JETNET IQ PULSE

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Rollie Vincent JETNET iQ Creator/Director



Come Together, Right Now

The Beatles' Abbey Road, released in 1969, still seems as young as fresh flowers in spring. The opening track on the album - Come Together - remains one of the foursome's most played tunes, although the meaning of its lyrics will be debated at least until jet fuel is no longer burned to thrust our industry forward. While the Liverpool band was dissolving, their fans were, thankfully, never ready for the show to end. Across the business aviation industry, key players and fans alike are today eager to come together, sooner than later, to refresh acquaintances and friendships, share stories over a glass of wine or ale, and continue doing business together. With flying activity finally returning to levels last experienced in 2019, at least in several key markets in the world, new aircraft orders and pre-owned aircraft sales are signals to many that now is the time to come together again.

Taking the cue from the many metrics and industry opinions that we closely monitor, we recently announced that the time is now right to host our 10th JETNET iQ Summit. An event we could not have in 2020, we are delighted to be able to confidently say that our Summit will be held <u>in-person</u> (yay!) on September 15-16 at the spectacular fly-in / fly-out TWA Hotel at JFK Airport.

"..... we recently announced that the time is now right to host our 10th JETNET iQ Summit. ." For those like us who are eager to come together again, please join us to make and renew personal connections and share and discover new insights as we host the industry's leaders. To learn more about the Summit and our agenda, and to register, please go to:

www.jetnet.com/summit

This issue of JETNET iQ PULSE is sponsored by the International Aircraft Dealers Association. IADA is this year celebrating 30 years of togetherness amongst its members, who represent a diverse and very successful group of aircraft brokers and dealers, and other organizations affiliated with the aircraft transaction community. IADA members are at the forefront of worldwide dealmaking, with Q4 2020 transaction volumes at unprecedented levels despite COVID and tightening inventory.

As we have highlighted in prior issues of JETNET iQ PULSE, today's business aircraft marketplace is not for the uninformed buyer or seller. Engaging a high-performing and experienced team to support acquisition, disposal, upgrade, fleet planning, management, and operational decisions is amongst the very first steps to ensuring peace-of-mind and good outcomes.



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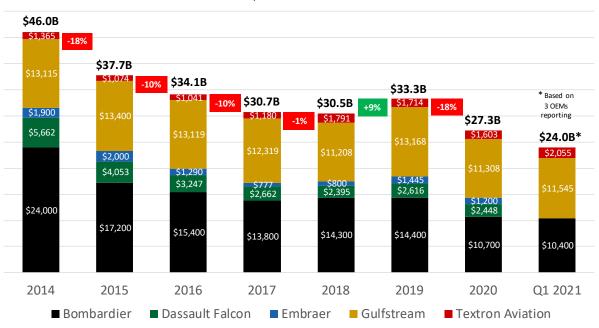


Outlook

Firm order backlogs across the business aircraft OEMs are amongst the many important metrics to monitor the health of the industry. Backlogs are typically reported on a value basis (in \$U.S. or Euros), a unit basis (i.e., the number of aircraft on order, regardless of the price point), or sometimes both. In the accompanying chart, we present the latest information on firm order backlogs for the 5 largest manufacturers. The Year 2019 (remember?) saw a rebuilding of order backlogs for the first time since the Global Financial Crisis of 2008/2009, with aggregate values up 9% YOY. No sooner had this happened when the industry's nosewheel tire and at least a couple of the mains were burst by the COVID-19 pandemic. None of the "Big 5" OEMs escaped the nasty descent of 2020 without losing at least some backlog. Collectively, we calculate that backlogs eroded by ~18% on a \$U.S. basis last year.

Based on Q1 2021 earnings reports for 3 of the OEMs, Textron Aviation blazed out of the starting blocks, with firm order backlog up over \$450M or 28% in just 90 days. This and other reports of strong sales activity, both in the new and pre-owned business aircraft markets, is a clear signal of a return to health across various market segments, particularly given Textron Aviation's broad 15-model product line that covers the spectrum from piston to turboprop and turbofan aircraft models. Backlogs at the other OEMs – which already represent more than a year's and sometime approaching two year's total production – represent a floor upon which new orders will be built this year and beyond. Based on numerous indicators, we believe that the outlook for the industry has already brightened, supporting our decision to increase our 10-year delivery outlook appropriately and rather substantially.

Business Aircraft OEM Order Backlogs: 2014-2021 YTD



Primary Business Aircraft OEM Backlogs \$U.S. in Millions

Source: Regulatory filings; JETNET iQ estimates; Dassault backlog converted from Euros to \$U.S.; Dassault and Embraer Q1 2021 backlogs are not yet reported

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Aircraft Dealers Have Come A Long Way, Baby





Wayne Starling Executive Director International Aircraft Dealers Association (IADA)

IADA Commemorating 30 Years in 2021

Thirty years ago, in 1991, the preowned private airplane transaction business was a little too much like the wild west. Bad actors were giving legitimate used aircraft sales experts a bad name.

"Everybody was tired of the 'get rich quick' people who were coming into our industry and trying to sell airplanes with far less ethics and a lot more baloney than you would expect to have," said OGARAJETS Founder John Foster. "They were giving us a bad reputation and everyone wanted to be done with them."

Around 1990, Johnny Gantt, of Gantt Aviation, called Foster to say the aviation resale community really needed an association to deal with unscrupulous players. The industry wanted to ensure its dealers and brokers were people of good character who possessed good business ethics. "We had our first meeting at Johnny Gantt's place shortly thereafter," Foster said. The group wanted to make sure they created an opportunity for small and family owned businesses to be heard and participate.

Original first year member companies are known today as Gantt Aviation, OGARAJETS, Duncan Aviation, JBA Aviation, Leading Edge, General Aviation Services, QS Partners, Eagle Aviation, Aerosmith Penny, Austin Jet, Jet Transactions and Sacramento Aviation.

Starting the National Aircraft Resale Association (NARA), as it was known in those days, was tough. It took a huge amount of time away from their businesses to get everything right, and it cost a lot of money. It was a challenging time.

"It was hard work. And as they say, it was probably the best of times. We had great, great synergy amongst us. We were very selective as to who we offered memberships. We wanted to make sure that people had been in business. They had proven themselves to be good at what they did. They had the right business ethics and they were the kind of people we wanted to do business with," Foster said.





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Aircraft Dealers Have Come A Long Way, Baby (cont.)

Foster continued: "We also had \$10,000 dues. That was a real divider for some people who were really solid citizens. They just couldn't get over how they could get their money back for the \$10,000 they spent each year to be a member of the NARA organization. The committed people came in. The other people drifted away. We quickly grew to about 12 companies."

"And the amazing thing we saw then was how much great talent there was. Some of these people I had done business with. Some I didn't know very well at all. It was just amazing how much synergy we had and the care for our businesses and the care for our industry, and what great ideas came from all of these different people," Foster added.

IADA Is Born

Fast forward to 2021. Different chairmen have served as leaders of the organization every year since that 1991 founding. They've had great ideas as the organization has matured. And the impact on the industry has been truly amazing.

Today, NARA has changed its name to the International Aircraft Dealers Association (IADA), with a thoroughly global outlook that reflects its worldwide influence on the private aircraft transaction industry. IADA has created the first accreditation program for aircraft dealers, in this case administered by an impartial third party to very rigorous professional standards of expertise and ethics.

There are now nearly 50 IADA-accredited dealers, over a hundred IADA-certified brokers, more than 60 IADA-verified products and services members and nearly all the major OEM business aircraft manufacturers. While IADA's entry bar is high, today's membership dues are actually much lower than they were in the beginning.

Celebrating 30 Years

As it celebrates its 30th anniversary, IADA is a powerhouse global cooperative network consisting of the world's only accredited dealers and IADA-certified brokers, major OEMs, and industry-leading verified products and services members.

Comprising only seven percent of the world's business jet dealers, IADA dealers buy and sell more aircraft by dollar volume than the rest of the world's dealers combined, averaging over 700 transactions and \$6 billion in annual volume. Recently, IADA members actually registered over 1,200 global transactions, worth more than \$10 billion, in the 12-month period from April 1, 2020 to March 31, 2021. Importantly, this occurred during uncertain economic times in the midst of the pandemic.







THE WORLD'S ONLY ACCREDITED DEALERS.

The International Aircraft Dealers Association is the collective force influencing and shaping the aircraft transaction industry.



Experience the power of the collective.



Aircraft Dealers Have Come A Long Way, Baby (cont.)

Exclusive Online Marketplace

AircraftExchange is IADA's online marketplace and the industry's premier source of exclusive aircraft for sale or lease by IADA dealers. IADA's robust listing verification process ensures that, unlike other online advertising venues, there are no duplicates, no phantom listings, and no aircraft advertised that are not truly for sale. IADA and AircraftExchange's global collective network improves the efficiency, transparency, integrity, and costs associated with a preowned aircraft transaction.

IADA also has implemented IADA U, an online continuing education tool to keep IADA-certified brokers at the top of their game. Its curriculum includes coursework developed and taught by expert products and services members of IADA, who know their subjects inside and out.

Those dual professional recognition programs – accreditation for dealers and certification for their brokers – are the backbone of IADA's professionalism and rigid standards of ethical behavior. When business aircraft owners are looking to buy or sell an airplane, the IADA imprimatur signals professionalism and expertise.

IADA is the collective force influencing and shaping the aircraft transaction industry. With accredited dealers of all sizes, and dozens of verified Products and Services members skilled in aircraft transactions, IADA is the acknowledged leader in developing industry standards for efficient, effective, and ethical business aircraft transactions.

In the past year, the IADA Foundation received tax-exempt status, and it continues to support philanthropic programs that enhance the industry, including providing scholarships for college students studying for careers in business aviation. Working for business aircraft owners globally, IADA provides a facility for professional standards, ethics, and exchange of information among its members and to the public for the purpose of creating a more efficient market, facilitating transactions, and providing transparency in transactions, thereby increasing business aircraft ownership and usage worldwide. For more info about IADA go to www.IADA.aero.

About IADA's AircraftExchange.com

AircraftExchange is the exclusive online marketplace for IADA. The public search portal was created by IADA to provide business jet and private jet buyers a trustworthy and efficient way to identify, locate and purchase preowned aircraft from the most ethical dealers and brokers in the world.

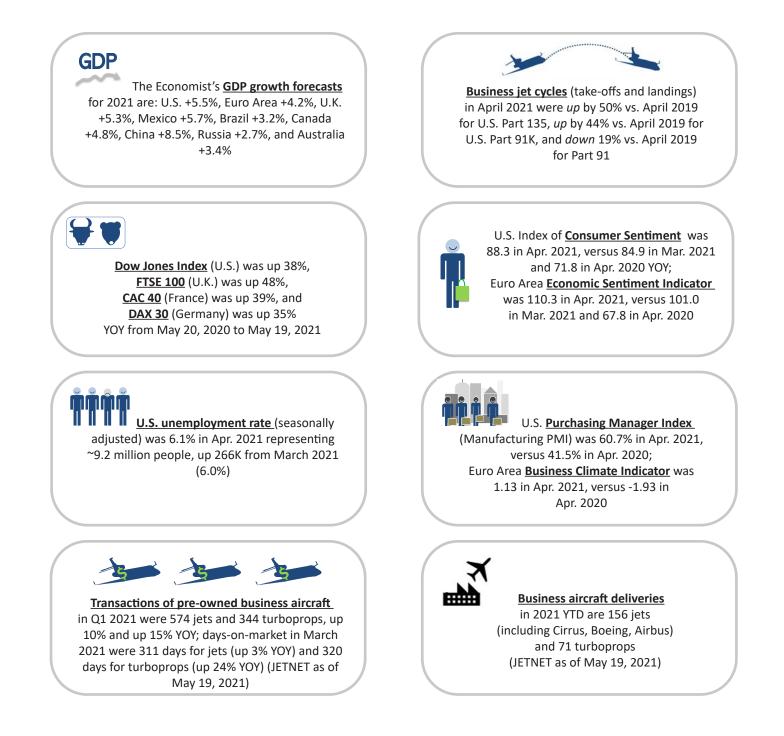
Only IADA-accredited aircraft dealers may list used aircraft for sale on this search portal, where buyers can shop from an average of 500 listings at any given time. For more info, go to AircraftExchange.com.





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Business Conditions





Pre-Owned Business Jet Inventory and Transactions

Annualized Whole Aircraft Retail Sales and Leases (Units): 2006 Through Q1 2021

With inventory at exceptionally low levels – just 7.2% of the in-service fleet at the end of Q1 2021, and 6.8% as of May 19 – while transaction activity remains at a strong pace, the industry's "cupboards" are continuing to be cleared. Everything from the most attractive models – late model, low hours / cycles, brand X, white-with-stripe corporate exterior, beige interior, N-registered, on-program, professionally-flown, no damage history, fast WiFi system, hangared since new, one corporate owner – to classic aircraft delivered before some of us were even born are selling. The post-recession differences in inventory / transactions between 2021 and 2009 could not be more stark. The U.S. tumbled into an 18-month economic recession beginning in December 2007 through the end of June 2009. Most recently, the U.S. fell into

recession in February 2020. While the U.S. National Bureau of Economic Research (NBER) has yet to officially declare the country free of the COVID-19 recession, U.S. Bureau of Economic Analysis data suggest that the country's economy rebounded sharply in Q3 2020 and has been expanding ever since. Buoyed by unprecedented government investment / marketplace intervention and an associated sharp reduction in unemployment, the U.S. economy is on a path to grow at a scorching 6.4% rate in 2021, according to the International Monetary Fund. With OEMs eager to sell their latest wares, we suspect that new aircraft transactions which involve trade-ins to the manufacturer will keep the pre-owned market primed with sellable inventory for the foreseeable future.



Pre-Owned Business Jet Inventory and Pre-Owned Whole Retail Transactions - Worldwide

Source: JETNET / JETNET iQ; includes whole aircraft retail sales and leases to end users; TTM = Trailing Twelve Months

BUSINESS AVIATION MARKET INTELLIGENCE

TTM



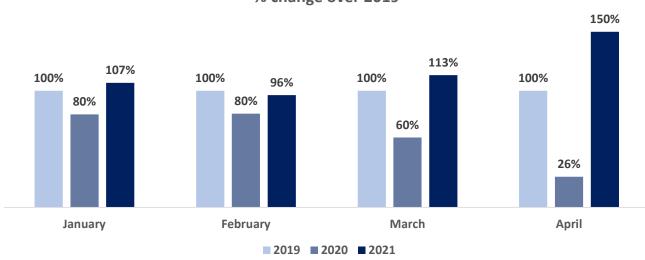
Business Jet Cycles: U.S. Part 135

January-to-April: 2019, 2020, and 2021

Happy pre-COVID days are here again for on-demand U.S. business jet flight operations, based on the latest FAA and ADS-B Out flight information available to JETNET and JETNET iQ. After last year's sharp disruptions in air travel demand, flight cycles (one takeoff and landing) are sharply up YOY and now consistently up over the same months in 2019, further substantiating the gut feelings that many of us may have regarding a return to better days - and bluer skies - for the business aviation industry. April 2021 cycles approached 100,000 flights, up more than 50% compared to April 2019, and more than 5X above an historically "easy comparable" in 2020. Anecdotal evidence of all-new customers to business jet flying is abundant as more and more people are discovering the many benefits of private flying. While we should not presume that all of these new customers will continue to be served as frequently by business aviation as they are today

once commercial air services rebound, industry players are no doubt doing their utmost to convince them otherwise.

We are mindful of the fact that increases in on-demand charter flights are not, however, solely from customers with infrequent requirements. Some of the biggest consumers of Part 135 flights are in fact the fractional program providers like NetJets, Flexjet, PlaneSense, AirShare, and others who depend upon vetted on-demand lift providers to support their own operations on an as-needed basis, especially in times of highly concentrated demand. Our own JETNET iQ research and quarterly surveys of business aircraft owners / operators suggest that there is considerable upside to utilization, given the continuing preponderance of flights for purposes other than purely to conduct business.



Part 135 Flight Activity % change over 2019

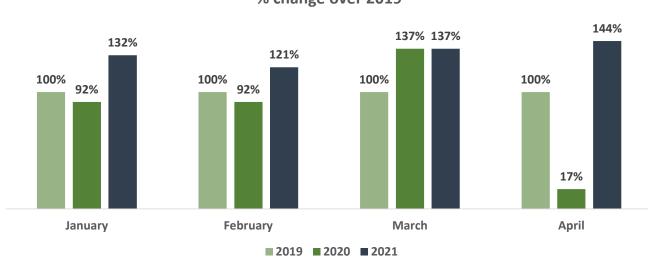
Source: U.S. FAA / DOT; JETNET ADS-B Out network signals; JETNET iQ analysis



Business Jet Cycles: U.S. Part 91K

January-to-April: 2019, 2020, and 2021

U.S. fractional program flying continued on its torrid pace in April 2021, up dramatically over April 2020 and over April 2019. Fractional flying has outpaced other operational categories, especially within the light through super mid-size jet segments, as customers make good use of their allocated hours and many use their downgrade interchange options to "right size" their aircraft to meet their and their families needs. In April 2021, fractional business jet cycles ended the month up 44% over 2019 demand levels, and up more than 8x YOY, with April 2020 being a month the industry will long want to forget. We understand that much of the demand for Part 91K flying continues to be based largely on leisure, VFR (visiting friends and relatives), and personal flying, including repositioning flights to / from 2nd and 3rd homesites. Flying for business purposes appears to be quite limited at this time, providing good upside potential in the future as fractional market demand transitions back to a more traditional mix of personal and business travel.



Part 91K Flight Activity % change over 2019

Sources: U.S. FAA / DOT; JETNET ADS-B Out network signals; JETNET iQ analysis

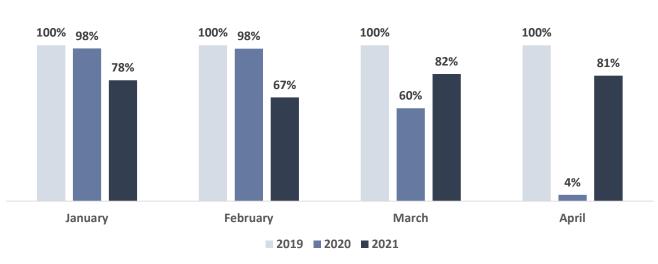


Business Jet Cycles: U.S. Part 91

January-to-April: 2019, 2020, and 2021

Corporate and private business jet operations (so-called Part 91) continued on their more sluggish recovery trajectory in April 2021, based on the latest flight information available to JETNET and JETNET iQ. There was an absolute collapse of Part 91 flying beginning in mid-March and continuing through all of April 2020, as public and private corporations, HNWIs, and other customers hunkered down in reaction to

the Black Swan of COVID-19. The latest flight tracking data updated through May 19, 2021 indicate that corporate and private flights have recovered to a little more than 80% of 2019 (pre-COVID) levels, held back by a slow return to flying for business purposes. Other constraints on demand include lingering border restrictions and quarantine requirements that continue to disrupt international flight operations.



Part 91 Flight Activity % change over 2019

Sources: U.S. FAA / DOT; JETNET ADS-B Out network signals; JETNET iQ analysis



About JETNET iQ

JETNET IQ is a business aviation market research, analysis and forecasting service consisting of three main elements:

- JETNET iQ Reports are the definitive analytical reference for business aviation, incorporating quarterly state-of-the-industry analyses, owner / operator surveys, and detailed delivery and fleet forecasts;
- JETNET IQ Summits are annual industry conferences providing unique data, insights and networking opportunities; and
- JETNET iQ Consulting provides customized research and analysis for clients on a project-by-project basis.

JETNET iQ Reports are available in various formats on a subscription basis, and are published regularly by JETNET LLC, 101 First Street, Utica, NY 13501 - currently offered at 11 different levels. JETNET iQ is a partnership between JETNET LLC of Utica, New York and Rolland Vincent Associates, LLC, of Plano, Texas.

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Since late 2010, JETNET has conducted quarterly surveys of the worldwide community of business aircraft owners and operators in order to gauge customer sentiment, brand perceptions, aircraft purchase, selling, and utilization expectations, and other factors. JETNET iQ Global Business Aviation Surveys are password-protected and by invitation-only. Potential respondents are drawn randomly from the JETNET worldwide database of business jet and business turboprop owners and operators; they are initially contacted by telephone and/or e-mail by JETNET's team of multilingual researchers. Target respondents include chief pilots, directors of aviation, and senior management. Each survey includes at least 500 respondents in 50 or more countries each quarter, and respondents closely reflect the worldwide distribution of the business jet and turboprop community.

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Appendix

Data sources:

Real GDP growth forecasts (2021): The Economist – May 15, 2021 https://www.economist.com/economic-and-financial-indicators/2021/05/15/economic-data-commodities-and-markets Stock Markets: Dow Jones Industrial Average: http://ca.spindices.com/indices/equity/dow-jones-industrial-average London Stock Exchange (FTSE 100): https://www.londonstockexchange.com/indices/ftse-100 Euronext Paris (CAC 40): https://live.euronext.com/en/product/indices/FR0003500008-XPAR Frankfurt Stock Exchange (DAX 30): https://www.boerse-frankfurt.de/indices/dax?mic=XETR Initial Unemployment Claims: Bureau of Labor Statistics (U.S.); https://www.dol.gov/ui/data.pdf; "SA" = seasonally adjusted Unemployment: Bureau of Labor Statistics (U.S.); https://www.bls.gov/news.release/pdf/empsit.pdf Consumer Confidence: University of Michigan Survey of Consumers (U.S.); http://www.sca.isr.umich.edu European Commission (Euro Area) – Economic Sentiment Indicator; https://ec.europa.eu/info/sites/info/files/full_bcs_2021_02_en.pdf Business Confidence: U.S. ISM Manufacturing PMI (U.S.) https://www.ismworld.org/globalassets/pub/research-and-surveys/rob/pmi/rob202103pmi.pdf Eurostat (Euro Area); https://ec.europa.eu/eurostat/databrowser/view/teibs010/default/table?lang=en https://ec.europa.eu/eurostat/databrowser/view/ei_bsci_m_r2/default/table?lang=en Business aircraft fleet, deliveries, transactions, days-on-market (DOM), utilization: JETNET; GAMA Survey results: JETNET iQ Global Business Aviation Surveys (Quarterly) Photo credits: Page 1 (LHS): The Beatles / Apple Music; Page 1 (RHS): TWA Hotel / David Mitchell; Page 4: Mike Fuchslocher / Shutterstock; Page 5: IBC Aviation; Page 7: IADA; All other photos / images: Rolland Vincent Associates, LLC / JETNET iQ

Definitions and Abbreviations:

For the purposes of these Reports, business aircraft may be classified into 4 primary categories, reflecting propulsion, price, performance, and weight class differences. These categories are: Turboprops (Single-Engine Turboprops - SETP and Multi-Engine Turboprops - METP), Small Jets (Personal Jets, Very Light Jets), Medium Jets (Super-Light Jet, Mid-Size Jet, Super Mid-Size Jet), and Large Jets (Large Jet, Large Long-Range Jet, Large Ultra Long-Range Jet, Airline Business Jet). The "Personal Jet" category includes single-engine turbofan-powered models, today represented by the Cirrus Vision Jet.

- B&GA: Business & General Aviation EIS: Entry in Service FBO: Fixed Base Operator (private air terminal) FTSE: Financial Times Stock Exchange (London) GAMA: General Aviation Manufacturers Association GDP: Gross Domestic Product
- HNWI: High Net Worth Individual MTOW: Maximum Takeoff Weight NGO: Non-Governmental Organization OEM: Original Equipment Manufacturer QOQ: Quarter over Quarter QTD: Quarter to Date
- S&P: Standard & Poor's TTM: Trailing Twelve Months WHO: World Health Organization YOY: Year over Year YTD: Year to Date

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