

4

....

AEROSPACE & DEFENSE M&A PULSE

THIRD QUARTER 2019



What We're Discussing with Clients	PAGE 3
Q3 2019 Market Summary & Outlook	PAGE 4
Macroeconomic Trends & Signals	PAGE 5
Aerospace & Defense M&A Activity	PAGE 6
Strategic Planning for Sale	PAGE 7

ABOUT PMCF

P&M Corporate Finance ("PMCF"), a U.S. registered broker/dealer, is an investment bank focused exclusively on middle market transactions with professionals in Chicago, Detroit, Denver, and across the globe through Corporate Finance International[™] affiliates. Offering a depth of advisory services, PMCF helps clients worldwide meet their sale, acquisition, financing, and strategic growth objectives. Additional information on PMCF can be found by visiting our website, www.pmcf.com.

PHIL GILBERT Managing Director 248.223.3326 phil.gilbert@pmcf.com



SAGAR JANVEJA Vice President 312.602.3604 sagar.janveja@pmcf.com

INVESTMENT BANKING SERVICES:

- Mergers & Acquisitions
- Carve-outs & Divestitures
- Strategic Assessments
- Corporate Advisory
- Readiness Reviews
- Capital Raising



SCOTT SCHRAMM Analyst 312.602.3609 scott.schramm@pmcf.com

SELECT PMCF AEROSPACE & DEFENSE TRANSACTIONS



What We're Discussing with Clients

The aerospace and defense (A&D) market remains solid and robust. Strong tailwinds, excellent demand drivers, and favorable macroeconomic factors continue to propel the industry for the foreseeable future. High commercial aircraft orders, modernization and required upgrades of systems and platforms, enhanced focus and investments within cabin interiors, and increased government defense spending are some of the factors driving growth across industry segments.

Governmental protectionist actions in aluminum and steel producing nations and restrictions on some technology transfers, along with production disruptions (e.g. Boeing 737 Max), highlight supply chain risks. Effective supplier and supply chain management is crucial. Collaboration, cross-planning, and shared objectives will drive the necessary process controls and improvements while keeping costs competitive.

The following are three critical topics we are regularly discussing with our clients:

Modernization and Upgrades of Platforms & Hardware

The global commercial aircraft market remains strong driven by order intake across the entire value chain. A primary driver is the need for modernizing and upgrading existing hardware, systems, and platforms.

As governments anticipate a more hostile geopolitical global environment, there is political consensus to fast-track modernization, upgrades, and replacements, highlighted by Congress greenlighting the simultaneous development of a Black Hawk replacement and the Chinook Block II.

Companies with the ability to participate in modernizing and upgrading weapons systems, military aircraft, and naval vessels will benefit the most. Significant growth and new business opportunities are on the horizon for companies with ready, off-the-shelf replacement solutions or technologies that can deliver next-generation capabilities at reasonable costs. Companies should be addressing, or be prepared to address, the demand for increased modernization by examining their product and technology offerings and current cost structure, or risk losing lucrative contracts to competitors with affordable solutions.

Pursuing Tariff Exemptions

Tariffs remain a risk for A&D companies and suppliers, especially for aluminum and specialty alloys and steel. Organizations representing U.S. aerospace and defense interests believe that aspects of the tariffs will have significant adverse effects on the industry, including increased expenses, fewer resources for R&D, and challenges finding suitable replacements for key raw materials.

However, processes are in place that allow companies to secure exclusions from tariffs on imported aluminum and steel if they can demonstrate that it's not possible to purchase the products in the United States from domestic suppliers. Filing for and ultimately receiving an exemption can be a long and complicated process, but worth the time and effort to recoup meaningful spend on materials. While the U.S. Department of Commerce is buried with requests for exemptions, if not already addressed, completing and filing the needed documentation should be a priority.

Successful Supplier Relationship Management (SRM)

Supplier relationship management (SRM) is a systematic approach for assessing suppliers' contributions and influences on a business. Having a disciplined process of managing all interactions with third party organizations can drive the value of the relationship and improve collaboration, reduce the risk of failure, and increase a company's competitive advantage.

With the increasing complexity and potential risks of an integrated supply chain, supplier relationship management is critical and is no longer only about execution, cost, and delivery. A focused partnership and communication strategy can determine which buyers and suppliers remain competitive through realizing improved efficiencies, enhanced productivity and quality, and added value. SRM also helps with managing exposure and risk. Developing effective supplier management processes takes time and a significant resource commitment. The payoff is reduced execution risk and greater predictability of costs and new program launches.

Consider developing a dedicated SRM process and/or committing to a manager tasked with guiding the relationship, administration, and agreements. An outlined communication and delivery plan, integrated software systems to both centralize data as well as support business goals, and implementing a formal performance measurement/rating system are just a few strategies that companies can implement.

Q3 2019 Market Summary & Outlook

YTD 2019 Market Summary & Outlook

Overall, market activity has been quite stable on a year-over-year basis in 2019. Total deal value for YTD 2019 of \$64.4 billion is 2.7 times higher compared to YTD 2018 driven by mega deals including United Technologies/Raytheon and Advent International/Cobham plc. Setting aside these sizable transactions, overall activity has been consistent over the last four years, highlighting the robust fundamentals of the current M&A market for A&D.

General market dynamics support middle-market transactions, which are currently driving deal volume and value. Strategic buyers continue to dominate the space.

Transaction valuations have remained relatively steady over the past year. For A&D transactions under \$250 million, mean enterprise value to EBITDA multiples trended slightly higher from 9.5x to 10.2x between Q3 2018 and Q2 2019.

PMCF Perspectives: Increasing Focus on Cabin Interiors

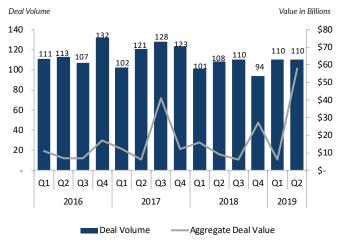
The aircraft cabin interiors market is projected to grow from \$27 billion in 2018 to \$40 billion by 2025 – a CAGR of 5.87 percent. Increasing aircraft orders, additional component retrofitting, and the rising demand for an enhanced passenger experience including inflight entertainment and connectivity options, are currently driving this growth.

Suppliers are working closely with airlines in developing cabin interiors that can generate new sources of revenue including onboard shopping, wireless internet, and advertising. Virtual reality (VR) is another option that airlines are exploring as a premium service and source of comfort for nervous flyers. Potential advertising opportunities may exist within VR as well.

Suppliers taking advantage of this growing opportunity include those that focus on electronics and communication systems such as displays and controls, as well as cabin seating (e.g. RECARO's "connected economy seat") providers that can offer various and innovative configurations and customizations. Companies with wellequipped manufacturing facilities, but more importantly, secure distribution networks, competitive pricing, and on-time delivery stand to benefit the most as the cabin interiors segment continues to grow.

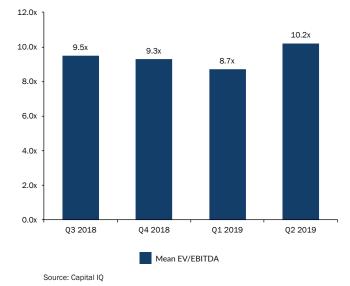


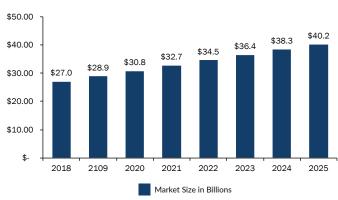
AEROSPACE AND DEFENSE DEALS BY YEAR





AEROSPACE AND DEFENSE TRADING MULTIPLES



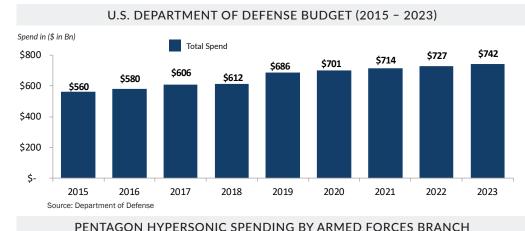


AIRCRAFT CABIN INTERIORS MARKET SIZE

Source: MarketsandMarkets

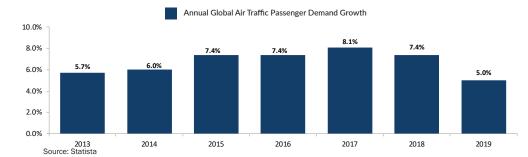
Macroeconomic Trends & Signals

The aerospace and defense market in 2019 should experience robust growth, with increases in overall defense spending and weapons development, and steady growth in the commercial aviation market.



- The U.S. Department of Defense (DoD) is increasing spending to counter and deter external threats, particularly Iran, North Korea, and global terrorism.
- This strategy can sustain U.S. authority and guarantee amenable regional power balances, while responding to growing political, economic, military, and information competitions.
- Unclassified Pentagon Hypersonic Spending Plan U.S. \$ in Millions \$1,800 \$1 685 \$1.600 \$1.463 \$1,404 \$1,400 \$1,200 \$1,000 \$800 \$718 \$600 \$359 \$400 \$181 \$200 \$ 2020 2021 2022 2023 2024 2020 2021 2020 2021 2022 2023 2024 2022 2023 2024 2020 2021 2022 2023 2024 Navv Army Air Force DARPA Source: Department of Defense
- The Pentagon continues to develop its hypersonic weapons portfolio (in the role of "catch up" to Russia and China) and the ever-pressing demand to position itself as the leader in advanced systems.
- Advanced development of scramjetpowered cruise missiles and airlaunched boost-glide systems continue to drive supply chain demand and boost DoD spend.

AIR TRAFFIC PASSENGER GROWTH (2013 - 2019)



- Air traffic passenger growth continues to experience a significant boom as economic conditions remain stable.
- Positive global dynamics, increased business travel and tourism, and the spread of global airlines to new regions are accelerating air traffic year-overyear.
- Companies are contending with high prices for raw materials. Although there has been some price moderation, the persistence of elevated prices underscores the need for companies to optimize cost savings. While commodity price programs are common in other industries, we see many suppliers with no contractual protections. As many customers are pushing long-term, fixed price LTA's (with annual price adjustments), addressing commodity exposure is critical.

Source: Federal Reserve Bank of St. Louis Note: Indices anchored at 100.0 on Jan 2014

1/15

125.0

115.0

105.0

95.0

85.0

75.0

1/14

RAW MATERIALS (Q1 2018 - YTD 2019)

Resin

Steel

1/16

Aluminum

1/17

1/18

1/19

WWW.PMCF.COM | 5

Aerospace & Defense M&A Activity

SELECT A&D TRANSACTIONS

(\$ in Millions)					
Announce Date	d Target	Buyer	Implied EV	EV/TTM Revenue	EV/TTM EBITDA
Sep-19	Arotech Corporation	Greenbriar Equity Group LLC	\$101	1.1x	21.3x
Sep-19	APC Technology Group PLC	Oryx International Growth Fund Limited	\$27	1.1x	15.1x
Sep-19	PFW Aerospace AG	Hutchinson SA	n/a	n/a	n/a
Sep-19	Pacific Design Technologies, Inc.	AMETEK, Inc.	\$122	3.1x	n/a
Aug-19	Turnkey Fabrication LLC	TG Manufacturing, LLC	n/a	n/a	n/a
Aug-19	Avalon Precision Metalsmiths	Sigma Electric Manufacturing Corp.	n/a	n/a	n/a
Jun-19	Canadair Regional Jet Program of Bombardier Inc.	Mitsubishi Heavy Industries, Ltd.	\$750	n/a	n/a
Jun-19	AIM Aerospace, Inc.	Sekisui America Corporation	\$510	2.9x	n/a
Jun-19	EDAC Technologies Corporation	Hanwha Aerospace Co., Ltd.	\$295	2.0x	n/a
Jun-19	Systron Donner Inertial, Inc.	EMCORE Corporation	\$26	1.0x	7.0x
May-19	First Sensor AG	TE Connectivity Ltd	\$342	1.9x	13.3x
May-19	JEP Holdings Ltd.	UMS Holdings Limited	\$73	1.2x	8.7x
Apr-19	Positek Limited	discoverIE Group plc	\$6	3.1x	7.7x
Apr-19	L&T Shipbuilding Ltd.	Larsen & Toubro Limited	\$158	n/a	n/a
Apr-19	Night Vision business of Harris Corporation	CorporationElbit Systems of America, LLC	\$350	n/a	n/a
Apr-19	ARCH Global Precision LLC	The Jordan Company, L.P.	n/a	n/a	n/a
Mar-19	Nuvotronics LLC	Cubic Corporation	\$72	n/a	n/a
Mar-19	Kforce Government Holdings, Inc.	ManTech International Corporation	\$115	1.2x	12.5x
Feb-19	MicroPact Inc.	Tyler Technologies, Inc.	\$204	2.9x	n/a
Jan-19	Aeronautics Ltd.	Rafael Advanced Defense Systems Ltd.	\$237	2.4x	n/a
Source: Capita					

Source: Capital IQ

KEY DEAL HIGHLIGHTS

Geographic Expansion and Product Enhancement

Hanwha Aerospace Acquires EDAC Technologies On June 10, 2019, the South Korean aviation company Hanwha Aerospace announced it is acquiring EDAC Technologies from Greenbriar Equity Group for \$295 million USD (2.0x revenue). The acquisition will be completed by the end of 2019. EDAC is headquartered in Connecticut and founded in 1946. The company's clients include Pratt & Whitney, GE, and Rolls-Royce. The acquisition establishes an American foothold and allows Hanwha Aerospace to expand its business and enhance its high-tech capabilities.

Market Expansion

ManTech Acquires Kforce Government Solutions On March 1, 2019, ManTech International Corporation announced the acquisition of Kforce Government Solutions, Inc. for \$115 million in cash (1.2x revenue; 12.5x EBITDA). Kforce is headquartered in Fairfax, VA and provides technology solutions, data management, and analytics during federal health and defense missions. Kforce generated nearly \$100 million in revenue during the 2018 fiscal year. The acquisition incorporates an additional 500 employees to the ManTech team, and allows ManTech to deliver services in transformative ways that directly impact information technology programs. The company anticipates a slight rise in earnings per share during 2019 due to the acquisition.

Planning for a Sale and Unlocking the Value in a Business

Before launching a sale process, shareholders and management should assess internal strategic goals and risks to best position the company for a successful outcome. The following key factors are among those to review and address before going to market:

Customer Mix

Customer selection is very critical, and companies should examine their current base and mix to mitigate any potential concerns. Demonstrating strength and tenure of its customer relationships will be viewed very favorably to potential buyers.

While customer diversification is beneficial and can alleviate risks in the event that a customer leaves, concentration can also be a benefit if managed properly. Providing high value services and critical components to multiple divisions and/or facilities within a particular client can create a certain "stickiness" with that customer and meaningful penetration. In addition, a company's ability to demonstrate growth in wallet share within a few key accounts underscores customer reliance.

Systems and Processes

Strong systems and processes reduce variability and enhance predictability, addressing key investor risk factors. Real time tracking of the metrics most impactful to your business, and a proscribed approach to address and resolve variances, is an essential management tool.

Additionally, a robust continuous improvement culture that helps drive production efficiencies and value-add initiatives is essential to offset customer price down requirements. Many companies set specific dollar goals for annual cost improvements – often tied to annual cost reductions mandated by an LTA.

Finally, a disciplined capital expenditure strategy that carefully monitors payback and IRR metrics provides a critical control on both quoting and investment. A robust system that allows for the accurate comparison of competing IRR/payback outcomes, while also evaluating time-based considerations (e.g. start of production, rate of ramp, timing of the capital investment, etc., all against the backdrop of a transaction) drives informed decision making.

Management Depth and Succession

The strength and experience of a company's management team is a critical piece when preparing for a sale. Buyers will want to ensure that a well-rounded management team is in place, and has the requisite industry, technical, and customer knowledge to lead the company going forward.

It is also critical that the "bench" below the top level of management is deep and developing. A formal internal succession strategy, including assessment of the strengths, weaknesses, and developmental needs of the next generation leaders, is increasingly important, particularly in a tight labor market. Buyers will be comforted by the fact that there is leadership with a track record of success ready to move up in the event of unexpected turnover.

Revenue Visibility

Visibility into a company's future revenue streams is a crucial component in driving valuation and an optimal purchase price. Mapping end applications for many parts can be challenging – particularly parts with an MRO or aftermarket application. Similarly, parts with application across airframes can be difficult to assess. Where clear mapping isn't possible, working with customers, assessing industry data, and evaluating past and future relationships (e.g. units in service and expected retirements/additions for a service part) may be needed to develop an approach. Keep in mind this will likely involve trial and error and may provide only directional guidance.

Growth Prospects

A company's ability to support its estimated growth with a detailed and tactical gameplan helps investors gain confidence in the forecast. The plan may include both an analysis of pipeline/known opportunities and a mid-term expansion strategy. An effective tool we've seen for assessing pipeline is to rank likelihood of success by specific milestones. For example, a quote, development of a prototype, approval for tooling release, etc. Objective metrics remove the false optimism that often accompanies sales pipelines. The mid-term strategy must include specific targets, milestones, actions/tactics, deadlines, and accountabilities.

PMCF | INVESTMENT BANKING







DETROIT Two Towne Square Suite 425 Southfield, MI 48076 Phone: 248.223.3300 CHICAGO 120 S Riverside Suite 2100 Chicago, IL 60606 Phone: 312.602.3600 DENVER 8181 E Tuffs Avenue Suite 600 Denver, CO 80237 Phone: 720.370.8181



Two-time winner, Boutique Investment Banking Firm of the Year by M&A Advisor

Awarded, Cross Border Corporate and Strategic Acquisition of the Year by $M\&A \ Advisor$

Awarded, Cross Border M&A Deal of the Year by M&A Advisor

Awarded, Deal of the Year by ACG Detroit

This market overview is not an offer to sell or a solicitation of an offer to buy any security. It is not intended to be directed to investors as a basis for making an investment decision. This market overview does not rate or recommend securities of individual companies, nor does it contain sufficient information upon which to make an investment decision.

P&M Corporate Finance, LLC will seek to provide investment banking and/or other services to one or more of the companies mentioned in this market overview.

P&M Corporate Finance, LLC, and/or the analysts who prepared this market update, may own securities of one or more of the companies mentioned in this market overview.

The information provided in this market overview was obtained from sources believed to be reliable, but its accuracy cannot be guaranteed. It is not to be construed as legal, accounting, financial, or investment advice. Information, opinions, and estimates reflect P&M Corporate Finance, LLC's judgment as of the date of publication and are subject to change without notice. P&M Corporate Finance, LLC undertakes no obligation to notify any recipient of this market overview of any such change.

The charts and graphs used in this market overview have been compiled by P&M Corporate Finance, LLC solely for illustrative purposes. All charts are as of the date of issuance of this market overview, unless otherwise noted.

The PMCF Aerospace & Defense Index may not be inclusive of all companies in the A&D industry and is not a composite index of the A&D industry sector returns. Index and sector returns are past performance which is not an indicator of future results.

This market overview is not directed to, or intended for distribution to, any person in any jurisdiction where such distribution would be contrary to law or regulation, or which would subject P&M Corporate Finance, LLC to licensing or registration requirements in such jurisdiction.

WWW.PMCF.COM