

**Correct Aircraft Weight and Balance calculations ensure the aircraft operates safely within its maximum weight limits and centre of gravity range, which directly affects stability, performance, and controllability.**

Weight and Balance is one of the most critical preflight calculations a pilot must perform. It verifies that the aircraft's total weight does not exceed the maximum gross weight and that the centre of gravity (CG) falls within the manufacturer-approved envelope. An overloaded aircraft or one with CoG out of limits can be dangerously difficult or impossible to control.

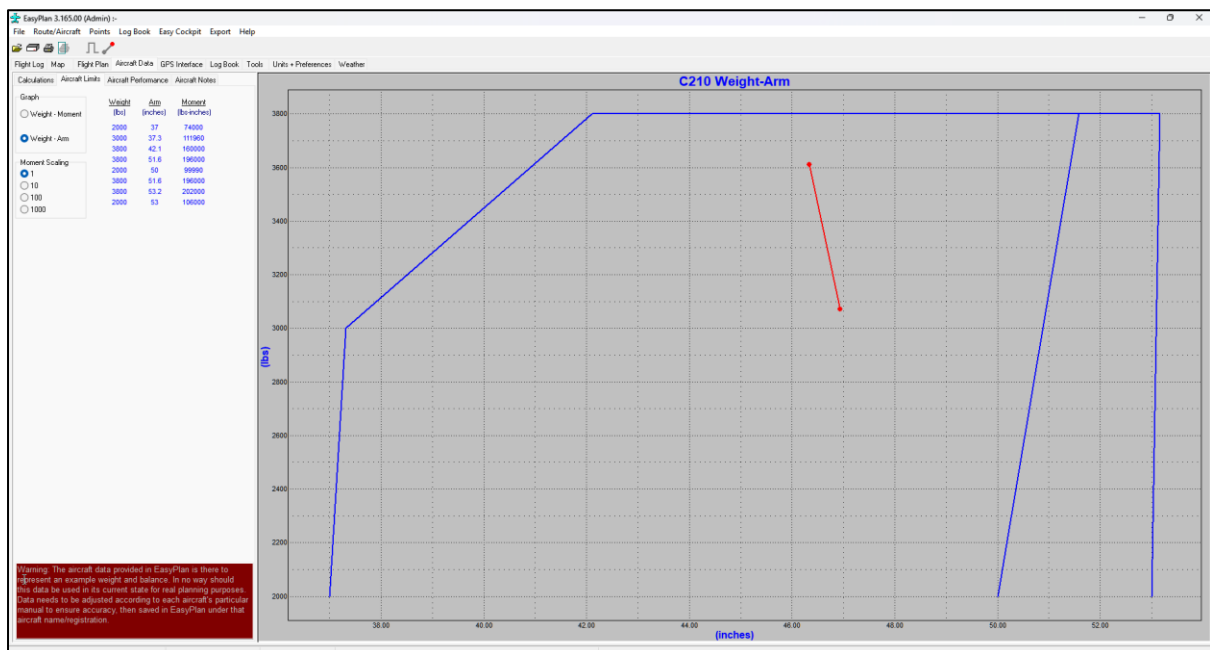
EasyPlan provides the tools to set up your aircraft weight & balance and then for the pilot to make sure that the aircraft is within its weight limits and centre of gravity.

So, in a multi-pilot/user, multi-aircraft environment it may happen that certain fields within these tools might be changed by users, whether inadvertently or perhaps to suit a specific flight.

For these reasons and to enhance safety to this tool, we have added a 'Field locking option' where the Authorised Person (Safety Officer/Chief Pilot) can make sure that certain fields cannot be changed, i.e.

- Aircraft Limits – this is the input page where the envelope is drawn which defines the weight limits and CoG according to figures provided in a Specific Aircraft Manual
- Aircraft Performance – this is the page where aircraft details, speeds, fuel capacity, contingency fuel, reserve time etc are set up for any specific aircraft with a specific registration.
- Aircraft Calculations – this is where the pilot enters the loads for a specific flight which will then show if the aircraft is within its correct weight limits and Centre of Gravity

It is important that the correct weight and arm figures for any specific aircraft are inserted here.



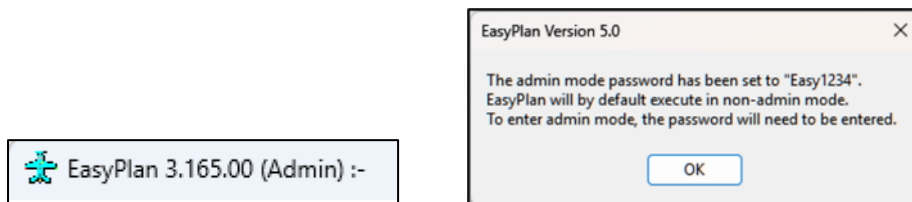
## How it works

Under “Units & Preferences” – ‘General Config’ a new option: ‘Operational Mode’ has been added where an Authorised Person can **enable** Dual Mode which means it sets you up in an “Administrator” Mode.

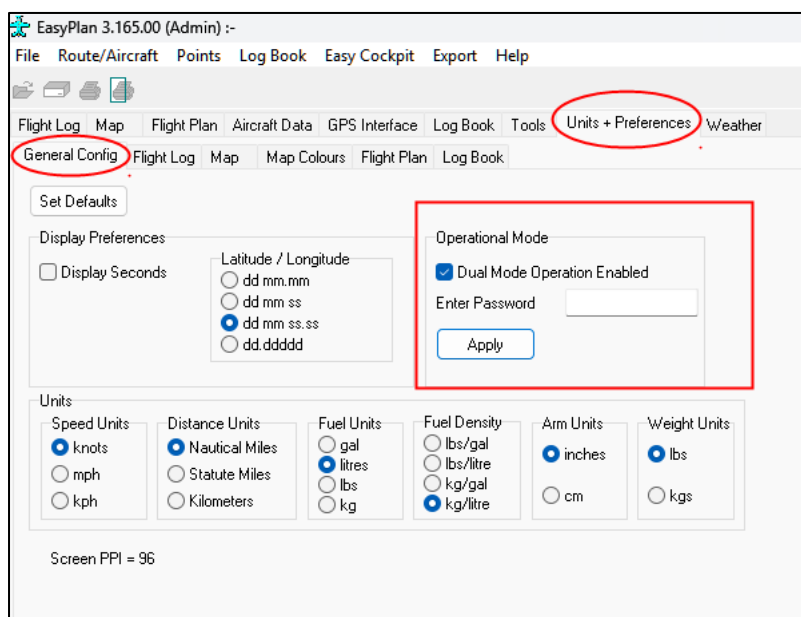
By Default, Dual Mode is NOT enabled, and the user has full access to all fields.

When enabled, EasyPlan is put into ‘Admin’ status. You can see this on the top of the toolbar.

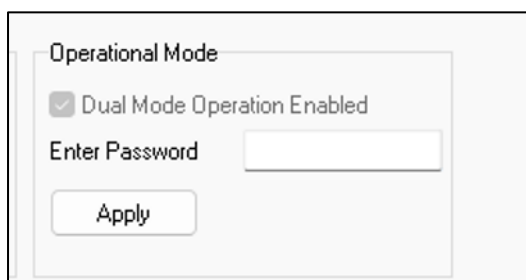
Admin Mode allows the Authorised Person to create/insert new Aircraft Weight & Balance details



If the Operator wants to have EasyPlan limiting access for certain users, an Authorised Person must, under Units&Preferences - General Config, enable ‘Dual Mode Operation’ and define a Password.



If the user forgets the password, there is no easy way to get it back, as there is no Default setting. In this case, please contact AviationDirect.



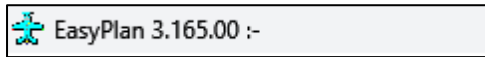
When in Admin Mode, the Authorised Person can create the specific aircraft data for each aircraft on their fleet, saved under the Aircraft Registration, which will then be used by pilots before flight.

The Authorised Person can change/revise/update all fields as required.

To secure the Aircraft Data, 'Dual Mode Operation' must stay enabled.

The authorised person then needs to **CLOSE/EXIT** EasyPlan and when EasyPlan is opened again, the main fields under Aircraft Limits, Aircraft Performance, and some in Calculations, are LOCKED and are no longer editable.

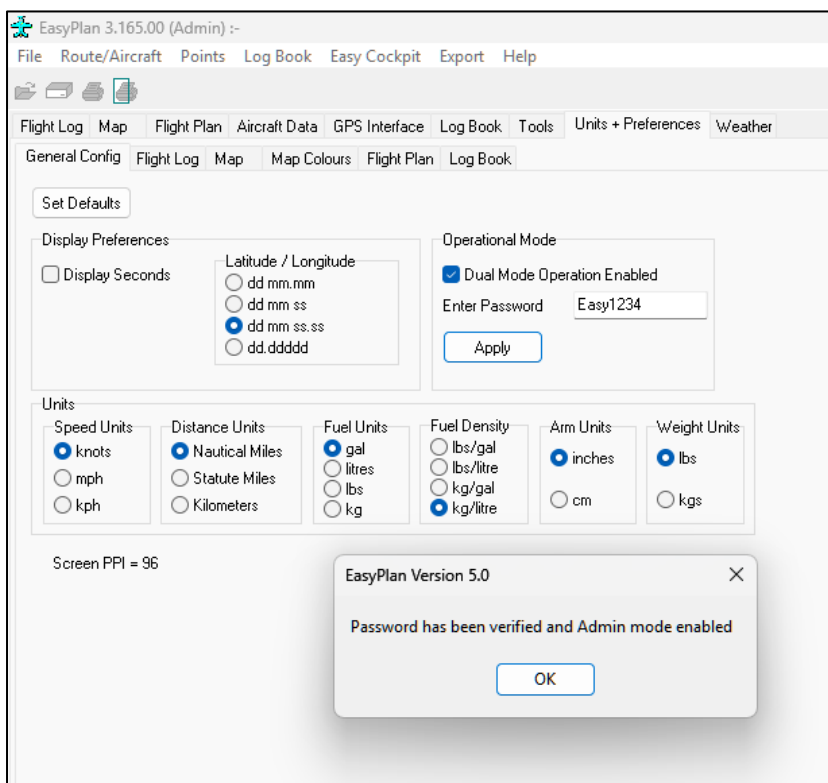
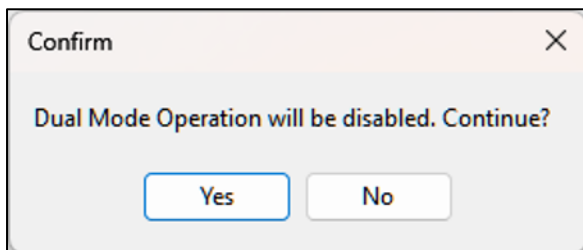
EasyPlan is no longer in Admin Mode.



Only in the Calculations Tab can a non-authorized person revise the load figures for a certain aircraft and a certain flight. The Default Arm and Moment figures are no longer accessible.

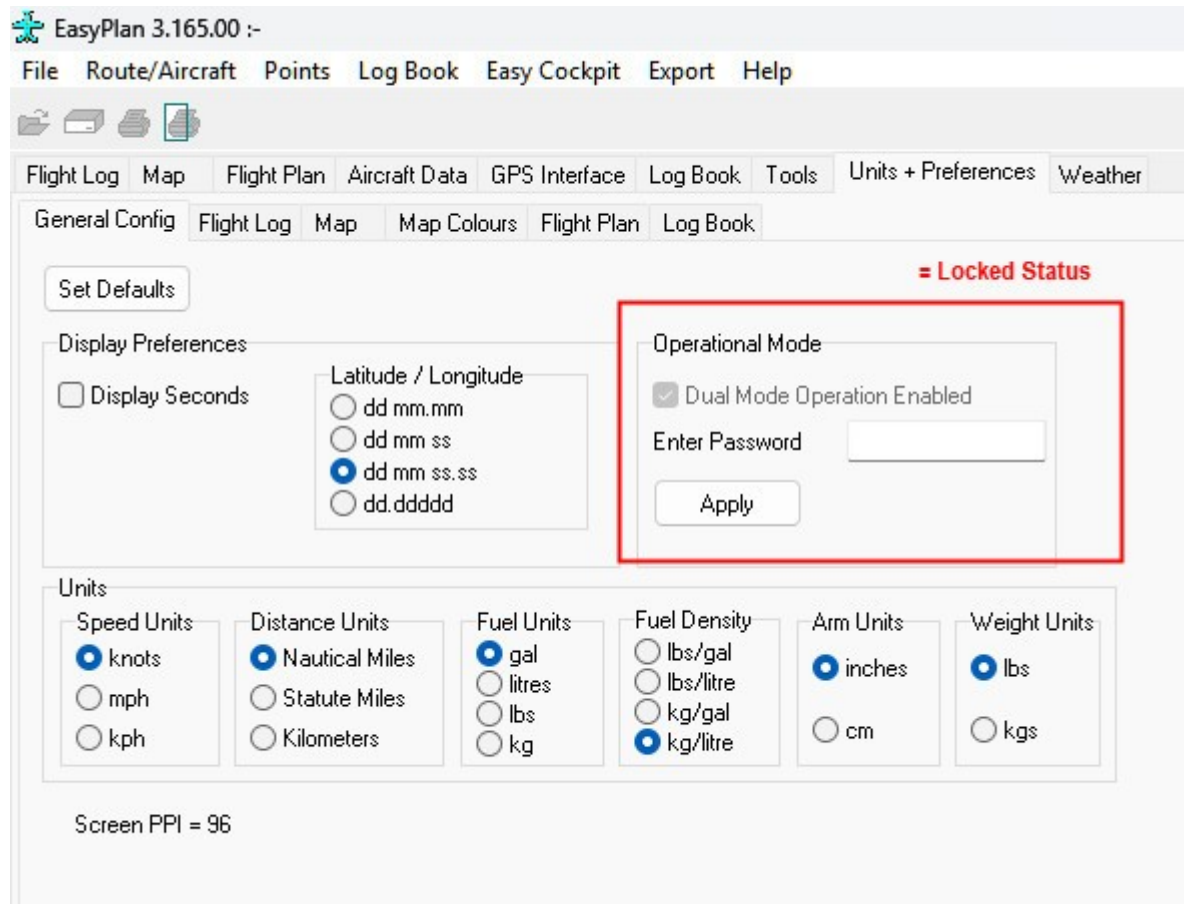
Only an Authorised Person can access and Enable Dual Mode Operation by inserting and applying the Password in order to revise any data.

Only an Authorised Person with the correct Password can DISABLE Dual Mode Operation and this can only be done while EasyPlan is in ADMIN Mode.



## Aircraft Data in EasyPlan – Limiting access to certain fields in a multi-pilot environment

Dual Mode Enabled:



Aircraft Limits in Admin Status

In Locked Status

EasyPlan 3.165.00 (Admin) :-		EasyPlan 3.165.00 :-																																																							
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# Aircraft Data in EasyPlan – Limiting access to certain fields in a multi-pilot environment

## Aircraft Performance – in Admin Status

EasyPlan 3.165.00 (Admin) :- Aircraft\_C210\_Lep1

File Route/Aircraft Points Log Book Easy Cockpit Export Help

Flight Log Map Flight Plan Aircraft Data GPS Interface Log Book To

Calculations Aircraft Limits Aircraft Performance Aircraft Notes

Details

Type: C210

Registration: ZSABC

Performance

Total Fuel Capacity Main Tanks: 80 (gal)

Total Fuel Capacity Aux Tanks: 0 (gal)

Fuel For Ground Manoeuvring: 5 (gal)

Unusable Fuel: 2 (gal)

Contingency Fuel (5 %): 5 %

Contingency Fuel (5 Mins): 5 min

Reserve Time: 45 min

Fuel Density: 0.7 (kg/litre)

Climb Rate: 500 (fpm)

Descent Rate: 500 (fpm)

	Climb	Level	Descent	
Fuel Consumption:	16	13	10	(gal/h)
Speed:	120	160	170	(knots)

Compass Deviation

0 deg	0
90 deg	0
180 deg	0
270 deg	0

Default Height

0-89 deg	FL075
90-179 deg	FL075
180-269 deg	FL085
270-359 deg	FL085

## In Locked Status

EasyPlan 3.165.00 :-

File Route/Aircraft Points Log Book Easy Cockpit Export Help

Flight Log Map Flight Plan Aircraft Data GPS Interface Log Book To

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180-269 deg	FL085
270-359 deg	FL085

## Aircraft Calculations – in Admin Status

EasyPlan 3.165.00 (Admin) :-

File Route/Aircraft Points Log Book Easy Cockpit Export Help

Flight Log Map Flight Plan Aircraft Data GPS Interface Log Book To

Calculations Aircraft Limits Aircraft Performance Aircraft Notes

Item	Quantity (gal)	Unit Weight (lbs)	Total Weight (lbs)	Arm (inches)	Moment (lbs-inches)
Aircraft	1	2320	2320	39.5	91700
Fuel	90	6	540	43.0	23203
Front	1	150	150	36	5400
Front	1	150	150	36	5400
Middle	2	120	240	68	16320
Back	1	100	100	101	10100
Baggage	1	110	110	138	15180
<b>TOTAL</b>			<b>3610</b>	<b>46.3</b>	<b>167303</b>
Total - no fuel			3070	46.9	144100

## In locked status

EasyPlan 3.165.00 :-

File Route/Aircraft Points Log Book Easy Cockpit Export Help

Flight Log Map Flight Plan Aircraft Data GPS Interface Log Book To

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Baggage	1	110	110	138	15180
<b>TOTAL</b>			<b>3610</b>	<b>46.3</b>	<b>167303</b>
Total - no fuel			3070	46.9	144100

Only these fields are accessible to the Non-Authorised Person

**WARNING: It is the responsibility of the Operator/Pilot-in-Command, to ensure that the latest Aircraft Data for the Aircraft TYPE & Aircraft REGISTRATION has been imported and is used for this route.**

<https://www.icao.int/operational-safety/doc-8643-aircraft-type-designators/search>