Flight Plan At-a-Glance - Fall 2019

What You Need to Know

Commercial Aircraft
• Commercial aircraft backlog is down in 2019, as orders fall to lowest levels in ten years.
• Boeing is still building 737 Max aircraft and parking them in Seattle ... a jammed parking lot.
• Short-term adjustments in Boeing production rates should create little initial disruption for suppliers.
• The Moss Adams Aerospace Index (mid-caps) is up 21% in last year compared to 1% for SP500.

Drones
• Defense and Commercial drones will expand across multiple applications in 2020 and beyond.
• FAA is rapidly addressing rules and regulations that will allow expanded use in the U.S.
• Market forecasts expect the drone market to triple to over $100 Billion by 2023.

Space
• Investment continues to grow in Space companies. The first “Space ETF” was launched in 2019.
• The future information economy depends upon constellations of LEO satellites.
• SpaceX is planning the world’s largest LEO broadband constellation satellites.

Actions to Take Now
• Prepare and be ready for a potential M&A transaction ... with a Readiness Review.
• Prepare for the new Revenue Recognition Standards ASC 606.
2019 Commercial Aircraft Backlog Heads Down

- Aircraft Orders for first eight months of 2019 was lowest in ten years ... at 403 aircraft.
- Deliveries during the same eight month period was 776 aircraft.
- Along with 253 cancellations, the commercial backlog has dropped by 626 aircraft since the start of this year.
- There are currently 466 fewer single-aisles and 160 fewer wide-bodies on firm backlog order.
- Boeing and Airbus still have 7-8 years of backlog at planned production rates, but backlog is no longer growing.

737 Max Deliveries Still at Full Stop

- The absence of 737 MAX deliveries brings single-aisle aircraft to lowest level in years.
- Boeing delivered just two single-aisle aircraft in July and just one in August.
- Boeing cannot deliver the MAX until the grounding is lifted, but is still building the 737 MAX and parking completed aircraft.
- When the grounding is lifted, it could take well into 2020 to work through all the parked aircraft.
- In contrast, Airbus has delivered record numbers of single-aisles and wide-bodies this year.

Source: Aerospace Market News, Moss Adams Research, industry Reports
### Selected Public Companies

($)US in millions, except where noted and per share amounts

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Market Cap</th>
<th>Enterprise Value</th>
<th>Sales</th>
<th>EBITDA</th>
<th>EBITDA Margin</th>
<th>TTM Sales</th>
<th>TTM EBITDA</th>
<th>EV Multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small/Mid Cap Aerospace</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TransDigm Group Incorporated</td>
<td>27,033</td>
<td>41,377</td>
<td>4,979</td>
<td>2,174</td>
<td>44.4%</td>
<td>8.4x</td>
<td>19.0x</td>
<td></td>
</tr>
<tr>
<td>Spirit AeroSystems Holdings, Inc.</td>
<td>8,424</td>
<td>9,320</td>
<td>7,633</td>
<td>1,197</td>
<td>15.7%</td>
<td>1.2x</td>
<td>7.8x</td>
<td></td>
</tr>
<tr>
<td>Hexcel Corporation</td>
<td>6,543</td>
<td>7,681</td>
<td>2,320</td>
<td>547</td>
<td>23.6%</td>
<td>3.3x</td>
<td>14.0x</td>
<td></td>
</tr>
<tr>
<td>Teledyne Technologies Incorporated</td>
<td>11,534</td>
<td>12,357</td>
<td>3,001</td>
<td>578</td>
<td>19.3%</td>
<td>4.1x</td>
<td>21.4x</td>
<td></td>
</tr>
<tr>
<td>Triumph Group, Inc.</td>
<td>1,059</td>
<td>2,550</td>
<td>3,262</td>
<td>217</td>
<td>6.6%</td>
<td>0.8x</td>
<td>11.8x</td>
<td></td>
</tr>
<tr>
<td>Moog Inc.</td>
<td>2,833</td>
<td>3,570</td>
<td>2,840</td>
<td>356</td>
<td>12.5%</td>
<td>1.3x</td>
<td>10.0x</td>
<td></td>
</tr>
<tr>
<td>Curtiss-Wright Corporation</td>
<td>5,413</td>
<td>6,112</td>
<td>2,461</td>
<td>504</td>
<td>20.5%</td>
<td>2.5x</td>
<td>12.1x</td>
<td></td>
</tr>
<tr>
<td>HEICO Corporation</td>
<td>13,916</td>
<td>14,702</td>
<td>1,991</td>
<td>528</td>
<td>26.5%</td>
<td>7.4x</td>
<td>27.9x</td>
<td></td>
</tr>
<tr>
<td>AAR Corp.</td>
<td>1,384</td>
<td>1,621</td>
<td>2,127</td>
<td>156</td>
<td>7.4%</td>
<td>0.8x</td>
<td>10.4x</td>
<td></td>
</tr>
<tr>
<td>Astronics Corporation</td>
<td>954</td>
<td>1,087</td>
<td>813</td>
<td>98</td>
<td>12.1%</td>
<td>1.3x</td>
<td>11.1x</td>
<td></td>
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<tr>
<td>Ducommun Incorporated</td>
<td>469</td>
<td>714</td>
<td>677</td>
<td>76</td>
<td>11.2%</td>
<td>1.1x</td>
<td>9.4x</td>
<td></td>
</tr>
</tbody>
</table>

Median: $6,112 $2,461 $504 15.7% 1.3x 11.8x

Average: $9,190 $2,911 $585 18.2% 2.9x 14.1x

As of October 2, 2019

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### Index of 11 Mid-Cap Aerospace Suppliers

- Index continues to outperform S&P 500; Boeing stock attempting to recover from 737 Max grounding.
- EBITDA multiples average and median holding around 12x and 14x.
- EBITDA multiples highly correlated with EBITDA margins.
- The public companies continue to target a growing share of aerospace supply chain.

Source: S&P Capital IQ; Commercial News Reports
The First Commercial Drone License ... Goes to UPS

**UPS**
- FAA has awarded Part 135 Standard certification to the UPS subsidiary, UPS Flight Forward. Business jet operators and others scheduled airline services get the same 135 certification.
- Over the past six months in Raleigh, NC, UPS has run more than 1,000 revenue-generating flights, moving blood samples and pharmaceutical supplies around the hospital campus.
- “This certification allows us to fly an unlimited number of drones and an unlimited number of flights with an unlimited number of remote operators,” according to Bala Ganesh, the vice president of UPS’s advanced technology group.

**Wing (Google)**
- Wing, owned by Google’s parent company Alphabet, also has the certification. The scope of its operation is limited to a town called Christiansburg, Virginia.
- Wing will make deliveries of FedEx Express packages and Walgreens medicine and wellness goods to customers' homes in that community.

**Amazon**
- Amazon and other companies are making highly publicized pushes into drone delivery.
- Amazon Prime Air has promised 30-minute delivery service using drones for packages up to five lbs.

Source: Business Insider, Wired, Industry Analysis, Moss Adams Research
Wide Range of Drone Applications ... in Every Industry

- Companies are just starting to scratch the surface for applications of drones.
- Consumer applications include everything from package delivery to medical services.
- The FAA in 2018 selected 10 cities for its UAS Integration Pilot Program (IPP), giving local governments the chance to test real-world drone applications and see how they would impact airspace.
- A Chinese company, SZ DJI Technology Co. (“DJI”) dominates the global drone market with 70%+ share and is making gains in nearly every product category.

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Entertainment and Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drone technology can assist with the tracking and management of crop health and production, including pest control, irrigation and seeding, along with the monitoring of livestock.</td>
<td>Drones can provide a variety of new vantage points for viewers and unique aerial shots for filmmaking, live sporting coverage and broadcasting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security and Law Enforcement</th>
<th>Energy and Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td>With a set of eyes in the sky, police and other law enforcement organizations can identify, monitor and prevent dangerous and hostile situations while maintaining a safe distance.</td>
<td>Drones will allow companies to safely view and inspect stockpiles, pipelines and natural resource deposits, in addition to exploring and mapping new potential sites.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mapping and Real Estate</th>
<th>Disaster Management and Emergency Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drone videography and photography can provide agents and sellers with dynamic images for better marketing, and assist developers and appraisers with evaluating properties and parcels of land.</td>
<td>Drones can quickly reach areas struck by disaster, such as a tsunami, hurricane, flood or avalanche, aid in search-and-rescue operations and deliver emergency supplies to stranded communities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail and E-Commerce</th>
<th>Environmental Research and Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an exciting alternative to traditional shipping and delivery mechanisms, drones have the ability to transform the way retailers and consumers send and receive a variety of goods, including groceries, apparel, household items, and even medicine.</td>
<td>From the monitoring of coastal erosion to the tracking of endangered animals, drone technology can further a variety of environmental research and conservation initiatives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Monitoring</th>
<th>Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drones are an effective means by which utility companies and local governments can perform aerial inspections and support maintenance of high voltage powerlines, roads and bridges.</td>
<td>Drones can help property adjusters assess commercial and residential property damage in a disaster zone quickly, from the convenience and safety of an off-site location.</td>
</tr>
</tbody>
</table>
Investment in Space Expanding Rapidly

The first Global “Space” ETF Fund was launched in April of 2019 (The Procure Space ETF – NYSEArca: UFO)
- Tracks the S-Network Space Index (30 Companies), which focuses on companies that are significantly engaged in space-related activities.
- Approximately 80% of companies in the index derive the majority of revenues directly from their involvement in the space industry.

Virgin Galactic and Hedosophia Announce Merger to Create the World’s First and Only Publicly Traded Commercial Human Spaceflight Company
- Announced July 9th 2019, expected to close in Q4. Once the deal closes, the Company will be publically traded.
- Social Capital Hedosophia (SCH) will take a 49% stake in the merged company at a valuation of $1.5 billion.
- Reportedly $80M of commitments have been made by customers towards trips to space on Virgin Galactic.

Boeing backs Virgin Galactic with strategic $20M investment
- Announced October 8, 2019.
- $20M investment was made through Boeing’s HorizonX Ventures.
- Virgin Galactic and Boeing call this an “exciting partnership” to “build something that can truly change how people move around the planet”.

NASA awards $43M to Blue Origin, SpaceX, and others for technology to take humans to the Moon and potentially to Mars
- Announced October 1, 2019.
- Funding will be distributed to 14 companies to work on technologies required to get to the Moon through the “Artemis” program.
- Blue Origin received the largest contract ($10M) to demonstrate the viability of producing and storing liquid rocket propellant on the Moon.
- SpaceX was awarded a $3M contract to develop nozzles that will be used in spacecraft refueling operations.
$3 Billion invested in Space Start-Ups in 2018-19, primarily for launch systems.

- Includes launch vehicles, small satellites, communications systems, and ground support. NASA, as well as other governments and commercial customers contracting for launch services.
- Eleven companies selected by NASA for lunar landing studies, including the recently announced Blue Moon module planned by Blue Origin.

Low Earth Orbit (LEO) satellites will be the backbone of 5G wireless

- Small satellites (SmallSats) are quickly overtaking large-scale high-altitude legacy satellites. SmallSats utilize LEO to reduce the lag time of signals and data. The Federal Communications Commission has approved deployment of over 5,000 small satellites.
- Over 40 U.S. companies are developing launch systems (rockets) to send SmallSats into orbit.

Manned missions will resume ... performed by private companies

- NASA expected to turn over crewed spaceflight to SpaceX’s Dragon 2 capsule in 2019 when it sends a replacement crew to the International Space Station.
- A stated national priority by Vice President Mike Pence is to return astronauts to the moon by 2024.

Source: Company Press Releases, Satellite Industry Association, Aviation Week, Commercial News Reports, Moss Adams Research
Transaction Readiness:  Create Value for your Company

Much more to the supply chain than making a good part

- Crucial that supply partners coordinate delivery via shared information and interconnection.
- Required investments in automation to enable scale and productivity gains.
- OEMs expect suppliers to lower costs while increasing volume.
- More information sharing and transparency among supply chain partners.
- Willingness to embrace LTAs and find ways to succeed within the requirements.

More to valuation multiples than company size alone.

- Predictable programs and production runs.
- Customer & contract base.
- Ability to ramp-up production and improve productivity as volumes rise.
- Strength of the management team.
- Investment in capital equipment and facilities.

A smaller company can be rewarded with the value premium of a larger company.

- Demonstrate the characteristics of a larger company ... and ability to grow.
- Disciplined management of operations and delivery.
- Integration into the supply-chain for programs with LTAs.
A&D manufacturers are in the process of implementing Accounting Standards Codification (ASC) Topic 606, Revenue from Contracts with Customers, which is effective for annual reporting periods beginning after December 15, 2018 and interim reporting periods beginning after December 15, 2019.

The core principles of the new standard will now require aerospace and defense manufacturers to complete the following five step process to establish when revenue will be recognized:

1. Identify the contract with the customer
2. Identify the performance obligations in the contract
3. Determine the transaction price
4. Allocate the transaction price to the performance obligations in the contract
5. Recognize revenue when the entity satisfies a performance obligation

In some circumstances the new five-step process may result in the same revenue recognition outcome as legacy GAAP, however, regardless of the accounting outcome, it’s nearly certain the disclosures required by ASC 606 will be more detailed and require considerably more time to prepare as compared to what most companies provided under legacy GAAP.

Under ASC 606, all contract manufacturers will need to evaluate whether the performance obligations should be recognized over time, or at a point in time. This evaluation is required regardless of whether the manufacturer had been previously applying contract accounting under ASC 605–35.

ASC 606 requires over-time revenue recognition in any of the following three situations:

- The customer both receives and consumes the benefits of the entity’s performance as the entity performs.
- The entity’s performance creates or enhances an asset (for example, work in process) that the customer controls as the asset is created or enhanced.
- The manufacturer’s performance does not create an asset with an alternative use to the manufacturer, and the manufacturer has an enforceable right to payment for performance completed to date including a reasonable profit.
Consequently, some aerospace and defense contractors that have historically recognized revenue at a point in time, i.e. point of shipment, may now be required to recognize revenue over time, i.e. percentage completion. Conversely, some manufactures that have historically recognized revenue over time may be required to recognize revenue at point of shipment if they fail to meet the above criteria. **The key for aerospace in defense contractors will be to evaluate their contracts with customers** to determine if they meet the alternative use and payment provisions of the new standard.

Additionally, companies need to review the potential tax implications of implementing the new revenue recognition standard. Tax reform brought in new tax rules for recognizing revenue that, when combined with changes made by ASC 606, complicate historical treatment. For aerospace and defense contractors that have an “applicable financial statement” (such as audited financial statement), the new tax rules require income recognition no later than when recognized for financial reporting. The new tax rules are not a true conformity requirement because they can only serve to accelerate tax recognition when compared to historical tax treatment.

Importantly, the tax change only relates to gross income. Therefore, companies may want to consider other tax accounting method changes that could serve to better match expenses to the new revenue recognition model. Some tax accounting changes require advance consent, meaning they require a filing fee and must be filed before the close of the tax year. For calendar year companies, it is important this be evaluated and considered prior to December 31, 2019. Consult your tax provider to help you address compliance with the tax reporting for the new revenue recognition rules.

Source: Moss Adams Tax Research
## Selected Aerospace M&A Activity – Fall 2019

<table>
<thead>
<tr>
<th>Announced</th>
<th>Acquirer/Investor</th>
<th>Target</th>
<th>Target Description</th>
<th>Transaction Value (MM)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/04/19</td>
<td>AMETEK, Inc. (NYSE:AME)</td>
<td>Pacific Design Technologies, Inc.</td>
<td>Pacific Design Technologies, Inc. designs and manufactures liquid cooling systems and components for commercial aerospace, defense, and space platforms.</td>
<td>$125</td>
<td>3.1x</td>
<td>-</td>
</tr>
<tr>
<td>08/09/19</td>
<td>Pattonair Limited</td>
<td>Wesco Aircraft Holdings, Inc. (NYSE:WAIR)</td>
<td>Wesco Aircraft Holdings, Inc. distributes aerospace products and provides supply chain management services to the aerospace industry in North America and internationally.</td>
<td>$1,949</td>
<td>1.1x</td>
<td>13.8x</td>
</tr>
<tr>
<td>07/30/19</td>
<td>CVC Capital Partners Limited</td>
<td>Ortic Engineering and Manufacturing, Inc.</td>
<td>Ortic Engineering and Manufacturing, Inc. designs, manufactures, and delivers OEM-pedigree parts and accessories for legacy aerospace platforms.</td>
<td>$1,365</td>
<td>-</td>
<td>20.1x</td>
</tr>
<tr>
<td>07/29/19</td>
<td>Parker-Hannifin Corporation (NYSE:PH)</td>
<td>Exotic Metals Forming Company LLC</td>
<td>Exotic Metals Forming Company LLC engineers, manufactures, and provides aftermarket support services for vital systems and components of aerospace industries.</td>
<td>$1,725</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>07/26/19</td>
<td>Edgewater Services, LLC</td>
<td>Orizon Aerostructures Inc.</td>
<td>Orizon Aerostructures Inc. manufactures and supplies parts and subassemblies for commercial aerospace, military fixed wing, rotorcraft, missile/ground support, and general aviation manufacturers and suppliers.</td>
<td>$28</td>
<td>-</td>
<td>-</td>
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<tr>
<td>06/17/19</td>
<td>Sekisui Chemical Co., Ltd. (TSE:4204)</td>
<td>AIM Aerospace, Inc.</td>
<td>AIM Aerospace, Inc. designs, manufactures, and supplies composite ducting, sub structural, and interiors parts for airlines and original equipment manufacturers worldwide.</td>
<td>$510</td>
<td>2.9x</td>
<td>-</td>
</tr>
<tr>
<td>06/11/19</td>
<td>AeroVironment, Inc. (NasdaqGS:AVAV)</td>
<td>Pulse Aerospace, Inc.</td>
<td>Pulse Aerospace, Inc. develops, manufactures, and supplies unmanned helicopters and associated systems.</td>
<td>$26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>06/10/19</td>
<td>Hanwha Aerospace Co., Ltd. (KOS:012450)</td>
<td>EDAC Technologies Corporation</td>
<td>EDAC Technologies Corporation provides design, manufacturing, and services for tooling, fixtures, molds, jet engine components, and machine spindles.</td>
<td>$295</td>
<td>2.0x</td>
<td>-</td>
</tr>
<tr>
<td>06/05/19</td>
<td>II-VI Incorporated (NasdaqGS:IIIV)</td>
<td>Redstone Aerospace Corporation</td>
<td>Redstone Aerospace Corporation manufactures and markets cryogenic systems and high precision pointing subsystems to aerospace and defense sector.</td>
<td>$30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>03/04/19</td>
<td>Arthur J. Gallagher &amp; Co. (NYSE:AJG)</td>
<td>Global Aerospace Operations of Jardine Lloyd Thompson Group plc</td>
<td>Comprises aerospace retail and wholesale insurance broking business.</td>
<td>$250</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>02/28/19</td>
<td>Kratos Defense &amp; Security Solutions, Inc. (NasdaqGS:KTOS)</td>
<td>Florida Turbine Technologies Inc./ FTT Core LLC</td>
<td>Specializes in the development of turbomachinery systems and components for aircraft engines, space propulsion, and power.</td>
<td>$64</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01/29/19</td>
<td>Mercury Systems, Inc. (NasdaqGS:MRCY)</td>
<td>GECCO Inc.</td>
<td>Designs and manufactures hardware and software solutions of avionics for aerospace industry.</td>
<td>$37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01/10/19</td>
<td>VSE Aviation, Inc</td>
<td>1st Choice Aerospace Inc. (Florida) and 1st Choice Aerospace Inc. (Ohio)</td>
<td>The companies provide component maintenance, repair, and overhaul (MRO) services for new generation and legacy commercial aircraft families.</td>
<td>$152</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11/29/18</td>
<td>AerSale Inc.</td>
<td>Avborne Accessory Group, Inc.</td>
<td>Provides repair and overhaul services to the commercial and military aviation industry worldwide.</td>
<td>$22</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10/10/18</td>
<td>TransDigm Group Incorporated</td>
<td>Esterline Technologies Corporation</td>
<td>Designs, manufactures, and markets engineered products and systems primarily for aerospace and defense customers in the United States and internationally.</td>
<td>$4,367</td>
<td>1.9x</td>
<td>11.8x</td>
</tr>
<tr>
<td>10/04/18</td>
<td>Smiths Group plc</td>
<td>United Flexible, Inc.</td>
<td>Designs, develops, and manufactures aircraft engine parts. The company's products include aerospace tube and duct fabrication, hose and assemblies, metal bellows, and fluoroplastic tubing and machine PTEE parts.</td>
<td>$345</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>09/18/18</td>
<td>Ortic Engineering and Manufacturing</td>
<td>Firstmark Corporation</td>
<td>Manufactures and sells components and sub-assemblies for aerospace and defense applications in the United States.</td>
<td>$97</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>09/13/18</td>
<td>Vision Technologies Aerospace</td>
<td>MRA Systems, LLC</td>
<td>Designs, manufactures, and services aerostructures and nacelle systems for commercial and military aircraft in the United States and internationally.</td>
<td>$630</td>
<td>1.2x</td>
<td>10.0x</td>
</tr>
<tr>
<td>09/12/18</td>
<td>HEXPOL AB</td>
<td>Kirkhill-TA Co.</td>
<td>Designs, manufactures, and markets rubber products primarily for aerospace and defense customers in the United States and internationally.</td>
<td>$49</td>
<td>1.3x</td>
<td>13.7x</td>
</tr>
<tr>
<td>07/13/18</td>
<td>TransDigm Group</td>
<td>SKANDIA, Inc.</td>
<td>Manufactures and sells aircraft interior products and services for the aviation industry.</td>
<td>$84</td>
<td>3.2x</td>
<td>-</td>
</tr>
<tr>
<td>09/06/18</td>
<td>Polaris Industries Inc.</td>
<td>WSI Industries, Inc. (NasdaqOM:WSCII)</td>
<td>Engages in the precision contract metal machining business in the United States.</td>
<td>$27</td>
<td>0.6x</td>
<td>8.7x</td>
</tr>
</tbody>
</table>

Source: Capital IQ as of 10/2/19
## Selected Defense M&A Activity -- Fall 2019

<table>
<thead>
<tr>
<th>Transaction Announced</th>
<th>Acquirer/Investor</th>
<th>Target</th>
<th>Target Description</th>
<th>Value ($ in millions)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/23/19</td>
<td>Greenbriar Equity Group LLC</td>
<td>Arotech Corporation (NasdaqGM:ARTX)</td>
<td>Arotech Corporation provides defense and security products worldwide.</td>
<td>$106.4</td>
<td>1.1x</td>
<td>21.3x</td>
</tr>
<tr>
<td>08/07/19</td>
<td>Avon Rubber p.l.c. (LSE:AVON)</td>
<td>Advanced Ballistic Protection Business of 3M</td>
<td>Advanced Ballistic Protection Business of 3M comprises ballistic helmets, body armor, flat armor, and related helmet-attachment products serving government and law enforcement.</td>
<td>$116.0</td>
<td>1.4x</td>
<td>10.7x</td>
</tr>
<tr>
<td>07/30/19</td>
<td>Mercury Systems, Inc. (NasdaqGS:MRCY)</td>
<td>American Panel Corporation</td>
<td>American Panel Corporation manufactures display products for military vehicles and commercial aircraft.</td>
<td>$100.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>06/07/19</td>
<td>EMCORE Corporation (NasdaqGM:EMKR)</td>
<td>Systron Donner Inertial, Inc.</td>
<td>Systron Donner Inertial, Inc. manufactures and supplies micro-electro-mechanical systems inertial sensors (MEMS) and systems. The company offers tactical grade navigation systems, inertial measurement units, multi-axis inertial sensing systems; accelerometers; and gyrosopes.</td>
<td>$25.8</td>
<td>0.9x</td>
<td>-</td>
</tr>
<tr>
<td>05/23/19</td>
<td>Serco Inc.</td>
<td>Naval Systems Business Unit of Aeronautics and Technology</td>
<td>Naval systems business unit and related contracting entities operations.</td>
<td>$225.0</td>
<td>0.7x</td>
<td>10.4x</td>
</tr>
<tr>
<td>04/22/19</td>
<td>Jacobs Engineering Group Inc. (NYSE:JEC)</td>
<td>The KeyW Holding Corporation (NasdaqGS:KEYW)</td>
<td>The KeyW Holding Corporation, together with its subsidiaries, provides national security solutions to the intelligence, cyber, and counterterrorism communities in the United States.</td>
<td>$602.5</td>
<td>1.9x</td>
<td>NM</td>
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<tr>
<td>04/05/19</td>
<td>Elbit Systems of America, LLC</td>
<td>Night Vision business of Harris Corporation</td>
<td>Night Vision business of Harris Corporation comprises right vision technology business for the U.S. and allied military and security forces, and for the federal homeland security market.</td>
<td>$350.0</td>
<td>-</td>
<td>-</td>
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<tr>
<td>01/30/19</td>
<td>CACI International Inc (NYSE:CACI)</td>
<td>Mastodon Design, LLC</td>
<td>Mastodon Design, LLC designs and manufactures rugged signals intelligence, electronic warfare, and cyber operations products and solutions.</td>
<td>$225.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01/28/19</td>
<td>ECS Federal, LLC</td>
<td>DHA Group Inc.</td>
<td>DHA Group Inc. provides information technology, and management and consulting services to federal government and commercial clients.</td>
<td>$46.0</td>
<td>0.9x</td>
<td>-</td>
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<tr>
<td>12/12/18</td>
<td>Cerberus Capital Management, L.P.</td>
<td>Sparton Corporation</td>
<td>Sparton Corporation, together with its subsidiaries, designs, develops, and produces proprietary products for domestic and foreign defense, and commercial applications.</td>
<td>$256.4</td>
<td>0.7x</td>
<td>9.1x</td>
</tr>
<tr>
<td>12/03/18</td>
<td>Olive Investor, L.P.</td>
<td>Navistar Defense LLC</td>
<td>Navistar Defense LLC designs and manufactures military vehicles and engines.</td>
<td>$140.0</td>
<td>-</td>
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<tr>
<td>12/12/18</td>
<td>Cerberus Capital Management, L.P.</td>
<td>Sparton Corporation (NYSE:SPA)</td>
<td>Sparton Corporation, together with its subsidiaries, designs, develops, and produces proprietary products for domestic and foreign defense, and commercial applications.</td>
<td>$183.3</td>
<td>0.7x</td>
<td>9.1x</td>
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<tr>
<td>12/03/18</td>
<td>Olive Investor, L.P.</td>
<td>Navistar Defense LLC</td>
<td>Navistar Defense LLC designs and manufactures military vehicles and engines.</td>
<td>$140.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10/01/18</td>
<td>Extant Components Group Holdings, Inc.</td>
<td>All Assets and Technical Data Rights of NavCom Defense Electronics, Inc.</td>
<td>All Assets and Technical Data Rights of NavCom Defense Electronics, Inc. comprises designs and manufactures navigation systems, radar altitude systems, and test equipment.</td>
<td>$27.0</td>
<td>2.1x</td>
<td>-</td>
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<tr>
<td>09/24/18</td>
<td>Universal mCloud Corp. (TSXV:MCLD)</td>
<td>Ascent Aerosystems LLC</td>
<td>Ascent Aerosystems LLC designs, manufactures, and sells aerial drones for military and public safety applications.</td>
<td>$6.6</td>
<td>-</td>
<td>-</td>
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<tr>
<td>07/31/18</td>
<td>Themis Computer, Inc.</td>
<td>Germane Systems LC</td>
<td>Germane Systems LC designs, tests, and manufactures commercial off the shelf-based rugged computers, servers, and storage systems for mission-critical military, aerospace, and industrial applications worldwide.</td>
<td>$45.0</td>
<td>-</td>
<td>-</td>
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<tr>
<td>07/02/18</td>
<td>L3 Technologies, Inc. (NYSE:L3)</td>
<td>Applied Defense Solutions, Inc.</td>
<td>Applied Defense Solutions, Inc. operates as a aerospace engineering, software development, and space situational awareness company.</td>
<td>$50.0</td>
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<td>-</td>
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Source: Capital IQ as of 10/2/19

<table>
<thead>
<tr>
<th>Transactions Represented</th>
<th>Transaction Value</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
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<tbody>
<tr>
<td>Median</td>
<td>$116.0</td>
<td>0.9x</td>
<td>10.4x</td>
</tr>
<tr>
<td>Mean</td>
<td>$155.6</td>
<td>1.1x</td>
<td>12.1x</td>
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</tbody>
</table>
Moss Adams: Your Aerospace Deal Partner

Regardless of your transaction size or geographic footprint, we’re committed to helping you cultivate transaction value.

<table>
<thead>
<tr>
<th>Timely, Decisive Support</th>
<th>Single Point of Contact</th>
<th>Deal Flow</th>
<th>A Life-Cycle Approach to Client Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>The success of your transactions hinges on well-timed input.</td>
<td>Keeping a pulse on prospective investments is imperative.</td>
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</tr>
<tr>
<td>We equip you with time-sensitive data and deal points to address issues and refine your strategy.</td>
<td>A key leader on your Moss Adams engagement team will deploy resources where needed and serve as your frontline point person.</td>
<td>We can facilitate introductions to select client organizations whose operations we know firsthand, including many midsize companies.</td>
<td>From acquisition to exit and all points between, we provide guidance to help you in each stage of the investment life cycle.</td>
</tr>
</tbody>
</table>
250+ Aerospace & Defense Clients
20+ Aerospace M&A transactions advised in 2018

ARIZONA
Phoenix

CALIFORNIA
Fresno
Los Angeles
Manhattan Beach
Napa
Orange County
Silicon Valley
Sacramento
San Diego
San Francisco
Santa Rosa
Stockton
Walnut Creek
Woodland Hills

COLORADO
Denver

KANSAS
Kansas City

NEW MEXICO
Albuquerque

OREGON
Eugene
Medford
Portland

TEXAS
Dallas
Houston

WASHINGTON
Bellingham
Everett
Issaquah
Seattle
Spokane
Tacoma
Tri-Cities
Wenatchee
Yakima

Moss Adams Location
Satellite

30+ locations west of the Mississippi
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Kurt Lippmann
Tax Partner
kurt.lippmann@mossadams.com

Roger Rancourt
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Roger.rancourt@mossadams.com

Star Fischer
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Brandon Clewett
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(949) 221-4000

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(310) 477-0450

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