Guyana Civil Aviation Authority

Civil Aviation Definitions and Terms



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The following lists precise definitions and descriptions of civil aviation terms which are necessary for those involved in the ICAO statistics programme. These definitions were adopted from the International Civil Aviation Organisation (ICAO) to ensure standardization with international best practices.

Commercial Air Carriers

Air Cargo: General term used by the airline industry to mean any property (freight, express and mail) transported by air, except baggage.

Air taxi revenue flights: On-demand, non-scheduled flights on short notice for the carriage by air of passengers, freight or mail, or any combination thereof for remuneration usually performed with smaller aircraft including helicopters (typically no more than 30 seats). Also includes any positioning flights required for the provision of the service.

Aircraft Departure: defined as a take-off of an aircraft. For statistical purposes, departures are equal to the number of landings made or flight stages flown.

Aircraft Hours: Aircraft hours are based on "block-to-block" time (i.e. from the moment the aircraft is pushed back from the gate or starts taxiing from its parking stand for take-off to the moment it comes to a final stop at a gate or parking stand after landing); also known as block time.

Aircraft: defined as any machine that can derive support in the atmosphere from the reactions of the air other than reactions of the air against the earth's surface.

Aircraft Kilometres: defined as the sum of the products obtained by multiplying the number of revenue flight stages flown by the corresponding flight stage distance. The calculation of the distance is based on the Vincenty formula.

Air Passenger: defined as any person, excluding on-duty members of the flight and cabin crews, who make a journey by air.

All-freight and Mail Services: defined as scheduled or non-scheduled air service performed by an aircraft carrying revenue loads other than revenue passengers, i.e. freight and mail.

Breakeven load factor. The weight load factor at which point operating revenues equal operating expenses. It is obtained by multiplying the weight load factor by the ratio of the operating expenses to the operating revenues.

Block-to-block Time: defined as the total time measured in hours and minutes measured from the aircraft's initial move from its departure point until its final stop at its arrival point.

Cabotage: defined as traffic carried between city-pairs in a State other than the one where the reporting carrier has its principal place of business.

City-pair: defined as two cities between which travel is authorized by a passenger ticket or part of a ticket (flight coupon) or between which shipments are made in accordance with a shipping document or part thereof.

Commercial Business Flights: The commercial operation or use of aircraft for the carriage of passengers or goods by companies as an aid to the conduct of their business. These flights depend on the availability of the aircraft for whole aircraft charter, flown by professional pilot(s) employed to fly the aircraft.

Commercial Air Transport Operator: An operator that, for remuneration, provides scheduled or non-scheduled air transport services to the public for the carriage of passengers, freight or mail. This category also includes small-scale operators, such as air taxis and commercial business operators, that provide commercial air transport services.

Distances. Aerodrome-to-aerodrome great circle distances should be used at least for international services, in all items involving distance computations. Distances can be calculated using the Great Circle Distance, defined as the shortest distance between any two points on the surface of the Earth, using the Vincenty distance formula associated with the World Geodesic System – 1984 (WGS 84) adopted by ICAO and referred to in Article 3.7.1.1 of Annex 15 to the Chicago Convention (WGS 84). The latitude and longitude of aerodromes can be taken either form aerodrome data published in the national Aeronautical Information Publication (AIP) or from a source using such data (for example, the *Location Indicators* – Doc 7910 website of ICAO).

Distance flown per passenger: the average distance flown per passenger is computed by dividing the passenger-kilometres by the related number of passengers carried.

Domestic Flight Stage: defined as a flight stage not classifiable as international. Domestic flight stages include all flight stages flown between points within the domestic boundaries of a State by an air carrier whose principal place of business is in that State. This also includes flight stages between a State and territories belonging to it, as well as flight stages between any two such territories regardless of if a flight stage crosses international waters or over the territory of another State.

Flight: defined as the operation of an aircraft on one or more flight stages, using a single flight number, assigned by the airline.

Flight Coupon: defined as each component part of a ticket containing separate travel authority for subdivisions of the total travel covered by the passenger ticket.

Flight Stage: defined as the operation of an aircraft from take-off to its next landing. A flight stage is classified as either international or domestic.

Freight: defined as goods transported by bulk.

Freight mass. The factor to convert freight loads from volume into mass (or vice versa) is left to the discretion of the carrier. However, if no conversion factor is available, it is recommended that 161 kilograms per cubic meter be used. The same conversion factor can be used for passenger baggage.

International Flight Stage: defined as a flight stage with one or both terminals in the territory of a State, other than the State in which the air carrier has its principal place of business.

Low cost carrier. An air carrier that has a relatively low-cost structure in comparison with other comparable carriers and offers low fares and rates. Such an airline may be independent, the division or subsidiary of a major network airline or, in some instances, the ex-charter arm of an airline group.

Mail: defined as all correspondence and other objects tendered by and intended for delivery to postal administrations.

Non-revenue (Commercial Air Transport) services: defined as non-commercial business aviation, test flights, training and all other flights for which no revenue is received.

Non-scheduled (revenue) Air Service: defined as a commercial air transport service performed as other than a scheduled air service. These flights are not operated according to a published schedule but sold to individual members of the public.

Operating Air Carrier: defined as that carrier whose flight number is being used for air traffic control purposes, i.e. the operator of the aircraft. For the purposes of reporting air carrier statistics to ICAO, all operational and traffic items should be reported by the operating carrier, including code-shared, franchised, pooled, blocked-off charter, blocked-space arrangements, joint services and leased aircraft services.

Operating expenses per traffic-unit (operating unit cost): Refers to a type of financial measurement which relates the capacity applicable to the operating expenses. It is computed by dividing the operating expenses by the tonne-kilometres available.

Operating revenues per traffic-unit (operating revenue yield): Refers to a type of financial measurement which relates the traffic to the operating revenues. It is computed by dividing the operating revenues by the tonne-kilometres performed.

Revenue Passenger: defined as a passenger for whose transportation an air carrier receives commercial remuneration. This definition, for example, includes: i) passengers travelling under publicly available promotional offers (for example, "two-for-one") or loyalty programmes (for example, redemption of frequent-flyer miles); ii) passengers travelling as compensation for denied boarding; iii) passengers travelling on corporate discounts; iv) passengers travelling on preferential fares (for example, government, seamen, military, youth, student, etc.). This definition, for example, excludes: i) persons travelling free, ii) persons travelling at a fare or discount available only to employees of air carriers or their agents or only for travel on business for the carriers, and iii) infants who do not occupy a seat.

Revenue Traffic: defined as traffic, i.e. passengers, freight or mail, flown by an air carrier for which it receives commercial remuneration.

Scheduled (revenue) services: defined as flights which are scheduled and performed for remuneration according to a published timetable, or so regular or frequent as to constitute a recognizably systematic series, which are open to direct booking by members of the public. And this is inclusive of extra session flights occasioned by overflow traffic from scheduled flights.

Speed flown: the average aircraft speed flown is obtained by dividing the aircraft kilometres flown by the related aircraft hours. Where the latter refers to block-hours flown, the result is referred to as the average block speed.

Stage distance per aircraft: the average stage distance flown per aircraft is obtained by dividing the aircraft kilometres flown by the related number of aircraft departures.

Technical stop. A stop most commonly used to refuel the aircraft, to make unexpected essential repairs or to respond to some emergency need to land the aircraft. No traffic is unloaded or loaded during a technical stop.

Commercial Arrangements

Blocked-off Charters: the whole capacity of an aircraft is blocked off for charter sale on flights published as scheduled flights but carried out as charter flights on the same or similar routing and operating time.

Blocked-space Arrangements: defined as a number of passenger seat and/or specified cargo space purchased by an air carrier for the carriage of its traffic on an aircraft of a second carrier.

Code-sharing: defined as the use of the flight designator code of one air carrier on a service performed by a second air carrier, which service is usually identified as a service of, and being performed by, the second air carrier.

Franchising. The granting by an air carrier of a franchise or right to use various of its corporate identity elements (such as its flight designator code, livery and marketing symbols) to a franchisee, i.e. the entity granted the franchise to market or deliver its air service product, typically subject to standards and controls intended to maintain the quality desired by the franchiser, i.e. the entity granting the franchise.

Joint Service Flight: defined as a flight identified by the designator codes of two air carriers that, with the concurrence of their respective States, typically have agreed with each other to share revenues and/or costs.

Leased Aircraft: defined as an aircraft used under a contractual leasing arrangement to increase an air carrier's fleet capacity.

Pooling Arrangements: defined as an air carrier commercial agreement which may involve some degree of capacity control and may cover matters such as routes operated, conditions of operations, and the sharing between the parties of traffic, frequencies, equipment, revenues and costs.

Traffic and Capacity

Freight Tonnes Carried: this is calculated by counting each tonne of freight on a particular flight (one which has the same flight number throughout the trip of the shipment) only once. Only if the freight is flown on both the international and domestic stages of the same flight, then is it counted as both a domestic and an international shipment.

Freight Tonne-kilometres Performed: a freight tonne-kilometre is performed when a tonne of freight is carried one kilometre. Calculation of freight tonne-kilometers equals the sum of the products obtained by multiplying the number of tonnes of freight carried on each flight stage by the stage distance.

Mail tonne-kilometres Performed: a mail tonne-kilometre is performed when a tonne of mail is carried one kilometre. Calculation of mail tonne-kilometers equals the sum of the products obtained by multiplying the number of tonnes of mail carried on each flight stage by the stage distance.

If no conversion factor to convert freight and mail loads from volume into mass is available, the reporting carrier may use 161 kilograms per cubic meter as their conversion factor.

Maximum Certificated Take-off Mass (MCTM): defined as the maximum permissible take-off mass of the aircraft according to the certificate of airworthiness, the flight manual or other official documents.

On-flight Origin and Destination Traffic: defined as the revenue traffic carried on an air service identified by a flight number, subdivided into the city-pairs served by that flight on the basis of the point of embarkation and disembarkation. In the case of passengers, the city-pair concerned is determined by the point of embarkation and disembarkation covered by one flight coupon.

Passengers Carried: this is obtained by counting each passenger on a particular flight (one which has the same flight number throughout) only once and not repeatedly on each individual flight stage. Only if a passenger flies on both the international and domestic stages of the same flight, then are they counted as both a domestic and international passenger.

Passenger Load Factor: defined as a measure of how efficiently the capacity available was used. It is expressed as a percentage of passenger-kilometres performed over seat-kilometres available.

Passsenger-kilometres Performed (PKP): one passenger-kilometre is performed when a passenger is carried one kilometre. Calculation of passenger-kilometres equals the sum of the products obtained by multiplying the number of revenue passengers carried on each flight stage by the stage distance. The resultant figure is equal to the number of kilometres travelled by all passengers.

Passenger tonne-kilometres performed: Passenger tonne-kilometres performed are obtained by applying a standard mass per passenger to the passenger-kilometres performed.

Payload Capacity: defined as the total payload capacity available (in metric tonnes), above and below deck, taking into account any restrictions which may be due to operational or commercial reasons.

Payload Carried: defined as the revenue load of passengers, baggage, freight and mail carried in the aircraft as measured in metric tonnes.

Seat-kilometre Available (ASK): One seat-kilometre is available when a seat is flown one kilometre. Seat-kilometres available are equal to the sum of the products obtained by multiplying the number of passenger seats available for sale on each flight stage by the stage distance. It excludes seats not available for the carriage of passengers because of payload and/or operational restrictions.

Tonne-kilometres Performed (TKP): defined as a measure of the overall traffic (passengers, freight and mail) carried by an air carrier. It represents a metric tonne of revenue load carried one kilometre. Total tonne-kilometres performed is the summation of the products obtained by multiplying the total tonnes of revenue load (passengers, freight and mail) carried on each flight stage by the flight stage distance.

To obtain the TKP for an air carrier one needs to first convert the PKP into passenger tonne-kilometres performed. One does this by multiplying the PKP by the average passenger mass (which includes that of its luggage – normal and excess). It is advised by the ICAO that if no average passenger mass (plus normal and excess baggage) data is available one may use one hundred (100) kilograms per passenger. This factor represents the average passenger mass as well as normal baggage allowance and excess baggage.

That is: Total tonne-kilometres performed = passenger tonne-kilometres performed + freight tonne-kilometres performed + mail tonne-kilometres performed.

Tonne-kilometres Available: defined as a measure of the total capacity available for a flight. One tonne-kilometre is available when one tonne of payload capacity is flown one kilometre. Tonne-kilometres available equals the sum of the products obtained by multiplying the number of tonnes available for the carriage of revenue load (passengers, freight and mail) on each flight stage by the stage distance.

Weight Load Factor: defined as the overall load factor for an air carrier. It is expressed in percentage form as total tonne-kilometres performed over total tonne-kilometres available.

Airports

Aerial Work: An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertising, etc.

Aircraft movement. An aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure is counted as two movements.

Commercial air transport. Air transport services available to the general public for the transportation of passengers, mail and/or freight for remuneration. Includes air taxis and commercial business flights.

Commercial business flights. The commercial operation or use of aircraft by companies for the carriage of passenger or goods as an aid to the conduct of their business. These flights depend on the availability of the aircraft for whole aircraft charter, flown by a professional pilot(s) employed to fly the aircraft.

Direct transit traffic. Traffic which both arrives and departs the point (transits the point) as part of a continuous movement under a single air ticket or waybill, without a stopover, on the same or different aircraft identified by the *same* airline designator and flight number. Direct transit traffic is counted only once.

General aviation (GA) activities. All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire (Annex 6, Part II). For ICAO statistical purposes the general aviation activities are classified into non-commercial business flights, aerial work, instructional and pleasure flying, and other flying.

Non-commercial business flights: These operations cover corporate and owner-operated business flights.

- a) Corporate business flights: defined as the non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot(s) employed to fly the aircraft.
- b) Owner-operated business flights: defined as the non-commercial operation or use of aircraft by an individual for the carriage of passengers or goods as an aid to the conduct of his/her business.

International airport. Any airport designated by an ICAO Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities such as customs, immigration, public health, agricultural quarantine and similar procedures are carried out.

Stopover traffic: Traffic which has taken a stopover, an intentional interruption of movement through a point under a single air ticket or waybill for a period of time beyond that required for direct transit through or, when changing flights, for a period normally extending to the departure time of the next connecting flight and (exceptionally) including an overnight stay.

Transfer traffic: Traffic connecting between aircraft identified by different airline designators and flight numbers. Transfer traffic is counted twice: once upon arrival and once on departure.

Aircraft By Configuration

Combi/Combination Aircraft: defined as an aircraft with enhanced capabilities for the carriage of both freight and passengers, i.e. freight on the passenger deck.

Freighter Aircraft: defined as an aircraft configured solely for the carriage of freight and/or mail. Persons which accompany certain kinds of cargo may also be carried.

Other Aircraft: defined as an aircraft not used for commercial air transport.

Passenger Aircraft: defined as an aircraft configured for the transport of passengers and their baggage. Any freight, inclusive of mail, is generally carried in cargo holds in the belly of the aircraft.

National Civil Aviation Authorities

Air operator certificate (AOC): defined as a certificate authorizing an operator to carry out specified commercial air transport operations.

Approved training organization: defined as an organization approved by a Member State in accordance with the requirements of Annex 1 - Personnel Licensing to the Convention on International Civil Aviation, to perform flight crew training and operating under the supervision of that State.

Licensing Authority: defined as the Authority designated by a Member State as responsible for the licensing of personnel.

Operator: defined as a person, organization or enterprise engaged in or offering to engage in an aircraft operation.

State of Design: refers to the State having jurisdiction over the organization responsible for the type design.

State of Manufacture: refers to the State having jurisdiction over the organization responsible for the final assembly of the aircraft.

State of the Operator: refers to the State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

State of Registry: refers to the State on whose register the aircraft is entered.