iniBuilds

Grumman G-21 Goose
MANUAL

Microsoft Flight Simulator

Preface

FOR SIMULATION USE ONLY - DESIGNED FOR SINGLE-PILOT OPERATIONS

This guide is designed to help provide a straightforward set of instructions to aid in operating the Grumman G-21A Goose. It has been produced using multiple real-world G-21A Operator manuals from various dates, with modifications to various procedures to make them more manageable in-game.

PHOTOSENTIVE SEIZURE WARNING

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these “photosensitive epileptic seizures” while playing video games.

Immediately stop playing and consult a doctor if you experience any symptoms.

These seizures may have a variety of symptoms, including light-headedness, altered vision, eye or face twitching, jerking, or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects.

Parents should watch for or ask their children about the above symptoms. Children and teenagers are more likely than adults to experience these seizures.

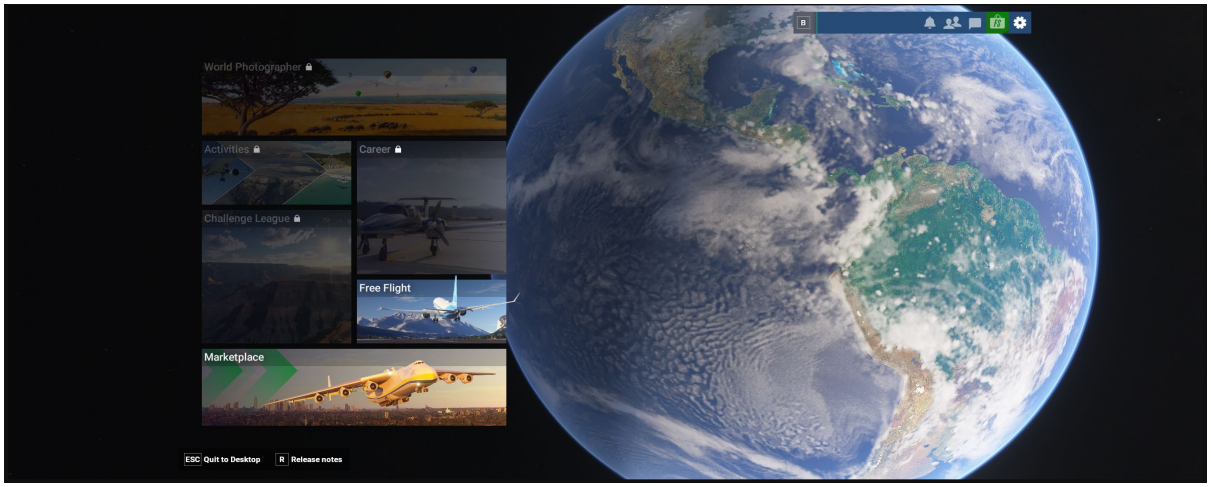
You may reduce risk of photosensitive epileptic seizures by taking the following precautions:

- Play in a well-lit room.
- Do not play if you are drowsy or fatigued.

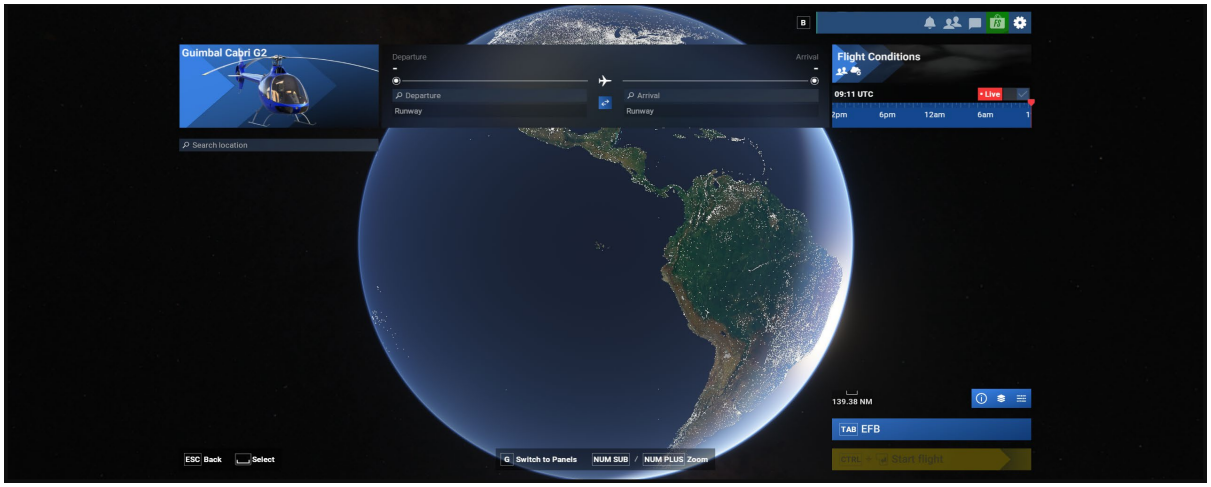
If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing video games.

Aircraft Selection and Liveries

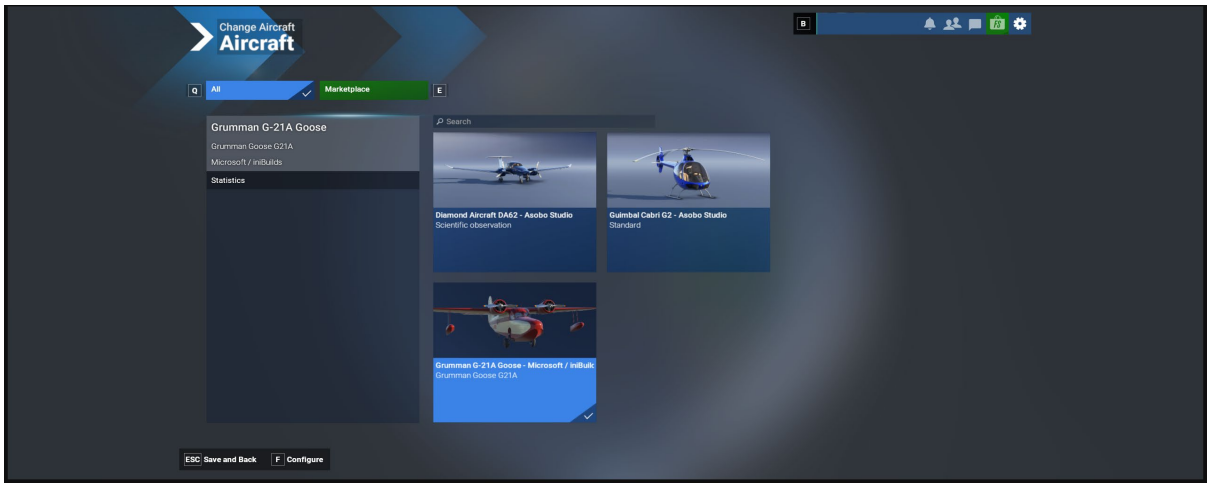
To fly the Grumman G-21A Goose, you need to select it from the Aircraft Selection menu. Select Free Flight from the main menu.



Then click on the Aircraft selection icon in the top left.

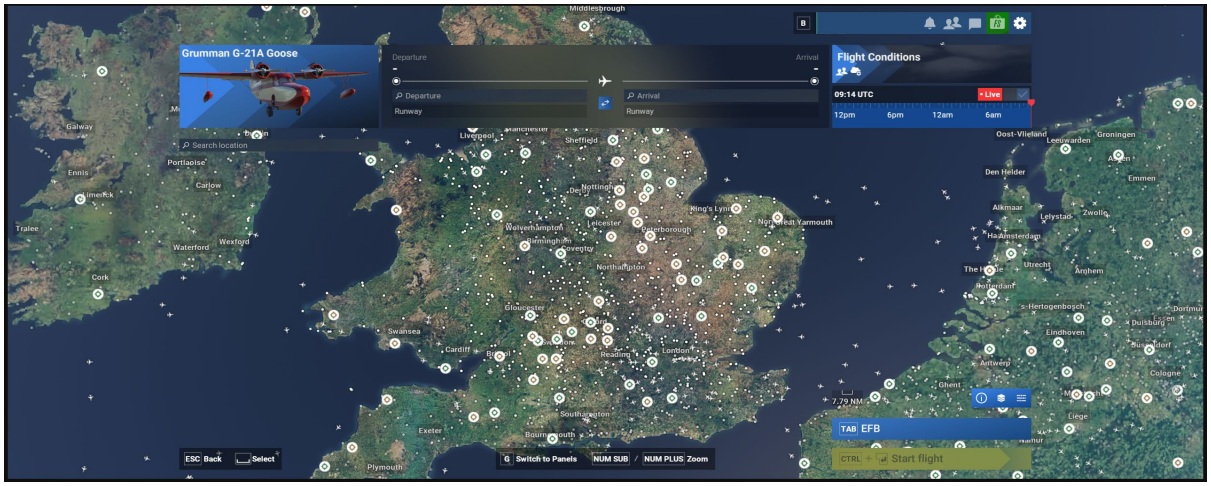


Scroll until you see the G-21A Goose or type in the search bar “Goose” or “G-21A” and the aircraft will show.



Select the aircraft and press Save and Back, or press escape.

Enter your required airport or scroll around the globe to select it, then hit Fly or Ctrl+Enter.



Pre-Flight Walk Around

Microsoft Flight Simulator 2024 comes with a pre-flight walk around feature where you can interact with and check the status of your aircraft.

When you select a Ramp slot at your desired airport you will spawn outside of the aircraft.

Around the aircraft are various Pins, which can be toggled On or Off.

Click on the desired Pin to interact with the flight surface, which can be dragged to check movement or click on the tyre to check the wear and tear status of it.

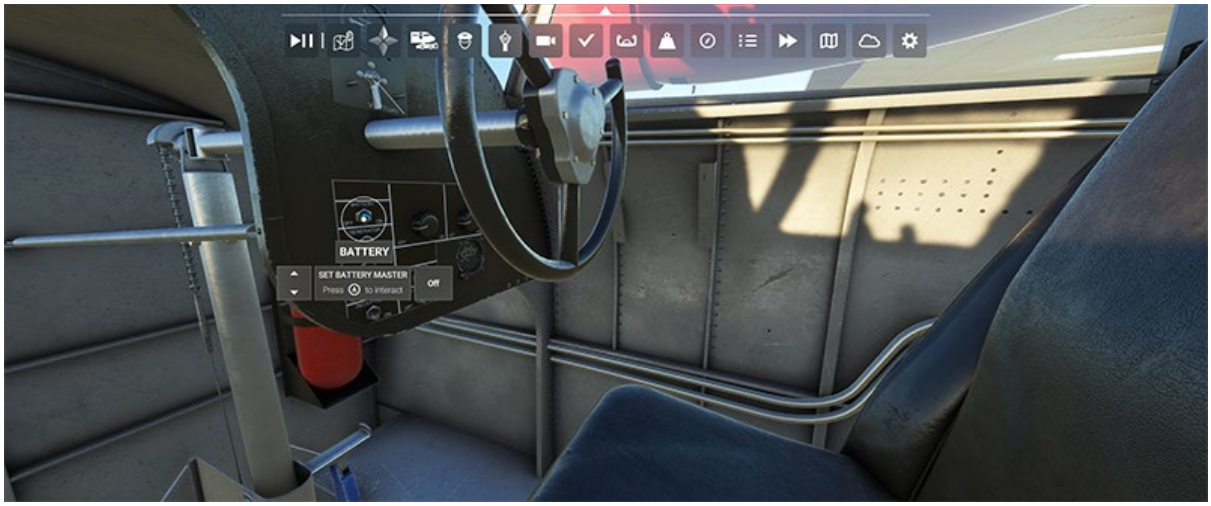
To enter the cockpit click on the door handle on the left-hand side of the aircraft.

Cockpit Interaction

Some switches, levers and knobs within the cockpit have interaction where you can push, pull, or scroll them for certain functions.

On the PC, left click the knob and push the mouse for “push” interaction and pull the mouse for “pull” interaction whilst holding the mouse button down. Some functions also may have middle-mouse button “scroll” or right-mouse click “set” functions.

On the Xbox, press **A** to interact with the knob and use **A** to “push”, **X** to “pull”, Right Stick to “scroll” and **B** to finish the interaction.

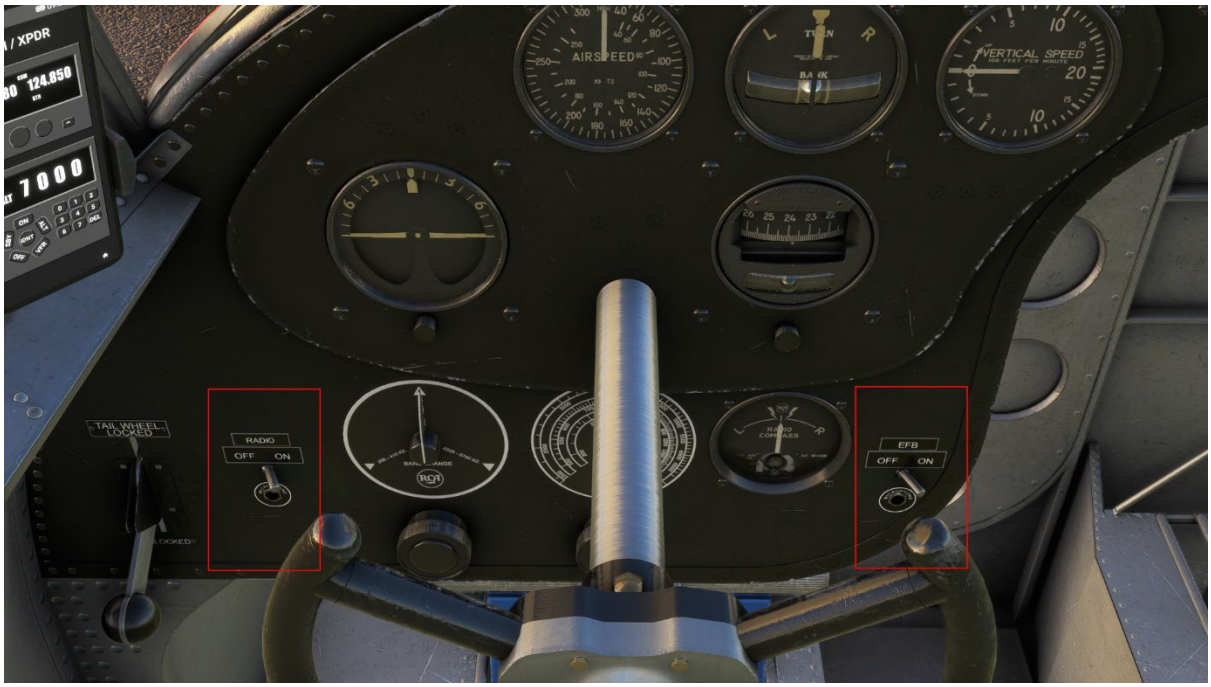


Electronic Flight Bag (EFB)

There is an Electronic Flight Bag (EFB) phone located on the Captains side of the cockpit which allows for radio interaction within the aircraft.

To Show/Hide the EFB, there is a switch behind the Captains yoke on the right hand side labelled EFB Off/On. This allows you to hide the EFB during flight if you should wish to do so.

To the left side of the yoke is the Radio Off/On switch. This needs to be set to "On" for the radios to work in the aircraft. You can hide the EFB with radios still working in the background.



Checklists

Whilst this guide offers comprehensive details along with the Quick Reference Card (QRC), there are handy procedure checklists built within the simulator which can be found by pressing Tab, or whichever key you have bound to bring up the EFB.

Select the aircraft icon.

Then select Checklists.

Important Notes and Substitutions

The aircraft has a high centre of gravity (COG) and therefore is not designed to be taxied at high speed as it could tip over. Taxiing should be carried out at low speed.

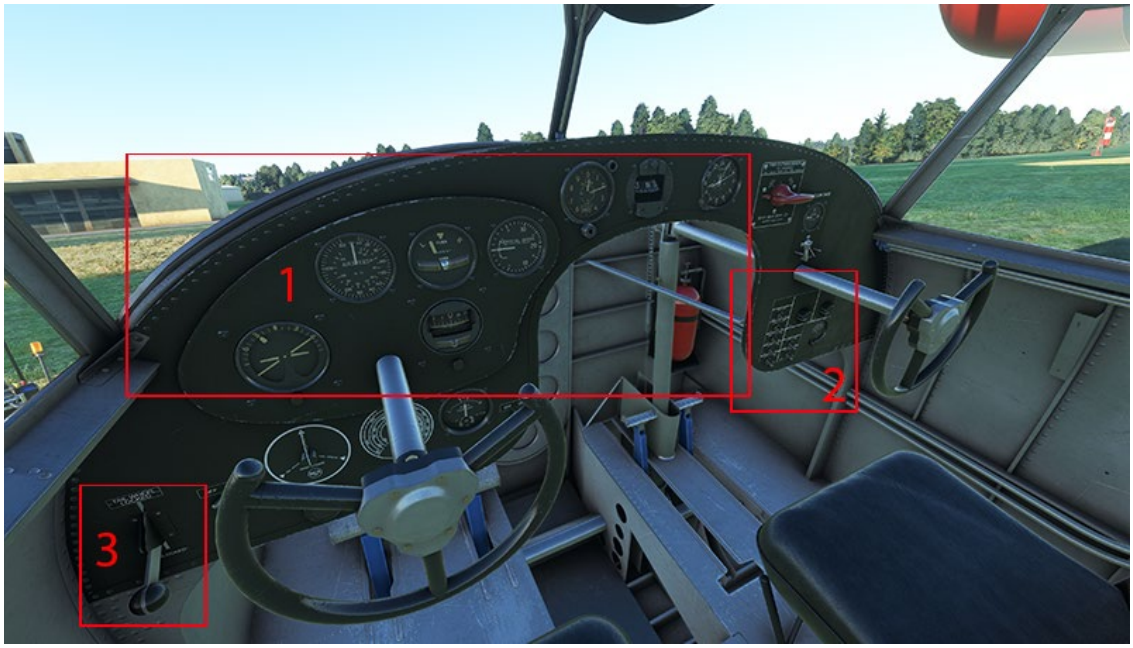
Some features of the aircraft, such as the old-style radio navigation are not functional due to those systems not existing in real world anymore or some functions have been removed for gameplay purposes.
Any gauge, switch, dial or lever that is not animated should be considered as Inoperative [INOP].

Grumman G-21A Goose Specifications

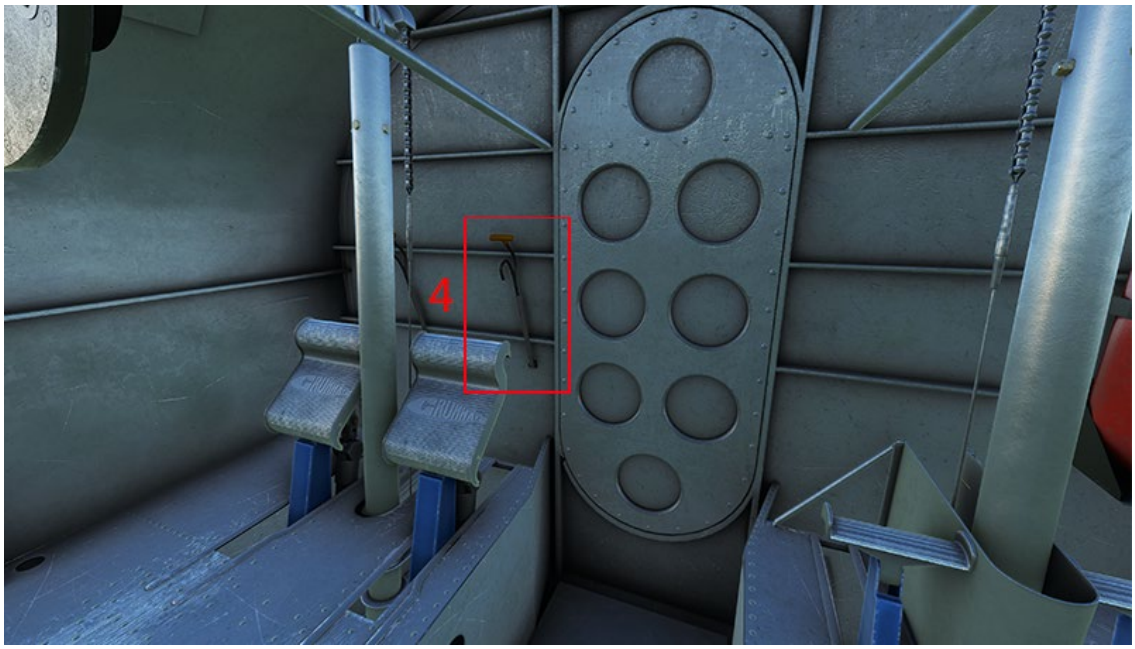
Cruise Speed: 145 MPH
Max Altitude: 24,000 Ft
Max Weight: 8000 Lb
Range: 800 Miles
Fuel Capacity: 220 Gal
Length: 38 Ft
Wingspan: 49 Ft

Cockpit Layout

Main Panel

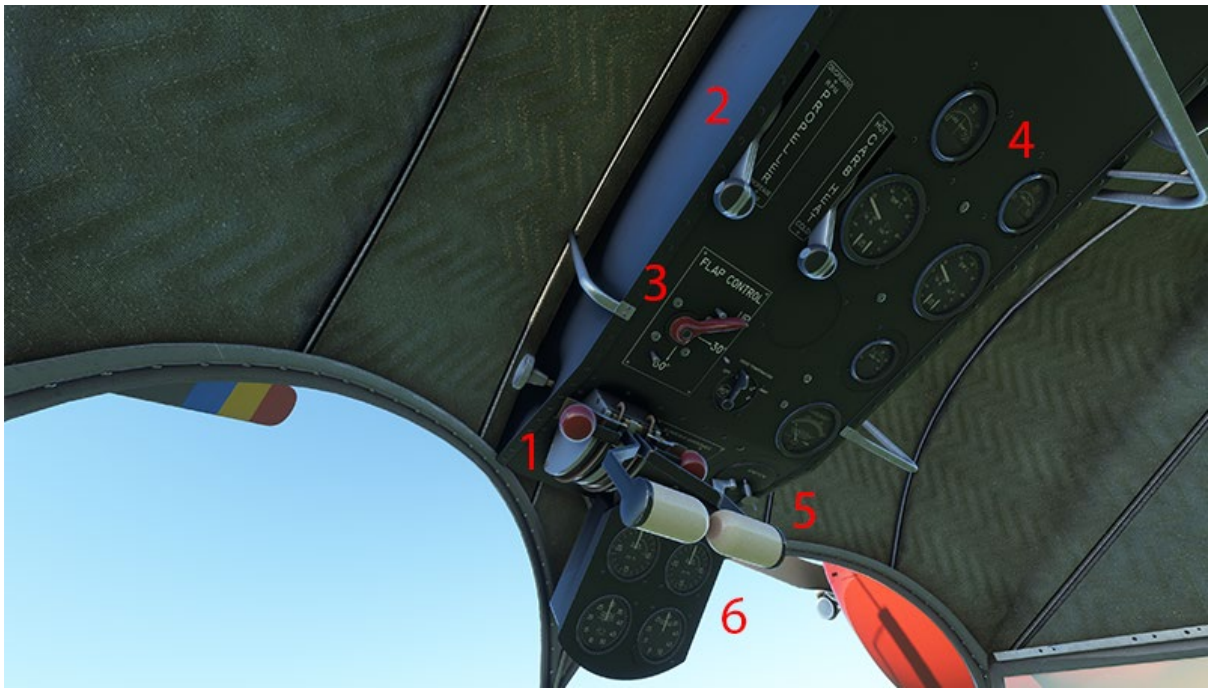


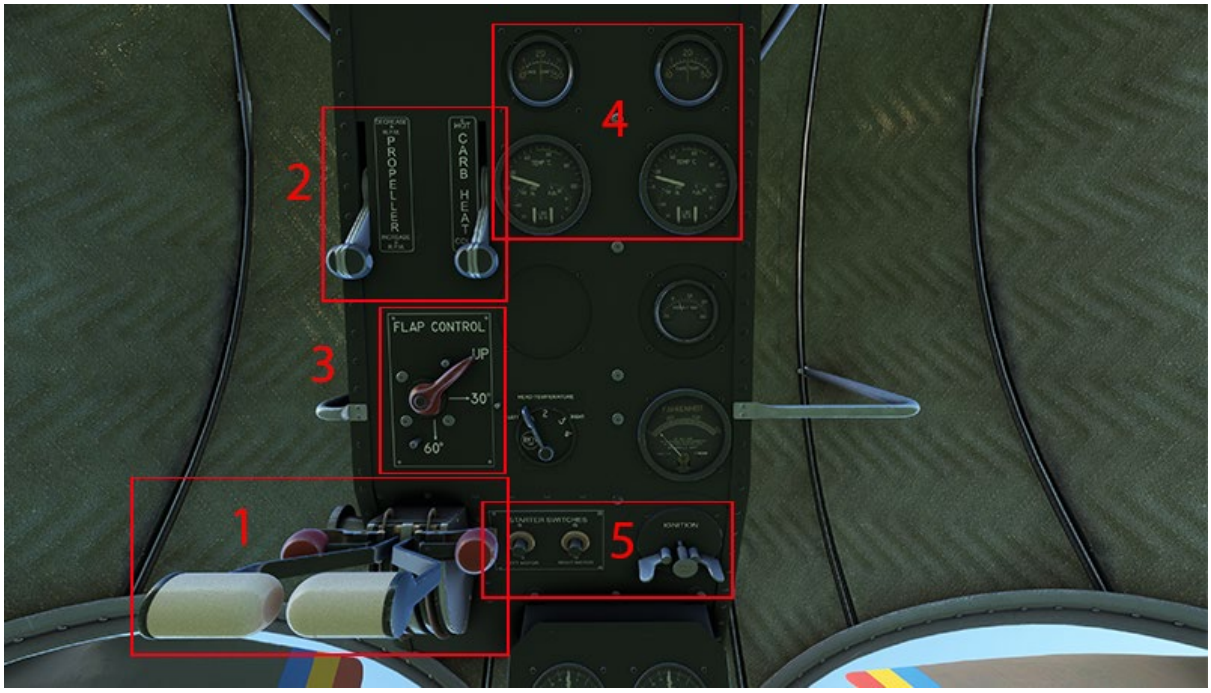
1. Main Instruments
2. Switch Panel
3. Tail Lock Lever



4. Parking Brake

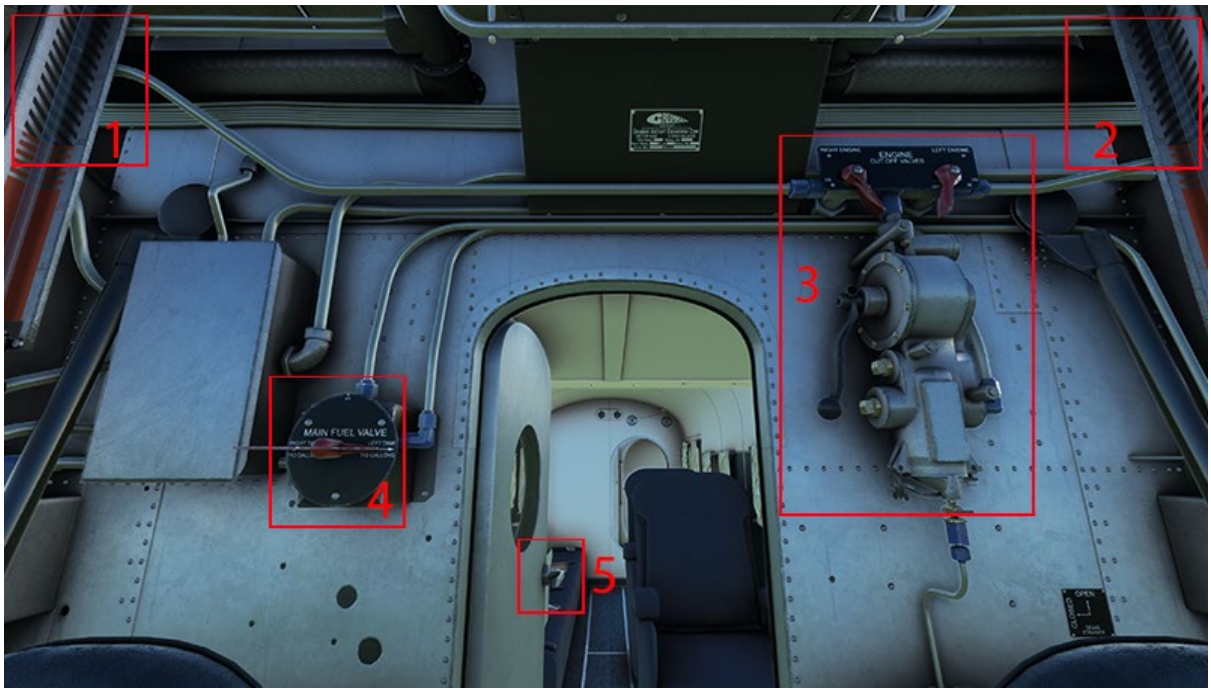
Overhead Panel



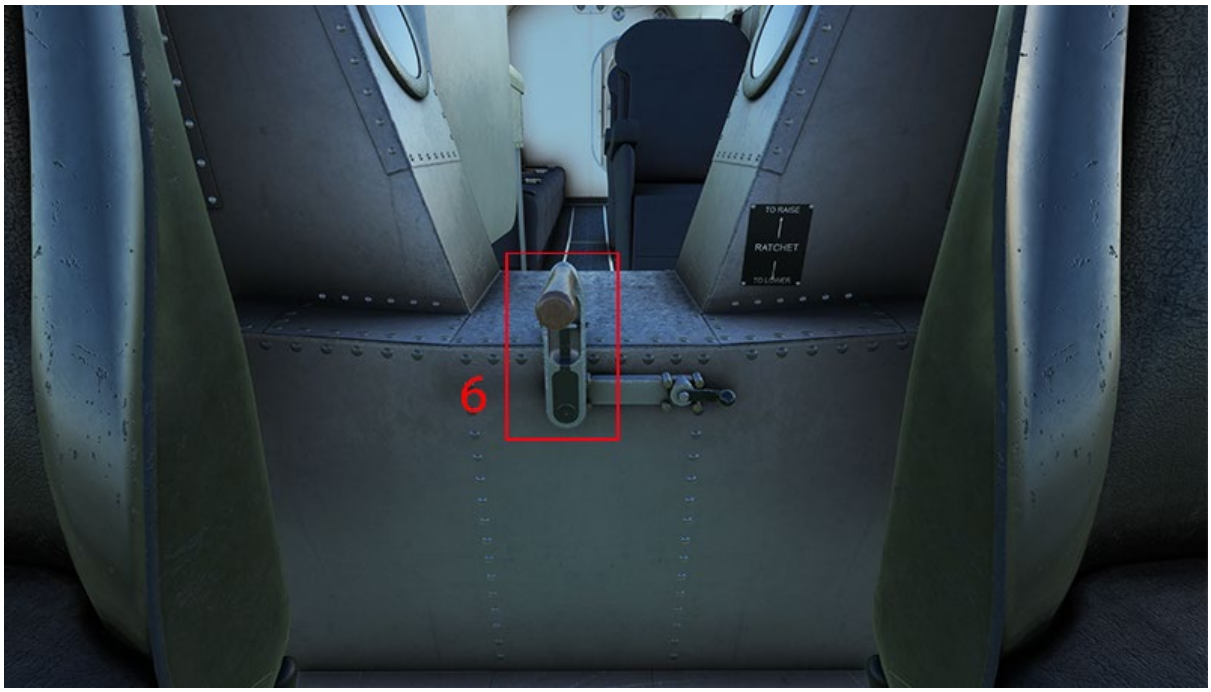


1. Throttle and Mixture Levers
2. Propeller and Carb Heat Levers
3. Flaps Lever
4. Pressure and Temperature Gauges
5. Magnetos and Starter Switches
6. Manifold and RPM Gauges

Fuel Panel and Landing Gear Lever (rear wall of cockpit)

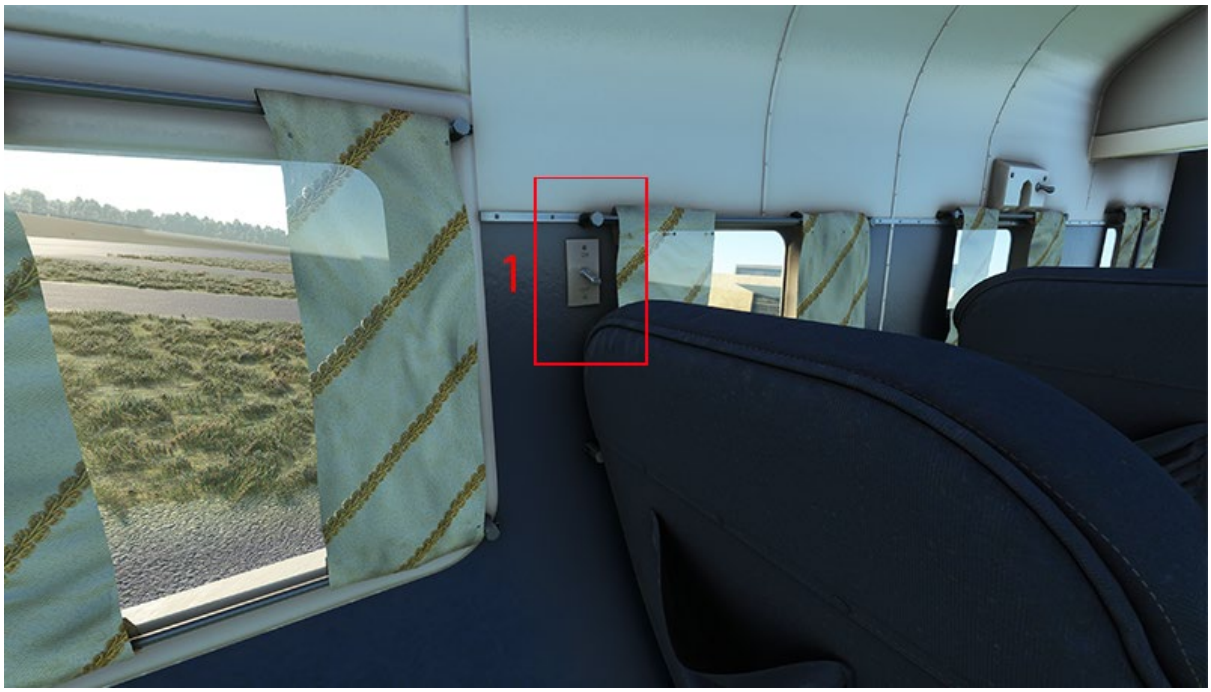


1. Right Tank Fuel Quantity Indicator
2. Left Tank Fuel Quantity Indicator
3. Fuel Valves and Wobble Fuel Pump
4. Fuel Tank Selector
5. Cockpit/Cabin Door Handle

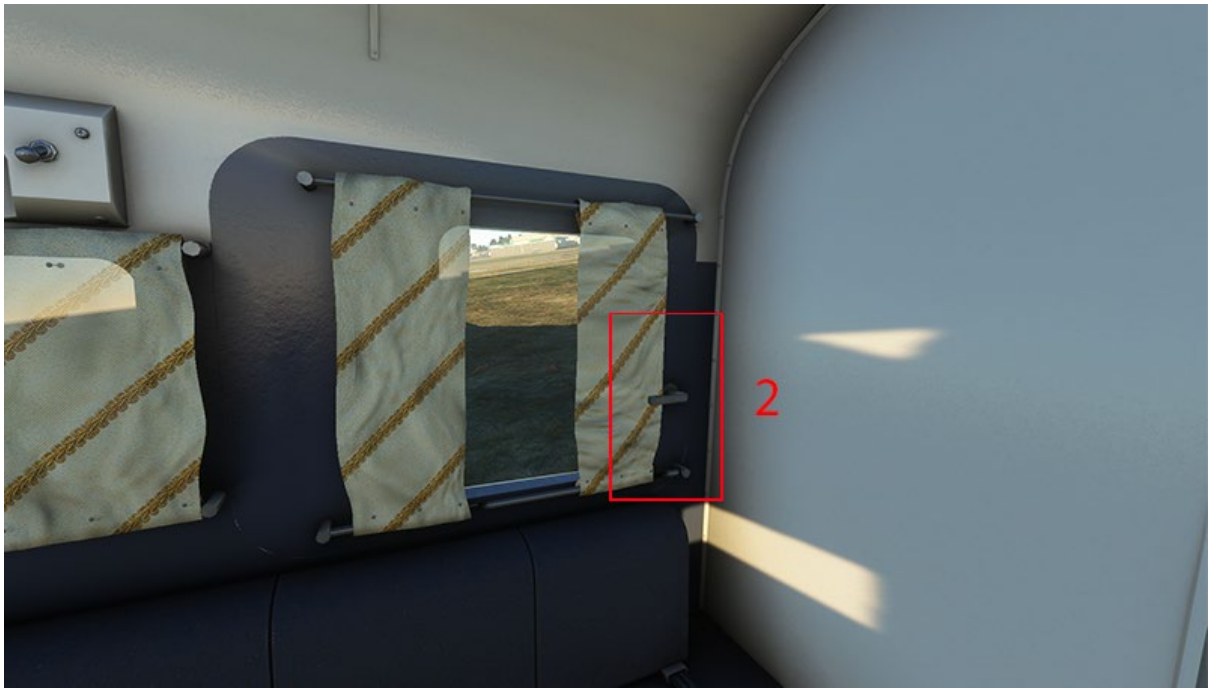


6. Landing Gear Lever

Rear Passenger Cabin



1. Rear Cabin Light Switch
2. Front Cabin Light Switch



1. Main Cabin Door Handle
2. Emergency Cabin Door Handle

Pre-Start

Battery..... ON
Generator..... ON
Push Volt Button to check..... 10-30 VOLTS
Fuel Valves .....Open
Prop levers .....Fully Forward
Carb Heat Levers ..... As Required
Mixture Levers ..... Fully Forward (Rich)
Throttles.....Closed

Right Engine Start

Beacon Light..... ON
Right Magneto ..... BOTH
Wobble Fuel Pump.....Look for > 5PSI
Engine Start Button..... Press with > 5 PSI
Throttle .....Open ½ inch
Monitor RPM and Manifold Pressure .....For Good Start

Left Engine Start

Left Magneto..... BOTH
Engine Start Button.....Press
Mixture/Choke .....Fully Out
Throttle .....Open ½ inch
Monitor RPM and Manifold Pressure .....For Good Start

Normal Taxi, Take Off & Climb (Water and Land)

Flight Controls .....Free and Correct Movement
NAV Light..... ON
Parking Brake ..... Release
Tail Wheel Lock ..... OFF
Throttle.....Advance
Taxi ..... Slowly
Steering .....With Rudder
Line Up .....Runway Centreline
Tail Wheel Lock .....On
Flaps ..... Fully UP
Throttle.....Moderate Increase Until Full for Takeoff
Stick .....Hold Slightly Back
Rudder..... Hold Slightly Left
Positive Climb.....Gear UP as appropriate

Cruise

RPM..... 1900
Manifold..... 27 Inches
Engine Gauges.....Check within limits

Descent and Approach

Prop levers ..... Fully Forward
Descent Speed..... 80-100 MPH
Flaps Stage 1.....Below 100 MPH
Tail Wheel Lock .....On

Water Landing & Taxi

Tail Wheel Lock ..... OFF
Gear.....UP
Stick Maintain Back Pressure .....½ Inch
Flaps Fully Down ..... Not Above 200ft AGL
Maintain Descent and Touch Down Speed..... 70-80 MPH
At Touch Down..... Throttle IDLE
Flaps Fully Up .....As soon as possible whilst on the water
Stick Slowly Back ..... As Speed Decreases
Steering .....With Rudder and Differential Throttle as Required

Water Transition at Shoreline

Upon Reaching Shore and Traversing to Land ..... Gear DOWN
Throttle ..... Advance Slowly
Taxi ..... As Normal

Hard/Soft Surface Landing & Taxi (non-water)

Straight in Approach to the Runway ..... Carry Out
Maintain Speed in Downwind Leg ..... 80-100 MPH
Tail Wheel Lock ..... As Required
Gear ..... DOWN
Flaps Fully Down ..... Not Above 200ft AGL
Maintain Descent and Touch Down Speed ..... 70-80 MPH
At Touch Down ..... Throttle IDLE
Stick Slowly Back ..... As Speed Decreases
Toe Brakes ..... Gently Apply as Required
Flaps ..... UP
Steering ..... With Rudder and Differential Throttle as Required
Taxi ..... As Normal
NAV Lights ..... OFF
Parking Brake ..... ON

After Landing & Shutdown

Fuel Valves ..... OFF
Fuel Pressure ..... Monitor at Zero
Throttles ..... Closed
Magnetos (Both) ..... OFF
Generator ..... OFF
Battery ..... OFF