



INDUSTRY UPDATE

AEROSPACE & DEFENSE
Q2 2020

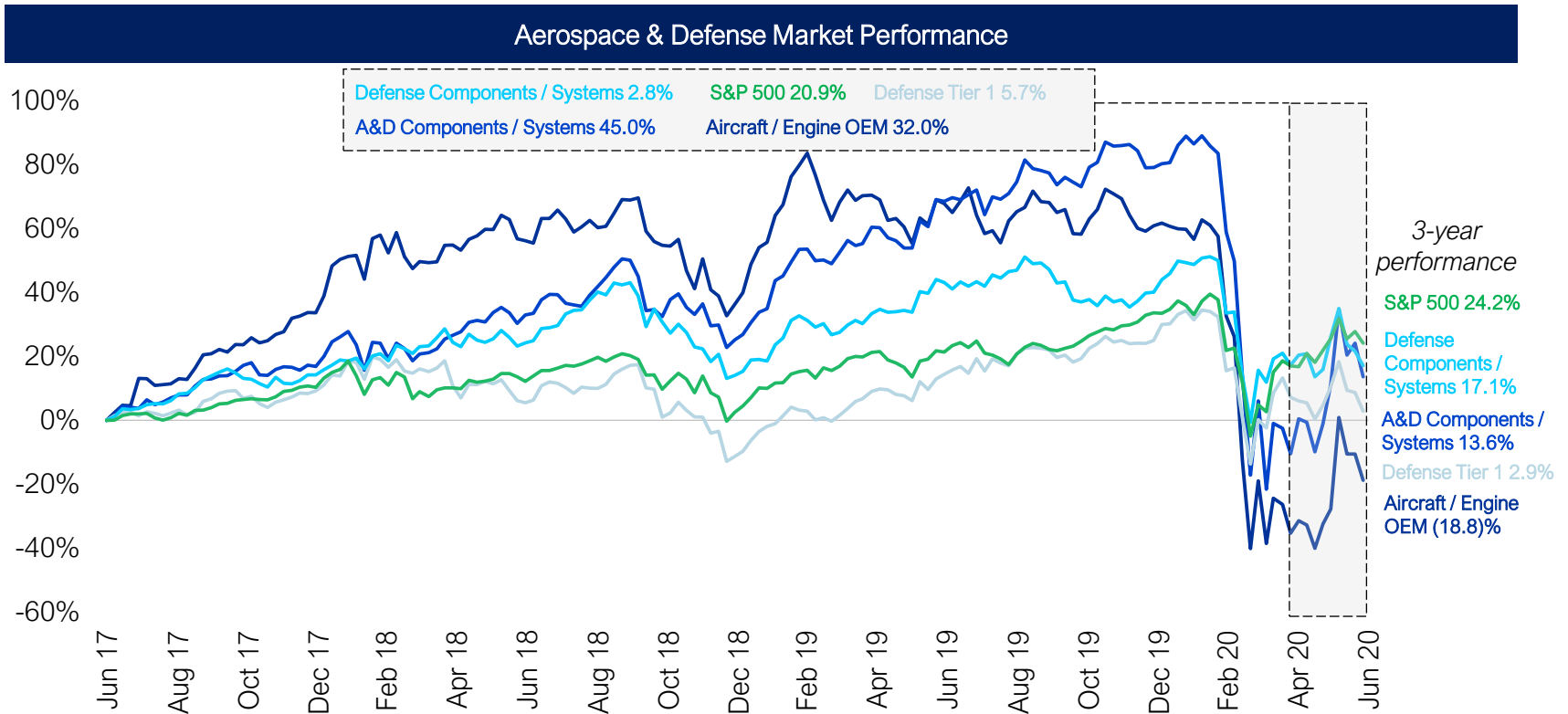


GREENWICH
CAPITAL GROUP

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Public Market Performance

Q2 2020 represented a significant recovery for many public equities against the backdrop of the pandemic and market declines in the first quarter. Across the indices tracked in this update, A&D Components / Systems (+45.0%) and Aircraft / Engine OEMs (+32.0%) outperformed compared to the S&P 500 (+20.9%), followed by Defense Tier 1 (+5.7%) and Defense Component / Systems (+2.8%). Impacts of the pandemic continue to evolve with respect to global demand for air travel while the FY21 defense authorization remains in process.



Source: S&P Capital IQ

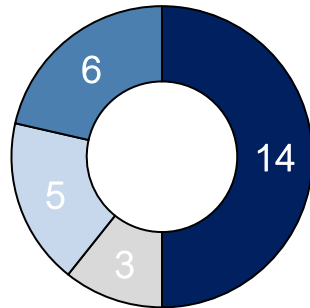
Note: All values based on publicly available data as of 6/30/2020



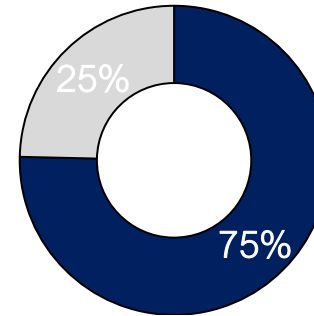
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M&A Activity

Q2 2020
Transaction Volume:
28



- Aerospace
- Defense IT/Services
- Defense
- Space



- Strategic Buyer
- Financial Buyer

Select Transactions:

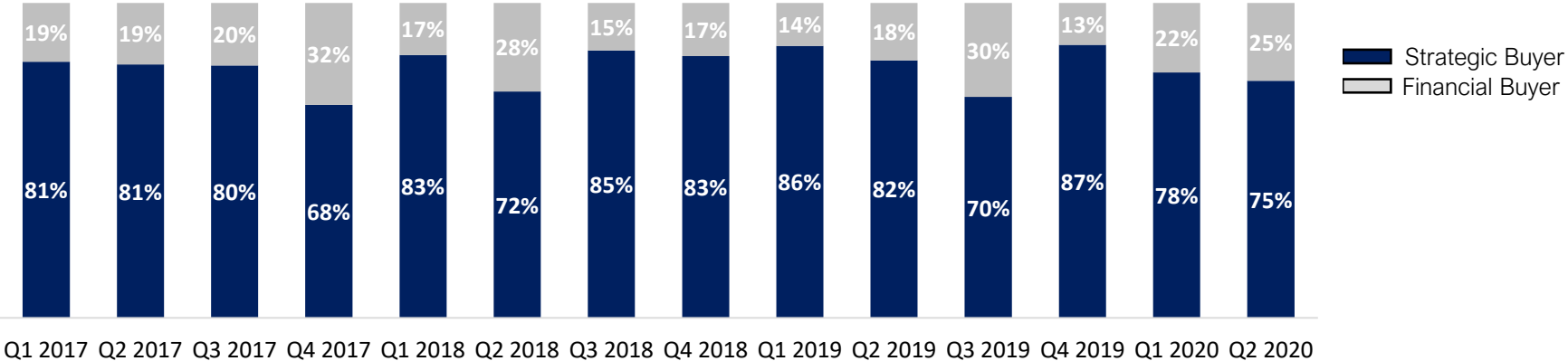
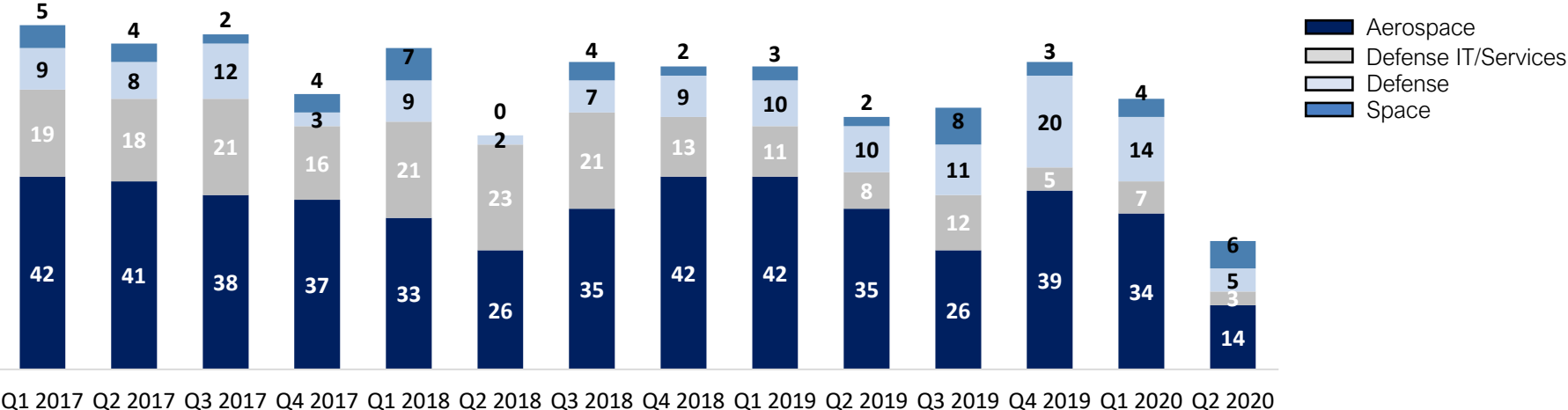
Announced	Target / Seller	Buyer	Transaction Value (\$mm)	Target Description
06/29/2020	Composite Manufacturing Business of AAR Manufacturing	Architect Equity LLC	-	The composites business unit designs, fabricates and assembles composite products for customers in the commercial A&D market
06/25/2020	Vricon, Inc. (SAAB AB)	Maxar Technologies Inc. (NYSE:MAXR)	\$140	Vricon provides satellite-derived 3D data for defense and intelligence markets, with software products that support military simulation and training
06/23/2020	Shadin L.P. (The Wright Group)	Gardner Standard LLC	-	Shadin designs and manufactures instrumentation for turbine, piston and rotor aircraft for military and corporate aviation markets
06/16/2020	ASC Signal Corporation	Kratos Defense & Security Solutions, Inc. (NasdaqGS:KTOS)	\$35	The acquisition broadens Kratos' space ground systems business with the addition of earth station antennas used for strategic communications
06/15/2020	WaveStrike, LLC	Novetta Solutions (The Carlyle Group)	-	WaveStrike is a provider of software engineering services, data analytics and technology solutions to national security customers
06/11/2020	Rocky Mountain Hydrostatics, Inc.	HEICO Corporation (NYSE:HEI)	-	Rocky Mountain overhauls industrial pumps, motors and other hydraulic units with a focus on the support of legacy systems for the US Navy
06/01/2020	Deep Space Systems Inc.	RedWire, LLC (AE Industrial Partners)	-	DSS develops integrated spacecraft, fully qualified payloads and embedded software. DSS will be combined with Adcole Space to form RedWire
05/12/2020	PulseR, LLC (Oaktree Capital Management)	The Jordan Company, L.P.	-	PulseR manufactures ruggedized magnetic solutions for use in military, commercial aerospace, space and industrial applications.
05/06/2020	Tethers Unlimited, Inc.	AMERGINT Technologies, Inc.	-	Tethers Unlimited develops programmable radios for small satellites, advanced space propulsion modules and systems for in-space manufacturing
05/04/2020	FlightWire Technology, Inc.	New Wave Design, Verification, LLC	-	FlightWire provides laboratory equipment and services designed to ease the implementation of IEEE-1394 and AS5643 requirements
04/21/2020	Asco Industries NV	Spirit AeroSystems Holdings, Inc. (NYSE:SPR)	-	Asco provides high lift wing structures, mechanical assemblies and major functional components to the commercial aerospace and military markets
04/20/2020	Precision Optics Business of Collins Aerospace	AMERGINT Technologies, Inc.	-	The business unit provides precision electro-optical systems for defense and national security space missions
04/02/2020	Technical Directions Inc.	Kratos Defense & Security Solutions, Inc. (NasdaqGS:KTOS)	-	Technical Directions makes jet turbines behind the US Air Force Research Laboratory's low-cost cruise missile, the Gray Wolf
04/01/2020	Precinmac Precision Machining (GenNx360 Capital)	Bain Capital, Pine Island Capital Partners	-	Precinmac is a manufacturer of machined components and assemblies for companies in the A&D, semiconductor and general industrials sectors

Source: Capital IQ and GCG research



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M&A Trends

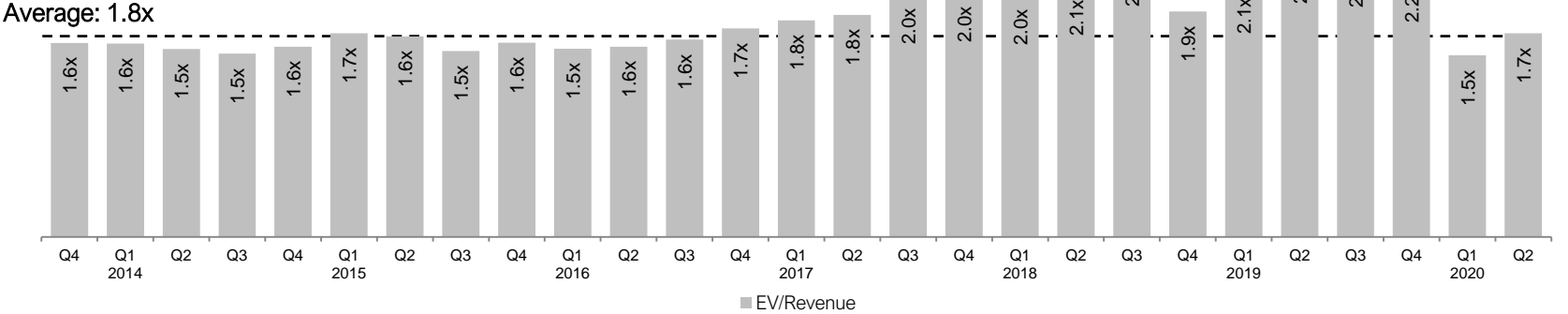
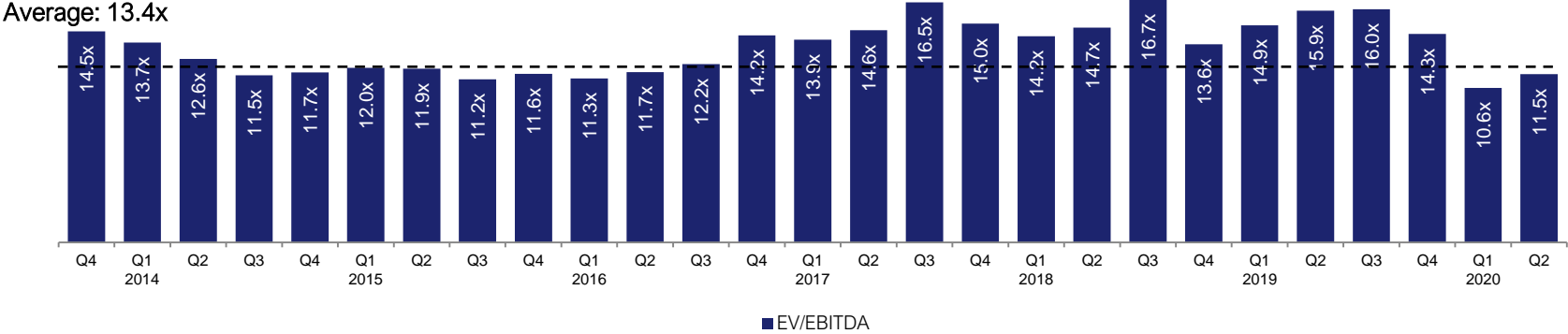


Source: S&P Capital IQ & GCG Research
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Public Company Trading Multiples



Source: S&P Capital IQ
 Note: All values based on publicly available data as of 6/30/2020



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Public Comparable Companies

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:	
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA
Aircraft/Engine OEM								
The Boeing Company	\$127,146	\$70,550	20.4%	(49.6%)	2.2%	(3.5%)	1.8x	NM
Airbus SE	\$62,713	\$75,341	6.3%	(49.6%)	15.1%	4.7%	0.8x	14.6x
Bombardier Inc.	\$11,578	\$15,932	2.7%	(81.6%)	9.3%	2.2%	0.7x	19.1x
Textron Inc.	\$10,531	\$13,298	18.9%	(38.0%)	15.5%	11.0%	0.8x	7.0x
MTU Aero Engines AG	\$9,191	\$5,242	16.6%	(27.2%)	19.5%	15.8%	1.7x	9.4x
Rolls-Royce Holdings plc	\$8,311	\$21,968	(11.3%)	(66.9%)	5.7%	(1.3%)	0.4x	22.8x
Dassault Aviation SA	\$2,716	\$8,278	18.7%	(35.8%)	31.6%	12.0%	0.3x	2.0x
Embraer S.A.	\$950	\$2,057	(18.5%)	(70.9%)	14.8%	3.3%	0.5x	12.8x
Mean	\$27,863	\$26,583	6.7%	(52.5%)	14.2%	5.5%	0.9x	12.5x
Median	\$9,861	\$14,615	11.5%	(49.6%)	14.9%	4.0%	0.7x	12.8x

Source: S&P Capital IQ

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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:	
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA
A&D Components/Systems								
Safran SA	\$48,139	\$28,351	7.2%	(31.5%)	46.7%	20.0%	1.7x	8.0x
TransDigm Group Incorporated	\$40,275	\$5,970	29.0%	(8.6%)	55.0%	43.9%	6.7x	15.2x
HEICO Corporation	\$12,627	\$2,048	29.6%	29.6%	39.0%	26.8%	6.2x	22.2x
Woodward, Inc.	\$5,822	\$2,929	31.0%	(31.5%)	24.8%	16.8%	2.0x	11.3x
Hexcel Corporation	\$4,836	\$2,287	25.1%	(44.1%)	26.9%	23.7%	2.1x	8.9x
Meggitt PLC	\$3,971	\$3,015	9.2%	(45.3%)	35.0%	21.7%	1.4x	6.3x
Spirit AeroSystems Holdings, Inc.	\$3,772	\$6,973	(1.3%)	(70.6%)	10.9%	10.6%	0.5x	5.0x
Triumph Group, Inc.	\$1,857	\$2,900	39.7%	(60.7%)	20.4%	9.9%	0.6x	5.8x
AAR Corp.	\$964	\$2,218	14.3%	(43.8%)	14.8%	6.5%	0.4x	5.6x
Ducommun Incorporated	\$712	\$722	42.6%	(22.6%)	21.2%	12.2%	1.0x	7.7x
Senior plc	\$642	\$1,471	12.3%	(68.5%)	19.6%	10.5%	0.5x	4.1x
Astronics Corporation	\$496	\$722	24.4%	(73.7%)	21.5%	9.3%	0.7x	6.7x
Héroux-Devtek Inc.	\$453	\$432	2.5%	(48.9%)	16.8%	13.7%	1.0x	6.7x
Latécoère S.A.	\$384	\$801	4.5%	(27.3%)	34.0%	4.0%	0.5x	10.4x
Magellan Aerospace Corporation	\$374	\$695	21.4%	(57.4%)	15.3%	13.8%	0.5x	3.7x
Mean	\$8,355	\$4,102	19.4%	(40.3%)	26.8%	16.2%	1.7x	8.5x
Median	\$1,857	\$2,218	21.4%	(44.1%)	21.5%	13.7%	1.0x	6.7x

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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:	
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA
Defense Tier 1								
Raytheon Technologies Corporation	\$136,009	\$76,891	(37.4%)	(52.7%)	26.5%	18.1%	1.8x	9.3x
Lockheed Martin Corporation	\$113,078	\$62,920	4.6%	0.4%	13.5%	13.9%	1.8x	12.5x
Northrop Grumman Corporation	\$66,086	\$34,272	(2.0%)	(4.8%)	21.3%	11.9%	1.9x	14.7x
General Dynamics Corporation	\$56,858	\$38,838	11.9%	(17.8%)	17.8%	14.0%	1.5x	9.7x
BAE Systems plc	\$22,126	\$24,243	(5.1%)	(4.9%)	64.5%	10.8%	1.0x	7.6x
Leonardo S.p.a.	\$8,987	\$15,000	0.9%	(47.6%)	36.5%	10.6%	0.6x	4.7x
Huntington Ingalls Industries, Inc.	\$8,976	\$9,082	(7.9%)	(22.4%)	17.9%	11.7%	1.0x	7.7x
Saab AB (publ)	\$3,884	\$3,803	34.5%	(23.2%)	22.5%	9.9%	1.0x	9.0x
Mean	\$52,001	\$33,131	(0.1%)	(21.6%)	27.5%	12.6%	1.3x	9.4x
Median	\$39,492	\$29,258	(0.5%)	(20.1%)	21.9%	11.8%	1.2x	9.1x

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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:	
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA
Defense Components/Systems								
L3Harris Technologies, Inc.	\$44,014	\$21,424	(6.8%)	(10.3%)	28.5%	18.8%	2.1x	11.0x
Thales S.A.	\$21,249	\$20,650	0.4%	(34.6%)	24.6%	11.9%	1.0x	7.3x
Elbit Systems Ltd.	\$7,171	\$4,558	7.3%	(9.0%)	26.4%	10.5%	1.5x	12.4x
FLIR Systems, Inc.	\$5,876	\$1,893	26.2%	(25.0%)	48.6%	20.7%	3.1x	14.4x
Mercury Systems, Inc.	\$4,240	\$756	6.0%	11.8%	45.1%	18.5%	5.6x	28.2x
Aerojet Rocketdyne Holdings, Inc.	\$2,894	\$1,966	(8.1%)	(11.5%)	18.1%	14.1%	1.5x	9.9x
Cubic Corporation	\$2,394	\$1,504	9.4%	(25.5%)	27.7%	8.0%	1.6x	16.6x
Kratos Defense & Security Solutions, Inc.	\$2,150	\$726	8.5%	(31.7%)	26.3%	8.5%	3.0x	29.6x
Ultra Electronics Holdings plc	\$1,945	\$1,093	4.7%	18.0%	29.0%	15.8%	1.9x	11.3x
AeroVironment, Inc.	\$1,608	\$367	32.4%	40.3%	41.7%	15.3%	4.4x	28.5x
Chemring Group PLC	\$920	\$487	19.6%	27.7%	76.1%	19.0%	1.9x	10.1x
Espey Mfg. & Electronics Corp.	\$31	\$31	(3.8%)	(30.0%)	19.1%	6.7%	1.0x	15.2x
Mean	\$7,874	\$4,621	8.0%	(6.6%)	34.3%	14.0%	2.4x	16.2x
Median	\$1,955	\$1,299	6.6%	(10.9%)	28.1%	14.7%	1.9x	13.4x
Aerospace & Defense Mean	\$20,208	\$13,830	10.2%	(29.7%)	26.7%	12.9%	1.7x	11.5x
Aerospace & Defense Median	\$4,558	\$3,015	8.5%	(31.5%)	22.5%	11.9%	1.4x	9.8x

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Aerospace & Defense Expertise

GCG's Aerospace & Defense ("A&D") team has an extensive industry background formed by working with dozens of clients across nearly all aspects of the commercial aerospace, regional jet, business jet, helicopter, military aircraft, and defense supply chain continuum. With experience serving private and publicly traded A&D companies in the U.S. and abroad, GCG has a deep understanding of the trends and dynamics affecting this increasingly global industry.

More about Greenwich Capital Group

Greenwich Capital Group ("GCG") is a middle market focused advisory firm offering a range of investment banking and consulting services to private companies, public companies and private equity investors. For additional perspective or to discuss M&A related opportunities in the aerospace & defense sector, please reach out to GCG's A&D practice leader, Peter Frankfort. For more information, please visit www.greenwichgp.com.



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Data Sources: We have based our findings on data provided by industry recognized sources. Data and information for this publication was collated from the S&P Capital IQ database. For more information on this or anything else related to our research, please email info@greenwichgp.com.

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