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A I R C R A F T F U E L C O N S U M P T I O N A N D T R A F F I C — C O M M E R C I A L A I R C A R R I E R S

Reporting Instructions

FILING REQUIREMENTS

General

This form is to be used by ICAO Member States to report fuel consumption and traffic statistics by aircraft type for each of their commercial air carriers that operates scheduled and/or non-scheduled flights.

This report should cover the calendar year January to December.

Filing schedule

This form should be completed on an annual basis and filed with ICAO within two months of the end of the reporting period to which it refers.

Electronic filing

States should submit the requested data in electronic format, either by e-mail via the Internet (sta@icao.int) or on a compact disc. An electronic copy of this form, together with the relevant instructions, can be obtained from the ICAO Internet site (http://www.icao.int/staforms) or by contacting the ICAO Secretariat.

Confidentiality

Data provided in the report will be treated as confidential and will not be made public in such a way as to permit identification of individual carriers.

STATISTICS TO BE REPORTED

For the purpose of reporting air carrier statistics to ICAO, all fuel consumption and traffic items should be reported for the operating carrier, including code-shared, franchised, pooled, blocked-off charter, blocked-space arrangements, joint services and leased aircraft services (see definitions below). In this context the term operating carrier normally refers to that carrier whose ICAO designator is being used for air traffic control purposes (the ICAO designator in box 7 of the flight plan). In case the operating carrier is different from that whose flight number is being used for air traffic control purposes (e.g. in some kinds of leased aircraft services), these items shall be reported for the actual operating carrier. Any deviations should be so identified under “Remarks”.

Data should be reported for the total fleet operated by the air carrier for commercial air transport broken down by aircraft type. Additional copies of Form M should be used if more space is required.

A**ircraft in fleet by type (Columns a and b).**

Manufacturer, model and series (Column a). Each aircraft by its complete model designation (e.g. Boeing 747-400, Airbus 340-300, etc.) shall be entered. A separate entry shall be made for each type of aircraft in the air carrier fleet.

Version code (Column b). The three one-letter codes given in Note on the form refer to the version of the aircraft used (i.e. passenger, freighter or combination).

Fuel consumed (Columns c, f, i and l). The mass of fuel uplifted in metric tonnes for all aircraft in each aircraft type (columns a and b refer) in air carrier's fleet should be reported. There should not be distinction given between fuel types. Fuel uplift can be determined based on the measurement by the fuel supplier, as documented in the fuel delivery notes or invoices. Alternatively, fuel uplift can also be established using aircraft onboard measurement systems.

The data shall also include fuel consumed by the auxiliary power units.

If the fuel uplift is determined in units of volume (e.g. litres, gallons, cubic metres), this amount should be converted to mass by using actual density values, expressed as kg/litre and determined for the applicable temperature for a specific measurement. If on-board measurement systems cannot be used, the actual density shall be the one measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or delivery note. If such information is not available, the actual density shall be determined from the temperature of the fuel during the uplift provided by the fuel supplier or specified for the aerodrome where the fuel uplift takes place, using standard density – temperature correlation tables. If any of that information is not available, only then a standard density factor of 0.8 kg/litre shall be applied. The method of the conversion shall be indicated in the "Remarks"

Tonne-kilometres performed (Columns d, g, j and m). For all aircraft in each aircraft type the sum of the products obtained by multiplying the number of tonnes of revenue load (i.e. one for which remuneration is received) carried on each flight stage by the corresponding stage distance shall be entered.

To convert aircraft passenger loads into weight loads, the number of revenue passengers carried is multiplied by a factor representing the average mass of the passenger plus both normal baggage allowance and excess baggage. This conversion factor is left to the discretion of the carrier. However, if no conversion factor is available, it is recommended that 100 kilograms be used.

Freight shall include express and diplomatic bags.

Mail shall include all correspondence and other objects tendered by and intended for delivery to postal administrations shall be included under this heading.

The factor to convert freight and mail loads from volume into mass 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 sums of tonne-kilometres performed (columns d, g, j and m) for all aircraft types for a specific year should be equal to the corresponding numbers reported in Form A for that year.

Tonne-kilometres available (Columns e, h, k and n). The sum of the products obtained by multiplying the number of tonnes of payload capacity available on each deck (including the aircraft belly for freight and mail carriage) for the carriage of revenue load (passengers, freight and mail), taking into account payload and operational restrictions on the supply of capacity where applicable, on each flight stage by the corresponding stage distance shall be entered. The method of conversion of passenger, freight and mail capacity into tonnes available should be indicated in the *Remarks.*

The sums of tonne-kilometres available (columns e, h, k and n) for all aircraft types for a specific year should be equal to the corresponding numbers reported in Form A for that year.

The above three data items (i.e. fuel consumed, tonne-kilometres performed and tonne-kilometres available) shall be calculated and reported separately for all aircraft in each aircraft type for:

International scheduled services, which include revenue flights 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 extra section flights occasioned by overflow traffic from scheduled flights. Data for these columns are to be computed from all international flight stages performed during the reporting period.

International non-scheduled services (excluding on-demand flights), which include flights other than reported under international scheduled services performed on an irregular basis for remuneration, including empty flights related thereto, inclusive tours and blocked-off charters. Air taxi flights, commercial business aviation or other on demand revenue flights should be excluded.

Data for these columns are to be computed from all international flight stages performed during the reporting period.

International total (scheduled and non-scheduled, excluding on-demand flights). The sum of International scheduled and international non-scheduled services (excluding on-demand flights).

Total services (international and domestic scheduled and non-scheduled, excluding on-demand flights), which include international total and domestic total services. Domestic services include domestic flight stages performed on scheduled and non-scheduled services.

Should there be a problem of data availability for total services (international and domestic scheduled and non-scheduled, excluding on-demand flights), reporting on data items in this section is not obligatory.
Any surface transportation of passengers and freight arranged by an air carrier in connection with an air journey should not be included in the data.

Per cent of biofuels (total services) (Column o). The share of biofuels in total fuel uplift should be given for total services (international and domestic, scheduled and non-scheduled excluding on-demand flights). It can be calculated, for instance, from the fuel purchase records, which indicate the biomass fraction and net caloric value of the fuel.

DEFINITIONS OF TERMS USED

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). This definition includes any positioning flights required for the provision of the service.

Biofuels. Products refer to non-fossil energy sources which are made from living organisms or from biogenic feedstocks (plant oils or animal fats). In order to be considered as biofuel, the fuel must contain over 80 percent renewable materials.

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. A number of passenger seats and/or specified cargo space purchased by an air carrier for the carriage of its traffic on an aircraft of a second air carrier.

Code sharing. The use of the flight designator code of one air carrier on a service performed by a second air carrier, which service is usually also identified (and may be required to be identified) as a service of, and being performed by, the second air carrier.

Distances. Aerodrome-to-aerodrome great circle distances should be used in all items involving distance computations (Items 1, 6, 7, 9, 10, 12, 17, 18, 19 and 20). Distances can be calculated using the Great Circle Distance which is defined as the shortest distance between any two points on the surface of the Earth which should be approximated using the Vincenty distance formula associated with the World Geodesic System – 1984 (WGS 84) adopted by ICAO and referred to in Annex 15 to the Chicago Convention. The latitude and longitude of aerodromes can be taken either form aerodrome data published in Aeronautical Information Publication (AIP).

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

> ***International*.** 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.
>
> ***Domestic*.** 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. Flight stages between a State and territories belonging to it, as well as any flight stages between two such territories, should be classified as domestic. This applies even though a stage may cross international waters or over the territory of another State.

NOTES:

1. In the case of multinational air carriers owned by partner States, traffic within each partner State should be reported separately as domestic and all other traffic as international.

2. "Foreign" cabotage traffic (i.e. traffic carried between city-pairs in a State other than the one where the reporting carrier has its principal place of business) should be reported as international traffic.

3. A technical stop should not result in any flight stage being classified differently than would have been the case had the technical stop not been made.

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. 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. An aircraft used under a contractual leasing arrangement to increase an air carrier fleet capacity.

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

Revenue passengers. A passenger for whose transportation an air carrier receives commercial remuneration.

NOTES:

1. This definition includes, for example, a) passengers travelling under publicly available promotional offers (for example, "two-for-one") or loyalty programmes (for example, redemption of frequent-flyer points); b) passengers travelling as compensation for denied boarding; c) passengers travelling on corporate discounts; d) passengers travelling on preferential fares (government, seamen, military, youth, student, etc.).

2. This definition excludes, for example, a) persons travelling free; b) 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; c) infants who do not occupy a seat.

UNITS OF MEASUREMENT

Report all distance and weight items according to the metric system using the following conversion factors (foot/pound system to metric system):

1 short ton (2 000 lb)	= 0.9072 tonnes
1 long ton (2 240 lb)	= 1.0160 tonnes
1 statute mile (5 280 feet)	= 1.6093 kilometres
1 nautical mile (6 080 feet)	= 1.8531 kilometres
1 ton-mile (short tons and statute miles)	= 1.4600 tonne-kilometres
1 ton-mile (long tons and statute miles)	= 1.6352 tonne-kilometres
1 Imperial gallon	= 4.54609 litres
1 US gallon	= 3.78541 litres

Note.— "Tonne" denotes metric and "ton" the pound system of measurement.

SYMBOLS

Please use the following symbols as necessary in completing this form:

*	estimated data (asterisk immediately following the estimated figure)
(blank)	category not applicable
na	data not available.

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