#### ANNEX III

Monitoring methodologies for aviation (Article 52 and Article 56)

# 1. Calculation methodologies for the determination of GHGs in the aviation sector

#### Method A

The operator shall use the following formula:

Actual fuel consumption for each flight [t] = Amount of fuel contained in aircraft tanks once fuel uplift for the flight is complete [t] – Amount of fuel contained in aircraft tanks once fuel uplift for subsequent flight is complete [t] + Fuel uplift for that subsequent flight [t]

Where there is no fuel uplift for the flight or subsequent flight, the amount of fuel contained in aircraft tanks shall be determined at block-off for the flight or subsequent flight. In the exceptional case that an aircraft performs activities other than a flight, including undergoing major maintenance involving the emptying of the tanks, after the flight for which fuel consumption is being monitored, the aircraft operator may substitute the quantity 'Amount of fuel contained in aircraft tanks once fuel uplift for subsequent flight is complete + Fuel uplift for that subsequent flight' with the 'Amount of fuel remaining in tanks at the start of the subsequent activity of the aircraft', as recorded by technical logs.

#### Method B

The operator shall use the following formula:

Actual fuel consumption for each flight [t] = Amount of fuel remaining in aircraft tanks at block-on at the end of the previous flight [t] + Fuel uplift for the flight [t] - Amount of fuel contained in tanks at block-on at the end of the flight [t]

The moment of block-on may be considered equivalent to the moment of engine shut down. Where an aircraft does not perform a flight previous to the flight for which fuel consumption is being monitored, the aircraft operator may substitute the quantity 'Amount of fuel remaining in aircraft tanks at block-on at the end of the previous flight' with the 'Amount of fuel remaining in aircraft tanks at the end of the previous activity of the aircraft', as recorded by technical logs.

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# **▼**<u>B</u>

## 3. Emission factors for standard fuels

## Table 2

# Aviation fuel CO<sub>2</sub> emission factors

Fuel	Emission factor (t CO <sub>2</sub> /t fuel)
Aviation gasoline (AvGas)	3,10

Fuel	Emission factor (t CO <sub>2</sub> /t fuel)
Jet gasoline (Jet B)	3,10
Jet kerosene (Jet A1 or Jet A)	3,15

# 4. Calculation of Great Circle Distance

Distance [km] = Great Circle Distance [km] + 95 km

The Great Circle Distance shall be the shortest distance between any two points on the surface of the Earth, which shall be approximated using the system referred to in Article 3.7.1.1 of Annex 15 to the Chicago Convention (WGS 84).

The latitude and longitude of aerodromes shall be taken either from aerodrome location data published in Aeronautical Information Publications (AIP) in compliance with Annex 15 to the Chicago Convention or from a source using AIP data.

Distances calculated by software or by a third party may also be used, provided that the calculation methodology is based on the formula set out in this section, AIP data and WGS 84 requirements.