

DEFENSE & SPACE QUARTERLY MARKET UPDATE

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Industry Expertise: Illustrative Transactions

 A portfolio company of Has been acquired by 	 Has been acquired by A portfolio company of 	 A portfolio company of Has been acquired by 	 \$90,000,000 Initial Public Offering Joint Bookrunning Manager	 Has been acquired by A portfolio company of 	 Has been acquired by Booz Allen Hamilton
 A portfolio company of Has been acquired by 	 Has been acquired by 	 Has been acquired by 	 Has been acquired by 	 A portfolio company of Has been acquired by 	 A portfolio company of Has been acquired by
 Has received a strategic investment from 	 Has been acquired by 	 Has been acquired by A portfolio company of 	 Has been acquired by 	 Has received financing from 	 Has been acquired by
 \$227,700,000 Follow-On Offering Co-Manager	The Federal Government IT Solutions Business of Has been acquired by 	 Has been acquired by 	The Global Defense Services Business of Has been acquired by 	 Has been acquired by 	 Has been acquired by

Note: Transactions occurred between October 2017 and April 2022

Illustrative Equity Research Coverage*

EQUITY RESEARCH COVERAGE									
			Booz Allen Hamilton						

*The public companies displayed are actively covered by Raymond James Equity Research analysts

RAYMOND JAMES INVESTMENT BANKING 2

Defense & Space Industry Update

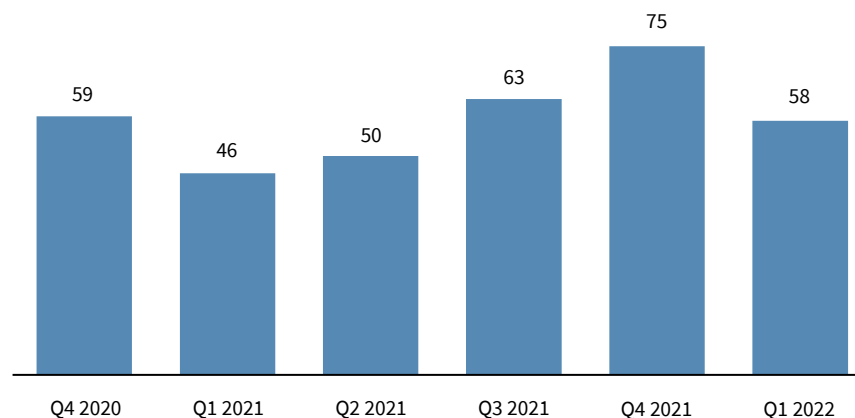
M&A Activity Summary

- Defense & Space M&A activity declined quarter-over-quarter for Q1 2022, largely driven by a heightened level of M&A activity in Q4 2021 as a result of sellers attempting to finalize deals by year-end. However, year-over-year M&A activity for Q1 2022 in the Defense & Space sector grew by ~25% compared to Q1 2021.
- Large strategic acquirers as well as financial buyers remained acquisitive in the face of increased turbulence in public markets. Kratos, SES, and BAE Systems all made strategic acquisitions throughout the quarter, signaling a desire for M&A that is expected to continue throughout the year. Additionally, financial buyers' interest in M&A will also drive elevated deal activity due to the need to deploy substantial existing dry powder.
- On March 27th, BAE Systems completed the acquisition of Bohemia Interactive Simulations, a portfolio company of The Riverside Company. The combination of BAE Systems and Bohemia, a provider of simulation technologies and integrated training solutions for military and civilian organizations around the globe, better positions BAE to meet customers' evolving needs in the rapidly growing market for global military training.

Industry News

- On March 28th, the President's FY 2023 Budget Request was released, calling for a total of \$813.0 billion in defense spending. The Department of Defense ("DoD") was allocated \$773.0 billion in proposed funding, a \$30.7 billion increase from the FY 2022 enacted amount. Within the proposal, innovation and modernization was a key theme, with \$130.1 billion allocated to programs that attempt to match and exceed the technological achievements of near-peer adversaries like Russia and China.
- On February 24th, the Russian military launched a multi-pronged offensive attack on Ukraine after months of build-up and military operations along the Russia-Ukraine border. Days later, U.S. Secretary of State, Antony Blinken, announced the authorization of \$350 million in lethal military assistance, including anti-armor and anti-aircraft systems, while the European Union stated that it would purchase ~\$500 million in lethal assistance and an additional ~\$50 million in non-lethal supplies to assist Ukrainian defense efforts.

Recent Defense & Space Transaction Activity ⁽¹⁾



Recent, Representative M&A Transactions ⁽²⁾



(1) Totals include all closed transactions reported by DACIS / Infobase as of 3/31/2022

(2) Transactions occurred between January 2022 and April 2022

Sources: C4ISRNET, DefenseNews, DACIS, Fiscal Year 2023 Budget Request

Spotlight: Signal Jamming

The ongoing conflict in Ukraine highlights the growing importance for the U.S. and its allies to bolster signal jamming capabilities as the era of peer and near-peer conflicts within contested and denied military environments has emerged

Signal Jamming Types and Military Use Cases



Command, Control, and Communication

Collect, disrupt, deny, neutralize, or deceive wireless devices, satellites, and military radios transmitting communication signals, intelligence data, and military operations

Use Cases:



SATCOM & Wireless Comms



Data Transport & Downlinks



3G, 4G & 5G Signals



Radar, Positioning, and Navigation

Locate, interfere, falsify, disrupt, or damage military radars, satellites, and vehicles from locating opposition forces and employing location data for navigation

Use Cases:



Satellite Navigations



Precision-Guided Munitions



Force Tracking & Surveillance

Russian Capabilities Observed in Ukraine



On March 22nd, 2022, Ukraine announced the capture of a Russian Krasukha-4 electronic system believed to track NATO aircraft and designed to detect and jam large adversarial radars



On March 27th, 2022, Ukraine announced the capture of a Russian Barnaul-T platform equipped with advanced radar, communication, and data transport modules that enable effective command and control of multi-domain airborne assets

Reports indicate that Ukraine has supplied captured Russian assets to NATO for further examination to gain a better understanding of Russian capabilities and determine gaps in NATO defense technology

Select United States Signal Jamming Programs and Initiatives to Combat Peer and Near-Peer Adversaries



TLS

Terrestrial Layer System (“TLS”) is a ground-based tactical electronic system mounted to a Stryker vehicle to defend against near-peer electromagnetic threats and deny, degrade, disrupt, or otherwise manipulate adversarial electronic systems

Program News and Funding Update:

~\$10M
Sep. 2021



Funding to finalize the prototype system that will be deployed for initial procurement



MFEW – AL

The Multi-Function Electronic Warfare – Air Large (“MFEW – AL”) program is intended to offer a suite of powerful, sophisticated airborne sensors and jammers via a pod for the MQ-1C Gray Eagle drone to jam cell phone, satellite, and GPS signals

Program News and Funding Update:

~\$75M
Nov. 2020



Contract to finalize prototype development, program delays have pushed initial procurement past 2023



Next Generation Jammer

The Next Generation Jammer program will upgrade U.S. Navy EA-18G Growlers with an advanced airborne electronic attack system that leverages electronically scanned array technology to disrupt, deny, and degrade enemy air defense and ground communication systems

Program News and Funding Update:

~\$400M
July 2021



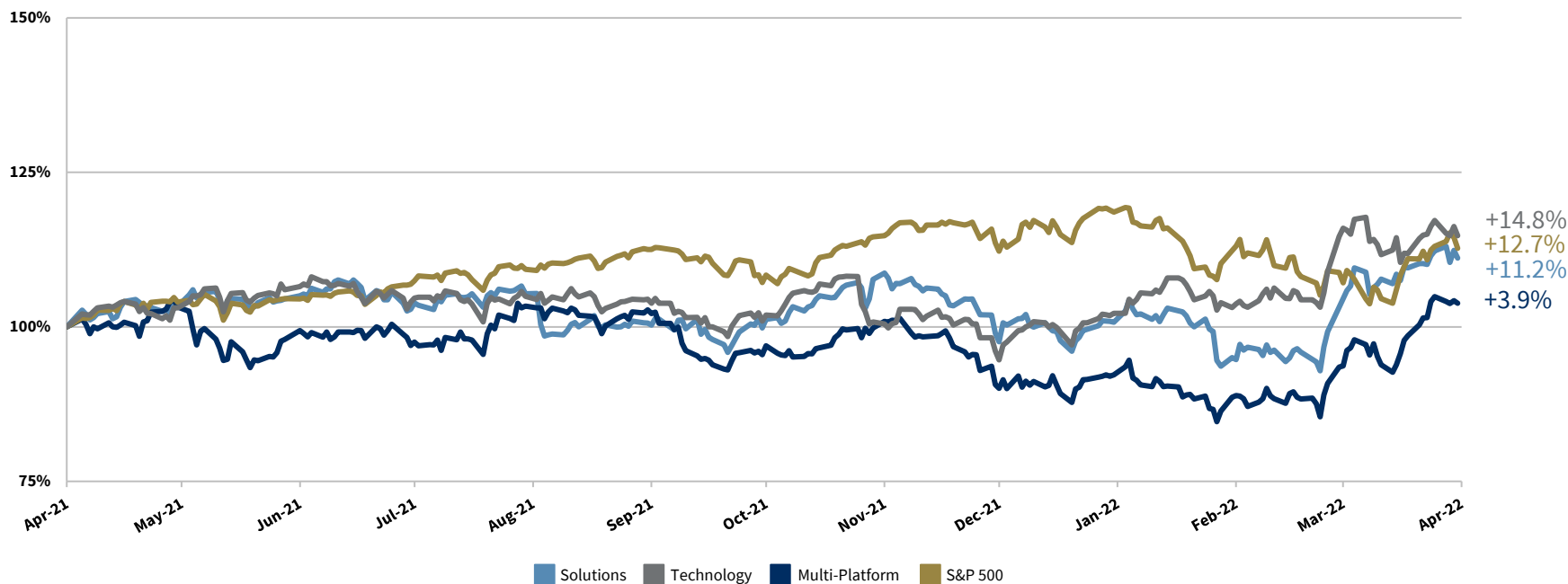
Additional funding (on top of ~\$2B in awards for prototype development) set-aside for initial system procurement

Public Defense & Space Market Performance

Market Commentary

- Over the last twelve months, the three indexes have all trended positively, with the Technology index outperforming the S&P 500 over the period
- All three indexes rebounded robustly from the March 2022 low, with the conflict in Ukraine driving investor demand for companies operating within the public Defense & Space market

LTM Defense & Space Index Performance



Source: Capital IQ; Data as of 3/31/2022

Note: Companies included are those tracked internally by Raymond James – individual assets disclosed on next page

Publicly Traded Defense & Space Companies

(\$ in millions except for stock price)

	Market Data						Financial Performance				Valuation Multiples		Valuation Multiples		Valuation Multiples	
	Company Name	Ticker	Price at 3/31/2022	% of 52-Week High	Equity Value	Enterprise Value	LTM				TEV / LTM		TEV / CY 2022 (P)		TEV / CY 2023 (P)	
							Total Sales	EBITDA	EBITDA Margin	Debt / EBITDA	Total Sales	EBITDA	Total Sales	EBITDA	Total Sales	EBITDA
Technology	AeroVironment, Inc.	NasdaqGS:AVAV	\$94.14	74.3%	\$2,328	\$2,460	\$449	\$60	13.4%	3.2x	N.M.	N.M.	5.0x	N.M.	4.5x	N.M.
	Kratos Defense & Security Solutions, Inc.	NasdaqGS:KTOS	\$20.48	67.6%	\$2,553	\$2,602	\$812	\$55	6.8%	5.7x	3.2x	N.M.	2.9x	29.6x	2.6x	23.5x
	Mercury Systems, Inc.	NasdaqGS:MRCY	\$64.45	81.1%	\$3,658	\$4,079	\$953	\$163	17.1%	3.0x	4.3x	25.0x	3.9x	16.8x	3.6x	15.9x
	Teledyne Technologies Incorporated	NYSE:TDY	\$472.63	98.9%	\$22,306	\$26,098	\$4,614	\$1,034	22.4%	4.0x	N.M.	25.2x	4.7x	19.2x	4.5x	18.1x
	Ultra Electronics Holdings plc ⁽¹⁾	LSE:ULE	\$43.69	97.2%	\$3,120	\$3,173	\$1,152	\$199	17.3%	1.2x	2.8x	16.0x	2.7x	14.9x	2.5x	13.8x
	Viasat, Inc.	NasdaqGS:VSAT	\$48.80	71.0%	\$3,632	\$6,054	\$2,682	\$494	18.4%	4.4x	2.3x	12.3x	2.0x	8.9x	1.9x	8.0x
Median:				77.7%	\$3,376	\$3,626	\$1,052	\$181	17.2%	3.6x	3.0x	20.5x	3.4x	16.8x	3.1x	15.9x
Average:				81.7%	\$6,266	\$7,411	\$1,777	\$334	15.9%	3.6x	3.1x	19.6x	3.5x	17.9x	3.3x	15.8x
Solutions	Booz Allen Hamilton Holding Corporation	NYSE:BAH	\$87.84	96.5%	\$11,705	\$14,214	\$8,105	\$923	11.4%	3.1x	1.8x	15.4x	1.6x	15.0x	1.5x	13.7x
	CACI International Inc	NYSE:CACI	\$301.26	96.1%	\$7,051	\$9,408	\$6,093	\$647	10.6%	3.3x	1.5x	14.5x	1.4x	13.3x	1.4x	12.3x
	Jacobs Engineering Group Inc.	NYSE:J	\$137.81	92.1%	\$17,807	\$21,233	\$14,091	\$1,274	9.0%	2.8x	1.5x	16.7x	1.4x	14.6x	1.3x	13.0x
	Leidos Holdings, Inc.	NYSE:LIDOS	\$108.02	98.5%	\$14,728	\$19,912	\$13,737	\$1,510	11.0%	3.3x	1.4x	13.2x	1.4x	13.6x	1.3x	12.8x
	ManTech International Corporation	NasdaqGS:MANT	\$86.19	93.7%	\$3,518	\$3,861	\$2,554	\$264	10.3%	1.3x	1.5x	14.6x	1.5x	15.1x	1.4x	14.4x
	Parsons Corporation	NYSE:PSN	\$38.70	86.0%	\$4,012	\$4,507	\$3,661	\$310	8.5%	2.1x	1.2x	14.5x	1.2x	13.6x	1.1x	12.5x
Multi-Platform	Science Applications International Corporation	NYSE:SAIC	\$92.17	95.5%	\$5,166	\$7,855	\$7,394	\$699	9.5%	3.4x	1.1x	11.2x	1.1x	11.8x	1.0x	11.5x
	Median:			95.5%	\$7,051	\$9,408	\$7,394	\$699	10.3%	3.1x	1.5x	14.5x	1.4x	13.6x	1.3x	12.8x
	Average:			94.1%	\$9,141	\$11,570	\$7,948	\$804	10.0%	2.8x	1.4x	14.3x	1.4x	13.9x	1.3x	12.9x
	BAE Systems plc	LSE:BA	\$9.43	93.6%	\$29,665	\$34,694	\$26,433	\$3,011	11.4%	2.7x	1.3x	11.5x	1.2x	8.8x	1.2x	8.5x
	The Boeing Company	NYSE:BA	\$191.50	73.5%	\$113,059	\$156,609	\$62,286	\$1,457	2.3%	N.M.	2.5x	N.M.	2.0x	19.4x	1.7x	14.8x
	General Dynamics Corporation	NYSE:GD	\$241.18	94.6%	\$66,953	\$78,525	\$38,469	\$5,271	13.7%	2.3x	2.0x	14.9x	2.0x	15.2x	1.9x	13.8x
	Honeywell International Inc.	NasdaqGS:HON	\$194.58	82.1%	\$133,381	\$143,169	\$34,392	\$8,696	25.3%	2.3x	4.2x	16.5x	4.0x	15.4x	3.7x	14.3x
	L3Harris Technologies, Inc.	NYSE:LHX	\$248.47	88.8%	\$47,970	\$55,073	\$17,814	\$3,637	20.4%	2.1x	3.1x	15.1x	3.1x	14.5x	3.0x	13.8x
	Lockheed Martin Corporation	NYSE:LMT	\$441.40	92.0%	\$120,205	\$129,703	\$67,044	\$9,010	13.4%	1.4x	1.9x	14.4x	2.0x	12.9x	1.9x	12.7x
	Northrop Grumman Corporation	NYSE:NOC	\$447.22	91.1%	\$69,812	\$80,521	\$35,667	\$8,734	24.5%	1.6x	2.3x	9.2x	2.2x	16.6x	2.1x	15.8x
	Raytheon Technologies Corporation	NYSE:RTX	\$99.07	94.9%	\$146,928	\$174,280	\$64,388	\$11,374	17.7%	2.8x	2.7x	15.3x	2.5x	13.9x	2.3x	12.2x
	Median:			91.5%	\$91,435	\$105,112	\$37,068	\$6,984	15.7%	2.3x	2.4x	14.9x	2.1x	14.8x	2.0x	13.8x
	Average:			88.8%	\$90,996	\$106,572	\$43,312	\$6,399	16.1%	2.2x	2.5x	13.9x	2.4x	14.6x	2.2x	13.2x

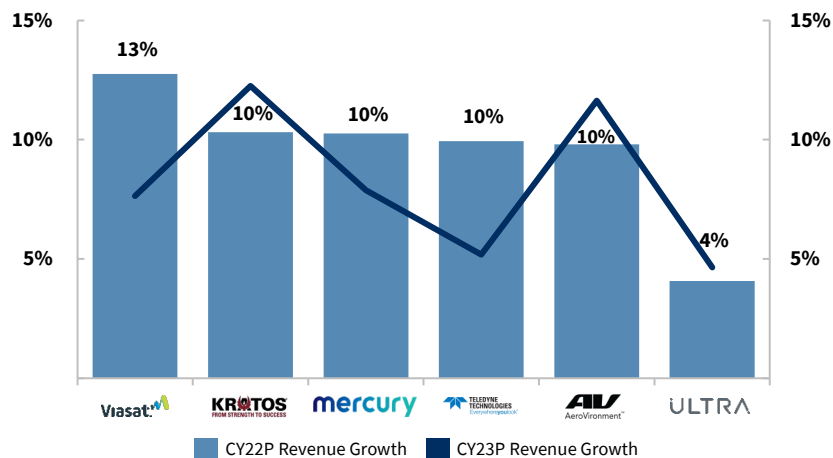
(1) On 8/16/2021, Cobham Ltd., a portfolio company of Advent International Corp, announced that it had agreed on the terms and conditions to acquire Ultra Electronics Holdings plc for \$3.55 billion.

Source: Capital IQ; Data as of 3/31/2022

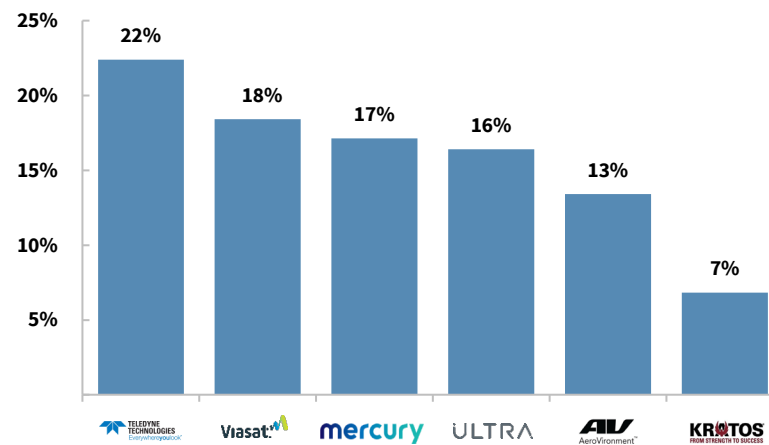
Financial projections are sourced from Capital IQ consensus estimates; foreign traded companies are listed in U.S. dollars at 12/31/2021 spot exchange rate; TEV / EBITDA valuation multiples less than 0.0x or greater than 30.0x and TEV / Total Sales multiples less than 0.0x or greater than 5.0x are considered not material ("N.M."); Debt / LTM EBITDA figures represent total debt divided by LTM EBITDA, which includes a lease adjustment

Defense & Space: Technology Benchmarking

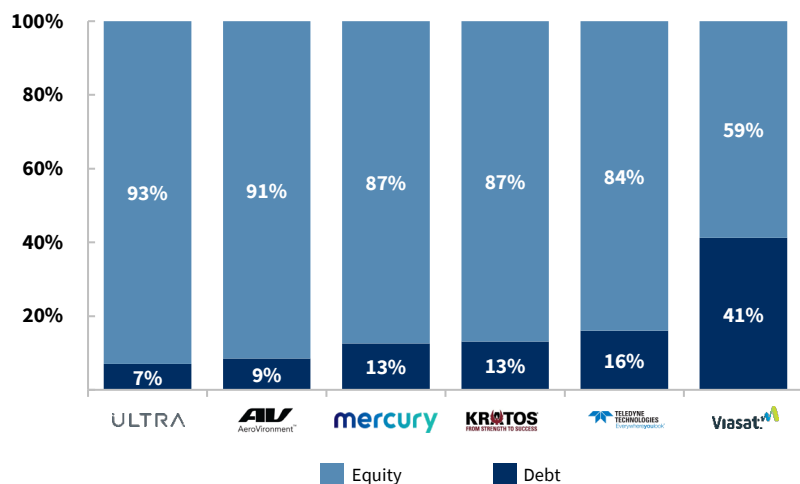
Revenue Growth: CY22P & CY23P ⁽¹⁾



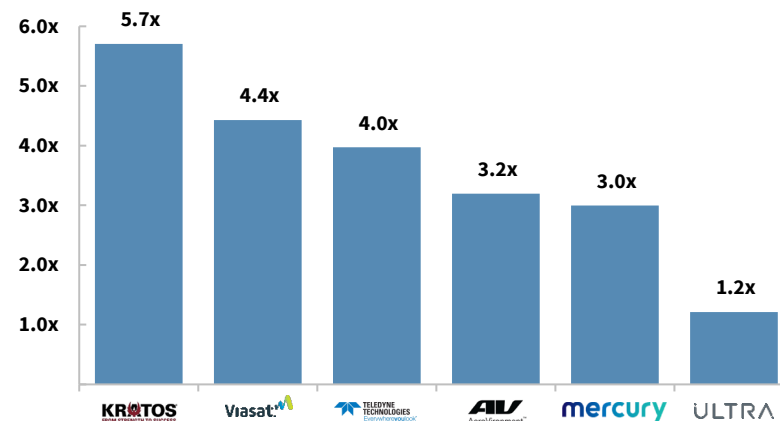
LTM EBITDA Margin



Capital Structure



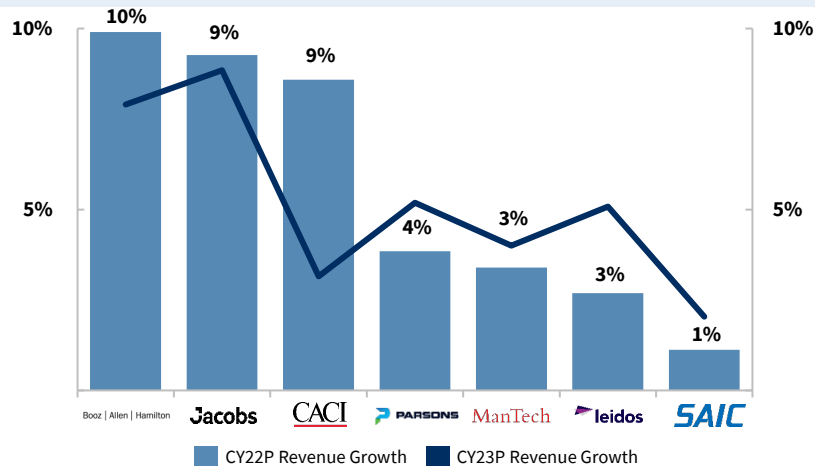
Total Debt to LTM EBITDA Ratio



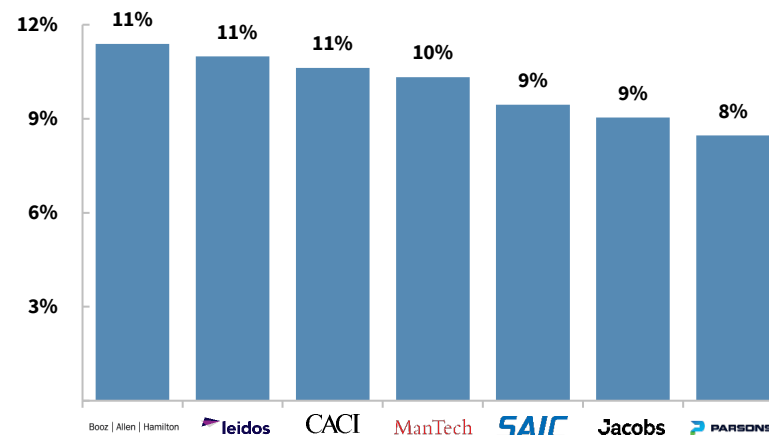
Source: Capital IQ; Data as of 3/31/2022

Defense & Space: Solutions Benchmarking

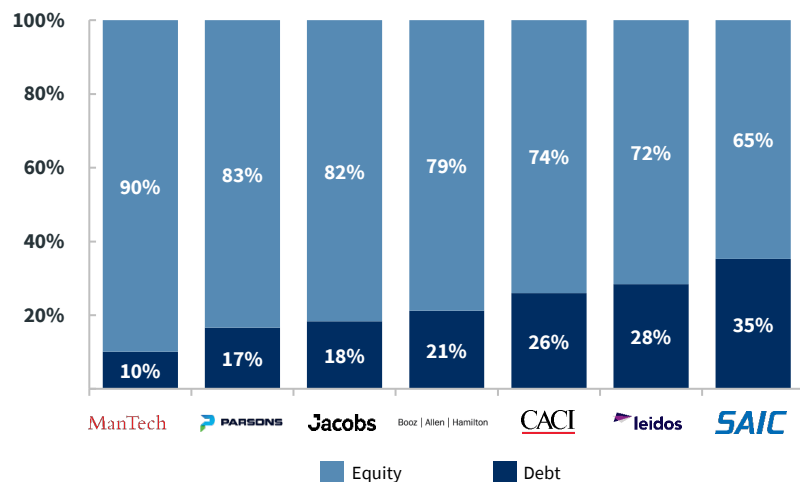
Revenue Growth: CY22P & CY23P



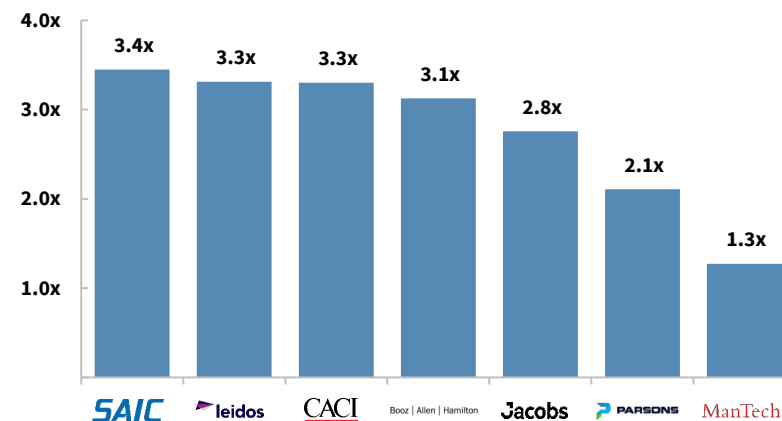
LTM EBITDA Margin



Capital Structure



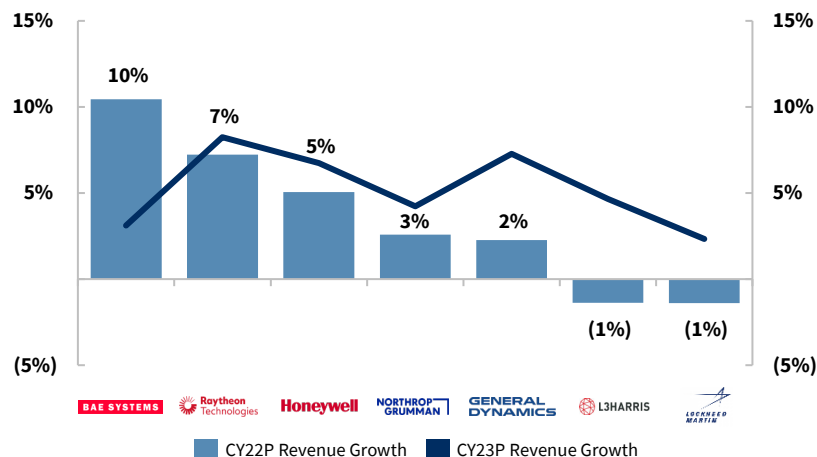
Total Debt to LTM EBITDA Ratio



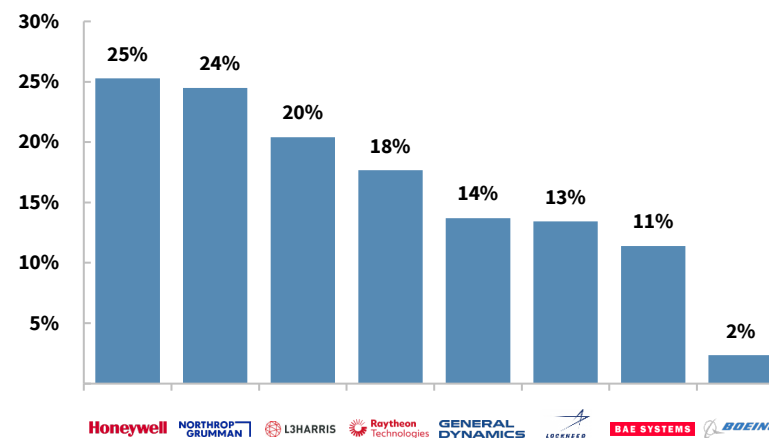
Source: Capital IQ; Data as of 3/31/2022

Defense & Space: Multi-Platform Benchmarking

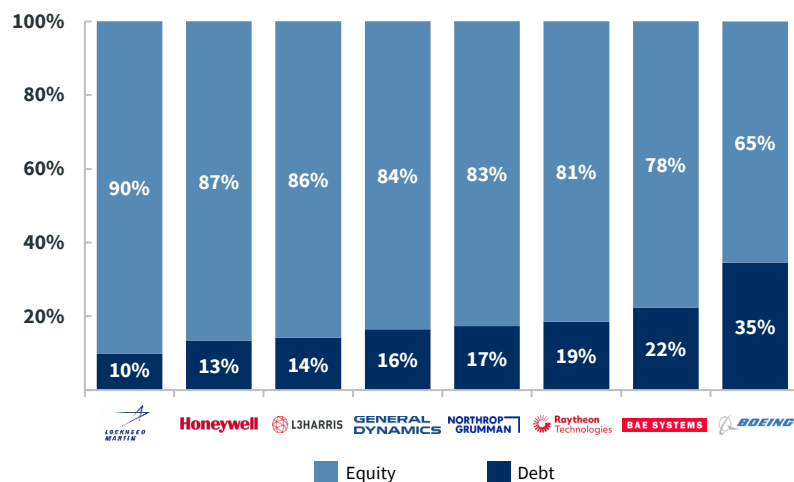
Revenue Growth: CY22P & CY23P ⁽¹⁾



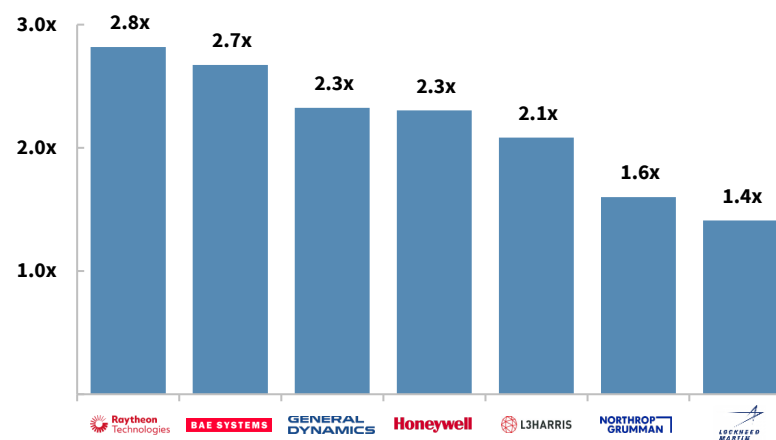
LTM EBITDA Margin



Capital Structure



Total Debt to LTM EBITDA Ratio ⁽²⁾



Source: Capital IQ; Data as of 3/31/2022

(1) Boeing excluded due to its historical financial results leading to outlying revenue growth figures

(2) Boeing excluded due to non-material financial data

Recent Defense & Space Transactions

PENDING

The Global Enterprise
Solutions ("GES") group of



Has entered a definitive
agreement to be acquired by

SES[^]

\$450 Million

Capabilities

- Satellite Services
- Electronic & Cybersecurity
- Aviation Maintenance Services
- Network & Telecommunications

Customers



Buyer Perspective

The CEO of SES stated, "They [GES] are a best-in-class solutions provider and the combination with our own SES Government Solutions business will allow SES to serve the US Government with an expanded and enhanced set of advanced connectivity and network solutions leveraging the world's largest multi-orbit satellite fleet."

MARCH 2022



Has been acquired by

HEICO

N.D.

Capabilities

- Space-Borne Filter Payload Assemblies
- Integrated Assemblies
- Passive Microwave Components

Customers



Buyer Perspective

The CEO of Heico stated, "Flight Microwave continues HEICO's strategy of buying the best-in-class, niche electronic components companies which are known for having excellent talent serving a demanding customer base."

MARCH 2022



A portfolio company of



Riverside

Has been acquired by

BAE SYSTEMS

N.D.

Capabilities

- Training & Simulation
- Defense Software Applications & Services
- 3D Modeling

Customers



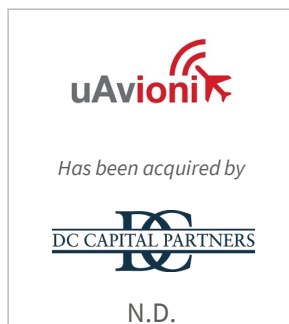
Foreign
Defense

Buyer Perspective

BAE stated, "Our combined capabilities will enable BAE Systems to meet this increasing demand for both military and civilian applications. The BISim purchase also strengthens our position to address the U.S. National Defense Strategy priority to support Joint All Domain Operations."

Recent Defense & Space Transactions

MARCH 2022



Capabilities

- ADS-B Transceivers
- GPS Receivers
- Manned / Unmanned Aviation
- Transponders

Customers



Buyer Perspective

A Partner at DC Capital stated, “uAvionix has a history of developing and delivering disruptive technology to the manned and unmanned sectors.

Their highly skilled and talented workforce continues to develop new, game changing solutions to meet evolving requirements.”

MARCH 2022



Capabilities

- Launch Vehicles
- Small Payloads
- In-Space Services

Customers



Buyer Perspective

AE Industrial Partners stated, “With the acquisition of Noosphere’s stake in Firefly, AEI will further expand its robust space investment portfolio, which includes investments in Redwire Space and Sierra Space...Firefly is at an inflection point and AEI’s acquisition will allow the company to realize the significant opportunities ahead.”

FEBRUARY 2022



Capabilities

- RF & Radio Design
- Geolocation
- Digital Signal Processing
- Overhead Persistent Infrared

Customers



Buyer Perspective

The CEO of Kratos said, “Cosmic AES is just an incredible technology-based product and solution provider in the space signals and cyber domains” and “CTT will provide a channel to additional new customer opportunity sets for Kratos.”

Recent Defense & Space Transactions

FEBRUARY 2022



Capabilities

- Autonomous Underwater Vehicles
- Oceanographic Sensing
- Mine Countermeasures

Customers



Buyer Perspective

The Co-Founder & CEO of Anduril stated, “The Dive Technologies team brings unparalleled, deep domain expertise under the sea as well as a shared commitment to transforming U.S. and allied military capabilities with advanced technology.”

JANUARY 2022



Capabilities

- PNT Engineering Services
- GPS Technology
- Personnel Tracking

Customers



Buyer Perspective

The CEO & President of ACR Group said, “Resilient and trusted PNT is a critical capability for defense and public safety communities with demanding location and navigation challenges. TRX Systems brings industry leading innovation and products...greatly expanding the Assured PNT solutions we offer.”

JANUARY 2022



Capabilities

- Microwave Receiver Products
- RF Engineering
- SIGINT & EW
- Software Development

Customers



Buyer Perspective

The CEO of Narda - MITEQ stated, “Our partnership with iRF will further strengthen and broaden both organizations’ market presence and penetration, customer relationships, and technology and product development capabilities.”

Recently Awarded Defense & Space Contracts

Date	Customer(s)	Winning Bidder(s)	Amount (\$MM)	Description
2/28/2022	U.S. Defense Information Technology Contracting Organization ("DITCO")	Leidos, Inc.	\$11,054.0	DITCO contracts for Defense Enclave Services ("DES")
2/28/2022	U.S. Naval Information Warfare Systems Command, Headquarters ("NAVWARSSYSCOM")	L3Harris Technologies, Inc.	\$3,690.0	NAVWARSSYSCOM contracts for portable radios and ancillary parts
3/31/2022	U.S. Army Contracting Command – Aberdeen Proving Ground ("ACC – APG")	Lockheed Martin Corporation	\$3,268.0	Army ACC-APG contracts for full-rate production lot 2 of the AN / TPQ-53 counter-fire target acquisition radar system
3/31/2022	U.S. Naval Sea Systems Command ("NAVSEA")	Raytheon Technologies Corporation	\$3,161.0	NAVSEA contracts for AN / SPY-6(V) family of radars and associated hardware
1/3/2022	U.S. Air Force SMC / PEO Space Systems, MILSATCOM Systems Directorate ("SMC/MC")	The Boeing Company	\$2,592.0	USAF SMC / MC contracts for Protected Tactical Satellite Communications ("PTS") hosted payload
2/28/2022	U.S. Space Development Agency ("SDA")	Lockheed Martin Corporation; Northrop Grumman Systems Corporation; York Space Systems, LLC	\$1,784.0	SDA contracts for the SDA Tranche 1 Transport Layer ("T1TL")
3/31/2022	U.S. Missile Defense Agency ("MDA")	Lockheed Martin Corporation	\$1,424.0	MDA mods contract for Terminal High-Altitude Area Defense ("THAAD") interceptors and associated one-shot devices
1/19/2022	U.S. SOCOM Special Operations Forces ("USSOCOM SOF")	Anduril Industries, Inc.	\$967.6	USSOCOM SOF contracts for counter-unmanned systems integration partner
3/16/2022	NASA Goddard Space Flight Center	KBR Wyle Services, LLC	\$640.0	NASA Goddard contracts for Ground Systems and Mission Operations 3 ("GSMO 3")

Source: DACIS / Infobase; Data as of 3/31/2022; Data sorted by reported contract ceiling size

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