

Weight calculation

In order to ensure that a flight has been carried out according to the specifications, Fly The World resp. by YAACARS certain weights are checked. The following table shows these weights as part of a calculation that should be calculation, as it should be done before each flight and as it can be seen in the transport transport data in the terminal.

Source Designation Description Test Empty weight in simulator DOW (Dry Operating Weight) Basic operating weight Correct aircraft? + Payload Cargo, baggage, Passengers ZFW Zero Fuel Weight Zero Fuel Weight Correct loading? + Fuel TOW Take-Off-Weight Take-off weight Correct amount of fuel?

Note for beta testers: The weight check is currently (January 2018) not yet completely implemented and will follow in the further course of the beta phase. Currently there is only a check of the TOW, the Payload and the fuel consumed.

Weight Definitions

Dry Operating Weight (DOW): Also referred to as basic operating weight (BOW). This is the This is the weight of the aircraft when it is ready for operation (basic operating weight). This is composed of the empty weight of the aircraft, the weight of the crew and their baggage, drinking water, meals and all other equipment, beverages, meals, and all other equipment needed for a flight. The DOW in FTW corresponds to the empty weight in the flight simulator, as there are variations from model to model.

Payload: Payload is the payload that is carried for a fee. This can be the weight of the passengers weight of the passengers and their baggage as well as that of the cargo or the sum of both. In FTW, the payload is therefore the total weight of all orders transported.

Zero Fuel Weight (ZFW): Sum of dry operating weight and payload. This weight is used in FTW to to check whether the correct aircraft was loaded with the correct amount of payload.

Take-Off-Weight (TOW): Weight of the loaded and fueled aircraft before takeoff. Players who value high realism may now complain that at this point the Ramp Weight (RW) should actually follow. Weight (RW) should follow. However, this weight was intentionally omitted in order not to make things too complicated. complicated.

Maximum Payload (PLmax): Maximum amount of payload that may be loaded into the aircraft. As Maximum Zero Fuel Weight can be used as a reference value: $MZFW - DOW = \text{Max Payload}$. However, this value is only used if no maximum payload can be researched for the aircraft. can be researched for the aircraft.

Maximum Zero Fuel Weight (MZFW): Maximum weight of the aircraft without fuel. Calculation, if no concrete data can be found: $DOW + \text{Maximum Payload} = MZFW$. However, this value is only used if no MZFW can be found for the aircraft.

Maximum Take Off Weight (MTOW): Maximum Take Off Weight. The maximum weight of an aircraft at the moment of takeoff. at the moment of takeoff. If this weight is exceeded, the flight cannot be started. be started.

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