

MAKING AEROSPACE INFORMATION INTELLIGENT

WINGX DEFINITIONS AND GLOSSARY

Actionable Business Intelligence

Definitions 1

- > The charts illustrated in this analysis source data from global flight activity sources including Air Traffic Control (such as Eurocontrol, FAA) and ADSB-networks (such as Flight Radar 24).
- > ATC records report all flight plans for aircraft filing flight plans. These records may exclude VFR flights which WINGX could alternatively pick up through access to ADSB records.
- All flights and fleet data analysis is carried out by WINGX Advance through our proprietary harvesting of multiple data sources; our data verification, cleaning and processing methodology; our database query logic; and our integration of analytics into our reports, data sets and dashboards.
- > WINGX define business aviation activity primarily around the flight records of business aviation aircraft, including jets, props and piston platforms, for non-scheduled activity only. Our wider definitions of business aviation also include rotary aircraft activity, and the non-scheduled movements of chartered airliner aircraft.
- WINGX have archived the analysis of more than a decade of global flight data, which we are able to illustrate in our customised reports, with the more standard reports generally covering last-12-month comparable periods. For optimal functionality, our dashboards generally cover the last 24 months.
- > WINGX track live activity of all aircraft, with our most frequent reporting currently 24-48HR lagging. Our Daily Tracker dashboards show updates for day-day flight activity, enabling any specific days to be compared.
- Our Monthly Tracker is aligned to our standard offline reporting, for month-month analysis, showing YOY, YTD, and
 L12M trends. If a non-standard specific time-frame is selected, the corresponding trend is for Period To Date (PTD))

Definitions 2

- Difference mission types are analysed and represented in our dashboards and offline reports. These correspond to the certification of the aircraft and analysis of the flight plan records, so that there is a distinction between business aviation activity which is commercial, and non-commercial.
- Aircraft activity defined as commercial are those where the aircraft has a standard national or regional certification (EG Part 135, Part 91, Part 91K, AOC, NCC), or, the aircraft has recorded flight plans notified as commercial (with reference to prefix or call sign).
- > The third way in which commercial or non-commercial activity is represented on our dashboard is through analysis of the operator itself; our proprietary research on each operator to deduce the operating model as one of the following:
- Aircraft Management Operators mainly managing aircraft on behalf of private owners
- Ambulance Operators known to be dedicated to medical/hospital related purposes
- Branded Charter operators known to be primarily focused on chartering (including hours programs)
- Cargo Operators known to be specialist freight carriers
- Fractional Operators operating fleet on behalf of fractional owners
- Private Flight departments operating aircraft on behalf of Owners and Companies
- Training/Demo/Maintenance Flights to and from same airport, and flights from known dedicated Training schools
- The categorisation of aircraft operators is also extended across all the other fleet category activity tracked by WINGX.
 For example, in covering Scheduled Aircraft Activity, we distinguish Legacy, Low Cost, Cargo and Regional airline categories, and for Rotary, Off-Shore, Ambulance, Charter, Rescue.

Definitions 3

- All Aircraft are identified by OEM (airframe, engine, avionics). In terms of aircraft size, WINGX categorise aircraft by Segment from Bizliner and Ultra Long Range Jet, to Very Light Jets. These are also represented within a meta category of Large, Medium, and Small. All Aircraft are further identified by ICAO code/name, and Variants, defined as Models, are tracked from each of these ICAO platforms. Further analysis can identify Tail and Serial.
- Flight activity is located to and from airports, defined by ICAO/IATA and full-name. Activity is measured as departures but can also be measured as arrivals, and as movements (combining). On the dashboard, activity can be filtered by arrival airport, departure airport and pair.
- Flight sectors are categorised by different durations, with 0-30m considered Empty Legs, then short flights (1.5H), midrange (1.5-3H), long range (3-6H), very long range (6H+). From sector length analysis, the analysis also tracks NM distance, and implied speed (Great Circle).
- The higher level geographical analysis can be filtered around State (both US and province/county/land, etc); Country;
 Continent Region; and various sub-continental regions, EG Middle East, North Africa, Caribbean, Central Asia.
- Aircraft operators are defined by operator type (branded charter, private, etc); by operator country HQ (flag); by Register (country, EG 9H). WINGX also capture and track the number of aircraft managed by each operator, and the number of aircraft active on each airport route. Hence aircraft activity can also be represented as utilisation rates (hours and cycles per aircraft unit).
- Aircraft can be identified by tail sign, and associated to an operator (except where 'Under Research'), and to an airport (airport base, dependent on share of departure flights).

Definitions 4 (Metrics)

- > Derived from Flight Activity, WINGX provide METRICS which illustrate derived insights including
- > Fuel:
- > Fuel volume is estimated by WINGX through calculation of the implied uplift, represented by the city pair sector operated, in terms of flight hours, distance and specific aircraft type consumption. Fuel volume data is then represented as indicative fuel uplift by airport, departure, pair, aircraft type, operator, in terms of unit level.
- > Handling:
- > WINGX track each movement with respect to the MTOW and wing-dimensions of the aircraft in question, from which indicative Handling volumes revenues can be identified.
- > Parking
- > WINGX measures time on the ground, between arrival and departure, for all aircraft, to show ground-stay periods, and by aircraft dimensions, parking and hangarage requirements.



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