

William Blair

Q3 2023

**Private and commercial aviation
reach new steady state**

In This Report

Delta's Reinvestment in Private Aviation

Strong Demand in Fractional Aviation

Activity Updates and Analyses

Aviation Services Industry Update



Aviation Services Observations and Key Trends

Commercial and Private Aviation Reach New Steady State, Fractional and Charter Balance Interest

Business jet activity year-to-date remains about 6% lower year-over-year. However, as growth trends tapered last summer, the activity deficit in recent months has trended in a more positive direction with September only down 5.1%, versus 9.5% in April. Compared to 2019, year-to-date activity is approximately 11.5% higher. The relative increase has been spread evenly throughout the year with 7 of 9 months showing more than a 10% growth in operations.¹

In addition, broader U.S. general aviation activity continues to trend positively, with recent monthly growth outperforming 2022 year-over-year by as much as 6.7% and cumulative year-to-date 2023 operations just surpassing the same period in 2022.¹

Delta Doubles Down on Wheels Up

In late September, Wheels Up closed a previously announced \$500 million credit facility led by Delta Air Lines and a consortium of other investors. The investment provides Wheels Up with both an important source of capital as well as expert guidance from investors with deep experience in premium travel.

Delta was already a 20% stakeholder in Wheels Up. Its additional investment correlates with consumer

trends seen across the aviation industry and may mark the start of broader airline investment in the jet charter market.

Increased demand for luxury and personalized experiences have driven higher consumption of first-class and business-class seats—Delta’s sale of premium tickets through June 2023 has outpaced main cabin sales and is 38% higher than the same period in 2022.² Furthermore, the commercial travel resurgence has increased competition in the industry, prompting airlines to invest in differentiation.

Fractional Ownership Still Seeing Strong Demand

Compared to 2022, fractional operators saw a 5.2% increase in flights through year-to-date September. Through the past four years, fractional growth has outperformed that of managed, charter, and corporate aircraft.³

Fractional jet ownership enables the traveler to purchase a piece of equity in a specific aircraft, entitling them to a certain number of flight hours each year. While fractional ownership is often more expensive than on-demand charters or prepaid flight hours, wealthy travelers are enjoying the numerous benefits: aircraft consistency, higher availability, tax treatment, and flying with less advanced notice. Fractional operators, such as FlexJet and NetJets, have experienced such a great surge in demand that their fractional aircraft have already sold out for 2024.

Key Conference Highlights



Sustainability Goals Remain

- Business Aviation leaders, including Ed Bolen (NBAA president & CEO) and Curt Casagna (NATA president), unveiled a new advocacy campaign, “Climbing. Fast.,” which emphasizes the important contribution from business aviation and affirms the entire sector’s commitment to net-zero emissions by 2050.

Competition for Pilots, Aviation Employees Remains High

- Flight delays and cancellations have plagued travelers throughout 2023 and are largely caused by a significant shortage of commercial pilots, mechanics, and air traffic controllers.
- According to JSfirm.com the number of companies advertising open positions is up 19.7%, with total jobs up 16.7% compared to 2022; some companies are offering signing bonuses of up to \$175,000 to attract pilot talent.⁴

1. FAA.

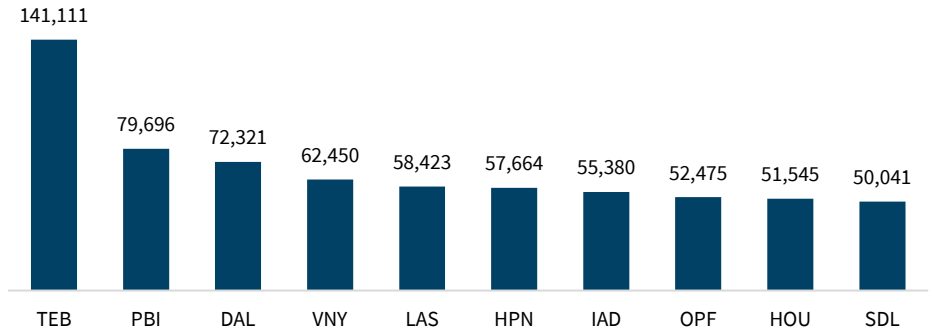
2. Delta Air Lines June 2023 Quarterly Report.

3. WingX Industry Analysis, October 2023.

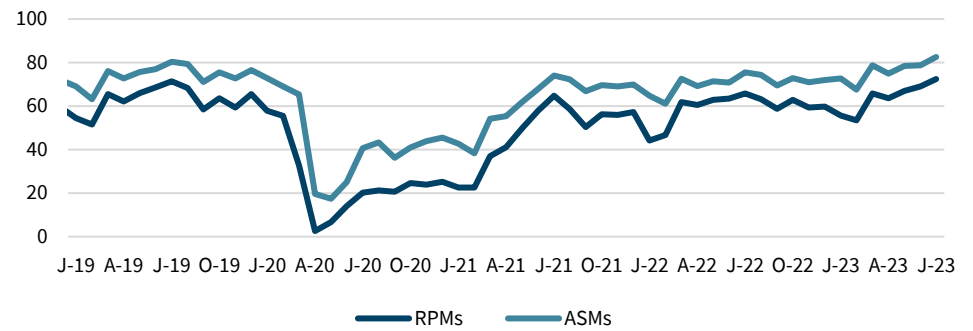
4. JSfirm.com data, October 2023.

Business Jet Operations and Commercial Flight Activity

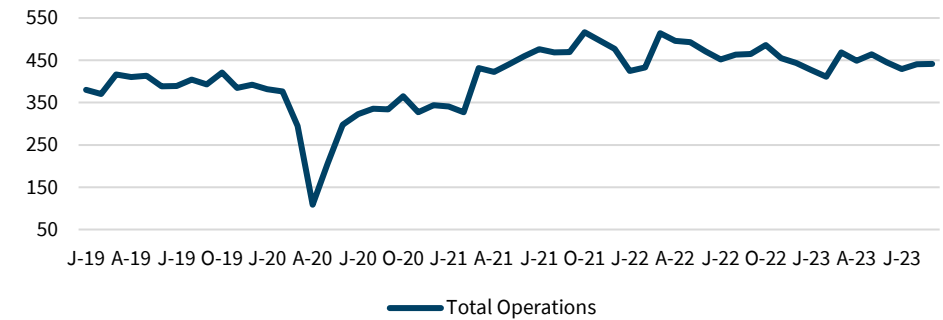
Top Ten Airports for Domestic Business Jet Operations (Trailing Twelve Months September 2023 Business Jet Operations)



Air Traffic (RPMs) and Capacity (ASMs) (Millions of Miles)

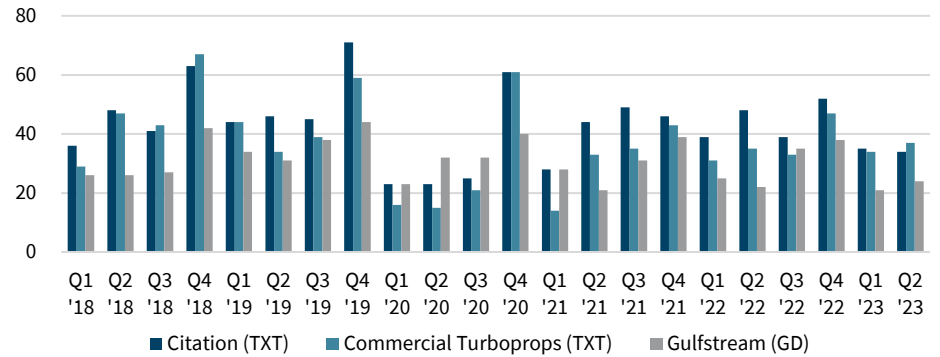


Business Jet Operations (Thousands of Operations)

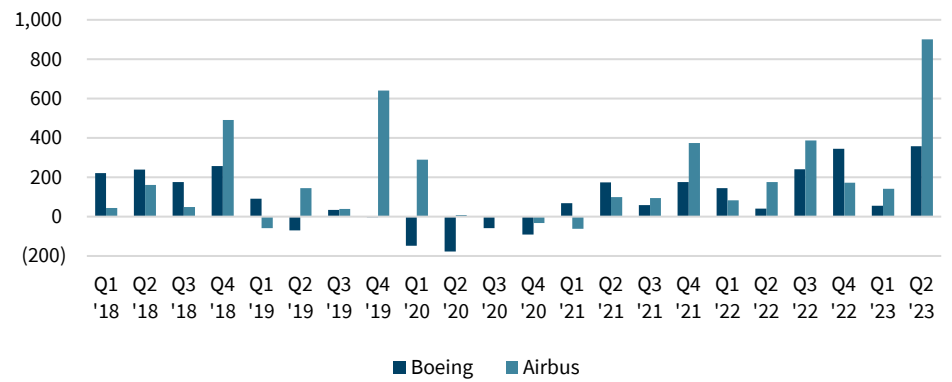


Business Jet and Commercial Aircraft Orders and Deliveries

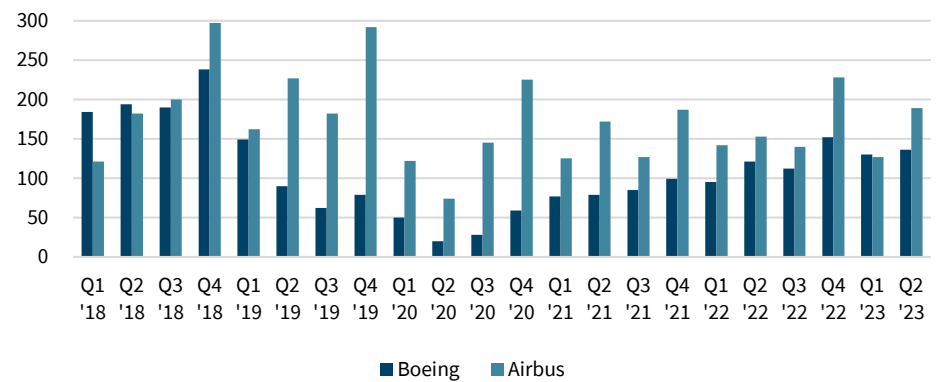
Private Aircraft Deliveries



Net Orders



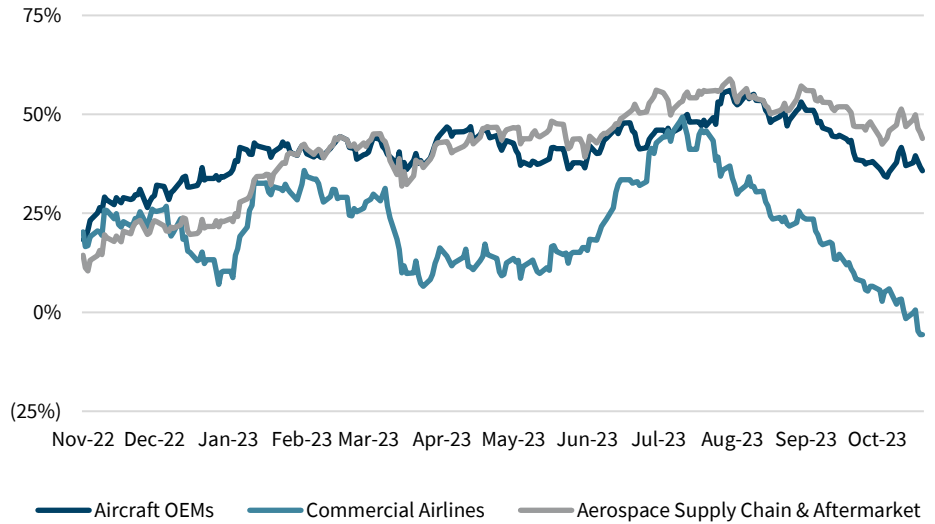
Deliveries



Public Company Performance

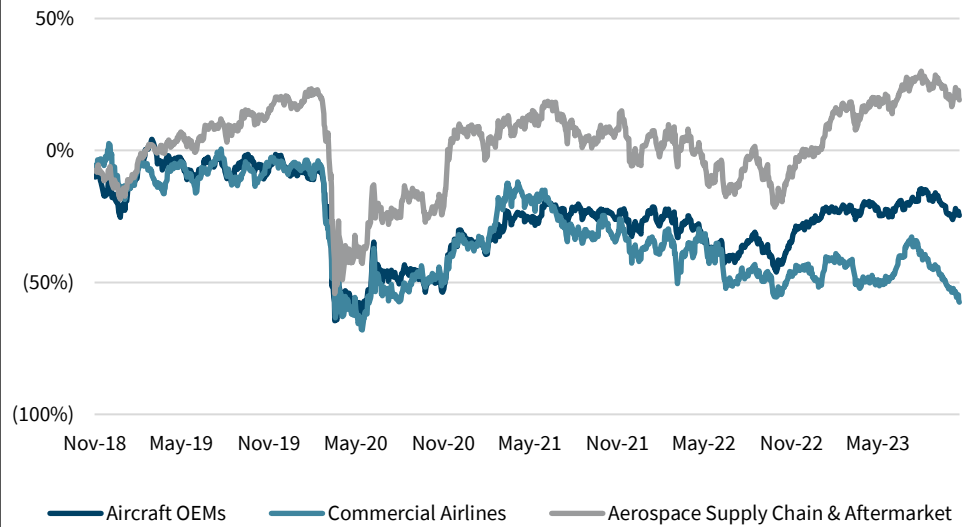
Public Company 1-Year Stock Performance

(Indexed Market Capitalization for the Period November 2022 – November 2023)



Public Company 5-Year Stock Performance

(Indexed Market Capitalization for the Period November 2018– November 2023)



Aircraft OEMs: ENXTPA:AIR, ENXTPA:AM, NYSE:BA, NYSE:ERJ, NYSE:GD, NYSE:TXT, TSX:BBD.B
Commercial Airlines: NasdaqGS:AAL, NasdaqGS:JBLU, NasdaqGS:UAL, NasdaqGS:ULCC, NYSE:ALK, NYSE:DAL, NYSE:LUV, NYSE:SAVE
Aerospace Supply Chain & Aftermarket: ENXTPA:SAF, NasdaqCM:ASLE, NasdaqGS:ATRO, NasdaqGS:VSEC, NasdaqGS:WWD, NYSE:AIR, NYSE:B, NYSE:DCO, NYSE:HXL, NYSE:KAMN, NYSE:MOG.A, NYSE:RBC, NYSE:SPR, NYSE:TDG, NYSE:TGI, NYSE:WCC, TSX:CAE, TSX:MAL, XTRA:MTX

Public Company Operating and Valuation Metrics

Company	Enterprise Value	Market Capitalization	% of 52 - Week High	Rev Growth			Enterprise Value /			
				'23P	'24P	LTM EBITDA Margin	LTM Revenue	NTM Revenue	LTM EBITDA	NTM EBITDA
Aircraft OEMs										
The Boeing Company	\$164,771	\$125,859	85.6%	21.6%	15.4%	3.8%	2.2x	1.9x	NMF	NMF
Airbus SE	110,119	113,626	95.3%	12.8%	14.2%	11.0%	1.6x	1.4x	15.0x	10.4x
General Dynamics Corporation	76,301	66,656	95.3%	7.8%	10.4%	11.6%	1.8x	1.7x	15.8x	12.5x
Textron Inc.	17,403	15,171	95.1%	8.4%	9.7%	11.8%	1.3x	1.2x	11.0x	9.9x
Bombardier Inc.	8,934	3,643	70.4%	25.5%	10.7%	10.7%	1.2x	1.1x	10.9x	6.7x
Dassault Aviation société anonyme	7,939	16,136	97.7%	(17.4%)	(9.0%)	10.7%	1.2x	1.3x	10.8x	10.9x
Embraer S.A.	4,625	2,982	94.5%	32.1%	6.6%	5.0%	0.9x	0.8x	17.1x	7.2x
Mean	\$55,727	\$49,153	90.5%	13.0%	8.3%	9.2%	1.4x	1.3x	13.4x	9.6x
Median	\$17,403	\$16,136	95.1%	12.8%	10.4%	10.7%	1.3x	1.3x	13.0x	10.2x
Aerospace Supply Chain and Aftermarket Support										
Safran SA	\$73,862	\$73,424	99.4%	38.9%	15.6%	18.6%	3.1x	2.6x	16.4x	13.4x
TransDigm Group Incorporated	69,259	52,970	94.5%	34.8%	15.7%	48.8%	10.5x	9.1x	21.6x	17.5x
WESCO International, Inc.	13,085	7,754	82.0%	23.3%	2.6%	7.5%	0.6x	0.6x	7.7x	7.2x
MTU Aero Engines AG	11,708	10,885	75.9%	14.8%	38.7%	(4.4%)	2.1x	1.5x	NMF	8.7x
CAE Inc.	9,062	6,683	85.1%	24.9%	4.0%	18.3%	2.8x	2.7x	15.2x	11.3x
Woodward, Inc.	8,459	7,850	95.7%	29.5%	9.1%	14.6%	2.9x	2.7x	19.9x	15.1x
RBC Bearings Incorporated	8,331	7,014	95.4%	104.0%	6.5%	29.6%	5.5x	5.2x	18.5x	17.0x
Hexcel Corporation	6,210	5,553	83.5%	32.9%	12.0%	19.3%	3.5x	3.1x	18.3x	14.9x
Spirit AeroSystems Holdings, Inc.	6,470	2,872	64.2%	40.5%	33.2%	(5.1%)	1.2x	0.9x	NMF	6.6x
Moog Inc.	5,176	4,237	96.2%	14.8%	4.3%	12.1%	1.6x	1.5x	12.9x	11.3x
Barnes Group Inc.	2,552	1,330	55.4%	7.1%	26.2%	19.8%	1.9x	1.5x	9.6x	7.9x
Triumph Group, Inc.	2,317	828	80.8%	(8.9%)	9.0%	13.7%	1.7x	1.5x	12.0x	9.5x
AAR Corp.	2,607	2,321	98.2%	13.5%	10.9%	7.9%	1.2x	1.1x	15.7x	12.0x
Kaman Corporation	1,134	576	77.0%	8.6%	1.9%	16.9%	1.5x	1.4x	8.7x	9.8x
VSE Corporation	1,442	979	98.8%	43.5%	(6.5%)	10.1%	1.3x	1.4x	13.3x	11.0x
Ducommun Incorporated	997	720	84.6%	16.7%	5.6%	10.5%	1.3x	1.3x	12.6x	8.6x
Astronics Corporation	722	527	69.3%	46.6%	14.1%	1.5%	1.1x	1.0x	NMF	8.8x
AerSale Corporation	760	717	67.1%	(1.5%)	33.7%	3.1%	2.3x	1.7x	NMF	10.1x
Magellan Aerospace Corporation	396	338	81.0%	15.4%	8.3%	6.0%	0.6x	0.6x	10.5x	5.8x
Mean	\$11,818	\$9,873	83.4%	26.3%	12.9%	13.1%	2.5x	2.2x	14.2x	10.9x
Median	\$5,176	\$2,872	83.5%	23.3%	9.1%	12.1%	1.7x	1.5x	13.3x	10.1x
Commercial Airlines										
Delta Air Lines, Inc.	\$45,985	\$23,091	72.4%	91.5%	(0.6%)	13.0%	0.8x	0.8x	6.2x	5.0x
American Airlines Group Inc.	38,655	8,032	64.4%	77.1%	3.0%	13.5%	0.7x	0.7x	5.4x	6.0x
United Airlines Holdings, Inc.	32,662	13,042	68.3%	113.1%	6.1%	15.4%	0.6x	0.6x	4.0x	4.3x
Southwest Airlines Co.	12,330	14,790	61.4%	61.1%	7.3%	6.1%	0.5x	0.5x	7.9x	6.1x
Alaska Air Group, Inc.	6,383	4,707	64.3%	67.6%	2.0%	8.5%	0.6x	0.6x	7.2x	4.8x
Spirit Airlines, Inc.	7,026	1,357	56.4%	68.1%	5.6%	0.9%	1.3x	1.2x	NMF	NMF
JetBlue Airways Corporation	4,690	1,396	44.3%	60.8%	(1.5%)	6.9%	0.5x	0.5x	7.1x	6.1x
Frontier Group Holdings, Inc.	3,635	937	30.1%	75.0%	6.9%	(1.8%)	1.0x	0.9x	NMF	7.6x
Mean	\$18,921	\$8,419	57.7%	76.8%	3.6%	7.8%	0.8x	0.7x	6.3x	5.7x
Median	\$9,678	\$6,370	62.9%	71.5%	4.3%	7.7%	0.7x	0.7x	6.6x	6.0x

Deal Spotlight



Company Overview

Fontainebleau Aviation is a premier provider of fixed base operator (FBO) services. Primarily located at Opa-Locka Executive Airport (KOPF), the company was established more than 30 years ago as a corporate flight division before expanding into a full-service FBO in 2011. Fontainebleau is also developing a new FBO at Fort Lauderdale Hollywood International Airport (KFLH).

Transaction Outcome

William Blair acted as the exclusive financial advisor to Fontainebleau Aviation in connection with its contemplated partnership with Skyservice Business Aviation, a portfolio company of Instar Asset Management. Skyservice is a Canada-based network of FBOs that provide a full spectrum of general aviation services. The partnership will expand Skyservice’s operations in South Florida and elevate both brands to a wider audience.

Recent M&A Transactions

Date	Target	Acquirer	Sub-Sector	William Blair Transaction
Pending	Fontainebleau Aviation	Skyservice (Instar)	FBO	●
Pending	Modern Aviation (16 locations)	Apollo (Majority) and Tiger Infrastructure Partners	FBO	
Pending	FlyExclusive	EG Acquisition	Charter	
Aug-23	Flying Colours	FlexJet (Eldridge and Directional Aviation)	MRO	
Jun-23	Yingling Aviation	AE Industrial Partners	FBO / MRO	
May-23	Star Handling	Skytanking (Primeflight)	Ground Handling	
Apr-23	Epps Aviation (Atlanta, GA)	Aero Centers (SAR-Trilogy and Redbird Capital)	FBO / Charter / MRO	●
Mar-23	Midwest Corporate Aviation	Clemens Aviation	FBO / Charter / MRO	
Mar-23	Atlas Air	Apollo Global, JF Lehman, and Hill City Capital	Air Cargo	
Mar-23	Golden Isles Aviation (St. Simons, GA)	Odyssey Aviation	FBO	
Mar-23	Dolphin Aviation (Sarasota, FL)	Hawthorne Global Aviation Services	FBO	
Feb-23	Western Jet Aviation	StandardAero	MRO	
Feb-23	Constant Aviation (Cleveland, OH)	Directional Aviation (AKA FlexJet)	MRO	
Jan-23	Dumont (Charter Division)	Rennia Aviation	Charter	
Nov-22	Northeast Aero Compressor (Bohemia, NY)	Jet Parts Engineering	MRO	
Nov-22	Associated Aircraft Manufacturing & Sales, Inc	First Aviation Services	MRO	
Oct-22	UltraAir (Omaha, NE)	Four Corners Aviation	Charter	
Oct-22	TCR International	3i Infrastructure	Ground Handling	
Oct-22	Mystic Jet Center (3 locations)	Modern Aviation	FBO	
Sep-22	Skytech (2 locations)	Pilatus	Charter / MRO	
Sep-22	Mayo Aviation (Centennial, CO)	Priester Aviation	Charter	
Sep-22	Textar Aviation (Dallas, TX)	Atlantic Aviation	FBO	
Sep-22	Elliot Aviation (Des Moines, IA)	Modern Aviation	FBO	
Sep-22	Odyssey Aviation (2 locations)	Granite Creek Capital Partners	FBO	
Aug-22	Menzies	Agility	Ground Handling	
Aug-22	Four Points Aero Services (Dallas, TX)	Elliot Aviation	MRO	
Aug-22	Blue Heron Aviation (Turks & Caicos)	Atlantic Aviation	FBO	
Jul-22	Skycharter (Halifax, Nova Scotia)	IMP Group	Charter	
Jul-22	Signature Flight Support (3 locations)	Atlantic Aviation	FBO	●
Jul-22	TAC Air (17 locations)	Signature Aviation	FBO	●
May-22	Central Flying Service	Tricoastal Ventures	MRO	
May-22	EB Airfoils (Palm City, FL)	StandardAero	MRO	
May-22	Ross Aviation (16 locations)	Atlantic Aviation	FBO	
May-22	Atlantic Aviation (Stuart, FL)	APP Jet Center	FBO	●
May-22	Air Service Hawaii (6 locations)	Ross Aviation	FBO	
Apr-22	Heliblade (Anderson, CA)	First Aviation Services	MRO	
Apr-22	Air Partner (United Kingdom)	Wheels Up	Charter	
Mar-22	Gulf Coast Aviation (Houston, TX)	Volato	Charter	
Mar-22	West Star Aviation (8 locations)	The Sterling Group	MRO	
Mar-22	Jet Edge International	VistaJet (Rhone Group)	Charter	
Mar-22	Hawthorne Global Aviation Services (6 locations)	Nova Infrastructure and Wafra	FBO / Charter / MRO	●

Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Debt Capital Markets Transactions

Launch Date	Company	Corporate Rating	Amount (\$ millions)				Term Loan B		2nd Lien
			Total	TLB	RC	2nd Lien	Spread (bps)	Floor (bps)	Spread (bps)
Jul-23	Ontic	B2/B	\$957	\$957	--	--	400	--	--
May-23	Atlantic Aviation	B/B2	\$750	\$750	--	--	400	50	--
Apr-23	Signature Aviation	B+/B2	\$400	\$400	--	--	375	50	--
Feb-23	American Airlines	B-/B2	\$1,000	\$1,000	--	--	275	--	--
Feb-23	Castlelake Aviation	BB-/Ba3	\$635	\$635	--	--	275	50	--
Sep-22	Ontic	B/B2	\$85	\$85	--	--	450	--	--
Jul-22	Atlantic Aviation	B/B2	\$425	\$325	\$100	--	400	50	--
Jun-22	Signature Aviation	B+/B1	\$1,100	\$1,100	--	--	375	50	--
Feb-22	Ontic	B/B2	\$80	\$80	--	--	400	--	--
Oct-21	Signature Aviation	B+/B1	\$330	\$330	--	--	275	50	--
Oct-21	Atlantic Aviation	B/B2	\$330	\$330	--	--	300	50	--
Sep-21	Castlelake Aviation	BB-/Ba3	\$1,730	\$980	\$750	--	275	50	--
Jul-21	Avolon	BBB-/Baa3	\$672	\$672	--	--	225	50	--
Jul-21	Ontic	B/B2	\$140	\$140	--	--	400	--	--
Jul-21	Air Canada	B+/Ba3	\$2,900	\$2,300	\$600	--	350	75	--
Jul-21	Atlantic Aviation	B/B2	\$1,925	\$1,350	\$225	\$350	300	50	575
Apr-21	Gogo	B-/B3	\$825	\$725	\$100	--	375	75	--
Apr-21	Signature Aviation	B+/B1	\$2,035	\$1,685	\$350	--	275	50	--
Apr-21	United Airlines	B+/Ba2	\$6,750	\$5,000	\$1,750	--	375	75	--
Mar-21	American Airlines	B-/B2	\$3,500	\$3,500	--	--	475	75	--
Feb-21	Ontic	B-/B3	\$551	\$551	--	--	400	--	--
Nov-20	Avolon Aerospace	BBB-/Baa3	\$675	\$675	--	--	250	75	--
Sep-20	Fly Leasing	BB/B1	\$180	\$180	--	--	600	100	--
Sep-20	Delta SkyMiles	--	\$3,000	\$3,000	--	--	375	100	--
Jun-20	JetBlue	B+/Ba2	\$750	\$750	--	--	525	100	--
Apr-20	Delta Air Lines	BB/Baa3	\$1,500	\$1,500	--	--	475	100	--
Feb-20	Avolon Aerospace	BBB-/Baa3	\$850	\$850	--	--	150	75	--
Jan-20	American Airlines	BB-/Ba3	\$1,220	\$1,220	--	--	175	--	--
Nov-19	Fly Leasing	BB/Ba3	\$391	\$391	--	--	175	--	--
Oct-19	Air Canada	BB+/Ba1	\$592	\$592	--	--	175	--	--
Oct-19	Ontic	B-/B3	\$740	\$480	\$85	\$175	475	--	850
Jul-19	WestJet Airlines	B+/Ba3	\$2,305	\$1,955	\$350	--	300	100	--
Jul-19	Kaman Distribution	B/B3	\$510	\$320	\$75	\$115	500	--	900
Nov-18	Atlantic Aviation	BB-/Ba3	\$1,325	\$1,025	\$300	--	375	--	--
Oct-18	XOJET	B/B2	\$210	\$210	--	--	575	--	--
Sep-18	Air Transport	--	\$1,220	\$675	\$545	--	NA	--	--
Sep-18	American Airlines	BB-/Ba3	\$500	\$500	--	--	200	--	--
May-18	American Airlines	BB-/Ba3	\$1,825	\$1,825	--	--	175	--	--
Apr-18	Avolon	BB+/Ba2	\$4,750	\$4,750	--	--	200	75	--
Apr-18	United Airlines	BB/Ba2	\$1,485	\$1,485	--	--	175	--	--
Feb-18	Air Canada	BB-/Ba3	\$798	\$798	--	--	200	75	--
Feb-18	AerCap	BBB-/Baa3	\$750	\$750	--	--	175	--	--
Dec-17	MB Aerospace	B/B2	\$305	\$255	\$50	--	350	100	--
Nov-17	Avolon	BB+/Ba2	\$369	\$369	--	--	175	--	--
Nov-17	American Airlines	BB-/Ba3	\$1,250	\$1,250	--	--	200	--	--
Nov-17	United Airlines	BB-/Ba2	\$1,493	\$1,493	--	--	200	--	--
Oct-17	Fly Leasing	BB-/Ba3	\$437	\$437	--	--	200	--	--
Oct-17	American Airlines	BB-/Ba3	\$990	\$990	--	--	200	--	--
Sep-17	Avolon	BB+/Ba2	\$5,000	\$5,000	--	--	225	75	--
Jul-17	AerCap	BBB-/Baa3	\$750	\$750	--	--	200	--	--
May-17	American Airlines	BB-/Ba3	\$735	\$735	--	--	200	--	--
May-17	Air Canada	BB-/Ba3	\$800	\$800	--	--	225	75	--
Apr-17	FLY Leasing	BB-/B1	\$448	\$448	--	--	225	--	--
Mar-17	United Airlines	BB-/Ba2	\$3,500	\$1,500	\$2,000	--	225	--	--
Mar-17	American Airlines	BB-/Ba3	\$1,843	\$1,843	--	--	NA	--	--
Jan-17	Avolon	BB+/Ba3	\$5,000	\$5,000	--	--	275	75	--

Premier, Global Boutique

Globally integrated advisory capabilities, deep sector experience, and unmatched industry intelligence driven by frequent dialogue with the most relevant market participants

Firm Snapshot

24

offices worldwide

~2,000

total employees

~725

investment banking employees

160+

M&A advisory transactions in 2022

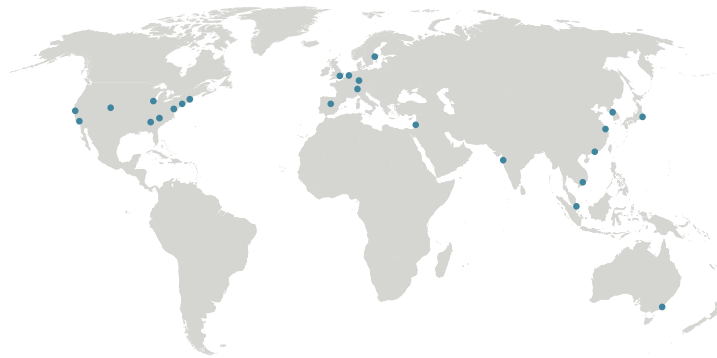
\$815B+

M&A and financing activity since 2018

100%

owned by active partners

Global Footprint



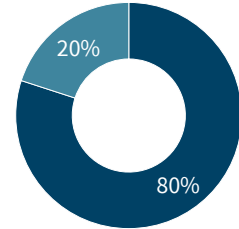
Selected Aviation Services Transaction Experience

 has contracted to partner with a portfolio company of Instar	 a portfolio company of Warburg Pincus has been acquired by 	 has been acquired by a portfolio company of SAR Trilogi Management and Redford Capital Partners	 has been acquired by a portfolio company of Blackstone, Global Infrastructure Partners and Cascade Investment
 a portfolio company of Blackstone, Global Infrastructure Partners & Cascade Investments has divested three FBO locations to a portfolio company of KKR	 a portfolio company of KKR has divested its Stuart, FL location to a portfolio company of Ridgewood Infrastructure	 GLOBAL AVIATION SERVICES a portfolio company of NexPhase has been acquired by 	 has been acquired by GREENBRIAR
 Follow-on Offering	 has been acquired by J.F. Lehman & Company	 has been acquired by 	 has been acquired by ROSS AVIATION

Note: Data is as of October 20, 2023. Map includes strategic partnerships with Allier Capital, BDA Partners, and Poalim Capital Partners.

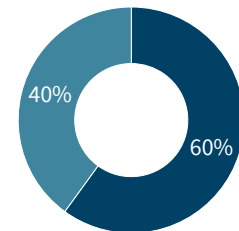
➤ Represents transactions closed by William Blair employees while at other firms.

M&A Expertise Since 2018



■ Sell-Side Advisory
■ Buy-Side Advisory

Trusted Advisor Since 2018



■ Repeat Clients
■ New Clients

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