

Commercial Aerospace

Boeing and Airbus potentially reached fullyear targets

Industry Overview

Boeing reached its 737 target with 392 deliveries in 2023

According to Aero Analysis Partners/AIR (AAP/AIR), Boeing maintained a robust delivery pace in December, registering 41 737s deliveries as of December 29th. After this strong performance, Boeing successfully met its full year target of 375-400 737s by reaching a total of 392 737s deliveries in 2023. Notably, this figure also slightly exceeded our estimate of 385 737's deliveries. Moreover, AAP data indicates that as of December 29th, there were six additional aircraft undergoing customer acceptance flights, with the potential for delivery before the year-end, including four destined for Chinese airlines.

787 target also achieved with 73 deliveries for the year

Boeing achieved its highest 787's monthly delivery rate this year, dispatching 11 aircraft in December. Following this, the company reached its full year target of 70-80 787s with ~73 deliveries in 2023. However, deliveries fell slightly below our estimate of 75 deliveries for the year. We maintain our Buy rating on Boeing.

Embraer's full year targets still look achievable

According to Cirium, Embraer delivered ~12 commercial aircraft and ~30 executive jets in December, bringing the yearly totals to ~60 and ~112 aircraft, respectively. Although these figures are below its full year targets of 65-70 deliveries for commercial aviation and 120-130 for executive aviation, it's worth considering potential upward adjustments, given Cirium's delays in reporting Embraer figures. We maintain our Buy on Embraer.

Airbus potentially hit its guidance with 724 deliveries

Cirium suggests that Airbus delivered ~99 aircraft in December, while we (BofA) estimate 101 (Airbus: 2023 done, focus moves to 2024 guide). If our estimates are correct, this would mean that Airbus delivered ~724 aircraft in 2023, which exceeds Airbus' guidance of 720 aircraft deliveries.

Please see inside for tables showing deliveries, orders, and cancellations.

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Equity Americas Aerospace

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Aircraft deliveries, orders, and cancellations

Exhibit 1: Aircraft deliveries, orders, and cancellations December 2023

Airbus deliveries were higher than in 2022 and 2021

		Dec-23	3		Dec-22	2		Dec-2	1		Dec-19)
			Cancellations								Orders	Cancellations
Boeing	58	45		69	250		38	81		35		2 5
737 Max	40	40	-	53	149	45	32	58	1	-		1 1
737 NG	-	-	-	1	-	-	1	-	-	6		
747	-	-	-	-	-	-	1	-		-		
767	5	-	-	2	-	-	2	19		3		
777	2	-	-	3	-	-	2	4	-	5		
787	11	5	•	10	101	2	-	-	-	21		1 4
Airbus	99	303		98	37	21	91	179		138	150	
A220 (CSeries)	11	40	-	8	-	21	7	26	8	7	80) 10
A319	1	-	-	-	10	_	-	-		1		1 -
A320	35	56		32	4	-	33	13		71		- 63
A321	37	201	-	44	7	-	33	124	-	33	5!	
A330	6	-	-	4	10	_	2	5	-	8	20	7
A350	9	6	-	10	6	-	14	11	7	16		- 33
A380	-	-	-	-	-	-	2	-	-	2		
Embraer	42	3	-	57	30	5	34	6	-	50	22	2 15
E175	3	-	-	9	3	5	6	-	-	9	20) 15
E190	-	-	-	3	1	-	-	-	-	3		
E195	9	-	-	10	18	_	2	-	-	4		
ERJ-135	-	-	-	-	-	-	_	-	-	2		
KC-390	-	3	-	-	-	-	1	-	-	1		
Legacy 450	-	-	-	-	-	-	-	-	-	7		
Legacy 500	-	-	-	-	-	-	-	-	-	5		1 -
Phenom 100	3	-	-	1	-	-	3	-	-	3		
Phenom 300	12	-	-	21	3	_	15	3	-	10		
Praetor 500	9	-	-	5	4	. <u>-</u>	3	2	_	3		1 -
Praetor 600	6	-		8	1	-	4	1	-	3		
Grand Total	199	351	-	224	317	73	163	266	23	223	180	141

Source: BofA Global Research, Cirium

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Exhibit 2: Aircraft deliveries, orders, and cancellations 4Q23 737s deliveries were higher than in 2022 and 2021

		4Q23			4Q22			4Q21			4Q19	
	Deliveries	Orders	Cancellations		Orders		Deliveries				Orders	Cancellations
Boeing	148	282	16	152	393	47	99	179	22	79	71	78
737 Max	103	160	16	107	273	45	78	154	- 20	-	31	30
737 NG	2	-	-	3	-	-	6	-	-	9	-	-
747	_	-	_	2	-	-	3	_	_	2		-
767	13	15	-	12	4	_	8	19	_	11		-
777	7	92	_	6	5	_	4	6	i -	12	2	2 41
787	23	15	-	22	111	2	_	-	2	45	38	3 7
Airbus	234	659	78	226	218	49	185	582	127	292	870	187
A220 (CSeries)	27	84	. 1	19	21	21	16	43	18	15	85	10
A319	1	-	_	-	10	_	1	-	_	1	1	-
A320	77	128	55	81	85		75	49	89	151	195	70
A321	94	414		95	83		66	458		68	476	5 21
A330	12	1	-	11	13	-	7	21	-	19	63	3 10
A350	23	32	-	20	6		17	11	7	35	50	37
A380	-	-	_	-	-	-	3	-	-	3	-	- 39
Embraer	67	35	_	80	58	8	56	21	_	84	60	
E175	7	4		14	3	5	12	6		22	20	
E190	_	-	_	3	1	-	_	_	_	6	3	-
E195	14	25	-	12	29	_	4	_	<u> </u>	7	20) -
ERJ-135	-	-	_	-	_	-	_	-	_	3	-	-
KC-390	_	3	-	1	_	3	1	-	_	1	-	-
Legacy 450	_	-	_	-	-	_	_	-	_	10	1	_
Legacy 500	_	-	_	-	_	-	_	_	_	5	1	-
Phenom 100	5	-	_	2	-	-	4	1	-	6	2	_

Exhibit 2: Aircraft deliveries, orders, and cancellations 4Q23 737s deliveries were higher than in 2022 and 2021

		4Q23			4Q22			4Q21			4Q19	
Phenom 300	22	2	-	31	13	- [22	6	-	16	2	-
Praetor 500	10	1	-	6	7	-	8	4	-	3	7	-
Praetor 600	9	-	-	11	5	-	5	4	-	5	4	-
Grand Total	449	976	94	458	669	104	340	782	149	455	1,001	280

Source: BofA Global Research, Cirium

BofA GLOBAL RESEARCH

Exhibit 3: Aircraft deliveries, orders, and cancellations 2023 737s deliveries were higher than in 2022 and 2021

		2023			2022			2021			2019	
						Cancellations						Cancellations
Boeing	519	1,130			932			880			229	
737 Max	383	726	103	374	696	136		720			37	
737 NG	8	-	-	13	-	-	18	16		70	20) 2
747	1	-	-	5	-	-	7	5		7	-	-
767	30	30		33	31	-	32	65		43	26	
777	24	124		24	66		24	53		45	38	
	73	250		31	139		14	21	32	158	108	
Airbus	722	2,003		663	1,173			911	264		1,528	
A220 (CSeries)	68	117		53	127	22	50	64	26	48	103	55
A319	7	2		6	23		4	1	-	6	2	! 8
A320	240	451	84	246	350		258	100		430	265	
A321	316	1,240	27	264	610		221	696	57	206	962	
A330	32	37	1	32	19		18	32	-	53	83	
A350	59	156	3	62	44	34	53	18	14	112	113	
A380	-	-	-	-	-	-	5	-	-	8	-	. 70
Embraer	173	134			195			177	9	203	170	
E175	25	36		35	11	38	27	42	-	67	49	
E190		12	3	3		2	2		-	12	3	
E195	35	37	-	18	53	2	19	30	-	10	32	-
ERJ-135	-	-	-	-	-	-	-	-	-	5	4	3
KC-390	1	3	-		-	9		-	-	2	5	-
Legacy 450	-	-	-	-	-	-	-	-	-	15	8	-
Legacy 500	-	-	-	-	-	-	-	-	_	12	3	3
Phenom 100	10	2	-	7	16		6	6	_	13	3	-
Phenom 300	61	27	-	59	69		56	69		51	38	
Praetor 500	20	7	-	15	22		14	16		3	10	
Praetor 600	21	10		22	23		17	14		13	15	
Grand Total	1,414	3,267	259	1,303	2,300	470	1,091	1,968	703	1,446	1,927	587

BofA Global Research, Cirium

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Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ВА	BA US	Boeing	US\$ 260.66	B-1-9
ERJ	ERJ US	Embraer	US\$ 18.45	C-1-9

Source: BofA Global Research



Price objective basis & risk

Boeing (BA)

Our PO of \$275 is based on the near-term average FCF of \$15/share and relative discount to the S&P500 of 0.8x (about half standard deviation above historical average). In our view, a multiple roughly in line with the historical average fairly reflects the looming aerospace recovery, strong demand for commercial jets, defense opportunities, and the lack of dividend.

Upside risks to our PO are the possible involvement of an activist shareholder, better-than-expected cash margins at 787 and/or MAX programs, the company's ability to sustain 777 delivery rates through the bridge to 777X, lower-than-expected 777X, future single-aisle and middle-of-the-market aircraft development costs.

Downside risks to our PO are as follows: Tight competition for engineering talent in the current labor market could make new product development more challenging. Execution risk on new programs and production ramp-ups (737MAX, 777X, KC-46) could result in cost overruns and margin contractions. Changes in trade policy that end in a trade war. A sharp and prolonged surge in oil prices to above \$100/bbl would be negative to aircraft demand. A downtum in commercial aviation, due to an exogenous factor, could adversely affect financial results. As aircraft are priced in USD, an unexpected rapid revaluation in the dollar could significantly affect order activity. Also, a strong dollar could improve Airbus' competitive advantage. 787 fixes could take longer than expected.

Embraer (ERJ)



Our PO of \$28 is based on a 0.75x relative P/FCF multiple on 2024 estimates and include 90% of Eve's Enterprise Value, to reflect Embraer's ownership.

Upside risks: a stronger-than-anticipated air traffic recovery, cost reductions and execution better than forecast, sales campaigns proceed better than forecast, greater recovery in light and medium business jets, better Brazilian defense and security budget.

Downside risks: ERJ's products do not have a large enough end market, operational challenges, downturn in commercial and/or business jet markets. ERJ is exposed to currency headwinds, as some of its cost base is denominated in Brazilian reals (BRL). BRL strength relative to the USD could negatively affect its margins. Many view ERJ as a Brazilian entity, even though its cash flow suggests its exposure is global. Last, a Brazilian market selloff could impact ERJ shares.

Analyst Certification

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US - Aerospace and Defense Coverage Cluster

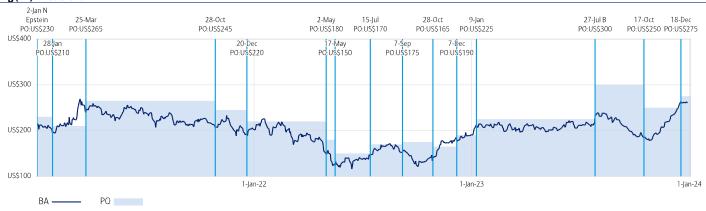
Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	AerCap Holdings N.V.	AER	AER US	Ronald J. Epstein
	Air Lease Corporation	AL	AL US	Ronald J. Epstein
	Boeing	BA	BA US	Ronald J. Epstein
	Booz Allen Hamilton	BAH	BAH US	Mariana Perez Mora
	BWX Technologies, Inc.	BWXT	BWXT US	Ronald J. Epstein
	CACI International	CACI	CACIUS	Mariana Perez Mora
	Cadre Holdings Inc	CDRE	CDRE US	Ronald J. Epstein
	Crane Co.	CR	CR US	Ronald J. Epstein
	Embraer	ERJ	ERJ US	Ronald J. Epstein
	General Dynamics	GD	GD US	Ronald J. Epstein
	Howmet Aerospace Inc.	HWM	HWM US	Ronald J. Epstein
	KBR	KBR	KBR US	Mariana Perez Mora
	Leidos Holdings	LDOS	LDOS US	Mariana Perez Mora
	Leonardo DRS, Inc.	DRS	DRS US	Ronald J. Epstein
	Northrop Grumman	NOC	NOC US	Ronald J. Epstein
	Palantir Technologies	PLTR	PLTR US	Mariana Perez Mora
	Parsons Corporation	PSN	PSN US	Mariana Perez Mora
	RBC Bearings Inc	RBC	RBC US	Ronald J. Epstein
	Rocket Lab	RKLB	RKLB US	Ronald J. Epstein
	Teledyne Technologies Inc	TDY	TDY US	Ronald J. Epstein
	TransDigm Group Inc.	TDG	TDG US	Ronald J. Epstein
NEUTRAL				
	Albany International	AIN	AIN US	Ronald J. Epstein
	Garmin	GRMN	GRMN US	Ronald J. Epstein
	HEICO Corporation	HEI	HEIUS	Ronald J. Epstein
	Hexcel Corporation	HXL	HXL US	Ronald J. Epstein
	L3Harris	LHX	LHX US	Ronald J. Epstein
	Lockheed Martin	LMT	LMT US	Ronald J. Epstein
	Textron	TXT	TXT US	Ronald J. Epstein
UNDERPERFORM				
	Bombardier	BDRBF	BDRBF US	Ronald J. Epstein
	Bombardier Inc.	YBBD B	BBD/B CN	Ronald J. Epstein
	CAE Inc.	YCAE	CAE CN	Ronald J. Epstein
	CAE Inc.	CAE	CAE US	Ronald J. Epstein
	Huntington Ingalls Industries	HII	HII US	Ronald J. Epstein
	Mercury Systems	MRCY	MRCY US	Ronald J. Epstein
	Raytheon Tech	RTX	RTX US	Ronald J. Epstein
	Spirit AeroSys-A	SPR	SPR US	Ronald J. Epstein
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RVW	T: 1.C	TCI	TCLUC	D. III.E
	Triumph Group	TGI	TGIUS	Ronald J. Epstein

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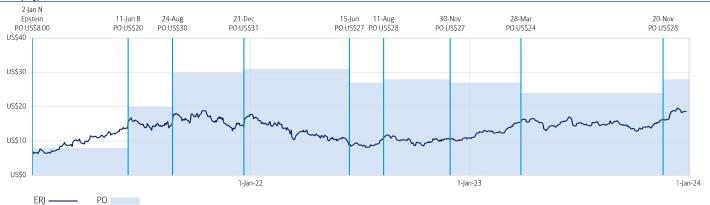
Boeing (BA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Embraer (ERJ) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Aerospace/Defense Electronics Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	31	62.00%	Buy	23	74.19%
Hold	11	22.00%	Hold	9	81.82%
Sell	8	16.00%	Sell	6	75.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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