# **Business Jets Strong in 2022 on Variants, Scarcity**

### BI Aerospace & Defense, Global Dashboard





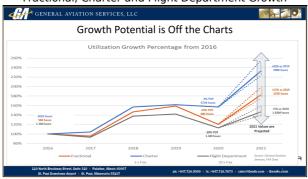
Biz-Jet Makers Poised to Profit in 2022 on Omicron, Scarce Used

(Bloomberg Intelligence) -- The makers of smaller jets, like Textron, Bombardier, Embraer, Gulfstream and Dassault, may have a successful 2022 as a tight used-aircraft market pushes up prices for pre-owned and new planes, boosting profits and margins. High-margin services businesses should also gain from increased operations as concerns about Covid-19 and variants bolster demand for private aviation. (12/02/21)

#### 1. Charter, Fractional Show Leisure Driver

Strong demand for charter and fractional flying indicates the pandemic has sparked demand for smaller jets and services, which should extend given emerging virus variants. Data from General Aviation Services show charter flights could rise 43% over 2019 levels in 2021, with fractional potentially 15% higher. Both fractional and charter are typically private individuals. Prolonging the trend could be flight departments that so far appear to be on track for a 5% increase.

As the pandemic lingers and corporations revise business-jet strategies, we could see lower-tier managers dispatched on the company jet as protection against Covid-19 or due to reduced schedules from airlines catering to leisure fliers, hence making business destinations less convenient. (12/02/21)



Fractional, Charter and Flight Department Growth

Source: Bloomberg Intelligence

#### 2. Used Sales Set the Stage for New

Used-jet transactions have been vibrant in recent quarters as more travelers opt for private aviation. Used business-jet and turboprop inventories are at the lowest percentage since Amstat started tracking the metric in 1984. This void supports prices for new and pre-owned aircraft, which we expect to last into 2022 as the pandemic and declines in airline offerings make private travel more appealing. In 4Q20, the heaviest dash for used aircraft took place, taking the best airplanes off the market and driving up prices. The subsequent year played host to the most resale activity in 14 years, driving prices up more and absorbing acceptable aircraft.

This dearth of quality used airplanes will certainly spur more builds from the primary manufacturers, Textron, Bombardier, Embraer and Gulfstream. (12/02/21)





Source: Bloomberg Intelligence

#### 3. Small-Jet Owners Wait to Trade Up

Longer hold times for aircraft also show the demand for airplanes and indicate the makers of smaller jets could benefit for an extended period. The average holding period has moved higher for Textron, Bombardier and Embraer, all of which make small to midsize jets. The ability to convert into a larger jet has likely been hamstrung by greater demand as these aircraft don't typically have a backlog, which could prolong increased demand. Larger-jet makers like Dassault and Gulfstream typically have a backlog, with customers placing orders at regular intervals, so have a better handle on demand. (12/02/21)

Average Holding Time by Manufacturer

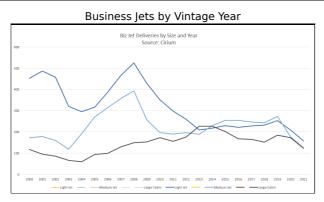


Source: Bloomberg Intelligence

### 4. Textron, Embraer Gain as Light Jets Leave

Light-jet manufacturers such as Textron, Embraer, Pilatus and Honda could get the most benefit from an aging fleet and aircraft retirements, as build rates for light jets last peaked around 2007-08, raising the average age for used light jets and reducing desirability of those available on the secondary market. The curve indicates small jets will make up the lion's share of retirements in the coming years, with about 3,300 built since 2008 and 3,700 before. Medium jets are in much better shape, with 2,154 built in or before 2008 and 2,831 since. Large-cabin jets may reap the smallest benefit on the aging fleet, with 892 built before 2008 and 2,279 since.

Light-jet owners are most affected by higher fuel prices, which could stymie gains for the manufacturers. (12/02/21)

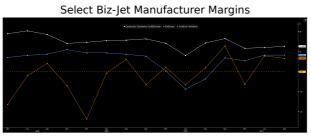


Source: Bloomberg Intelligence

## 5. Manufacturers' Response Limited by Supply Chain

Manufacturers are likely to boost build rates, though supply-chain constraints should keep these muted in the near term, which is positive for pricing and margins. Even the largest manufacturers are challenged to get more output from suppliers given supply kinks, including worker shortages and transport bottlenecks. We expect manufacturers to increase production by 10-15% of 2021 levels. Build rates are likely to keep rising if prices hold. There are signs of strong competition even now, with the launch of the Gulfstream G800 and G400 aimed at holding the ultra-long-range lead and providing a better entry point for new Gulfstream customers.

HondaJet's introduction of its new concept appears aimed at the Embraer Phenom 300, Pilatus PC-24 and Citation XJ4, though it's not known when this aircraft will be available. (12/02/21)



Source: Bloomberg Intelligence

## 6. Textron Makes the Most of Entry-Level Light Jets

Contributing Analysts Douglas Rothacker (Aerospace)

Light jets are likely to enjoy a solid manufacturer response given increased demand for entry-level aircraft, lower build rates over the past few years and ease of ramping up production. We expect over 13% more builds in 2022, fueled by a 15% increase at Textron, which is likely to increase lightjet builds the most in 2022. Textron cut the most from production in 2020, which should make it easier to bounce back to higher levels, though we expect 2022 rates to remain below the 2019 level of 126 and be driven by CJ3s.

All manufacturers are likely to increase, with Embraer, Pilatus and Honda likely to reach 2019 build rates for aircraft in the Maximum Takeoff Weight (MTOW) range of 10,000-20,000 pounds. (12/02/21)

#### Light let Build Expectations

Manufacturer	Model/Series	2022	2021	2020	2019	2018	2017	2016	2015	2014	201
Total Light Je		253	223	201	264	240	228	219	217	206	19
Embraer	Total	62	57	56	62	64	72	72	82	92	9
	Phenom 100	11	7	6	11	11	18	10	12	19	3
	Phenom 300	51	50	50	51	53	54	62	70	73	6
Pilatus	PC-24	40	35	33	40	18					
Honda	HondaJet 420	36	31		36						
Textron	Total	115	100	81	126	121	113	124	133	114	10
	Citation Mustang	1 - 1	-				7	10	8	8	1
	Citation M2	30	32	24	34	34	39	39	45	41	1
	CitationJet CJ3+	35	25	21	37	37	26	25	23	12	1
	CitationJet CJ4	30	28	23	33	29	23	29	35	27	3
	Citation XLS+	20	15	13	22	21	18	21	22	26	2

Source: Bloomberg Intelligence

## 7. Midsize Jets Push Higher on Fractional Use

Contributing Analysts Douglas Rothacker (Aerospace)

The almost 20% increase in midsize builds will exceed that of light jets in 2022. Textron may make the most of this category as well, with our expectation of a 23% gain driven by the Latitude. We expect Textron to exceed 2019 builds in this category on planned increases for the new Longitude and return to 2019 levels for the Latitude. The midsize category benefits from fractional operator fleet use such as Berkshire Hathaway's NetJets. The Latitude, Longitude and Bombardier Challengers and Embraer Legacy/Praetors are all used in fractional fleets, which are looking to add more aircraft as they manage record demand.

Bombardier's refresh of the smaller Challenger, now known as the 3500, could drive even higher build rates in this category. (12/02/21)

Midsize let Build Expectations

Mid-Size Jets Manufacturer Model/Series Total Mid-Size Jets		BI Esti		Historical							
		2022	2021	2020	2019	2018	2017	2016	2015	201	
		221	187	178	256	236	247	265	273	25	
Gulfstream	G100/150/200/280/350	20	20	22		28	28	27	34	3	
Cessna	Total	92	75	50	80	67	66	58	41	3	
	Citation Sovereign+	7	7	6	8	6	9	11	18	28	
	Citation Latitude	55	43	26	58	57	53	43	17		
	Citation Longitude	30	25	18	13						
	Citation X+				1	4	4	4	6		
Bombardier	Total	60	50	55	88	95	93	112	125	12	
	Learjet 70/75		9	11	12	12	14	24	32	3	
	Challenger 300/350		41	44	76	60	56	62	68	5	
	Challenger 605/650					23	23	26	25	3	
Embraer	Total	44	37	30	47	27	36	42	35	2	
	Legacy 450/Praetor 5	20	11	10	18	14	14	12	3		
	Legacy 500/ Praetor	24	26	19	24	9	15	21	20		
	Legacy 600/650			1	5	4	7	9	12	1	
Dassault	Total		5	21	8	19	24	26	38	4	
	Falcon 2000	5	5	13	4	12	12	22	31	3	
	Falcon 900			8	4	7	12	4	7		

Source: Bloomberg Intelligence

## 8. Large Cabins Gain as Backlog Benefits Smaller

Contributing Analysts Douglas Rothacker (Aerospace)

Large-cabin business-jet builds should rise over 10% in 2022, sparked by General Dynamics' Gulfstream as the first G700s -- the latest ultra-long-range jet -- are delivered. Bombardier will keep ramping up deliveries of its long-range competitor, the Global 7500, which could exceed our expectations and drive deliveries in this category even higher. The ultra-long-range, large-cabin market has benefited from robust customer demand, as evidenced by Dassault's announcement of the 10x, which enters the fray in 2025.

The dearth of used aircraft and backlogs for the newest, long-range aircraft will continue to push up demand for other large-cabin offerings, as customers prefer not to wait for open delivery slots that can be up to a year away. (12/02/21)

## Large Business Jet 2022 Build Expectations

Large Jets		BI Esti			Historical					
Manufacturer Model/Series		2022	2021	2020	2019	2018	2017	2016	2015	201
Total Large Jets		208	186	181	182	155	165	167	206	23
Gulfstream	Total	113	98	105	114	92	90	93	118	11
	G450/G500	30	25	26	19	12	9	16	22	2
	G550/G600	35	33	40	32	20	14	20	37	4
	G650/G700	48	40	39	63	60	67	57	59	5
Dassault	Total	25	20	17	14	19	29	21	12	
	Falcon 7x		- 1	5	4	4	7	17	12	2
	Falcon 8x	25	20	12	10	15	22	4		
Bombardier	Total	70	68	59	54	42	45	51	73	
	Global 7500/8000	40	39	35	11	1				
	Global Experss/6000	30	29	24	43	41	45	51	73	8
Embraer	Total	0	0	0	0	2		2	3	
	Lineage 1000					2	1	2	3	

Source: Bloomberg Intelligence

To contact the analyst for this research: George Ferguson at gferguson5@bloomberg.net