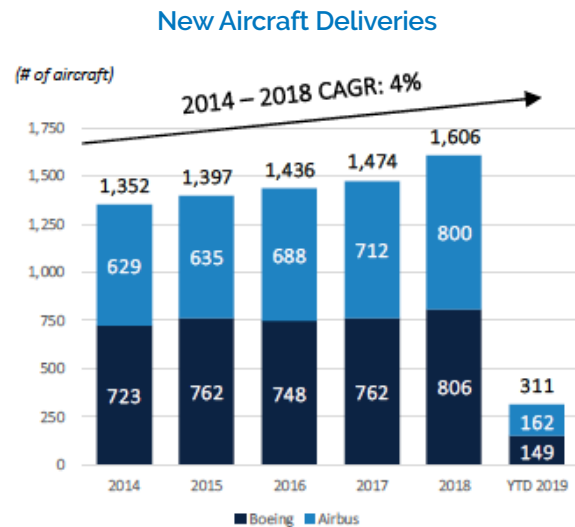
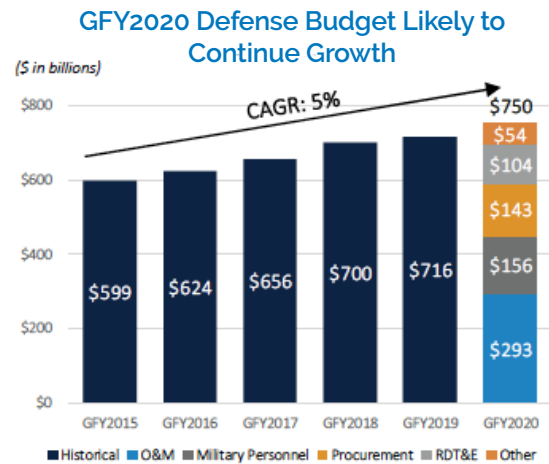
<p>April 2019</p> <p>Chemring Military Products</p> <p>a subsidiary of</p> <p>Chemring Group</p> <p>is being acquired by</p> <p>GO GLOBAL ORDNANCE</p>	<p>April 2019</p> <p>KGS</p> <p>a subsidiary of</p> <p>KFORCE</p> <p>is being acquired by</p> <p>ManTech International Corporation</p>	<p>April 2019</p> <p>GlobalTech</p> <p>has been acquired by</p> <p>TETRA TECH</p>	<p>February 2019</p> <p>SYSTRON DONNER INERTIAL</p> <p>a portfolio company of</p> <p>THE CARLYLE GROUP</p> <p>PAI and Schneider Electric</p> <p>has been acquired by</p> <p>RESILIENCE CAPITAL PARTNERS</p>	<p>December 2018</p> <p>SYSTEM HIGH CORPORATION INFORMATION'S BEST DEFENSE</p> <p>has received investment from</p> <p>ENLIGHTENMENT CAPITAL</p>
<p>November 2018</p> <p>BEI PRECISION SYSTEMS & SPACE COMPANY</p> <p>a portfolio company of</p> <p>J.F. Lehman & Company</p> <p>has acquired</p> <p>THISTLE DESIGN</p>	<p>October 2018</p> <p>Power Manager Business of</p> <p>Protonex a Ballard® company</p> <p>a subsidiary of</p> <p>BALLARD</p> <p>has been acquired by</p> <p>REVISION</p>	<p>September 2018</p> <p>emagine it</p> <p>has received a strategic investment from</p> <p>ENLIGHTENMENT CAPITAL</p>	<p>September 2018</p> <p>CAPEWELL AERIAL SYSTEMS LLC</p> <p>a portfolio company of</p> <p>CAPITALWORKS</p> <p>has been acquired by</p> <p>ARGOSY PRIVATE EQUITY</p>	<p>August 2018</p> <p>MacB MACHINERY GROUP, INC.</p> <p>has been acquired by</p> <p>ALION SCIENCE AND TECHNOLOGY</p> <p>a portfolio company of</p> <p>VERITAS CAPITAL</p>
<p>July 2018</p> <p>GenNx360 Capital Partners</p> <p>has acquired</p> <p>PAG PACIFIC AIRCRAFT GROUP, INC.</p> <p>a portfolio company of</p> <p>PNC RIVERARCH CAPITAL</p>	<p>July 2018</p> <p>GERMANE SYSTEMS™</p> <p>has been acquired by</p> <p>mercury systems™</p>	<p>July 2018</p> <p>Ai Aitech</p> <p>has been acquired by</p> <p>FIMI Opportunity Funds</p>	<p>May 2018</p> <p>TMA Complex Problems Solved</p> <p>has been acquired by</p> <p>NS2 NATIONAL SECURITY SERVICES</p>	<p>April 2018</p> <p>●● STRATEGIC RESOURCES ●● INTERNATIONAL</p> <p>has been acquired by</p> <p>Peraton™</p> <p>a portfolio company of</p> <p>VERITAS CAPITAL</p>
<p>February 2018</p> <p>THEMIS</p> <p>has been acquired by</p> <p>mercury systems™</p>	<p>January 2018</p> <p>rgs. US Falcon</p> <p>a portfolio company of</p> <p>CM EQUITY PARTNERS</p> <p>has been acquired by</p> <p>USfalcon.</p>	<p>January 2018</p> <p>BTP Systems Engineering and Technical Services</p> <p>has been acquired by</p> <p>serco</p>	<p>January 2018</p> <p>ADG CREATIVE BE HEARD™</p> <p>has been acquired by</p> <p>CHENEGA CORPORATION</p>	<p>November 2017</p> <p>AVANCE</p> <p>has been acquired by</p> <p>MAG AEROSPACE</p> <p>supported by</p> <p>CLAIRVEST</p>

Operational / Funding Environment

President Trump submitted his Government Fiscal Year ("GFY") 2020 budget request to Congress in March, outlining a total defense spend of \$750 billion, a 4.7% year-over-year ("YoY") increase over GFY2019's \$716 billion budget. The GFY2020 request includes \$718 billion for the Department of Defense ("DoD"), including \$164 billion for overseas contingency operations ("OCO") to circumvent budget caps. In this proposed budget request, the Navy, Air Force, and Army would all receive budgetary increases of ~\$10 billion from GFY2019 levels. The budget request places a particularly strong focus on developing high-end capabilities to include cyber and missile defense via a \$104 billion research development, test, and evaluation ("RDT&E") spend, which would represent an 8% increase from GFY2019. The Operations and Maintenance ("O&M") budget would also receive a significant bump from GFY2019, increasing 7%, to \$293 billion, as all branches of the military are placing a heightened emphasis on readiness. After the budget release, the Democrat-controlled House of Representatives was quick to rebuff President Trump's proposal, setting the stage for future budgetary negotiations and a potential appropriated funding level closer to former Secretary of Defense James Mattis' target of \$733 billion laid out in September.

In commercial aerospace, Airbus outpaced Boeing in deliveries through 1Q19, reporting 162 new aircraft deliveries to Boeing's 149. Boeing's topline figure is driven by 89 737 jet deliveries, accounting for nearly two-thirds of its net total, to 36 different customers, with no customer receiving more than nine aircraft. Meanwhile, Airbus' 162 deliveries in the quarter stayed in line with the pace of 2018, when its 800 deliveries represented a 12% increase over 2017's 712 deliveries, and marked the 16th straight year that deliveries increased. Airbus' overall backlog remains strong at 7,357 aircraft, and the company expects its pace of new deliveries to increase throughout the year as it continues to resolve automation issues. In net orders, Boeing received 91 through 1Q19, although that pace could slow after the two fatal crashes of its 737 Max jets led to the worldwide grounding of all 371 jets in operation. Conversely, Airbus reported -58 net orders in 1Q19 after several large cancellations, to include 33 A320 Neos, 42 A350s, and 31 A380s. However, robust passenger growth should continue to drive a strong aerospace market, as passenger traffic and capacity have been up YoY for each of the past five years.

In government technology solutions, modernization and network security continue to be focal points for federal agencies. While President Trump's GFY2020 IT budget proposal was flat compared to the administration's GFY2019 proposal (increase in civilian agencies offset by slight declines at defense agencies), there still remain significant opportunities to capitalize on the \$88 billion in funding. According to the proposal, IT modernization and cybersecurity will remain core competencies the government seeks to acquire and develop. Legacy systems are heralded as primary sources of government inefficiency and contractor discontent, often responsible for cyber and mission risks that lead to broader global vulnerabilities. With these threats in mind, nearly 80% of GFY 2020 IT dollars have been allocated to O&M with the intention of creating open systems that are dynamic, secure, and efficient. Following its first year in existence, the Technology Modernization Fund ("TMF"), which offers agencies additional funding and incentives to pursue innovative projects that promote technical innovation, continues to grow, with a request for \$150 million in additional seed funding. The President proposed a 10% increase to the overall cybersecurity budget, raising it to approximately \$17 billion, in response to concerns from numerous agencies on the importance of preventing cyberattacks. In addition to IT, the budget proposal tackles modernization and force readiness through an intensified focus on modernizing the nuclear deterrent, establishing the U.S. Space Force, and pursuing advanced capabilities in autonomous systems, hypersonics, and artificial intelligence (including \$208 million to scale DoD's Joint Artificial Intelligence Center). Overall, despite a relatively flat proposal, budgets remain at all time highs and the government continues to demonstrate a need for new technologies headlined by more than \$59 billion in research, engineering, and prototyping activities to maintain technological superiority.

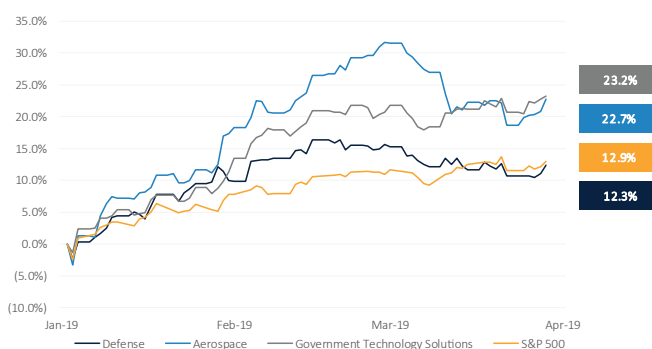


Capital Markets and Public Market Valuation Trends

The aerospace, defense, and government technology solutions indices rebounded from a sell-off in 4Q18 with strong gains to begin 2019. After the aerospace index ended 4Q18 down 22.0%, in line with the broader market, the index rebounded with strong growth in 1Q19, finishing the quarter up 22.7% to outpace the S&P 500 by 9.8%. While Triumph Group and Boeing witnessed notable gains throughout the quarter, all but two companies – Embraer and AAR – finished the quarter with positive returns. Triumph Group had the greatest return, finishing up 58.8% behind strong tailwinds from a series of divestitures, including the January sales of its metallics machining business to TECT Aerospace and TECT Power and its fabrications business to Arlington Capital Partners, as well as the March sale of its NASS Division to STS Aviation Group. Boeing was up as high as 36.1% in 1Q19 before the worldwide grounding of its 737 Max jets; however, the company still managed to finish 1Q19 up 17.8%, despite the 13.4% dip from its quarter-high on March 1st. Overall, the median aerospace enterprise value ("EV") / next twelve months ("NTM") EBITDA multiple trended with share prices, increasing from 4Q18's 9.9x to 10.3x, although still lagging behind 3Q18's recent high of 11.6x. Strong expected deliveries and increasing passenger growth should drive the aerospace index's continued rise into 2019.

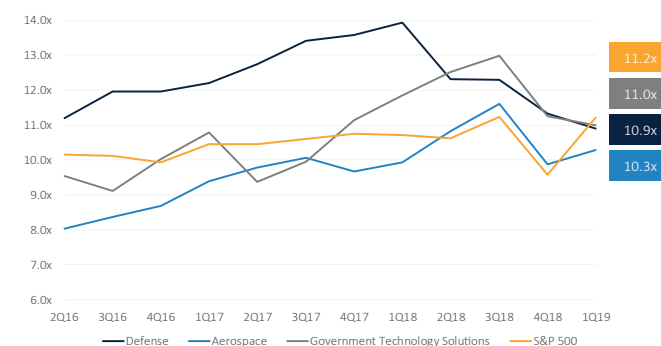
Relative Stock Price Performance⁽¹⁾

For the Three Months Ended March 31, 2019



Median Quarterly EV / NTM EBITDA Multiples⁽¹⁾

For the Three Months Ended March 31, 2019



Similarly, the defense index also returned to positive growth in 1Q19, ending the quarter up 12.3%. Strong performance by large defense primes tempered earlier investor anxiety, as shares in the index began to recover much of the decline experienced following the aforementioned 4Q18 selloff; however, valuation expectations have decreased slightly following the substantial downtick in the prior quarter – EV / NTM EBITDA multiples hit 10.9x compared to 11.5x in 4Q18. Despite the decrease in multiples, all companies in the defense sector realized 7%+ price increases throughout the quarter, ranging from 7.4% for BAE Systems to 20.1% for L3 Technologies, which also generally outpaced the 12.9% increase in the S&P 500. This healthy stock performance throughout the quarter was buoyed by President Trump's \$750 billion defense budget request, an increase of 4.7% over this year's budget. Additionally, as the Trump administration continues to signal support for upgrading and expanding the military, ranging from missile defense to a larger Navy, major primes are set to see valuations balloon through the end of the decade.

The government technology solutions index returned to growth in 1Q19 following a market-wide correction in 4Q18. The sector posted a 23.2% gain, significantly exceeding the S&P 500's gain of 12.9%. Median EV / NTM EBITDA valuations continue to hold at 11.0x, partially in response to budget optimism as well as broader market strength. The index also aligns closely with the current S&P 500 NTM valuation of 11.2x. CACI and Booz Allen Hamilton led the index, but the entire index showed positive gains for the quarter. CACI soared 28.2% during 1Q19 after announcing the acquisitions of LGS Innovations and Mastodon Design. The move is expected to bolster CACI's presence in the coveted intel, space, and cybersecurity markets, bringing differentiated capabilities in-house that demand higher margins from customers seeking high-end solutions enabled by proprietary products or IP. Similarly, Booz Allen Hamilton shares rose 31.2% after raising revenue guidance for this current year to ~8% growth, reflecting successful execution of its organic growth strategy. ManTech underperformed relative to its peers, finishing the quarter only up 4.8% after issuing FY2019 guidance lower than expected. Additionally, with potentially the first GovCon initial public offering ("IPO") since Booz Allen Hamilton in 2010, Parsons Corporation is reportedly seeking to raise \$500 million via an IPO. This move stands testament to GovCon market optimism. Larger firms can leverage IPO's as a vehicle to achieve liquidity, solicit institutional investment for growth from public markets, and capitalize on recent industry consolidation that creates an opportunity for the emergence of a new public player in the market.

(1) S&P Capital IQ, company filings, and KippsDeSanto research

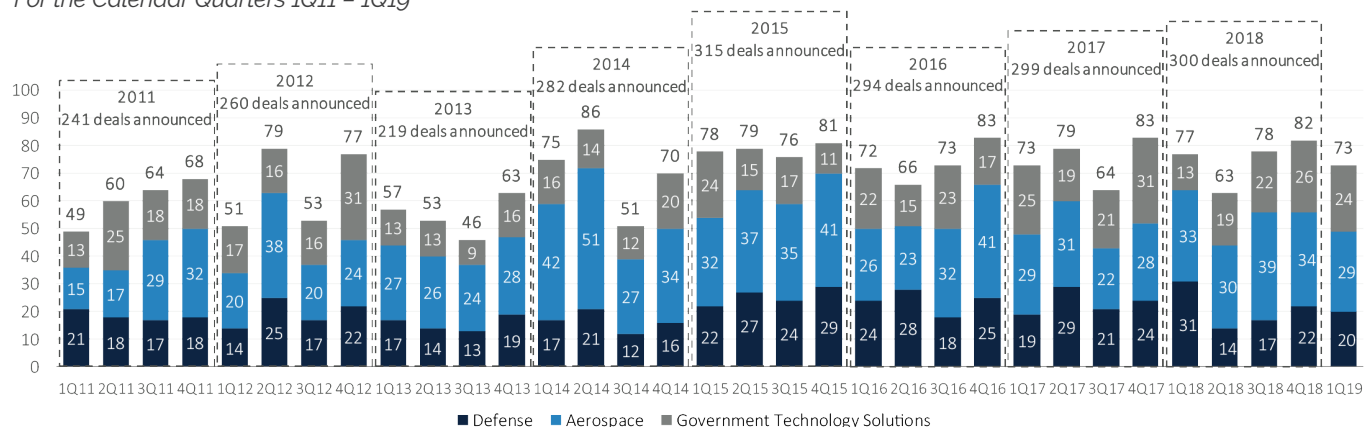
M&A Trends & Activity

There were 73 aerospace, defense, and government technology solutions M&A transactions announced during 1Q19. M&A activity in 1Q19 is in line with quarterly transaction levels seen from the same periods in 2014 – 2018. The aerospace and defense sectors maintained a transaction cadence consistent with 2017 and 2018, boasting 49 combined transactions in 1Q19. Coupled with a slight uptick in government technology solutions M&A volume, relative to a light 1Q18, strong activity within the aerospace and defense sectors contributed to the higher overall deal activity throughout the beginning of 2019.

While the 29 announced aerospace deals in the quarter is slightly lower than 3Q18 and 4Q18 levels, the sector outpaced both the defense and government services sectors for the fifth consecutive quarter. The sector experienced further consolidation throughout the quarter, as strategic buyers, including original equipment manufacturers ("OEMs"), continued to seek acquisitions that shore up their supply chains. In January, VSE Aviation, Inc. acquired 1st Choice Aerospace for an estimated \$112 million, which is expected to strengthen VSE's supply chain and broaden their customer base. Furthermore, Bombardier, Inc. acquired the Global 7500 Wing Program of Triumph Group, which bolsters the Company's position as a leading aerostructures manufacturer and facilitates Bombardier's shift towards becoming a pure play business jet provider. This transaction was one of eight aerospace divestitures in the quarter, the second highest total over the last 8 quarters.

M&A Transaction Volume⁽¹⁾

For the Calendar Quarters 1Q11 – 1Q19



The 20 defense transactions announced in the first quarter is slightly below 1Q18, but in line with historic first quarter M&A volume. Unmanned vehicle providers have emerged as an active buyer group in the sector as they look to acquire companies that will help them achieve scale and expand their capability sets. Recently, FLIR Systems acquired Endeavor Robotics for an estimated \$385 million, which has the largest deployed fleet of tactical unmanned ground vehicle systems in the world. This acquisition, in addition to FLIR's acquisition of Aeryon Labs and Prox Dynamics in 2018 and 2016, respectively, shows further commitment to the unmanned sector, adding both scale and expanded capabilities offerings. Additionally, the defense electronics and components sector within the broader defense industry, remains a compelling area of M&A investment, accounting for more than 40% of the quarter's transactions. In March, ST Engineering agreed to acquire Newtech Group NV, a provider of satellite communications ("SATCOM") equipment, expanding ST Engineering's product offerings and end markets. The deal is worth an estimated \$281M representing a 14.6x EBITDA multiple. With an estimated 8% CAGR over the next decade, the SATCOM sub-sector is anticipated to remain a popular investment area for both financial sponsor and strategic suitors.

Following a healthy 2018, which saw 80 government technology solutions deal announcements, 1Q19 started strong with 24 transaction announced YTD (including six greater than \$100M in EV). That deal count represents a nearly 85% increase over 13 deal announcements in 1Q18. Of these 24 announcements, private companies and private equity groups remained active, responsible for roughly two-thirds of total deals. Of the 16 deals that did not include public buyers, half were acquired by private strategic buyers, and the other half had financial sponsor involvement (either as new platforms or as tuck-ins to existing portfolio companies). Despite the influx of capital from financial sponsors aided by attractive credit markets, familiar buyers in the GovCon space were particularly active in 1Q19, including ManTech's acquisition of Kforce Government Solutions, VT Group's acquisition of National Technologies Associates, and Huntington Ingall's acquisition of Fulcrum IT. However, the marquee deal of 1Q19 was CACI's \$750 million acquisition of LGS Innovations, which bolsters its expertise in spectrum management, C4ISR, and cyber solutions to support a customer footprint strategically spread throughout the DoD and IC. Coupled with the smaller \$225 million acquisition of Mastodon Design, a provider of rapid design and manufacturing for ruggedized signals intelligence, electronic warfare, and cyber operations, CACI has shown a more aggressive posture on inorganic growth following their failed pursuits of CSRA and Engility last year.

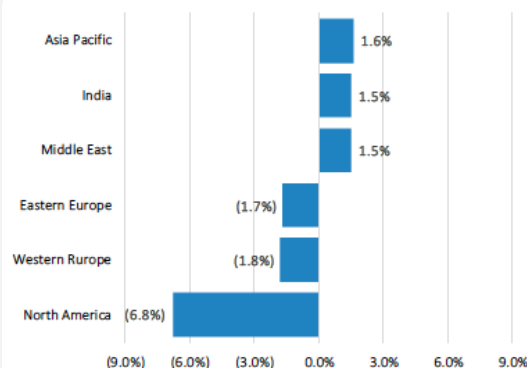
(1) S&P Capital IQ, company filings, and KippsDeSanto research

Aerospace Update

STRONGER AEROSPACE AND MRO FOCUS ON THE ASIA-PACIFIC REGION

MRO demand in the Asia-Pacific region is expected to nearly double in the next decade due to increased traffic demand and spending in the region. Airbus predicts that MRO solutions will increase at a yearly rate of 4.5% in the Asia-Pacific region as compared to 3.7% worldwide. Globally, the majority of MRO spend will emanate from narrowbody and widebody aircraft operators. In addition, as the majority of future aircraft deliveries will be in the Asia-Pacific region, labor market growth plans to follow, specifically migrating labor intensive heavy maintenance checks from the more expensive labor markets in the west to lower cost alternatives in the east. For perspective, the combined MRO demand in the Asia-Pacific, China, and India regions will be more than double the demand in North America by 2028 as this trend continues.

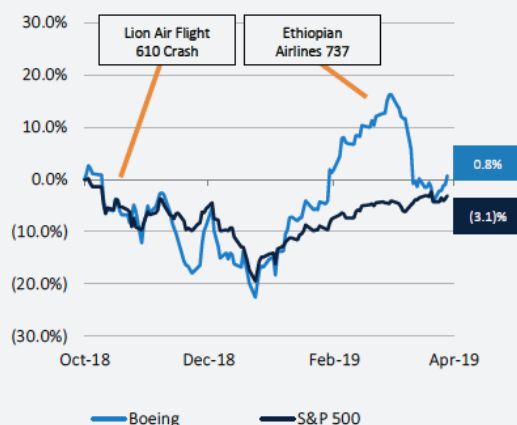
2017 - 2027 Fleet Share Change by Region⁽¹⁾



BOEING CRISIS ESCALATES AS COUNTRIES GROUND 737 MAX JETS

Airlines around the world have grounded the 737 MAX jets after a second crash involving this aircraft occurred in less than five months. While investigations of the Ethiopian Airlines crash are still being conducted, there is evidence linking this incident to the Lion Air crash involving the same aircraft in November. Boeing's tentatively approved software update was intended to address flaws in the flight-control system that Boeing introduced on the MAX. However, this software issue combined with the placement / size of the engines, faulty anti-stall systems, and inadequate communications are seen as the primary culprits. This global ban has rattled airline operators and forced significant flight delays, as fleet size has dwindled and the foreseeable delay in future deliveries by Boeing significantly impacts airlines' future increases in capacity and growth projections. However, despite the disruptions, many airlines have used the grounding as an opportunity to delay / cancel orders to save cash, counteracting the decline in capacity growth. As a result, Boeing's stock has dropped by 15%+ following this ban.

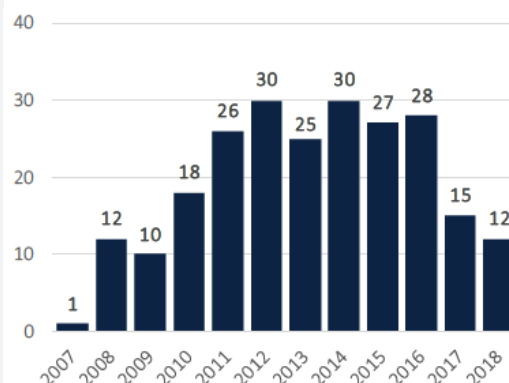
Volatility of the Boeing Index Share Price⁽²⁾



AIRBUS TO RETIRE THE A380 AS AIRLINES SHIFT FOCUS TO SMALLER AIRPLANES

Airbus has decided to halt production of the A380 superjumbo plane, abandoning its \$16 billion project after airlines around the world are flocking to smaller, nimbler jets for long-range travel. With the aircraft's main customer, Emirates, preparing to significantly cut the size of its latest order of approximately \$4 billion, this all but signals the end. Originally, the A380 was the European company's answer to Boeing's 747, which facilitated longhaul travel to the masses in 2007; however, most airlines have been less than enamored by this superjumbo, turning instead to a new breed of smaller fuel-efficient jets that give them the heightened flexibility. As a result of this trend, A380 sales lost momentum and Airbus never turned a profit on this flagship plane; write-offs related to the program have been weighing on the company for years. Airbus plans to replenish its backlog with increased A320 production as orders increase on this and other narrow-body models.

Declining Airbus A380 Production⁽³⁾



(1) Oliver Wyman Global Fleet MRO Market Forecast Summary Report

(2) S&P Capital IQ

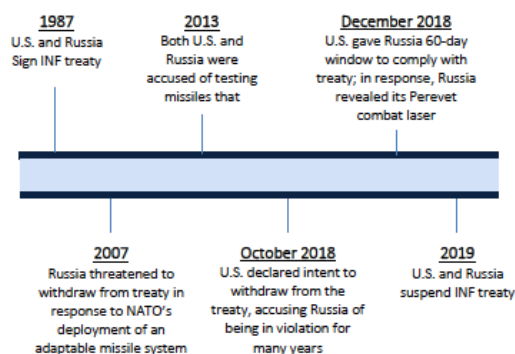
(3) Airbus SE Report

Defense Update

UNITED STATES AND RUSSIA SUSPEND 32-YEAR MILITARY ACCORD

The U.S. and Russia formally suspended the Intermediate-range Nuclear Forces ("INF") Treaty, which prohibited the development and testing of specified short and intermediate-range nuclear missiles capable of flying 310 miles to 3,400 miles. Signed in 1987 by U.S. President Ronald Reagan and Soviet leader Mikhail Gorbachev, the INF treaty was recognized as a symbol of the end of the Cold War. Earlier this year, the U.S. threatened to withdraw from the accord if Russia failed to destroy its 9M729 missiles that the U.S. believed were in violation of the agreement. In response, Russia suspended the treaty, enabling both countries to produce new and advanced missiles. Despite the suspension of the treaty, there is still an opportunity for the countries to execute a nondeployment agreement as a way to provide security assurances and circumvent a full-blown arms race.

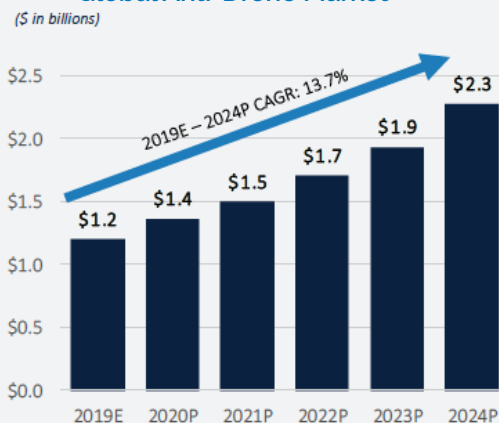
Events Leading up to INF Treaty Withdrawal



DEFENSE COMPANIES SHIFT FOCUS TO ANTI-DRONE DEFENSE SYSTEMS

Threats of potential drone attacks have grounded several recent commercial flights in cities such as New York, London, and Dubai. The rising count of drone related incidents in both civilian and military arenas has caused weapon manufacturers to prioritize the development of anti-drone defenses including missile systems, signal jammers, and laser cannons. Recently, Lockheed Martin announced its partnership with Germany's Diehl Defense, and Sweden's SAAB to produce a single counter-drone system that can defend against both large drones, through advanced missile systems, and small drones, via sophisticated radar and sensor technology. Additionally, Boeing has developed a high-energy laser that can be mounted atop combat vehicles to neutralize enemy drones and has already delivered several units to the U.S. Army. The anti-drone market is anticipated to nearly double in size to \$2.4 billion by 2024 as a result of defense and technology companies designing and producing these more effective drone counter measures.

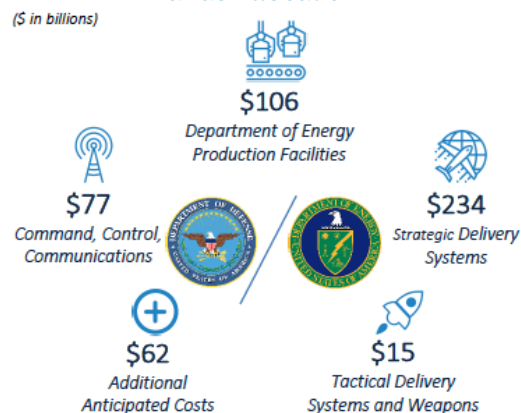
Global Anti-Drone Market⁽¹⁾



THE CBO RELEASED ESTIMATED COST TO MODERNIZE THE U.S. NUCLEAR ARSENAL

The Congressional Budget Office ("CBO") recently outlined the plan to modernize and maintain the U.S. nuclear arsenal over the next decade. Estimates showed it will cost approximately \$50 billion annually, or \$494 billion, over the next decade. Overall, the \$494 billion figure represents approximately 6% of overall projected defense spending during that same time period, which is 23% higher than the previous estimate of \$400 billion, released in 2017. The figure estimated in 2017 was a 15% increase over the number presented in 2015, demonstrating a clear upswing in the expected cost of implementing this initiative, much greater than normal course inflation. This modernization effort prioritizes strategic and tactical delivery systems, production facilities, and nuclear command, control, and communication systems and is part of a much broader effort to modernize all U.S. military capabilities across the board.

CBO's Nuclear Modernization Estimated Funds Allocation⁽²⁾



(1) Frost & Sullivan Market Research Report

(2) Congressional Budget Office: Projected Costs of U.S. Nuclear Forces

Government Technology Solutions Update

THE PARSONS CORPORATION – FILING FOR AN IPO

The Parsons Corporation, a technology-focused infrastructure and engineering firm, has actively sought to transform its business and refocus on the federal market, filing for an IPO that could value the Company at \$3 billion following its recent HQ relocation from Pasadena to D.C. This transaction, which could be launched as early as April, highlights attractive valuations in the sector reflective of market strength and optimism. Furthermore, the IPO caps a concerted campaign of targeted acquisitions to gain high-end capabilities and expand its footprint within coveted defense and intel customers. The acquisitions of OGSystems in January 2019 and Polaris Alpha in May 2018 bolster Parsons' portfolio of solutions to include artificial intelligence ("AI"), data analytics, cybersecurity, and geospatial intelligence.

Parsons' Concerted Acquisition Strategy Expands Solution Portfolio⁽¹⁾



INSTITUTIONAL BUYERS DRIVE STRONG 1Q19 M&A VOLUME

As strong macroeconomics continue to support momentum in the M&A market, 1Q19 experienced relatively high volume compared to recent quarters. Two-thirds of this sector's quarterly deal activity was driven by institutional buyers (public strategics and private equity). Fierce market optimism, coupled with attractive financing conditions, provides both public buyers and private equity firms with the necessary motivation and means to pursue growth targets dictated by analyst / investor expectations and internal rate of return requirements, respectively. These institutional buyers remain the consistent engine within the government technology solutions M&A landscape, supporting sustained deal activity that has steadily seen institutional buyers' share of deals increase from 55% in 2017 to 60% in 2018. Off to a strong start in 1Q19, these buyers accounted for 67% of deals, leading to an annualized run rate for the year of 96 announcements, outpacing 2018's count of 80.

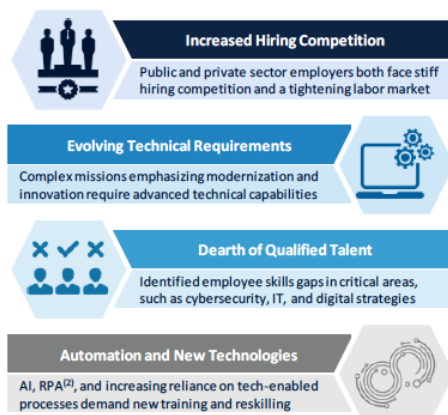
Public Strategics and Private Equity Continue Driving Volume



DEMAND FOR SKILLED LABOR DRIVES COMPETITION

Increasing demands on an undersized employee talent pool have created a juxtaposition in which the private and public sectors compete directly for new hires, but collaborate to reskill employees and adapt to the future workforce. A tightening labor market in the National Capital Region, expected to be exacerbated by Amazon's move to Virginia, as well as emerging technologies / automation contributing to significant skills gaps, highlight the dearth of qualified candidates for jobs increasingly reliant on technical competencies. As customers continue to emphasize modernization and emerging technologies, smaller, innovative companies with technical talent have the potential to become attractive takeover targets. Increasingly, acquisitions are focused not solely on customer penetration or market expansion, but also on acquiring requisite skillsets, certifications, and clearances. Moreover, automation and AI are tools contractors may leverage to drive efficiency and meet evolving mission requirements while mitigating against human capital shortfalls.

Public and Private Sectors Compete for Human Capital Talent



(1) S&P Capital IQ, company filings, and KippsDeSanto research
(2) Robotic process automation

Public Company Trading Analysis⁽¹⁾

(\$ in millions, except per share amounts)

Aircraft and Engine OEMs	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
Boeing	\$391.54	87.8%	\$221,017	\$226,371	\$110,913	\$17,422	15.7%	\$118,086	\$19,045	16.1%	2.04x	13.0x	1.92x	11.9x
Airbus SE	132.08	98.6%	102,464	98,393	78,650	10,287	13.1%	83,504	11,845	14.2%	1.25x	9.6x	1.18x	8.3x
General Electric Co	10.10	64.8%	87,967	202,444	116,112	13,871	11.9%	110,913	14,485	13.1%	1.74x	14.6x	1.83x	14.0x
Safran SA	138.18	99.4%	60,719	65,323	25,752	4,810	18.7%	27,388	5,446	19.9%	2.54x	13.6x	2.39x	12.0x
MTU Aero Engines AG	229.92	99.6%	11,872	13,030	5,351	996	18.6%	5,742	1,088	19.0%	2.43x	13.1x	2.27x	12.0x
Median		98.6%	\$87,967	\$98,393	\$78,650	\$10,287	15.7%	\$83,504	\$11,845	16.1%	2.04x	13.1x	1.92x	12.0x

Aerostructures	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
Spirit AeroSystems	93.65	93.3%	9,896	11,018	8,160	1,309	16.0%	8,576	1,401	16.3%	1.35x	8.4x	1.28x	7.9x
Hexcel	70.41	95.9%	5,976	6,900	2,418	576	23.8%	2,559	620	24.2%	2.85x	12.0x	2.70x	11.1x
Senior plc	2.94	66.5%	1,222	1,417	1,445	205	14.2%	1,504	214	14.2%	0.98x	6.9x	0.94x	6.6x
Triumph Group	19.83	71.8%	989	2,594	2,996	267	8.9%	2,976	347	11.7%	0.87x	9.7x	0.87x	7.5x
Median		71.8%	\$1,222	\$2,594	\$2,418	\$267	14.2%	\$2,559	\$347	14.2%	0.98x	9.7x	0.94x	7.5x

Aerospace Suppliers	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
Arconic	19.66	81.7%	8,908	13,028	14,431	2,113	14.6%	15,091	2,271	15.0%	0.90x	6.2x	0.86x	5.7x
Meggitt PLC	6.81	88.9%	5,249	6,618	2,840	648	22.8%	2,960	685	23.2%	2.33x	10.2x	2.24x	9.7x
Curtiss-Wright	112.54	78.5%	4,820	5,306	2,522	510	20.2%	2,617	537	20.5%	2.10x	10.4x	2.03x	9.9x
Moog Inc.	87.69	90.6%	3,200	3,906	2,903	398	13.7%	3,014	411	13.6%	1.35x	9.8x	1.30x	9.5x
RBC Bearings	128.56	75.7%	3,081	3,114	738	191	25.9%	809	NA	NA	4.22x	16.3x	3.85x	NA
Astronics	33.25	82.1%	1,083	1,301	779	107	13.7%	827	128	15.5%	1.67x	12.2x	1.57x	10.2x
Ducommun	43.97	93.0%	502	721	660	80	12.1%	684	84	12.3%	1.09x	9.1x	1.05x	8.6x
Eddie Stobart Logistic	1.31	67.7%	493	697	1,257	97	7.7%	1,329	106	7.9%	0.55x	7.2x	0.52x	6.6x
Héroux-Devtek	12.31	98.0%	448	638	416	64	15.3%	449	68	15.2%	1.54x	10.0x	1.42x	9.4x
Median		82.1%	\$3,081	\$3,114	\$1,257	\$191	14.6%	\$1,329	\$270	15.1%	1.54x	10.0x	1.42x	9.4x

Aftermarket / MRO	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
TransDigm Group	464.39	99.9%	24,565	35,125	5,856	2,402	41.0%	6,728	2,772	41.2%	6.00x	14.6x	5.22x	12.7x
HEICO	98.23	98.6%	12,135	12,937	1,997	517	25.9%	2,139	555	26.0%	6.48x	25.0x	6.05x	23.3x
Singapore Technologies Engineering	2.78	99.2%	8,687	8,958	5,621	699	12.4%	6,088	766	12.6%	1.59x	12.8x	1.47x	11.7x
BBA Aviation	3.28	70.6%	3,393	4,728	2,744	461	16.8%	2,709	523	19.3%	1.72x	10.3x	1.75x	9.0x
SIA Engineering	1.83	74.0%	2,049	1,747	767	84	10.9%	784	85	10.8%	2.28x	20.9x	2.23x	20.6x
AAR Corp.	33.48	65.0%	1,151	1,299	2,059	167	8.1%	2,213	NA	NA	0.63x	7.8x	0.59x	NA
Median		86.3%	\$6,040	\$6,843	\$2,401	\$489	14.6%	\$2,461	\$555	19.3%	2.00x	13.7x	1.99x	12.7x

(1) S&P Capital IQ, company filings, and KippsDeSanto research

Public Company Trading Analysis, cont.⁽¹⁾

(\$ in millions, except per share amounts)

Defense Primes	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / CY2019E Rev.	EV / CY2019E EBITDA	EV / CY2020P Rev.	EV / CY2020P EBITDA
Boeing	\$391.54	87.8%	\$221,017	\$226,371	\$110,913	\$17,422	15.7%	\$118,086	\$19,045	16.1%	2.04x	13.0x	1.92x	11.9x
Lockheed Martin	304.29	84.1%	86,056	99,443	56,723	9,247	16.3%	59,823	11,262	18.8%	1.75x	10.8x	1.66x	8.8x
Raytheon	184.76	80.4%	52,146	54,004	28,879	5,334	18.5%	30,790	5,743	18.7%	1.87x	10.1x	1.75x	9.4x
General Dynamics	172.31	75.0%	49,758	61,212	38,556	5,385	14.0%	40,478	5,775	14.3%	1.59x	11.4x	1.51x	10.6x
Northrop Grumman	274.11	76.0%	46,587	59,606	34,136	4,788	14.0%	36,225	5,235	14.5%	1.75x	12.4x	1.65x	11.4x
BAE Systems	6.33	71.0%	20,265	21,631	25,573	3,044	11.9%	26,872	3,213	12.0%	0.85x	7.1x	0.80x	6.7x
Median		78.2%	\$50,952	\$60,409	\$36,346	\$5,360	14.9%	\$38,352	\$5,759	15.3%	1.75x	11.1x	1.65x	10.0x

Defense Systems	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / CY2019E Rev.	EV / CY2019E EBITDA	EV / CY2020P Rev.	EV / CY2020P EBITDA
Safran	138.18	99.4%	60,719	65,323	25,752	4,810	18.7%	27,388	5,446	19.9%	2.54x	13.6x	2.39x	12.0x
L3 Technologies	211.32	94.5%	16,761	19,124	10,817	1,551	14.3%	11,373	1,666	14.6%	1.77x	12.3x	1.68x	11.5x
Huntington Ingalls Industries	212.44	79.3%	8,850	9,893	8,403	1,043	12.4%	8,656	1,115	12.9%	1.18x	9.5x	1.14x	8.9x
FLIR	48.76	76.3%	6,613	6,522	1,911	481	25.2%	2,017	528	26.2%	3.41x	13.5x	3.23x	12.4x
Cobham	1.46	82.5%	3,476	3,465	2,555	396	15.5%	2,634	433	16.5%	1.36x	8.8x	1.32x	8.0x
Kongsberg Gruppen	15.46	64.9%	2,774	2,118	2,555	181	7.1%	3,181	293	9.2%	0.83x	11.7x	0.67x	7.2x
Cubic	56.42	72.9%	1,757	1,986	1,482	167	11.3%	NA	NA	NA	1.34x	11.9x	NA	NA
AeroVironment	69.67	57.4%	1,644	1,350	335	51	15.4%	395	62	15.8%	4.04x	NM	3.42x	NM
Median		77.8%	\$5,044	\$4,993	\$2,555	\$439	14.9%	\$3,181	\$528	15.8%	1.56x	11.9x	1.68x	10.2x

Defense Electronics / Comm.	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / CY2019E Rev.	EV / CY2019E EBITDA	EV / CY2020P Rev.	EV / CY2020P EBITDA
Harris	163.30	93.0%	19,242	22,718	6,918	1,562	22.6%	7,428	1,762	23.7%	3.28x	14.5x	3.06x	12.9x
Teledyne	240.21	95.8%	8,701	9,309	3,093	573	18.5%	3,232	617	19.1%	3.01x	16.2x	2.88x	15.1x
Viasat	78.09	99.3%	4,723	5,844	2,187	406	18.6%	2,445	572	23.4%	2.67x	14.4x	2.39x	10.2x
Mercury Systems	64.35	94.8%	3,118	3,264	670	149	22.2%	741	171	23.0%	4.87x	22.0x	4.41x	19.1x
Kratos Defense & Security Solutions	15.80	88.4%	1,673	1,784	736	73	9.9%	847	92	10.9%	2.42x	24.5x	2.11x	19.4x
Ultra Electronics	20.86	90.2%	1,486	1,686	1,020	177	17.3%	1,061	189	17.9%	1.65x	9.5x	1.59x	8.9x
Comtech Telecommunications	23.60	63.9%	569	700	648	81	12.5%	693	95	13.8%	1.08x	8.7x	1.01x	7.3x
Median		93.0%	\$3,118	\$3,264	\$1,020	\$177	18.5%	\$1,061	\$189	19.1%	2.67x	14.5x	2.39x	12.9x

Homeland Security	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	Rev.	CY2019E EBITDA	Margin	Rev.	CY2020P EBITDA	Margin	EV / CY2019E Rev.	EV / CY2019E EBITDA	EV / CY2020P Rev.	EV / CY2020P EBITDA
Smiths Group	19.23	81.0%	7,614	8,869	4,509	896	19.9%	4,659	933	20.0%	1.97x	9.9x	1.90x	9.5x
MSA Safety Incorporated	104.70	94.5%	4,034	4,209	1,428	295	20.7%	1,498	320	21.4%	2.95x	14.3x	2.81x	13.2x
Axon	55.26	72.3%	3,251	2,901	485	82	16.9%	570	110	19.3%	5.98x	NM	5.09x	NM
OSI Systems, Inc.	88.76	97.3%	1,604	1,912	1,192	196	16.5%	NA	NA	NA	1.60x	9.7x	NA	NA
American Outdoor Brands	9.25	58.0%	505	695	647	107	16.5%	NA	NA	NA	1.07x	6.5x	NA	NA
Median		81.0%	\$3,251	\$2,901	\$1,192	\$196	16.9%	\$1,498	\$320	20.0%	1.97x	9.8x	2.81x	11.3x

(1) S&P Capital IQ, company filings, and KippsDeSanto research
NM = not meaningful

Public Company Trading Analysis, cont.⁽¹⁾

(\$ in millions, except per share amounts)

Government Technology Solutions	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
Leidos Holdings	\$64.89	89.8%	\$9,320	\$12,155	\$10,678	\$1,072	10.0%	\$11,144	\$1,135	10.2%	1.14x	11.3x	1.09x	10.7x
Booz Allen Hamilton	58.73	99.9%	8,227	9,789	7,019	699	10.0%	7,459	749	10.0%	1.39x	14.0x	1.31x	13.1x
CACI International	185.90	92.6%	4,622	5,606	5,193	483	9.3%	5,549	552	9.9%	1.08x	11.6x	1.01x	10.2x
SAIC	77.28	82.8%	4,584	6,474	6,579	544	8.3%	6,767	582	8.6%	0.98x	11.9x	0.96x	11.1x
Perspecta Inc.	20.81	75.2%	3,363	6,028	4,328	724	16.7%	4,435	734	16.6%	1.39x	8.3x	1.36x	8.2x
ManTech International	54.35	79.8%	2,162	2,164	2,113	177	8.4%	2,253	193	8.5%	1.02x	12.2x	0.96x	11.2x
ICF International	75.50	91.8%	1,420	1,609	1,464	138	9.4%	1,528	150	9.8%	1.10x	11.6x	1.05x	10.7x
KeyW	8.54	84.9%	424	679	519	50	9.6%	550	55	10.1%	1.31x	13.6x	1.23x	12.2x
VSE Corporation	33.49	63.0%	365	546	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vectrus, Inc.	27.44	68.9%	309	317	1,319	58	4.4%	1,397	63	4.5%	0.24x	5.5x	0.23x	5.0x
Median		83.9%	\$2,762	\$3,885	\$4,328	\$483	9.4%	\$4,435	\$552	9.9%	1.10x	11.6x	1.05x	10.7x

Engineering & Construction	Stock Price 04/01/19	% of 52 Week High	Market Cap	Enterprise Value	CY2019E			CY2020P			EV / CY2019E		EV / CY2020P	
					Rev.	EBITDA	Margin	Rev.	EBITDA	Margin	Rev.	EBITDA	Rev.	EBITDA
Jacobs Engineering	77.10	93.8%	10,757	12,630	12,712	997	7.8%	13,165	1,053	8.0%	0.99x	12.7x	0.96x	12.0x
AECOM	30.64	82.9%	4,783	8,037	20,363	993	4.9%	20,726	1,183	5.7%	0.39x	8.1x	0.39x	6.8x
Babcock International	6.66	58.5%	3,359	5,185	6,907	861	12.5%	6,633	868	13.1%	0.75x	6.0x	0.78x	6.0x
Tetra Tech	60.07	82.8%	3,317	3,513	2,469	273	11.1%	2,554	287	11.2%	1.42x	12.8x	1.38x	12.2x
KBR	19.87	89.4%	2,811	3,367	5,392	430	8.0%	5,803	468	8.1%	0.62x	7.8x	0.58x	7.2x
Median		82.9%	\$3,359	\$5,185	\$6,907	\$861	8.0%	\$6,633	\$868	8.1%	0.75x	8.1x	0.78x	7.2x

(1) S&P Capital IQ, company filings, and KippsDeSanto research
NM = not meaningful

Select Recent Aerospace / Defense M&A⁽¹⁾

(\$ in millions)

Announce Date	Buyer / Investor	Target	Target Description	EV	Revenue	EBITDA	EBITDA		EV / LTM	
							Margin		Rev.	EBITDA
03/27/19	Orolia S.A.	Skydel Solutions, Inc.	Provides global navigation satellite systems for positioning, navigation, and timing vulnerability testing	ND	ND	ND	ND		ND	ND
03/27/19	ST Engineering	Newtec Group NV	Provides satellite communications equipment for broadcast, government and defense, and enterprise VSAT applications	\$281.0	\$104.0	\$19.2	18.5%	2.70x		14.6x
03/26/19	Rheinmetall AG	IBD Deisenroth Engineering	Provides passive protection systems, with a focus on the use of next-generation materials in association with a modular and synergistic structural approach	ND	39.4	ND	ND		ND	ND
03/26/19	MAG Aerospace Corporation	Encore Aviation Pty	Provides engineering and maintenance services to a wide variety of fixed and rotary wing aviation organizations	ND	ND	ND	ND		ND	ND
03/18/19	Curtiss-Wright Corp.	Tactical Communications Group, LLC	Provides tactical data link software solutions for critical military communications systems	50.0	15.0	ND	ND	3.33x		ND
03/14/19	Cubic Corp.	Nuvotronics, Inc.	Provides microfabricated radio frequency ("RF") products	64.0	ND	6.1	ND		ND	10.5x
03/11/19	Greenbriar Equity Group / First Aviation Services	DART Aerospace	Provides mission equipment and aftermarket components for the helicopter and fixed-wing industries	ND	ND	ND	ND		ND	ND
03/11/19	STS Aviation Group	NAAS Line Maintenance Business Unit of Triumph Group	Provides line and fuel system maintenance support to airlines, MROs, government operators, and OEMs	ND	30.0	ND	ND		ND	ND
03/08/19	Tribus Aerospace, LLC	Midwest Precision, LLC	Provides precision manufacturing of complex components for aerospace, defense, energy, and engineered products markets	ND	ND	ND	ND		ND	ND
03/06/19	Boeing Co.	ForeFlight, LLC	Provides innovative flight planning and navigation software	ND	ND	ND	ND		ND	ND
03/04/19	Liberty Hall Capital Partners	Onboard Systems, Inc.	Provides external cargo handling equipment for civil and military helicopters	ND	ND	ND	ND		ND	ND
03/04/19	Luna Innovations	General Photonics	Provides innovative components, modules, and test equipment focused on the generation and control of polarized light	19.0	ND	ND	ND		ND	ND
03/01/19	Electro Technik Industries, Inc.	RF Technologies, Inc.	Provides high temperature brazed high power resistors, high power attenuators, and terminations for microwave and RF applications	ND	ND	ND	ND		ND	ND
02/28/19	Resilience Capital Partners, LLC	Syston Donner Inertial Systems, Inc.	Provides high performance quartz MEMS inertial sensors & systems	11.4	27.0	NM	ND	0.42x		ND
02/28/19	Kratos Defense & Security Solutions, Inc.	Florida Turbine Technologies, Inc. and FTT Core, Inc.	Provides engineering, development, and testing of advanced gas turbine engines, propulsion components, and systems	60.0	54.0	5.4	10.0%	1.11x		11.1x
02/28/19	Flight Support Group, Inc. (HEICO)	Decavo, LLC	Provides complex composite parts and assemblies incorporated into camera and related sensor assemblies and UAV airframes	ND	ND	ND	ND		ND	ND
02/27/19	Windjammer Capital Investors	Hermetic Solutions Group	Provides advanced hermetic packaging and components	ND	ND	ND	ND		ND	ND
02/27/19	Teijin Ltd	Renegade Materials Corporation	Provides heat-resistant thermoset prepreg for the aerospace industry	ND	ND	ND	ND		ND	ND
02/25/19	Hexagon AB	Thermoplae Sciences & Technology, LLC	Provides geospatial applications, mobile frameworks, and cloud computation	ND	20.0	ND	ND		ND	ND
02/20/19	Rafael Advanced Defense Systems Ltd. And Avichai Stoler	Aeronautics Ltd.	Provides the manufacturing of drones for military uses	231.0	ND	ND	ND		ND	ND
02/15/19	Kordsa, Inc.	Axiom Materials, Inc.	Provides composite materials for combining quality prepreg, adhesive, and ancillary composite products platform	ND	ND	ND	ND		ND	ND
02/15/19	Oriole Capital, Trive Capital, and Maz Aviation	GDC Technics Ltd.	Provides aircraft modification services with capabilities in design, engineering, and manufacturing	ND	ND	ND	ND		ND	ND
02/13/19	FLIR Systems, Inc.	Endeavor Robotics Holdings, Inc.	Provider of battle-tested, tactical unmanned ground vehicles for the global military and public safety markets	385.0	ND	ND	ND		ND	ND
02/11/19	The Lohia Group	L&S Light and Strong Ltd.	Provides the design and manufacture of UAV outer shell components, and composite material components for aircraft	ND	ND	ND	ND		ND	ND
02/11/19	Safran S.A.	ElectroMechanical Systems Business from Collins Aerospace	Provides pilot controls and electrical actuators for aircraft	ND	\$159.0	ND	ND		ND	ND

(1) S&P Capital IQ, company filings, and KippsDeSanto research
ND = not disclosed

Select Recent Aerospace / Defense M&A, cont.⁽¹⁾

(\$ in millions)

Announce Date	Buyer / Investor	Target	Target Description	EV	Revenue	EBITDA	EBITDA		EV / LTM	
							Margin		Rev.	EBITDA
02/04/19	DAC International, Inc.	Lynx Avionics	Provides the manufacture of headsets and intercom systems for aircraft	ND	ND	ND	ND		ND	ND
02/01/19	Whelan Engineering Company, Inc.	LoPresti Aviation	Provides aviation performance solutions company, primarily in aviation lighting, as well as in aircraft speed modifications	ND	ND	ND	ND		ND	ND
02/01/19	HEICO Corp.	Solid Sealing Technology, Inc.	Provides ceramic-to-metal connectors for demanding environments within the defense, industrial, semiconductor markets	ND	ND	ND	ND		ND	ND
01/29/19	Mercury Systems	GECO Avionics	Provides the design and manufacture of affordable safety-critical avionics and mission computing solutions	\$36.5	20.0	\$3.5	17.5%		1.83x	10.4x
01/28/19	Levine Leichtman Capital	SK AeroSafety Group	Provides inspection, maintenance, and repair of critical passenger safety equipment found on commercial and private aircraft	ND	ND	ND	ND		ND	ND
01/28/19	Flir Systems, Inc.	Aeryon Labs, Inc.	Provides high-performance unmanned aerial systems for the global military, public safety, and critical infrastructure markets	200.0	ND	ND	ND		ND	ND
01/24/19	Bombardier, Inc.	Global 7500 Wing Program of Triumph Group, Inc.	Provides a business jet program that includes bespoke interior with a full-size kitchen and four living spaces	ND	ND	ND	ND		ND	ND
01/24/19	Arlington Capital Partners	Triumph Group, Inc.'s Metallics Machining Operations	Provides vertically integrated assemblies, high velocity machining of components used to manufacture aerostructures	ND	150.0	ND	ND		ND	ND
01/23/19	Henry Schein, Inc.	North American Rescue, LLC	Provides survivability and casualty-care medical products to the defense and public-safety markets	ND	ND	ND	ND		ND	ND
01/23/19	digEcor Pty Ltd	Commercial In-Flight Entertainment Business of Collins Aerospace Systems ExecuJet	Provides the PAVES family of seat back and overhead solutions, as well as entertainment system and content services	ND	ND	ND	ND		ND	ND
01/21/19	Dassault Aviation		Provides MRO centers, fixed base operations, and aircraft management activities	ND	ND	ND	ND		ND	ND
01/21/19	Rheinmetall AG	Combat Vehicle Business of BAE Systems plc	Provides the MOD and Army maintenance and upgrade of a range of military vehicles and bridging systems	36.8	ND	ND	ND		ND	ND
01/16/19	ETL Systems Ltd	Atlantic Microwave Ltd	Provides RF and microwave equipment, components, and interconnects to the satcom, aerospace, and defense	ND	ND	ND	ND		ND	ND
01/15/19	Grand Traverse Economic Development	Bay Shore Steel Works, LLC	Provides armor plating engineering, fabricating, and machining services for the U.S. military	ND	ND	ND	ND		ND	ND
01/10/19	Gallant Capital Partners, LLC	Aero Turbine, Inc.	Provides turbine engine and accessory overhaul, repair and testing services to military and commercial clients	ND	ND	ND	ND		ND	ND
01/10/19	VSE Aviation, Inc.	1st Choice Aerospace	Provides component maintenance, repair and overhaul services and products for new generation and legacy commercial aircraft families	112.0	47.0	8.0	ND		2.38x	ND
01/10/19	Essex Industries, Inc.	Momeni Engineering, LLC	Provides precision machined OEM parts and assemblies to aerospace and medical companies	ND	ND	ND	ND		ND	ND
01/08/19	Hutchinson S.A.	Mide Technology Corp.	Provides products such as seals and wearable sensors for the aerospace, automotive, and manufacturing sectors	ND	ND	ND	ND		ND	ND
01/08/19	Ibis Tek, Inc.	Standard Bent Glass Corp.	Provides custom fabricated glass products, including transparent armor for the security and defense industry	ND	ND	ND	ND		ND	ND
01/07/19	Greenbriar Equity Group, LLC	STS Aviation Group	Provides component sales and distribution, engineering services, and aircraft repair and modifications to the global aviation industry	ND	ND	ND	ND		ND	ND
01/07/19	Trive Capital Holdings, LLC	California Brazing	Provides complex, high tolerance components for space, aircraft connectivity, specialty electronic, and various defense applications	ND	ND	ND	ND		ND	ND
01/07/19	Kellstrom Defense Aerospace	Williams Aerospace and Manufacturing, Inc.	Provides tooling, molding, and machining for complex defense aircraft components	ND	ND	ND	ND		ND	ND
01/02/19	Cubic Corp.	GRIDSMART Technologies	Provides real-world video processing camera sensors	87.0	35.0	8.0	22.9%		2.49x	10.9x
12/19/18	Teledyne Technologies, Inc.	Imaging Business of Roper Technologies	Provides imaging solutions, primarily for life sciences, academic research and customized OEM industrial imaging solutions	225.0	ND	ND	ND		ND	ND
12/17/18	Spartan Motors, Inc.	Strobes-R-Us, Inc.	Provides upfit services for government and non-government vehicles	ND	ND	ND	ND		ND	ND

(1) S&P Capital IQ, company filings, and KippsDeSanto research
ND = not disclosed

Select Recent Government Technology Solutions M&A⁽¹⁾

(\$ in millions)

Announce	Date	Buyer / Investor	Target	Target Description	EV	Revenue	EBITDA	EBITDA		EV / LTM	
								Margin		Rev.	EBITDA
	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 ("SEI&O"), cybersecurity, and service desk operations	ND	ND	ND	ND		ND	ND
	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	ND
	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	ND
	03/05/19	Tyto Athene, LLC	Island IT Consultants	Provides information and communications technology support services to the IC and other U.S. government agencies	ND	ND	ND	ND		ND	ND
	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%	1.17x		12.5x
	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	20.0	ND	ND		ND	ND
	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	ND
	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	ND
	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	ND
	02/04/19	IPKeys Technologies, LLC	SigmaFlow, LLC	Provides automated compliance tools for utilities and other highly-regulated critical infrastructure entities	ND	ND	ND	ND		ND	ND
	02/01/19	Tyler Technologies, Inc.	MicroPact, Inc.	Provides specialized, vertically oriented case management and business process management ("BPM") applications for government	185.0	70.0	ND	ND		2.64x	ND
	01/30/19	CACI International, Inc.	LGS Innovations, LLC	Provides real-time spectrum management, C4ISR, and cyber products and solutions to the IC and DoD	750.0	ND	ND	ND		ND	ND
	01/30/19	CACI International, Inc.	Mastodon Design	Provides rapid design and manufacturing of rugged signals intelligence ("SIGINT"), electronic warfare ("EW"), and cyber operations products and solutions	225.0	ND	ND	ND		ND	ND
	01/28/19	ECS Federal, LLC	DHA Group, Inc.	Provides mobility, cybersecurity, cloud, and IT services to the Federal Bureau of Investigation ("FBI") and other federal customers	46.0	50.0	ND	ND		0.92x	ND
	01/22/19	Perforce Software, Inc.	Rogue Wave Software, Inc.	Provides cross-platform software development tools and embedded components for building, connecting, and securing applications	ND	ND	ND	ND		ND	ND
	01/22/19	VT Group, Inc.	National Technologies Associates, Inc. (NTA)	Provides a full range of technical support services, ranging from design, acquisition, operation, and logistics support of complex systems	ND	ND	ND	ND		ND	ND
	01/22/19	Enlightenment Capital	System High Corporation	Provides global protection and security technical engineering solutions for critical National Security and Special Access Programs across the DoD and IC	ND	ND	ND	ND		ND	ND
	01/18/19	Huntington Ingalls Industries, Inc.	Fulcrum IT Services, LLC	Provides applications development, cybersecurity, network and communications engineering, online collaboration, help desk and call centers, information security, and disaster recovery	193.0	ND	ND	ND		ND	ND
	01/15/19	Culmen International, LLC	Centrifuge Systems	Provides next-generation big data business intelligence and visualization software	ND	ND	ND	ND		ND	ND
	01/14/19	Concept Plus, LLC	Dougherty & Associates, Inc. (DAI Solutions)	Provides organizational development, change management, communications, and learning with a track record of managing complex transformation initiatives	ND	ND	ND	ND		ND	ND
	01/10/19	Planned Systems International, Inc.	QuarterLine, LLC	Provides expertise in a wide range of clinical solutions and insights, behavioral health solutions, virtual care and telemedicine solutions, and enterprise technology services to public and private-sectors	ND	ND	ND	ND		ND	ND
	01/09/19	Hui Huliau	Advanced C4 Solutions	Provides professional support, cyberspace operations, and mission support services for federal agencies	ND	ND	ND	ND		ND	ND
	01/08/19	Parsons Corporation	OGSystems, LLC	Provides geospatial and security solutions for the DoD and IC	ND	ND	ND	ND		ND	ND
	01/07/19	Technical Services Corp. (TSC)	Accelerated Development & Support Corp.	Provides technically oriented services from program management to systems integration and engineering	ND	ND	ND	ND		ND	ND
	12/07/18	CSB, LLC	Artlin Consulting	Provides a wealth of customized services and solutions to help clients achieve their desired business results quickly and economically	ND	ND	ND	ND		ND	ND

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We welcome the opportunity to have a more detailed discussion of developments in our focus industries. For more information, please contact us:

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