



Meridian Capital Aerospace M&A Snapshot

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M&A Outlook

Building off the momentum of 2013, the aerospace and defense M&A market remains robust with 53 transactions closing between January and August of this year. Both strategics and private equity-backed suppliers seek to capitalize on strong OEM order success and are highly acquisitive, driving strong valuations. Transaction motivations include increasing the presence on high growth aircraft platforms, expanding manufacturing capabilities, and increasing aftermarket exposure. Given ongoing consolidation trends, increased cost pressure from OEMs, and strong valuations in M&A markets, Meridian Capital believes now is an apt time for shareholders to review their growth, financing, and ownership transition objectives.



Aerospace M&A: Key Trends

Macroeconomic Factors Drive Long-Term Growth Forecast

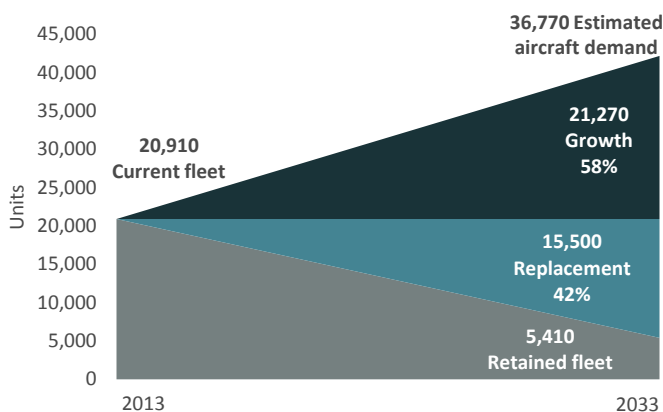
At the Farnborough Airshow in July, OEMs received orders worth an estimated \$115.5 billion. Boeing has amassed 941 year-to-date aircraft orders through August, while Airbus orders for the year have reached 722. Today, the combined backlog for Boeing and Airbus exceeds 11,430 aircraft, representing more than eight years of production. Notable orders include Emirates Airlines' purchase of 150 777X and Air Canada's order for 61 737 MAX.

Despite near record backlog levels and continued order momentum, recently cancelled orders by airlines such as Emirates, Lion Air, and Transaero have led some industry participants to be cautious of an order bubble. However, OEMs and a majority of analysts appear confident that healthy macroeconomic factors will continue to drive long-term aircraft demand. Driving factors include rising global air traffic metrics and accelerating aircraft retirement rates.

Fuel Efficiency and Reliability Improvements Drive Aircraft Retirements

As advancements in composite and engine technologies allow aircraft to fly longer distances and burn less fuel, airlines are seeking to accelerate the retirement of older aircraft. With fuel representing approximately 35% of airlines' operating costs and aircraft such as the Boeing 737 MAX offering 14% more fuel efficiency compared to previous

Demand Continues To Be Driven By Replacement Rates



Recent Industry News

- **Boeing Expects to Further Increase 737 Production Rates** [Read more >](#)
- **Airbus and Boeing Add to Backlog at Farnborough Air Show** [Read more >](#)
- **OEMs Remain Confident in Backlog** [Read more >](#)
- **Boeing Increases Global Aircraft Demand Forecast** [Read more >](#)
- **Strong Aircraft Demand from China** [Read more >](#)
- **Lockheed Martin Forecasts Strong Orders for the F-35** [Read more >](#)
- **Increased Airline Profitability Driving Engine Overhauls** [Read more >](#)

platforms, airlines are upgrading fleets as a necessity to improve profitability and remain competitive.

Reliability improvements in next generation aircraft also offer the opportunity to reduce maintenance costs and aircraft downtime, minimizing delays that cost airlines over \$8 billion annually. These fundamentals have led the retirement age of aircraft to drop from 26.6 years in 2011 to 23.2 years in 2012. As a result, Boeing estimates that 15,500 new aircraft will need to enter the market over the next 20 years to simply maintain the capacity of the existing global fleet.

Significant Air Traffic Growth in Asia Pacific

Rising income levels and a growing middle class is projected to increase air travel in the Asia Pacific by 6.3% annually through 2033, leading to an estimated 100 million new passengers added each year. Over the same period, Boeing forecasts 13,460 airplanes will be delivered to the region, representing 37% of the global market. To accommodate the increased demand for air travel, many airlines in the region are expanding fleets. In June, China's second largest airliner, China Eastern Airlines, confirmed it would buy 80 737 jets including 60 737 MAX. The purchase is incremental to the airline's previous order for 70 A320neo in February. The combined order is worth an estimated \$13.8 billion.

Aerospace M&A: Key Trends (Continued)

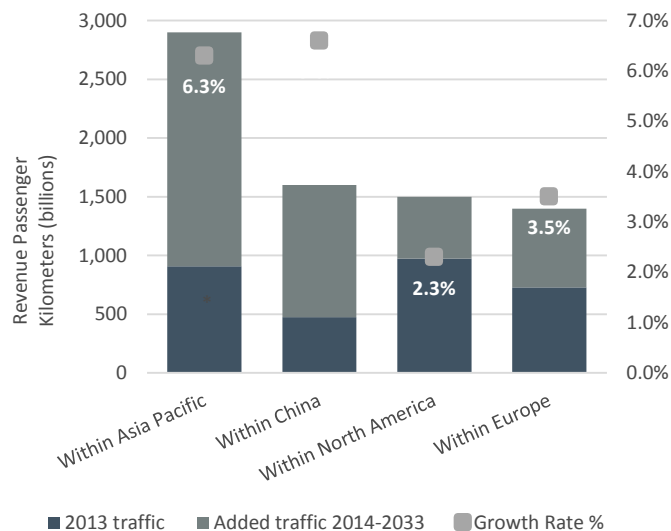
Significant Air Traffic Growth in Asia Pacific (Continued)

In addition to orders from established airlines, newly launched airlines are expected to drive demand. Since 2013, India’s Tata Group launched two new airlines through partnerships with AirAsia and Singapore Airlines.

Boeing and Airbus are well-positioned to serve the demand for aircraft in the Asia Pacific, as the aerospace supply chain in the region remains underdeveloped and analysts anticipate delays for COMAC’s introduction of its single-aisle C919.

Influenced by the majority of commercial aerospace growth coming from the 737, 787, A320, and A350, strategic and private equity investors have been seeking to build a stronger presence on these platforms both through internal initiatives and acquisitions. For suppliers, an established presence and ongoing bid opportunities on leading platforms is critical to driving long term revenue growth.

Projected Air Traffic Growth by Region Through 2033



*Excludes China

Source: Boeing

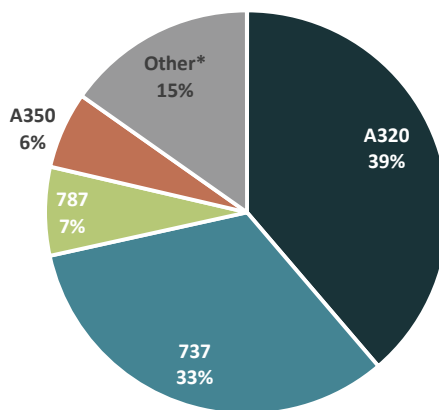
OEM Deliveries, Backlog, and Build Rates as of August 2014

Platform	Deliveries	Backlog	Monthly Production		
			Current	Projected	% Increase
Boeing					
737	315	4,008 ¹	42	47	11.9%
787	69	865	10	14	40.0%
Other	77	667	-	-	-
Total	461	5,540			
Airbus					
A320	306	4,733 ²	42	46	9.5%
A350	0	750	n/a	10 by 2018	n/a
Other	83	409	-	-	-
Total	389	5,892			

¹Includes orders for 2,219 737 MAX

²Includes orders for 3,257 A320neo

Aggregate Commercial Backlog – Boeing, Airbus, Bombardier, and Embraer (in units)
Total: 12,216



*Other category includes 747, 767, 777, A330, A380, CRJ, Cseries, Q-Series, E-Jets E2, and E-Jets

Popularity of New Aircraft Models Drives Increased Platform Concentration

Commercial

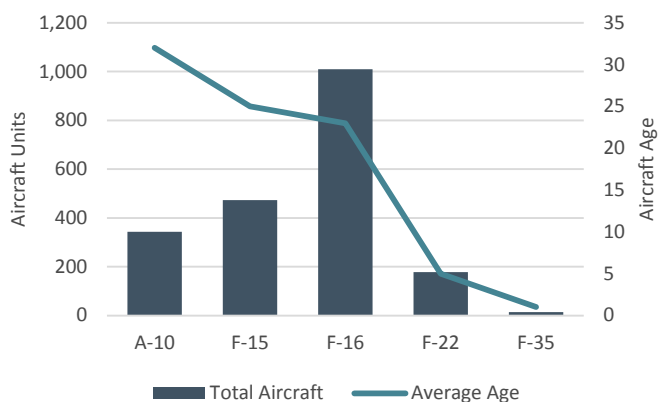
With airlines seeking to upgrade to more fuel efficient aircraft, the demand for next generation aircraft including the 737, 787, A320, and A350 continues to rise. As of August, these four platforms represented 85% of all commercial backlog. To meet demand, Boeing and Airbus continue to execute initiatives to increase production rates.

Aerospace M&A: Key Trends (Continued)

Defense

As a result of the U.S. defense forces' aging aircraft inventory and advancements in stealth technologies, the demand for modern defense aircraft such as the F-35 is growing. With an average age of over 20 years, the U.S. Air Force's fleet of F-15s and F-16s is becoming outdated. In total, U.S. defense forces are expected to be upgraded with 2,400 F-35s over the next two-to-three decades, creating bidding opportunities for defense contractors and component manufacturers. An additional 700 orders are anticipated to come from international buyers over the same period. Suppliers with significant part packages on these high growth platforms are attracting significant interest from investors.

U.S. Air Force Fighter Inventory



Source: Morgan Stanley

Increased Airline Profitability To Drive Aftermarket Spending

Strong global airline profitability and higher aircraft utilization rates has led to increased spending on aftermarket services and preventive maintenance programs in 2014. Analysts estimate airline profits will increase 33% this year, reaching \$18.7B. As a result, airlines are more aggressively investing in maintenance and repair projects. A recent MRO survey by Canaccord Genuity projects narrowbody MRO shop visits to increase 9% in 2014, and forecasts the strongest growth for engine repair shops since 2011. Lisi Aerospace's acquisition of Manoir Aerospace, a producer of precision forged engine blades and aerostructure components depicts a trend of increased desire to gain exposure to the engine overhaul market.

Increased Cost Pressures from OEMs

Over the past 18 months, Boeing's "Partnering for Success" program has driven cost pressure at all levels of the aerospace supply chain. The program's impact on profitability margins has led many suppliers to pursue acquisitions to gain scale, expand complex manufacturing and assembly capabilities, and provide more value-add services. Suppliers with proprietary manufacturing or design capabilities are achieving strong valuations due to a perceived ability to better maintain margins as a result of high switching costs for OEMs. Moreover, with aircraft build cycles extending 5-10 years, suppliers of designed-in products have greater leverage during contract negotiations. Suppliers with proprietary program capabilities remain attractive acquisition candidates for large strategics and private equity firms. In March, TransDigm continued to expand its portfolio of patented products, with its acquisition of EME, a manufacturer of highly engineered aerospace electromechanical actuators and components that receives 80% of its revenue from the sale of sole source products.

Private Equity Activity Remains Strong

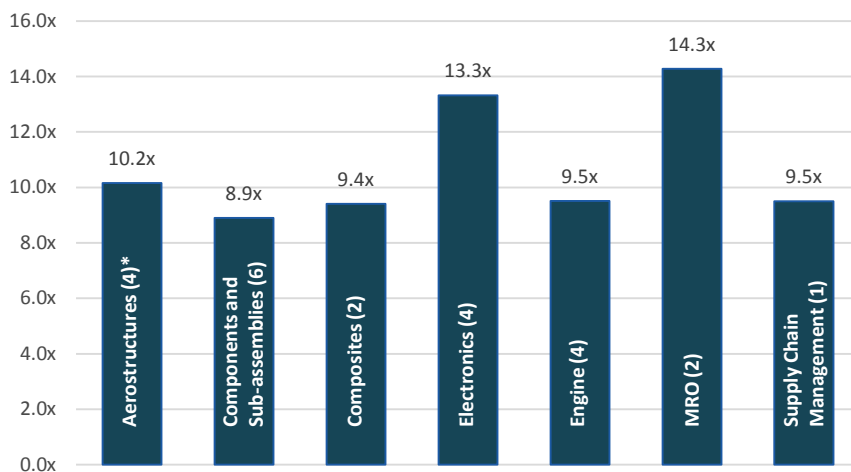
The aerospace industry's strong revenue visibility and positive macroeconomic drivers continue to generate interest from private equity investors. Through August, private equity firms have invested in 14 aerospace companies. In addition to making new platform investments, financial investors completed several add-on acquisitions to expand manufacturing and engineering capabilities of existing aerospace investments and gain access to high growth platforms.

Recent private equity add-on acquisitions include Liberty Hall Capital-backed Accurus Aerospace's acquisition of McCann Aerospace Machining, a supplier of complex monolithic machined structural parts and assemblies with exposure to the 787 and F-35. In addition, Sorenson Capital-backed Roberts Tool's acquired Excel Manufacturing, a manufacturer of high-wear, flight critical components. Furthermore, Blue Point Capital-backed Selmet acquired Onamac Industries, a manufacturer and supplier of complex machined components and assemblies.

Aerospace M&A: Select Recent Transactions and Valuation Metrics

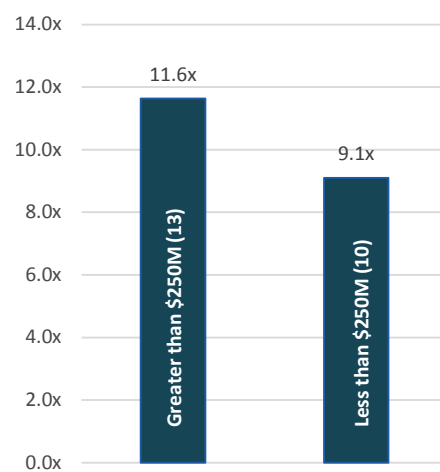
Date	Target	Buyer	Category	EV (M)
08/22/14	Star Dynamics Corporation	MWAGUSI, LLC	Electronics	\$5.0
08/06/14	RMDG Aerospace Ltd.	Avingtrans plc (AIM:AVG)	Components and Sub-assemblies	\$1.9
08/06/14	Eirtech Aviation Ltd.	Leading Edge Aviation Services, Inc.	MRO	-
08/04/14	Onamac Industries Inc.	Selmet, Inc.; Blue Point Capital Partners	Components and Sub-assemblies	-
07/14/14	Colt International, Inc.	World Fuel Services Corp. (NYSE:INT)	Hydraulic and Fuel Systems	\$63.0
07/09/14	Global Parts Aero Structures Inc.	GlobalParts.aero	MRO	-
06/30/14	Zeta Associates Incorporated	Lockheed Martin Corporation (NYSE:LMT)	Communications	-
06/20/14	Acument Global Technologies	Fontana Gruppo	Fasteners	-
06/12/14	Ucosystem Inc.	FIRSTEC Co., Ltd.	Unmanned Aerial Vehicles	\$3.9
06/05/14	Greenpoint Technologies, Inc.	Zodiac Aerospace (ENXTPA:ZC)	Aircraft Interiors	-
06/04/14	PATS Aircraft, LLC	Moelis Capital Partners LLC	Hydraulic and Fuel Systems	-
05/21/14	Wencor Group, LLC	Warburg Pincus LLC	MRO	-
05/13/14	ISR Group, Inc.	TCFI IG LLC	Unmanned Aerial Vehicles	\$18.6
05/08/14	Abu Dhabi Aircraft Technologies, Airframe/Component Businesses	Ethiad Airways P.J.S.C.	MRO	-
05/06/14	Manoir Aerospace SAS	Lisi Aerospace Creuzet	Engine	-
05/06/14	Ultra Electronics ICE, Inc.	Ultra Electronics Holdings plc (LSE:ULE)	Electronics	\$11.6
05/01/14	blades technology international inc.	Pratt & Whitney Company, Inc.	Engine	-
04/28/14	Societe d'Etudes et de Constructions Aero-Navales SAS	SAS AEDS	MRO	-
04/22/14	E.D.N. Aviation, Inc.	Velocity Aerospace; Prospect Partners	MRO	-
04/21/14	SPX Precision Components, LLC	Triangle Capital Corporation (NYSE:TCAP)	Components and Sub-assemblies	\$23.0
04/17/14	S-TEC Corporation and Chelton Flight Systems Inc.	Genesys Aerosystems	Electronics	-
04/11/14	SPX Precision Components, LLC	RFE Investment Partners; 24/6 Capital	Components and Sub-assemblies	\$62.0
04/09/14	Excel Manufacturing, Inc.	Roberts Tool Company, Inc.; Sorenson Capital	Components and Sub-assemblies	-
04/08/14	Fly-n-Sense SAS	BTG Industries Et Santé	Unmanned Aerial Vehicles	-
04/03/14	AeroQuest Inc.	GAL Aerospace Corp.	Aircraft Interiors	-
04/02/14	McCann Aerospace Machining Corporation	Accurus Aerospace Corporation; Liberty Hall Capital Partners	Aerostructures	-
04/02/14	Woodbine Products, Inc.	Welding Metallurgy, Inc.	Components and Sub-assemblies	\$2.7
04/01/14	Rücker Aerospace GmbH	AIDA Development GmbH	Engineering	-
04/01/14	R & G Aircraft Parts LLC	Merex Incorporated; Dubin Clark & Company	MRO	-
03/31/14	Maxair Ventures, Inc.	ARC Aerospace Industries, LLC	MRO	-
03/20/14	Sabena Technics S.A., Customer Contracts	AAR Corp. (NYSE:AIR)	MRO	-
03/20/14	Aerospace Dynamics International, Inc.	Precision Castparts Corp. (NYSE:PCP)	Aerostructures	\$625.0
03/17/14	Barfield, Inc.	Aero Maintenance Group LLC	MRO	-
03/13/14	Jallais Industrie SAS	Ste Mecachrome	Aerostructures	-
03/10/14	TOYO KOKU DENSHI Co.,Ltd.	Imasen Electric Industrial Co., Ltd. (TSE:7266)	Electronics	-
03/06/14	Elektro-Metall Export GmbH	TransDigm Group Incorporated (NYSE:TDG)	Electronics	\$47.4
03/04/14	RACE Completions Limited	Specialist Technologies Ltd.	Aircraft Interiors	-
03/03/14	AERnnoa AEROSPACE S.A.	Springwater Capital, LLC	Aerostructures	\$206.0

EV/EBITDA Valuation Multiples By Category (3 Year Average)



*Number of transactions with disclosed deal values in parentheses

EV/EBITDA Valuation Multiples By Deal Size (3 Year Average)



Aerospace M&A: Select Case Studies

Greenpoint Technologies, Inc. Acquired by Zodiac Aerospace



Target Description:

- Kirkland, WA-based provider of VIP cabin interior completions and modifications for Boeing business aircraft.

Investment Rationale:

- Further enhance competencies in cabin interiors in the domain of VIP and VVIP cabin interiors.

Wencor Group, LLC Acquired by Warburg Pincus



Target Description:

- Designs, develops, manufactures, and distributes aircraft parts for repair stations, operators of general aviation aircraft, and airlines worldwide.

Investment Rationale:

- Develop new product and repair offerings in order to become more of a single-source solution.

Manoir Aerospace SAS Acquired by Lisi Aerospace Creuzet



Target Description:

- French manufacturer and supplier of flight critical forged and precision machined aerostructure and aeroengine components.

Investment Rationale:

- Continue growth trajectory through the combination of complementary products and industrial know-how.

SPX Precision Components, LLC Acquired by RFE Investment Partners



Target Description:

- Manufacturer and supplier of parts, components, and assemblies for aerospace and defense industry customers worldwide.

Investment Rationale:

- Build an aerospace business that is diversified across military, commercial, rotorcraft, and fixed wing platforms.

Aerospace and Defense Public Comparables Analysis

Company Name	Market Cap (M)	EV (M)	LTM		EV/LTM		LTM Margin	52-Week Change
			Rev	EBITDA	Rev	EBITDA	EBITDA	
Aerospace								
Airbus Group N.V. (ENXTPA:AIR)	\$48,962	\$49,029	\$78,459	\$5,879	0.62x	8.34x	7.5%	6.6%
B/E Aerospace Inc. (NasdaqGS:BEAV)	\$9,070	\$11,480	\$3,892	\$835	2.95x	13.76x	21.4%	22.6%
Bombardier Inc. (TSX:BBD.B)	\$5,805	\$10,769	\$18,627	\$939	0.58x	11.47x	5.0%	(25.7%)
Ducommun Inc. (NYSE:DCO)	\$305	\$579	\$736	\$81	0.79x	7.14x	11.0%	5.0%
Embraer SA (NYSE:ERJ)	\$7,037	\$7,652	\$6,559	\$919	1.17x	8.33x	14.0%	14.3%
Esterline Technologies Corp. (NYSE:ESL)	\$3,649	\$4,091	\$2,100	\$375	1.95x	10.90x	17.9%	47.4%
HEICO Corporation (NYSE:HEI)	\$2,973	\$3,450	\$1,128	\$243	3.06x	14.18x	21.6%	0.2%
Hexcel Corp. (NYSE:HXL)	\$3,854	\$4,208	\$1,771	\$358	2.38x	11.76x	20.2%	9.8%
Kaman Corporation (NYSE:KAMN)	\$1,093	\$1,445	\$1,735	\$140	0.83x	10.29x	8.1%	9.5%
LMI Aerospace Inc. (NasdaqGS:LMIA)	\$179	\$466	\$403	\$42	1.16x	11.13x	10.4%	14.5%
MTU Aero Engines AG (XTRA:MTX)	\$4,397	\$5,001	\$4,882	\$665	1.02x	7.52x	13.6%	(4.9%)
Precision Castparts Corp. (NYSE:PCP)	\$34,615	\$38,180	\$9,777	\$3,066	3.91x	12.45x	31.4%	10.2%
Safran SA (ENXTPA:SAF)	\$27,524	\$30,617	\$19,157	\$2,580	1.60x	11.87x	13.5%	17.6%
Senior plc (LSE:SNR)	\$1,918	\$2,102	\$1,252	\$190	1.68x	11.07x	15.2%	1.4%
Spirit AeroSystems Holdings, Inc. (NYSE:SPR)	\$5,405	\$6,184	\$6,530	\$280	0.95x	22.12x	4.3%	70.0%
Textron Inc. (NYSE:TXT)	\$10,448	\$14,025	\$12,762	\$1,277	1.10x	10.98x	10.0%	34.2%
The Boeing Company (NYSE:BA)	\$92,390	\$90,112	\$88,425	\$8,280	1.02x	10.88x	9.4%	20.9%
TransDigm Group Incorporated (NYSE:TDG)	\$9,863	\$16,652	\$2,270	\$1,005	7.33x	16.58x	44.2%	36.3%
Triumph Group, Inc. (NYSE:TGI)	\$3,566	\$5,298	\$3,717	\$575	1.43x	9.21x	15.5%	(5.8%)
United Technologies Corporation (NYSE:UTX)	\$99,412	\$116,076	\$64,157	\$11,354	1.81x	10.22x	17.7%	5.1%
Zodiac Aerospace (ENXTPA:ZC)	\$8,971	\$10,336	\$5,240	\$864	1.97x	11.96x	16.5%	14.3%
Median	\$5,805	\$7,652	\$4,882	\$835	1.43x	11.07x	14.0%	10.2%
Mean	\$18,164	\$20,369	\$15,885	\$1,902	1.87x	11.53x	15.6%	14.4%
Defense								
BAE Systems plc (LSE:BA.)	\$23,160	\$25,015	\$25,809	\$2,971	0.97x	8.42x	11.5%	1.6%
Elbit Systems Ltd. (TASE:ESLT)	\$2,559	\$2,998	\$2,927	\$370	1.02x	8.11x	12.6%	32.1%
Kratos Defense (NasdaqGS:KTOS)	\$408	\$1,044	\$892	\$61	1.17x	17.19x	6.8%	(17.3%)
L-3 Communications Holdings Inc. (NYSE:LLL)	\$9,681	\$13,395	\$12,210	\$1,464	1.10x	9.15x	12.0%	24.6%
Lockheed Martin Corporation (NYSE:LMT)	\$55,209	\$57,942	\$44,836	\$5,766	1.29x	10.05x	12.9%	41.1%
Northrop Grumman Corporation (NYSE:NOC)	\$26,716	\$29,169	\$24,150	\$3,710	1.21x	7.86x	15.4%	39.6%
Raytheon Company (NYSE:RTN)	\$30,867	\$31,593	\$22,921	\$3,404	1.38x	9.28x	14.9%	33.5%
Rockwell Collins Inc. (NYSE:COL)	\$10,372	\$12,446	\$4,932	\$1,102	2.52x	11.29x	22.3%	8.0%
Thales SA (ENXTPA:HO)	\$11,123	\$11,326	\$18,273	\$1,845	0.62x	6.14x	10.1%	4.1%
Median	\$11,123	\$13,395	\$18,273	\$1,845	1.17x	9.15x	12.6%	24.6%
Mean	\$18,899	\$20,547	\$17,439	\$2,299	1.25x	9.72x	13.2%	18.6%

As of September 10, 2014

Meridian Capital Overview

Founded in 1995, Meridian is a leading middle market investment bank focused on providing M&A and corporate finance advisory services to private companies. Meridian employs fifteen investment professionals with aggregate transaction experience in excess of \$20 billion in deal value. Its senior advisors and managing directors have broad industry experience in a wide range of sectors, including aerospace, transportation and logistics, niche manufacturing, technology services and consumer products. The firm focuses on middle market companies with revenues between \$10 million and \$250 million. Meridian is differentiated through its multidisciplinary transaction teams, industry expertise and unrivaled middle market access to international markets through the firm’s partnership with Global M&A Partners.

Meridian Capital Aerospace Team

Meridian offers a unique set of transaction and operational experience to aerospace shareholders considering transaction alternatives. The firm’s Aerospace Team has successfully completed numerous aerospace transactions and is currently engaged in several active engagements. As a result, Meridian has deep, relevant relationships with private equity and strategic buyers throughout the sector. As aerospace consolidation and industry trends evolve, Meridian has the resources and experience to evaluate your strategic opportunities. Please contact a member of Meridian’s Aerospace Industry Team with questions or requests for additional information.

Selected Meridian and Global M&A Partners Aerospace and Niche Manufacturing Transactions



Manufacturer of precision machined components for the aerospace industry

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Procesos Termicos

Mexico-based provider of machining and special processing services

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Tier I manufacturer of precision aerospace components

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Manufacturer of specialty glass compositions

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Manufacturer of frequency control devices for aircrafts

-Acquired By-

Zimmerman Holdings Inc.



MERIDIAN CAPITAL INVESTMENT BANKERS

Pacific Aerospace & Electronics

Manufacturer of aerospace components

Divesture of casting division



MERIDIAN CAPITAL INVESTMENT BANKERS

ZMAN MAGNETICS

Manufacturer of precision magnetic components for the aerospace industry

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Manufacturer of composite components and systems for civil aircraft and helicopters

-Financial Advisory-



MERIDIAN CAPITAL INVESTMENT BANKERS



Leading UK manufacturer of advanced ceramics

-Acquired By-




MERIDIAN CAPITAL INVESTMENT BANKERS



Manufacturer of highly specialized aluminum access constructions for aircraft

-Acquired By-





Designer and manufacturer of large machine tools for aerospace and railway sectors

-Acquired By-





Manufacturer of precision metal parts for the aerospace industry

-Acquired By-