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MARKET UPDATE
Industry Expertise: Illustrative Transactions

Note: Transactions occurred between June 2018 and July 2022

Illustrative Equity Research Coverage*

*The public companies displayed are actively covered by Raymond James Equity Research analysts
Defense & Space Industry Update

M&A Activity Summary

- Defense & Space M&A activity increased modestly quarter-over-quarter during Q2 2022. Year-over-year, Q2 2022 M&A activity in the Defense & Space sector grew by ~32%.
- On June 21, 2022, RADA Electronic Industries Ltd. (NASDAQ: RADA) and Leonardo DRS, Inc. announced they have entered into a definitive agreement to merge and become a combined public company. The combined company will have a 2021 pro forma EBITDA base of $305 million and be a significant player in next-generation defense acquisition.
- Private equity closed an array of portfolio-shaping, platform investments and multiple add-on acquisitions in Q2 2022, led by activity from Veritas Capital and The Jordan Company. Veritas Capital acquired Epiq Solutions in July 2022 to serve as a platform for a new radio frequency (“RF”) solutions and embedded computing portfolio company. The Jordan Company made a strategic investment in CPI International, a portfolio company of Odyssey Investment Partners, in April 2022 and immediately bolstered its investment in CPI International with the acquisition of AdamWorks, LLC in early May.

Recent Defense & Space Transaction Activity (1)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2021</td>
<td>46</td>
</tr>
<tr>
<td>Q2 2021</td>
<td>50</td>
</tr>
<tr>
<td>Q3 2021</td>
<td>63</td>
</tr>
<tr>
<td>Q4 2021</td>
<td>75</td>
</tr>
<tr>
<td>Q1 2022</td>
<td>58</td>
</tr>
<tr>
<td>Q2 2022</td>
<td>66</td>
</tr>
</tbody>
</table>

Recent, Representative M&A Transactions (2)

- The U.S. House Armed Services Committee included a provision within the latest draft policy bill calling for a “National Hypersonic Initiative” to accelerate collaboration on cutting-edge, Mach 5 hypersonic technology. The recent draft bill hopes to create renewed focus in U.S. Department of Defense hypersonic R&D with the goal of spending $15 billion between 2015 and 2024 specifically focused on creating a network that facilitates collaboration among various Pentagon stakeholders.
- In May 2022, the NATO Science and Technology Organization and NATO Communications and Information Agency held its inaugural meeting and workshop to gain a better understanding of the potential applications of artificial intelligence in warfare. This initiative builds on progress made in October 2022, when NATO ministers created the group’s first-ever artificial intelligence technology adoption strategy, aimed at ensuring NATO nations maintain a technology edge over adversaries.

(1) Totals include all closed transactions reported by DACIS / Infobase as of 6/30/2022
(2) Transactions occurred between April 2022 and July 2022
Sources: C4ISRNET, DefenseNews, DACIS, Fiscal Year 2023 Budget Request
Spotlight: Optical Communications in Space

Optical communication is currently being explored as a new alternative to the slower and outdated technology of legacy satellite radio communications in order to revolutionize inter-satellite and satellite-to-ground / ground-to-satellite applications.

### Optical Communications Revolution

Optical communications refers to the use of lasers operating in the optical wavelengths of the electromagnetic spectrum to communicate data between two points. Compared to legacy radio communications, the shorter optical waves enable the following benefits:

- **Up to 100x Faster**
- **Secure and Difficult to Intercept**
- **Robust SWaP Benefits**
- **Broad Spectrum Availability**

### Use Cases:

- **SATCOM & Wireless Comms**
- **Inter-Satellite Laser Links**
- **Ground-to-Satellite Comms**

### A Look Ahead on Optical Communications

<table>
<thead>
<tr>
<th>($ in billions)</th>
<th>GFY 2022E</th>
<th>GFY 2027P</th>
</tr>
</thead>
<tbody>
<tr>
<td>~$0.4</td>
<td></td>
<td>~$1.2</td>
</tr>
</tbody>
</table>

The market for Optical Communications is expected to grow at a 24.5% CAGR over the next five years. Next-generation programs will be introduced to promote the transition away from legacy radio technology.

### Key United States Optical Satellite Communication Projects and Initiatives

**SDA: Research & Development**

The Space Development Agency (“SDA”) awarded three prototype agreements (totaling $1.8B for Tranche 1) to execute R&D on a constellation of 42 satellites in low Earth orbit. The project will have a total of 126 satellites using optical communication terminals to transfer data.

- **SA$A** Awarded Feb. 2022
- **NOR** Awarded Mar. 2022
- **Y**

### AFRL: BOBCAT

The U.S. Air Force Research Laboratory (“AFRL”) awarded an R&D contract for the Breakthrough Optical Beam Control Advanced Technologies (“BOBCAT”) program which aims to increase the exploration / research in optical beam controls for next-generation laser communications.

- **leidos**

Sources: DACIS, NASA, MarketWatch, Spacenews, DoD

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“You can get essentially unlimited spectrum for optical transmissions. And you can get much higher throughput through optical systems than through radio systems. This spectrum is unlicensed by the Federal Communications Commission or other authorities, so you can build your equipment and go.”

— Tom Wood, Sr. Director For Optical Communications & Networking
# Spotlight: *Top Gun* & U.S. Military Fighters – Past, Present & Future

The sequel to *Top Gun*, *Top Gun: Maverick*, continues the legacy of showcasing the most widely-used strike fighters in the U.S. military and the programs that contributed to each strike fighters’ success.

## Past

**Grumman F-14 Tomcat**

The F-14 was the primary jet in the original *Top Gun* and is referenced throughout *Top Gun: Maverick*.

The F-14 was the U.S. Navy’s primary multi-purpose fighter jet between 1974 - 2006.

**F-14 Tomcat Program**

- **Introduced**: Sep. 1974
- **Years of Service**: 32
- **Platforms Built**: 700+
- **Retired**: Sep. 2006
- **Internal Infrared Search and Track Sensor**
- **Top Speed of Mach 2.34**

## Present

**Boeing F/A-18F Super Hornet**

The Super Hornet was *Top Gun: Maverick*’s primary fighter jet flown throughout the film.

The Super Hornet replaced the F-14 as the U.S. Navy’s primary multi-purpose fighter jet.

**F/A-18 Program**

- **Introduced**: Apr. 1999
- **Years of Service**: 25+
- **Platforms Built**: 1,000+
- **Est. Future Purchases**: 150+
- **First All-Weather Fighter**
- **Open Mission Systems Architecture**

## Future

**Lockheed Martin F-35 Lightning II**

The F-35 was shown briefly in *Top Gun: Maverick* but was not shown in flight.

The F-35 is the Navy’s most advanced aircraft to-date and will make up the bulk of U.S. tactical aircraft until 2070.

**F-35 Program**

- **Introduced**: Jul. 2015
- **Years of Service**: 5+
- **Platforms Built**: 820+
- **Est. Future Purchases**: 3,100+
- **Active Electronically Scanned Array Radar**
- **Network-Enabled Ops**

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Sources: DACIS, Lockheed Martin, DoD, U.S. Navy, National Air & Space Museum, AeroWeb, Forecast International

(1) The F/A-18 Program includes both the F/A-18 Hornet and the F/A-18E/F Super Hornet

(2) The F-35 Program includes the F-35A, F-35B, and F-35C variants
Public Defense & Space Market Performance

Market Commentary

- Over the last twelve months, both the Technology and Solutions indices have realized slightly positive growth over the period, while the Multi-Platform Contractors index has declined year-over-year and is currently tracking performance similar to the S&P 500 index.

- With the continued Russia-Ukraine conflict and heightened global macroeconomic uncertainty, investors have flocked to presumed defensive assets in the equity markets, which has driven the Technology and Solutions indices to outperform the S&P 500 index over the LTM period.

LTM Defense & Space Index Performance

Source: Capital IQ; Data as of 6/30/2022
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)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Ticker</th>
<th>Price at 6/30/2022</th>
<th>% of 52-Week High</th>
<th>Equity Value</th>
<th>Enterprise Value</th>
<th>Market Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>AeroVironment, Inc.</td>
<td>NadsaqGS:AVAV</td>
<td>$82.20</td>
<td>72.0%</td>
<td>$2,636</td>
<td>$2,151</td>
<td></td>
</tr>
<tr>
<td>Kratos Defense &amp; Security Solutions, Inc.</td>
<td>NadsaqGS:KTOS</td>
<td>$13.88</td>
<td>47.7%</td>
<td>$1,735</td>
<td>$1,879</td>
<td></td>
</tr>
<tr>
<td>Mercury Systems, Inc.</td>
<td>NadsaqGS:MRCY</td>
<td>$64.33</td>
<td>89.0%</td>
<td>$3,710</td>
<td>$4,142</td>
<td></td>
</tr>
<tr>
<td>Teledyne Technologies Incorporated</td>
<td>NYSE:TDY</td>
<td>$375.11</td>
<td>75.9%</td>
<td>$17,571</td>
<td>$21,558</td>
<td></td>
</tr>
<tr>
<td>Ultra Electronics Holdings plc(^1)</td>
<td>LSE:ULE</td>
<td>$42.07</td>
<td>99.9%</td>
<td>$3,018</td>
<td>$3,067</td>
<td></td>
</tr>
<tr>
<td>Viasat, Inc.</td>
<td>NadsaqGS:VSAT</td>
<td>$30.63</td>
<td>44.5%</td>
<td>$2,280</td>
<td>$4,884</td>
<td></td>
</tr>
</tbody>
</table>

**Technology**

| Median: | 74.0% | $2,649 | $3,604 | |
| Average: | 71.9% | $5,058 | $6,280 | |

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Ticker</th>
<th>Price at 6/30/2022</th>
<th>% of 52-Week High</th>
<th>Equity Value</th>
<th>Enterprise Value</th>
<th>Market Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bocz Allen Hamilton Holding Corporation</td>
<td>NYSE:BAH</td>
<td>$90.36</td>
<td>98.8%</td>
<td>$11,954</td>
<td>$14,363</td>
<td></td>
</tr>
<tr>
<td>CACI International Inc</td>
<td>NYSE:CACI</td>
<td>$281.78</td>
<td>89.9%</td>
<td>$6,597</td>
<td>$8,660</td>
<td></td>
</tr>
<tr>
<td>Jacobs Engineering Group Inc.</td>
<td>NYSE:J</td>
<td>$127.13</td>
<td>84.6%</td>
<td>$16,352</td>
<td>$19,934</td>
<td></td>
</tr>
<tr>
<td>Leidos Holdings, Inc.</td>
<td>NYSE:LDOS</td>
<td>$100.71</td>
<td>90.6%</td>
<td>$13,763</td>
<td>$19,239</td>
<td></td>
</tr>
<tr>
<td>Palantir Technologies Inc.</td>
<td>NYSE:PLTR</td>
<td>$9.07</td>
<td>31.0%</td>
<td>$18,563</td>
<td>$22,028</td>
<td></td>
</tr>
<tr>
<td>Parsons Corporation</td>
<td>NYSE:PSN</td>
<td>$40.42</td>
<td>96.6%</td>
<td>$4,193</td>
<td>$4,728</td>
<td></td>
</tr>
<tr>
<td>Science Applications International Corporation</td>
<td>NYSE:SANC</td>
<td>$93.10</td>
<td>97.0%</td>
<td>$5,184</td>
<td>$7,751</td>
<td></td>
</tr>
</tbody>
</table>

**Solutions**

| Median: | 90.6% | $11,954 | $14,363 | |
| Average: | 84.1% | $10,944 | $12,998 | |

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Ticker</th>
<th>Price at 6/30/2022</th>
<th>% of 52-Week High</th>
<th>Equity Value</th>
<th>Enterprise Value</th>
<th>Market Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE Systems plc</td>
<td>LSE.BA</td>
<td>$10.09</td>
<td>98.8%</td>
<td>$31,789</td>
<td>$36,438</td>
<td></td>
</tr>
<tr>
<td>The Boeing Company</td>
<td>NYSE:BA</td>
<td>$136.72</td>
<td>56.9%</td>
<td>$80,888</td>
<td>$126,477</td>
<td></td>
</tr>
<tr>
<td>General Dynamics Corporation</td>
<td>NYSE:GD</td>
<td>$222.25</td>
<td>86.8%</td>
<td>$61,325</td>
<td>$71,591</td>
<td></td>
</tr>
<tr>
<td>Honeywell International Inc.</td>
<td>NadsaqGS:HON</td>
<td>$173.81</td>
<td>73.4%</td>
<td>$118,318</td>
<td>$129,655</td>
<td></td>
</tr>
<tr>
<td>L3Harris Technologies, Inc.</td>
<td>NYSE:LH</td>
<td>$241.70</td>
<td>86.4%</td>
<td>$46,618</td>
<td>$54,159</td>
<td></td>
</tr>
<tr>
<td>Lockheed Martin Corporation</td>
<td>NYSE:LM</td>
<td>$429.96</td>
<td>89.6%</td>
<td>$114,599</td>
<td>$124,361</td>
<td></td>
</tr>
<tr>
<td>Northrop Grumman Corporation</td>
<td>NYSE:NOC</td>
<td>$478.57</td>
<td>97.2%</td>
<td>$74,491</td>
<td>$86,306</td>
<td></td>
</tr>
<tr>
<td>Raytheon Technologies Corporation</td>
<td>NYSE:RTX</td>
<td>$96.11</td>
<td>90.7%</td>
<td>$247,537</td>
<td>$271,176</td>
<td></td>
</tr>
</tbody>
</table>

**Multi-Platform**

| Median: | 88.2% | $77,640 | $105,334 | |
| Average: | 84.9% | $83,808 | $100,018 | |

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\(^1\) On 7/6/2022, The U.K. Ministry of Defense officially cleared Cobham Ltd., a portfolio company of Advent International Corp., to proceed in its acquisition of Ultra Electronics Holdings plc for $3.6 billion, which was announced on 8/16/2021 and is expected to close in the second half of 2022. Source: Capital IQ; Data as of 6/30/2022

Financial projections are sourced from Capital IQ consensus estimates; foreign traded companies are listed in U.S. dollars at 6/30/2022 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 meaningful ("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 6/30/2022
Defense & Space: Solutions Benchmarking

Revenue Growth: CY22P & CY23P (1)

- Jacobs: 10% CY22P, 9% CY23P
- Booz Allen Hamilton: 6% CY22P, 6% CY23P
- CACI: 3% CY22P, 1% CY23P
- Leidos: 5% CY22P
- SAIC: 10% CY22P, 15% CY23P

LTM EBITDA Margin (2)

- Jacobs: 11%
- CACI: 10%
- Leidos: 9%
- SAIC: 9%
- Booz Allen Hamilton: 8%

Capital Structure

Equity: 99%, 84%, 80%, 79%, 75%, 71%, 66%
Debt: 1%, 16%, 20%, 21%, 25%, 29%, 34%

Total Debt to LTM EBITDA Ratio (2)

- Leidos: 3.0x
- SAIC: 3.0x
- Jacobs: 2.8x
- Booz Allen Hamilton: 2.0x
- CACI: 3.3x

Source: Capital IQ; Data as of 6/30/2022

(1) Palantir excluded due to the fact Palantir’s projections exhibit outsized revenue growth and therefore is not comparable to the other companies included in the index
(2) Palantir excluded due to not meaningful financial data
Defense & Space: Multi-Platform Benchmarking

Revenue Growth: CY22P & CY23P

- CY22P Revenue Growth
- CY23P Revenue Growth

LTM EBITDA Margin

- Honeywell
- Northrop Grumman
- Raytheon Technologies
- RAE Systems
- L3Harris

Capital Structure

- Equity
- Debt

Source: Capital IQ; Data as of 6/30/2022
(1) Boeing excluded due to its historical financial results leading to outlying revenue growth figures
(2) Boeing excluded due to not meaningful financial data
Recent Defense & Space Transactions

**JULY 2022**

- **EPIQ SOLUTIONS**
  - **Capabilities**
    - Low SWaP Software-Defined Radios
    - RF Sensing Software
    - Turnkey RF Solutions
    - Advanced Technology Development
  - **Customers**
  - **Buyer Perspective**
    - A Managing Partner of Veritas stated, “Epiq’s contemporary, market-leading open architecture solutions and unwavering commitment to its customers have positioned it at the forefront of the industry. With strong customer traction, the company is well positioned to meet its customers’ diverse and evolving needs”

**JUNE 2022**

- **TELEPHONICS**
  - **Capabilities**
    - Radar
    - Naval & Cyber Systems
    - Surveillance
    - Aircraft Communications
  - **Customers**
  - **Buyer Perspective**
    - The CEO of TTM stated, “I am excited for Telephonics to join TTM as we continue on our journey to move up the value chain and provide more engineered products to our offerings for our customers. We expect that the complementary portfolio and skills will enhance TTM’s strategic capabilities and growth opportunities”

**MAY 2022**

- **SUB U SYSTEMS**
  - **Capabilities**
    - Mesh Networking
    - Tactical Scalable Communications
    - Executive Communication Systems
  - **Customers**
  - **Buyer Perspective**
    - The CEO of Sigma Defense stated, “The acquisition of Sub U aligns with our vision of autonomously connecting people, systems and data with an integrated hardware and software approach to communications. We are very excited to be able to deliver a platform that will support leading edge solutions such as AI / ML and analytics at the edge”

- **N.D.**
  - **Capabilities**
    - N.D.
  - **Customers**

Sources: Capital IQ, Deltek GovWin, DACIS, and publicly available information; “N.D.” stands for “not disclosed”
## Recent Defense & Space Transactions

### MAY 2022

**Blue Sky Network**

*Has been acquired by*

**ACR**

*A portfolio company of*

**The Jordan Company**

*N.D.*

**Capabilities**

- Asset & Fleet Management
- Satellite Communications

**Customers**

**Buyer Perspective**

The President and CEO of ACR Group stated, “The importance of reliability and connectivity is paramount for austere environments. Blue Sky Network brings industry leading innovation and answers that solve these challenges for each of our core market segments within the ACR Group.”

### MAY 2022

**Thresher**

*Has been acquired by*

**Two Six Technologies**

*A portfolio company of*

**Carlyle**

*N.D.*

**Capabilities**

- Media Manipulation Detection
- Natural Language Processing

**Customers**

**Buyer Perspective**

The CEO of Two Six Technologies stated, “Thresher’s products and people are a compelling and complementary fit for Two Six, with our shared focus on advanced technologies, innovative products, and the global threats of great power competition.”

### APRIL 2022

**CPI**

*Has been acquired by*

**The Jordan Company**

*N.D.*

**Capabilities**

- Satcom and Antenna Systems
- Vacuum Electron Devices (“VEDs”)
- Microwave Signaling

**Customers**

**Buyer Perspective**

A Partner at TJC stated, “We are excited to partner with CPI, who is well-known in the industry for their exceptional management team and reputation for high-quality solutions across industrial technology markets. CPI’s technology solutions work to power and connect our customers and we look forward to embarking on a new phase of growth.”

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Sources: Capital IQ, Deltek GovWin, DACIS, and publicly available information; “N.D.” stands for “not disclosed”
## Recently Awarded Defense & Space Contracts

<table>
<thead>
<tr>
<th>Date</th>
<th>Customer(s)</th>
<th>Winning Bidder(s)</th>
<th>Amount ($MM)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/14/22</td>
<td>U.S. Naval Air Systems Command (&quot;NAVAIR&quot;)</td>
<td>Raytheon Technologies Corporation</td>
<td>$4,385.5</td>
<td>NAVAIR contracts for F-35 propulsion systems applicable to F-35 Lightning II aircraft</td>
</tr>
<tr>
<td>5/31/22</td>
<td>The National Aeronautics and Space Administration (&quot;NASA&quot;), Johnson Space Center (&quot;JSC&quot;)</td>
<td>Axiom Space, Inc.; Raytheon Technologies Corporation</td>
<td>$3,500.0</td>
<td>NASA JSC contracts for Exploration Extravehicular Activity Services (&quot;xEVAS&quot;) in support of the ISS and Artemis</td>
</tr>
<tr>
<td>5/22/22</td>
<td>U.S. National Reconnaissance Office (&quot;NRO&quot;)</td>
<td>Maxar Technologies, Inc.</td>
<td>$3,240.0</td>
<td>NRO contracts for the Electro-Optical Commercial Layer (&quot;EOCL&quot;) program</td>
</tr>
<tr>
<td>5/21/22</td>
<td>U.S. Space Command (&quot;USSPACECOM&quot;)</td>
<td>BlueHalo, LLC</td>
<td>$1,400.0</td>
<td>USSPACECOM awards OTA for the Satellite Communications Augmentation Resource program</td>
</tr>
<tr>
<td>5/22/22</td>
<td>U.S. National Reconnaissance Office</td>
<td>BlackSky Technology, Inc.</td>
<td>$1,000.0</td>
<td>NRO contracts for the EOCL program</td>
</tr>
<tr>
<td>5/17/22</td>
<td>U.S. Naval Air Systems Command (&quot;NAVAIR&quot;)</td>
<td>Lockheed Martin Corporation</td>
<td>$632.1</td>
<td>NAVAIR contracts for F-35 development Foundation 3 services</td>
</tr>
<tr>
<td>4/26/22</td>
<td>U.S. Naval Sea Systems Command (&quot;NAVSEA&quot;)</td>
<td>L3Harris Technologies, Inc.</td>
<td>$593.1</td>
<td>NAVSEA contracts for the Shipboard Panoramic Electro-Optic/Infrared (&quot;SPEIR&quot;) program</td>
</tr>
<tr>
<td>6/23/22</td>
<td>U.S. Space Force, Space Systems Command  (&quot;USSF SSC&quot;)</td>
<td>Lockheed Martin Corporation</td>
<td>$581.6</td>
<td>USSF SSC contracts for Global Positioning System (&quot;GPS&quot;) Block IIR / IIR-M / III on-orbit support</td>
</tr>
<tr>
<td>4/12/22</td>
<td>The National Aeronautics and Space Administration (&quot;NASA&quot;)</td>
<td>Jacobs Engineering Group, Inc.</td>
<td>$297.7</td>
<td>NASA contracts for aerospace testing and facilities operations and maintenance 5 (&quot;ATOM-5&quot;)</td>
</tr>
</tbody>
</table>

Source: DACIS / Infobase; Data as of 6/30/2022; Data sorted by reported contract ceiling size