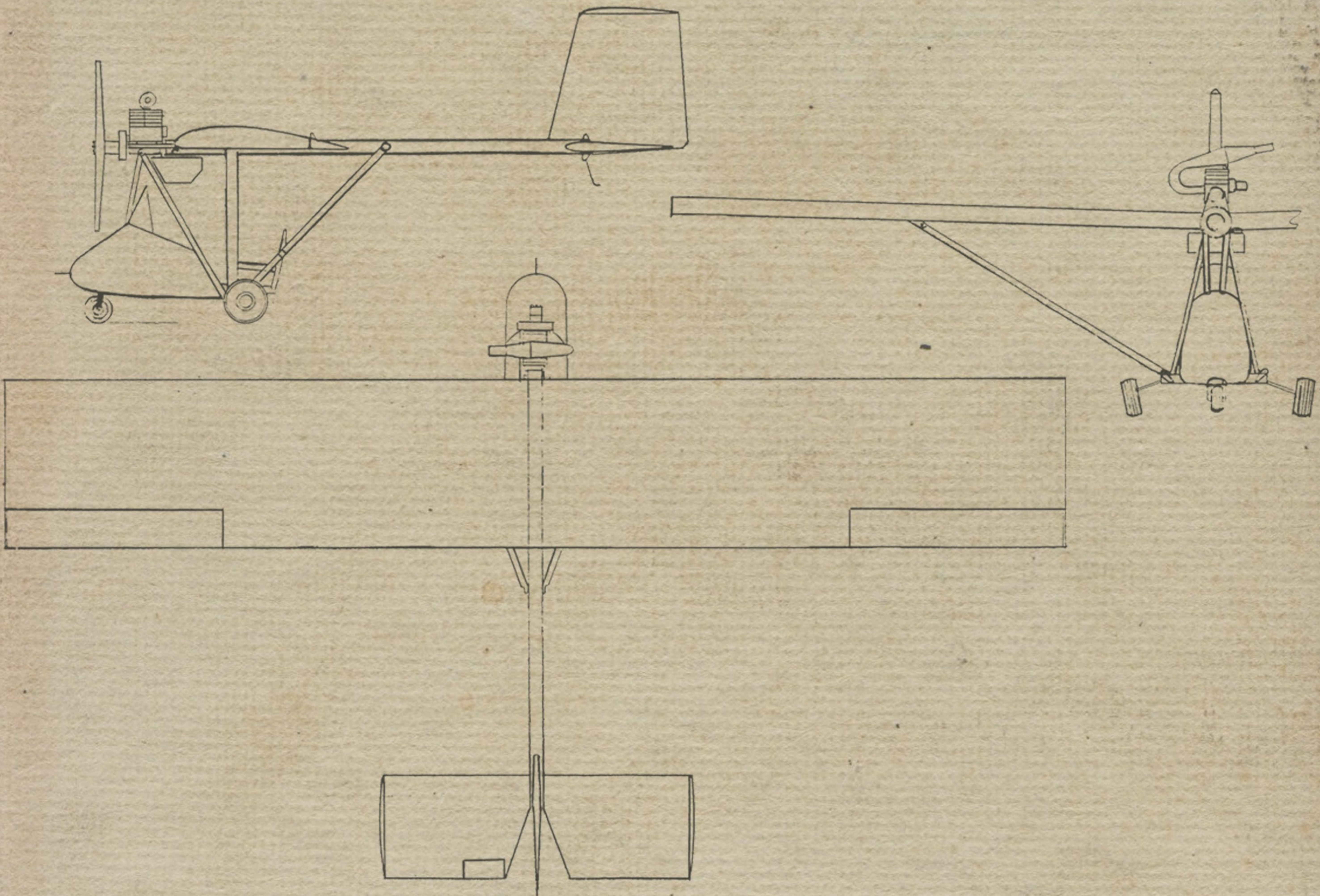


£5

PILOT'S OPERATING HANDBOOK

Whittaker MW6 Merlin



RARA-AVIS SIMS

ASOBO
STUDIO

Microsoft
Flight Simulator
2024

XBOX
GAME STUDIOS

INTRODUCTION



Rara Avis means 'Rare Bird' in Latin. The name was chosen because many of the subjects are not mainstream, such as F15's or Spitfires. They are less well known, but still appealing subjects.

Rara-Avis Sims hope to bring you high quality models which can be purchased for your use in Microsoft Flight Simulator 2024.

IMPORTANT INFORMATION

This product is intended for entertainment purposes only and should not be used for real world flight training.

No replication, reverse engineering of this software, either in whole or in part, is permitted in ANY form without the express written permission of Rara-Avis Sims. Any enquiries regarding commercial, military or academic use of this software should be directed to rara-avis_sim@outlook.com

By installing this software, you are hereby agreeing to the above terms and conditions.

It is recommended that the flight model within the simulator is set to modern to get the best flight dynamics from all planes.

KNOW THE WHITTAKER MW6 MERLIN



The Whittaker MW6 Merlin is a British ultralight, two-seat tandem aircraft designed by Mike Whittaker for amateur builders. Based on the single-seat MW5 Sorcerer, the MW6T "Merlin" variant features a strut-braced parasol wing, open cockpit, and fixed tricycle landing gear—with the engine mounted in tractor configuration above the cockpit.

Constructed from aluminum tubing and doped fabric-covered flying surfaces, it spans nearly 10m with a wing area of around 15.2m². It's most often powered by a 50hp Rotax 503 two-stroke engine. The model earned approval from the UK's Light Aircraft Association, and over 200 plan sets have been sold.

Styled as a 1930s aircraft, the design employs an unusual curved main rotor mast that also serves as a vertical stabilizer.

General characteristics

Crew: 2
Length: 15 ft 10 in (4.6 m)
Wingspan: 32 ft 9 in (9.98 m)
Empty weight: 419 lb (190 kg)
Gross weight: 8660 lb (390 kg)
Powerplant: 1 Rotax 503, 37 Kw (50hp)

Performance

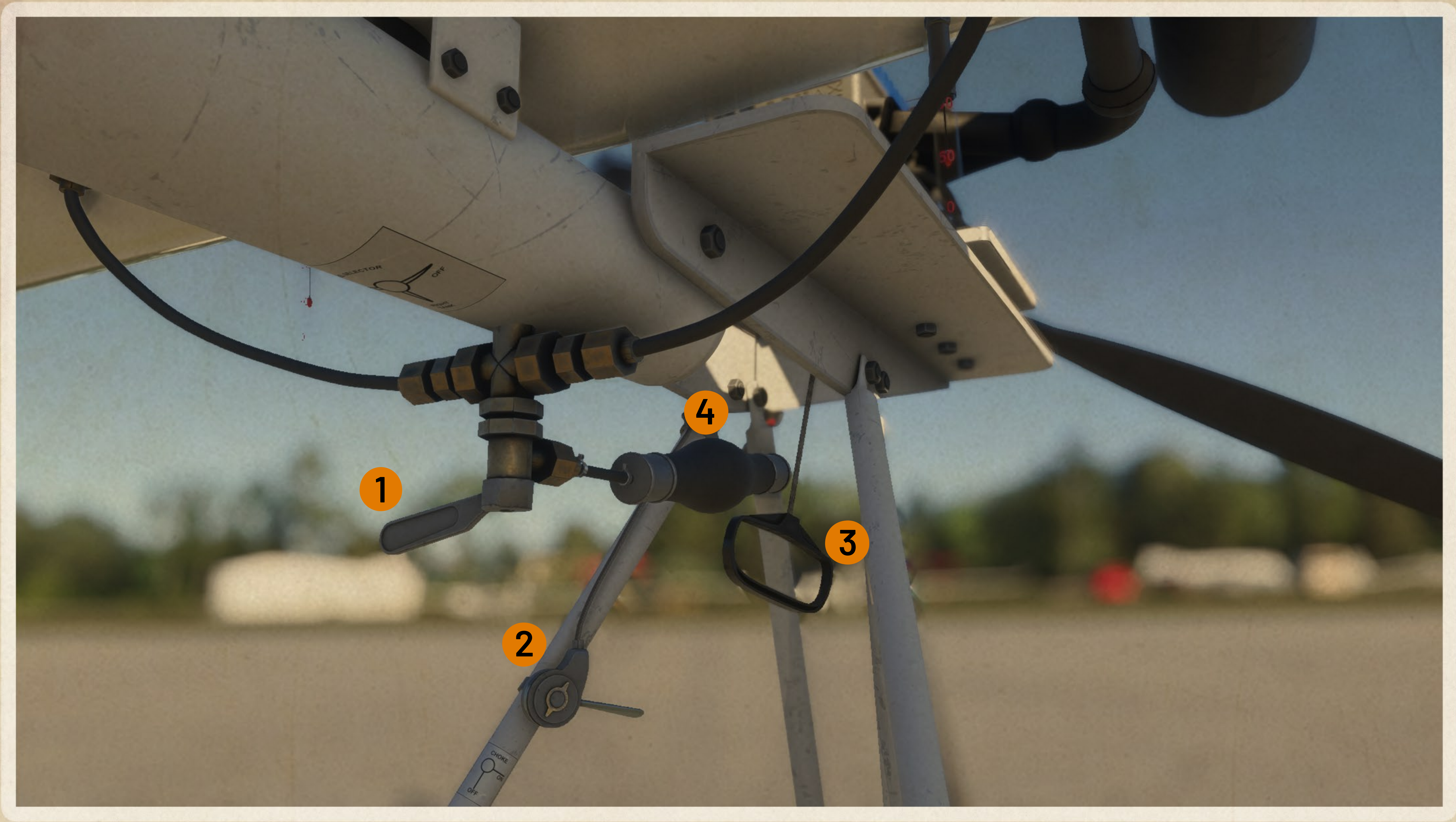
Maximum speed: 92 mph (148 km/h, 80 kn)
Cruise speed: 63 mph (102 km/h, 55 kn)
Stall speed: 35 mph (56 km/h, 30 kn)
Rate of climb: 490 ft/min (2.5 m/s)

PRODUCT FEATURES

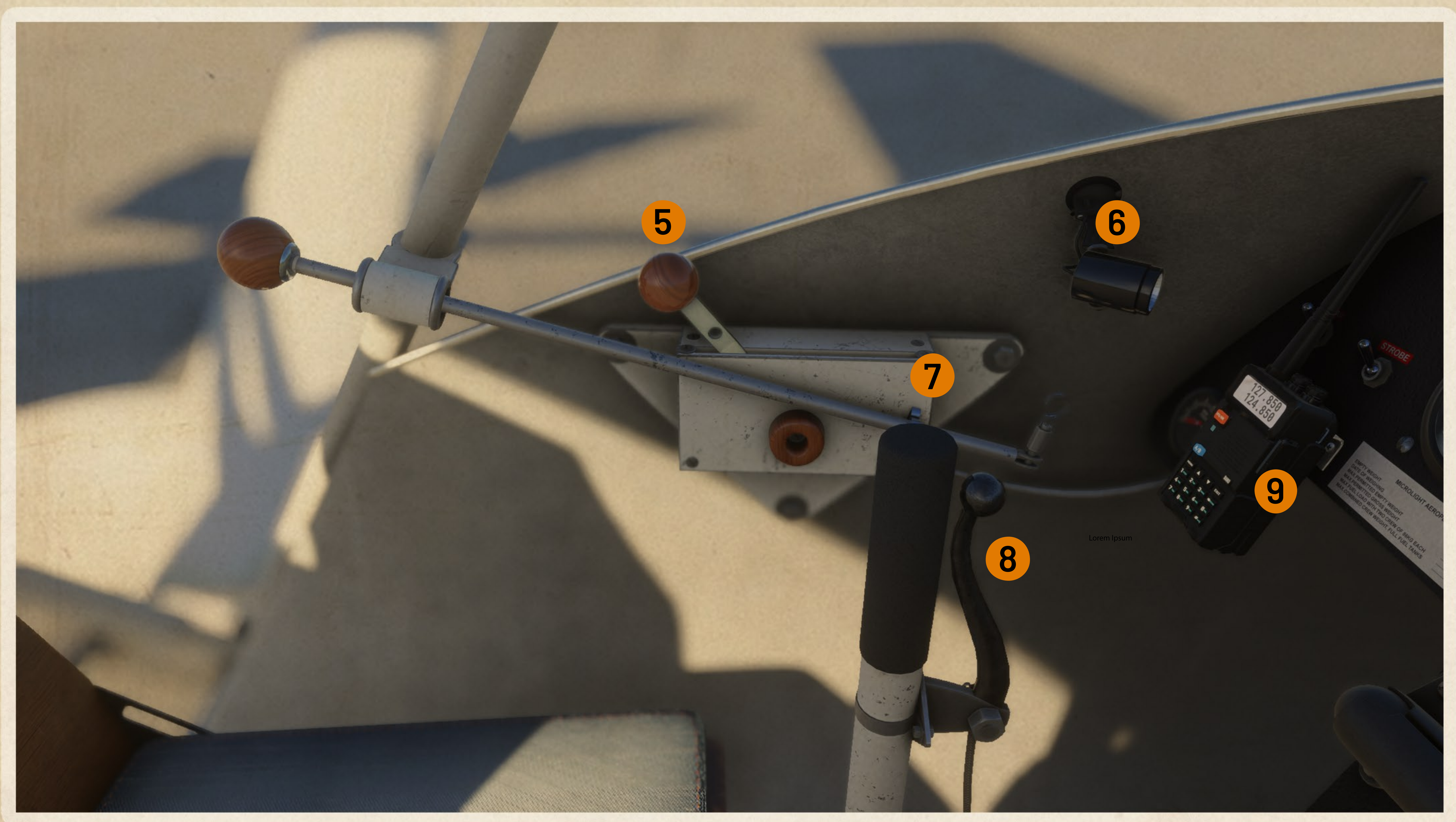


- . For Microsoft Flight Simulator 2024 only
- . PBR textures
- . Advanced 3D propeller blur
- . Detailed 3D model
- . Uses MSFS 2024 avatar pilots
- . 3D gauges
- . Custom sounds
- . Custom camera positions
- . 7 liveries + livery options within the logbook
- . Windscreen rain and icing effects
- . Custom animations
- . Custom plexiglass texture
- . Custom decals
- . FX - Tyre, dust
- . Custom nav & strobe light coding
- . Custom engine start-up procedure
- . Modular liveries
- . Togglable chocks, tie-downs, propeller & pitot covers
- . Custom checklist
- . Pre flight inspection
- . Detailed Rotax 503 engine
- . EFB (Electronic Flight Bag)
- . Pilots logbook for livery selection
- . Node based panel lighting

COCKPIT ORIENTATION 1



- 1. Fuel control
- 2. Enricher/Choke
- 3. Pull starter
- 4. Engine primer

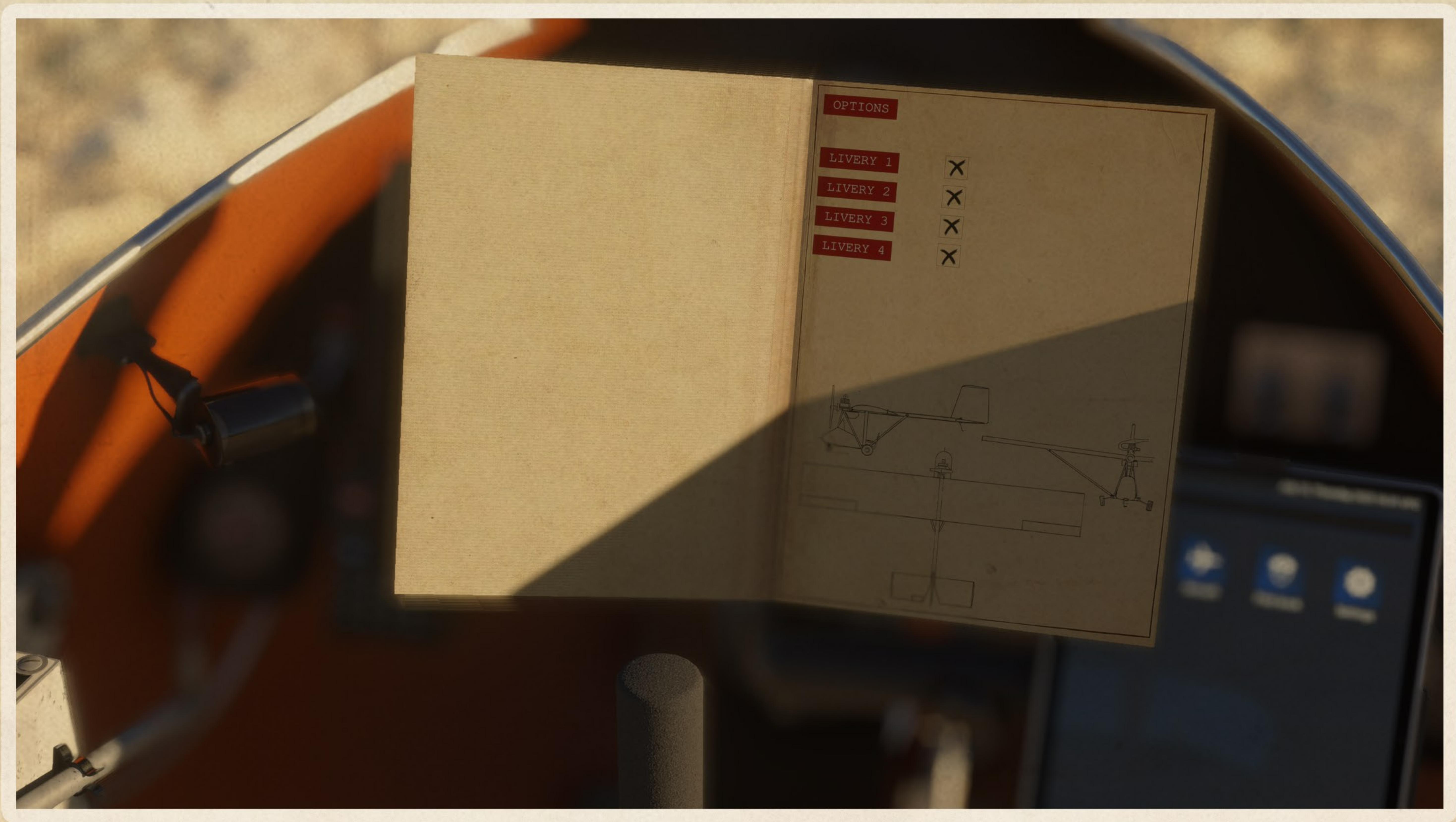


- 5. Throttle
- 6. Panel lighting
- 7. Throttle swapper for co-pilot
- 8. Parking brake/Brakes
- 9. Radio

COCKPIT ORIENTATION 2



- | | |
|-----------------------|-------------------------------|
| 1. M803 digital clock | 9. Battery |
| 2. Compass | 10. Magnetos |
| 3. Transponder | 11. Oil temperature |
| 4. Nav lights | 12. Cylinder head temperature |
| 5. Strobe lights | 13. RPM |
| 6. Airspeed | 14. Slip |
| 7. Altimeter | 15. Toggle EFB |
| 8. Vertical speed | |



Pilots loogbook can be found under the pilots seat.

EXTERNAL ORIENTATION



1. Check rudder
2. Check right aileron
3. Check left aileron

4. Enter aircraft
5. Check main tire pressure and condition
6. Check nose tire pressure and condition



7. Add or remove Propeller covers
8. Add or remove pitot cover
9. Add or remove wheel chocks
10. Add or remove tie-downs

NORMAL PROCEDURES 1

PREFLIGHT

1. Remove wheel chocks
2. Remove pitot cover
3. Check all moveable surfaces
4. Check wheels/tires
5. Check fuel quantity

STARTUP

1. Throttle open 1/4 inch
2. Enricher set to ON if air temperature is below 15°C and engine is cold
3. Magnetos (both)
4. Fuel set to left tank
5. Brakes test and set
6. Battery (on)
7. Pull starter (on) *
8. Engine gauges (check)
9. Transponder (ground)
10. Brakes (released)

TAKE-OFF

1. Release brakes
2. Advance throttle slowly
3. Apply slight rudder to counteract engine torque
2. Apply slight back pressure on control stick
4. At approximately 47 Knots slowly pull back on the control stick

* This may take more than one pull to start the engine.



NORMAL PROCEDURES 2

CRUISE

1. At cruise altitude adjust the throttle as necessary to maintain level flight
2. Use elevator trim to fine-tune level flight

DESCENT AND LANDING

1. Adjust throttle as necessary, when close to the runway reduce the throttle, be careful not to come in too fast and flip the plane over.
2. Ideally the main rear landing gear should touch down first, then slowly bring the nose wheel down.
3. Apply slight back pressure on the control stick to prevent ground looping.
4. Apply brakes while pulling back on the control stick until the desired taxi speed has been reached.

SHUTDOWN

1. Move the throttle to the closed/off position
2. Brakes (on)
3. Fuel selector to off position (off)
4. Magnetos (off)
5. Battery (off)
6. Exit aircraft
7. Chocks (on)
8. Pitot cover (on)
9. Propeller cover (on)



CREDITS

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3d model
Textures
Sounds
Coding
Flight dynamics

Freja Forrest

Testing

Support

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