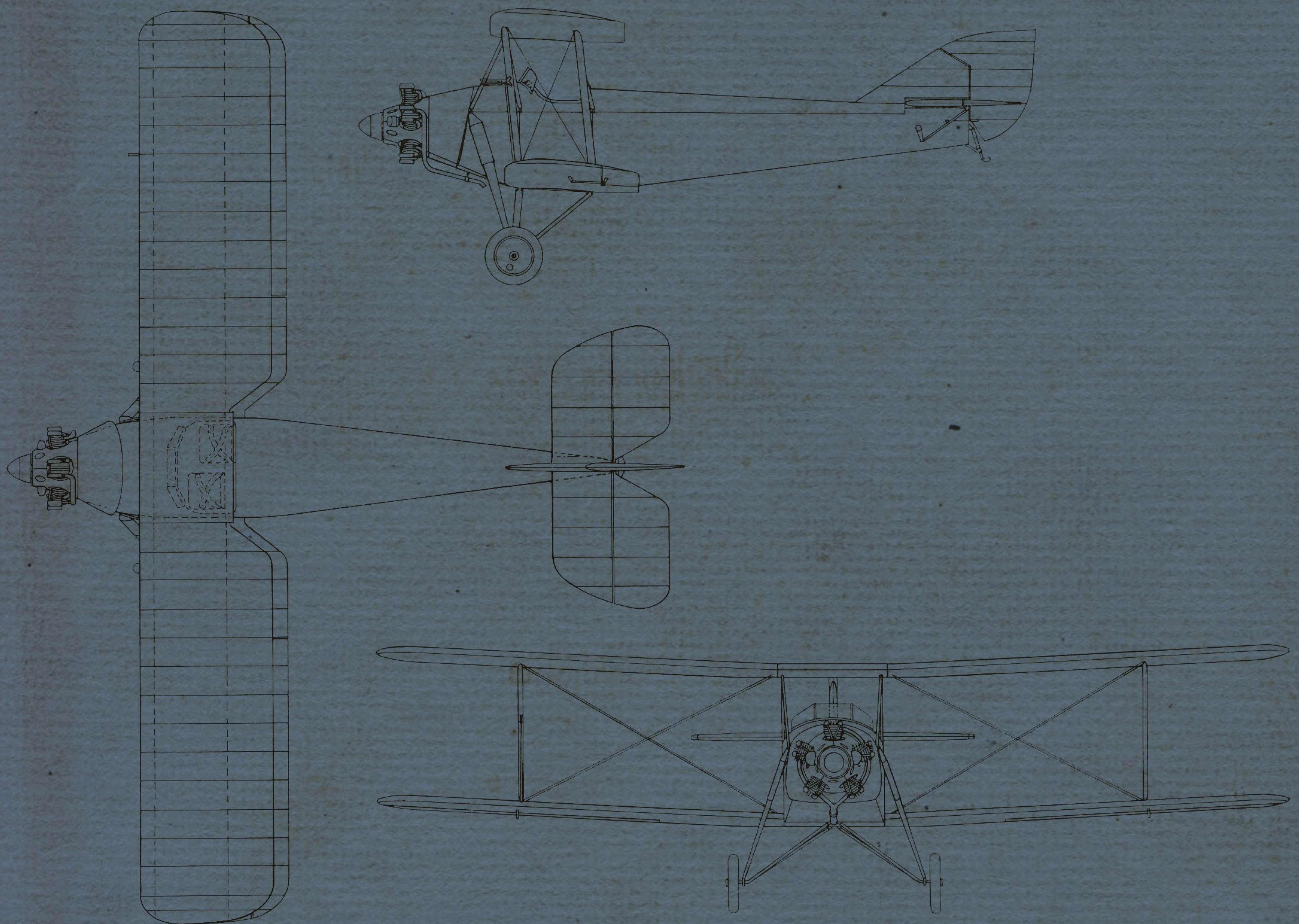# PILOT'S OPERATING HANDBOOK

Robinson Redwing
II & III

£5

RARA-AVIS SIMS

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.

The Robinson Redwing was a British two-seat single-engined biplane light aircraft built in the UK in 1930. Twelve were produced, selling mostly to Clubs; only one aircraft survives.

First flown in May 1930, the Robinson Redwing appeared at the peak of the boom in light aircraft enthusiasm in the UK. It was a single bay biplane with simple, parallel pairs of interplane struts. With only slight stagger, the wings were easy to fold. The tailplane was fixed to the top of the fuselage and the elevators were divided to allow rudder movement. Pilot and passenger sat side by side under the upper wing. Ahead of them the fuselage tapered to the engine mounting. The wide track undercarriage was of split axle type.

General characteristics

Crew: 2
Length: 22 ft 8 in (6.91 m)
Wingspan: 30 ft 6 in (9.30 m)
Height: 8 ft 7 in (2.62 m)
Wing area: 250 sq ft (23.2 m2)
Empty weight: 870 lb (395 kg)
Gross weight: 1,450 lb (658 kg)
Powerplant: 1 × Armstrong Siddeley Genet IIA 5-cylinder radial , 80 hp

Performance

Maximum speed: 95 mph (153 km/h, 83 kn)
Cruise speed: 85 mph (137 km/h, 74 kn)
Range: 275 mi (442 km, 239 nmi)
Range: 329 mi (531 km, 286 nmi)
Rate of climb: 800 ft/min (4.06 m/s)

. 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
. 4 liveries
. Windscreen rain and icing effects
. Custom animations
. Custom plexiglass texture
. Custom decals
. FX – Tyre, dust
. Two variants
. Wing fold animation
. Animated landing gear suspension
. Custom checklist
. Pre flight inspection (prop cover, pitot cover, chocks & tiedowns)
. EFB (Electronic Flight Bag)
. Clipboard with options
. Custom pitot animation (beta)
. Luggage compartment
. Detailed Armstrong Siddeley Genet engine
. Hand and quick start engine procedures
. GPS & transponder (hidden by default)
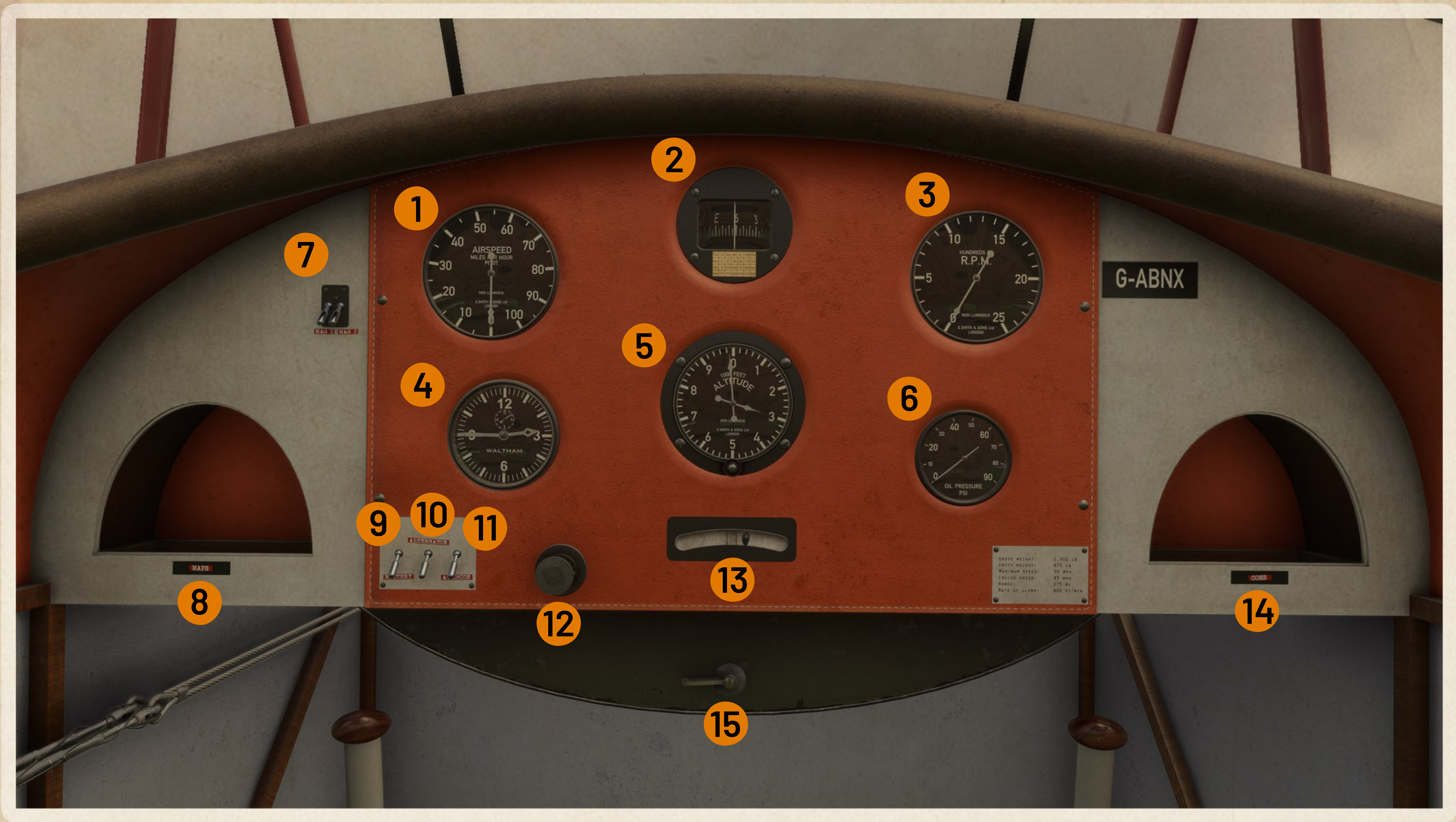
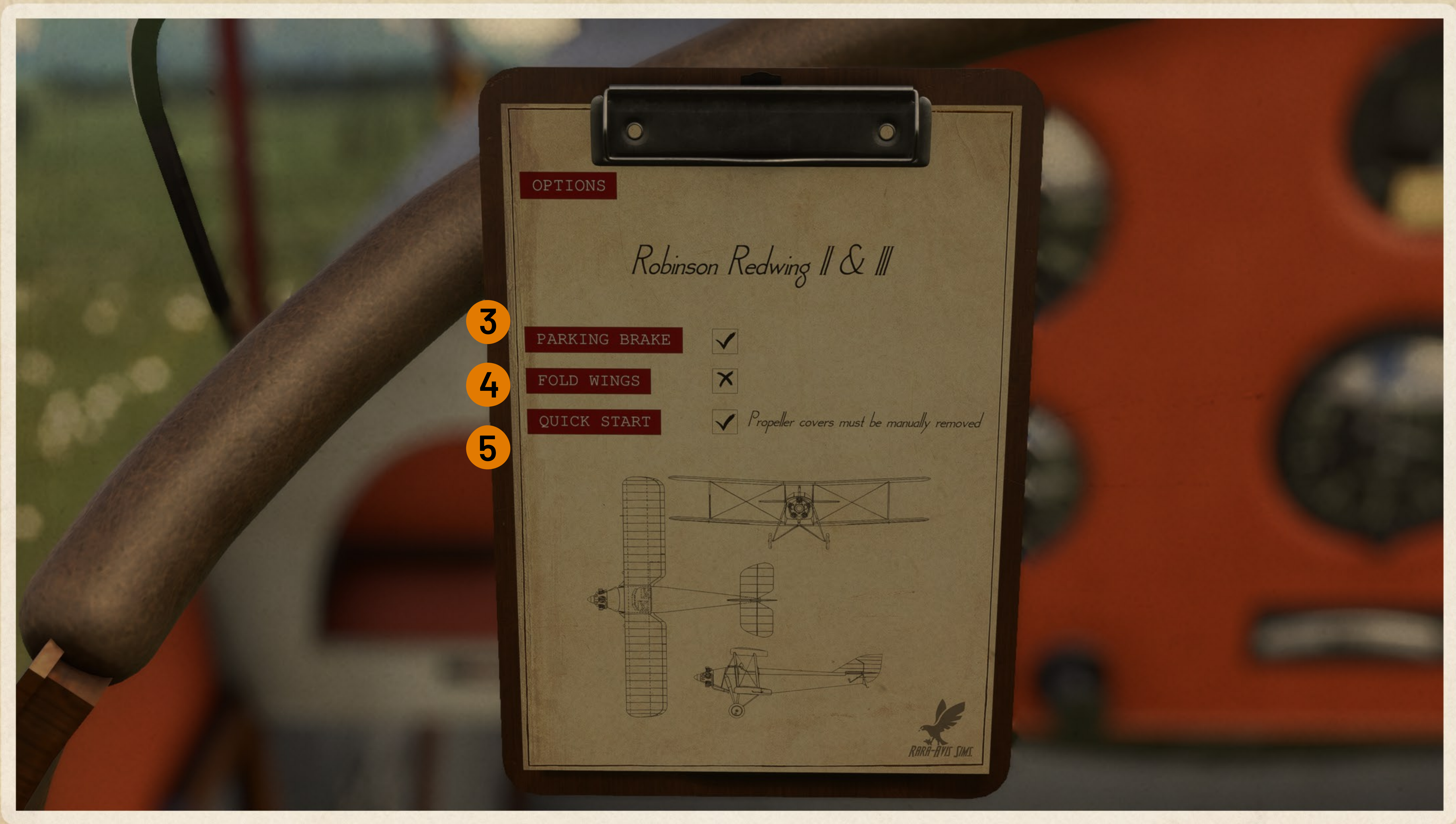|		
1. Airspeed (MPH)	6. Oil pressure	11. Avionics
2. Compass	7. Magnetos	12. Primer
3. RPM	8. GPS	13. Slip
4. Clock	9. Battery	14. Transponder
5. Altimeter	10. Alternator	15. Fuel valve

16. Throttle	20. Open door
17. Mixture	21. Brakes/parking brakes
18. Elevator trim	22. Fuel gauge
19. Clipboard	

1. Toggle EFB
2. Open door

3. Toggle paking brakes
4. Toggle wing fold
5. Engine "quick start"

1. Add or remove pitot cover
2. Toggle wing fold
3. Enter aircraft
4. Check landing gear struts
5. Toggle propeller covers

6. Check tire pressure and condition
7. Toggle chocks
8. Toggle tie-downs
9. Hand start engine*

Engine must be primed with battery, mixture, magnetos and fuel controls set.

10. Check rudder
11. Check elevator
12. Check tail skid

13. Open/close luggage compartment
14. Check ailerons

PREFLIGHT

   Remove propeller cover
2. Remove wheel chocks & tie-downs
3. Remove pitot cover
4. Check all moveable surfaces
5. Check wheels/tires
6. Check both leg struts & tail skid

STARTUP (manual)

1. Throttle open 1/4 inch
2. Mixture set to rich
3. Magnetos (both)
4. Brakes test and set
5. Battery (on)
6. Avionics (on)
7. Fuel valve (on)
8. Primer (x3)
9. Starter (on) – Exit aircraft and turn propeller
10. Alternator (on)
11. Engine gauges (check)
12. Transponder (ground)
13. Brakes (released)

TAKE-OFF

1. Release brakes
2. Advance throttle slowly
3. Apply slight back pressure on control stick
2. Apply slight rudder to counteract engine torque
3. At approximately 30 Knots slowly pull back on the control stick

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 to fast and flip the plane over.
2. Apply slight back pressure on the control stick to prevent ground looping.
3. 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
3. Parking brakes (on)
4. Mixture (off)
5. Fuel valve (off)
6. Magnetos (off)
7. Alternator (off)
8. Avionics (off)
9. Battery (off)
10. Exit aircraft
11. Chocks & tie-downs (on)
12. Pitot cover (on)
13. Propeller cover (on)

CREDITS

Craig Richardson

3d model
Textures
Sounds
Coding
Flight dynamics

Freja Forrest

Flight dynamics
Testing

Support

rara-avis_sim@outlook.com

© Rara-Avis Sims
2025