

Weight & Balance

The **W&B** panel allows you to prepare a weight and balance sheet for a flight.

WEIGHT AND BALANCE COMPUTATION
C56X - Cessna Citation Excel Reg.: A-BCDE

Date: 02-Jan-2023 Flight No.: MAN023A Router: EPVA - EDDM PAX: 3

AIRCRAFT STATIONS					CALCULATIONS				
Station name	Weight	Max	Avly	Plowrd	Item	Weight	Max	Plowrd	% MAC
	[kg]	[kg]	[kg]	[kg]		[kg]	[kg]	[kg]	[kg]
Crew	376	480	136.32	336.83	EMPTY AIRCRAFT	12 376		41 760.76	21.9%
Crew & Pantry	40	700	436.00	238.63	Crew & Pantry	310		936.29	
Left Cabin Case	0	15	158.20	0.00	BAR OPERATING WEIGHT	12 686		43 727.05	30.6%
Right Cabin Case	0	15	158.20	0.00	Payload	776		2 262.46	
Refreshment Center / Catering	50	111	172.30	86.15	ZERO FUEL WEIGHT	13 664	15 000	44 989.51	21.8%
Bar FWD Closet	15	70	353.70	23.49	Block Fuel	0 000	0 700	20 720.04	
Left Closet	10	40	374.30	18.13	Block Reserve	10 000	20 000	64 700.05	27.3%
Crew & Pantry	40		436.00		Taxi fuel	200		477.32	
Seat 3	212	340	234.30	496.51	TAKE-OFF WEIGHT	16 464	20 000	64 636.22	23.3%
Seat 4	212	340	234.30	496.51	Trip fuel	3 000		8 696.15	
Seat 5	170	340	236.54	492.85	LANDING WEIGHT	16 464	18 700	54 341.07	23.5%
Seat 6	0	340	236.54	0.00	Remaining fuel	2 000 0			
Seat 7	0	340	222.82	0.00					
Seat 8	0	340	222.82	0.00					
Seat 10 Fuel	0	340	236.68	0.00					
Seat 12 AB	0	340	236.62	0.00					
Left AB SFL	0	340	137.90	0.00					
Right SFL	0	340	137.90	0.00					
Block Baggage	390	700	436.00	375.83					
Payload	776		2 262.46						

LPMC			
Weight	Max	Avly	%MAC

Prepared by: _____ Approved by: _____

Example of a W&B sheet (PDF) prepared in Leon

Sections

The form is split into sections, in which you can edit the weight of each station taken into account during the W&B calculations:

- **Configuration** - allows selecting aircraft configuration other than the default (if available)
- **MTOW** - shows aircraft's MTOW
- **Crew & Pantry** - the place where you can edit weights for crew & pantry stations
- **Passengers** - in this section, you can edit PAX weights on the flight
- **Baggage** - the weight of the luggage (and/or cargo, mail, etc.) on the flight
- **Fuel** - the weight of fuel planned as a block, taxi and trip fuel

Calculation result

RESULT 	PREVIEW 
	% MAC Weight
EMPTY AIRCRAFT	37.9 12373.8
CREW & PANTRY	0 514
DRY OPERATING WEIGHT	30 12887.8
PAYLOAD	0 776
ZERO FUEL WEIGHT	27.6 13663.8 <small>REMAINS 1436</small>
BLOCK FUEL	0 6000
RAMP WEIGHT	27.3 19663.8 <small>REMAINS 736</small>
TAXI FUEL	0 200
TAKE-OFF WEIGHT	27.3 19463.8 <small>REMAINS 736</small>
TRIP FUEL	0 3000
LANDING WEIGHT	27.1 16463.8 <small>REMAINS 2236</small>

W&B calculation result - all weights and CG are within the limits

This section shows the result of W&B calculations - the position of the CG and aircraft weights versus structural limits.

For each structural weight limit, the difference between the structural limit and the actual weight will be shown. Weights within the structural limits and with CG within the envelope are green, while weights beyond structural limits or with CG beyond the envelope are red. There is also a green tick or a red triangle to indicate if the W&B results are correct.

Next to the **Result** section, there is a 'Preview' button, which opens a PDF file with a W&B sheet.

Activating W&B module

Weight & Balance functionality is optional and involves an additional charge per tail. Some aircraft types are not supported.

In order to set up Weight and Balance for an aircraft, contact us via [Customer Portal](#), letting us know the details or sending us the documents containing them, as follows:

1. Aircraft type
2. Aircraft registration
3. Aircraft S/N
4. Units of measurement to be used
5. CG envelope geometry (CG limitations)
6. Aircraft configuration (an arm of each station of the aircraft)
7. Maximum and default weights for each station
8. Position of the CG depending on the weight of the fuel on board
9. Actual and up-to-date basic empty weight and moment (or weight and arm) - aeroplane weighing form

It is recommended to provide:

1. Aircraft operating manual - chapter 'Weight and Balance'
2. Aircraft operating manual - chapter 'Limitations'

3. Aircraft Weight and Balance manual
4. The most recent aeroplane weighing form

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