BOX Quick Guide

Warning work in progress!

This guide is meant to be a quick reference for the basic operating procedures and gauges of all the aircraft, for both new and advanced users. This includes engine start up and engine management as well as takeoff and landing. The pages have been formatted in such a way to make for easy printing. The contrast has been adjusted so that it's legible on even the cheapest of printers! I recommend opening this guide on a second screen or printing out the few pages you need.

Be warned this is a work in progress. I am not an expert pilot and I welcome constructive feedback! If you see an error please let me know on the forum thread.

For potential updates please check on the forum thread here.

Good luck and see you in the skies!

Table of Contents

Key bindings 3
Fighters 5
Russian 5
I-16 Ishak Type 24 1941 (BOM) 5
MIG-3 Series 24 1941 (BOM) 7
P-40E-1 1941 (BOM) 9
LaGG-3 Series 29 1942 (BOS) 11
Yak-1 Series 69 1942 (BOS) 13
La-5 Series 8 1942 (BOS) 15
Supermarine Spitfire Mk. VB 1941(BOK) 17
Yak-1b Series 127 1943 (DLC) 19
Yak-7B Series 36 1942 (BOK) 21
P-39L-1 1943 (BOK) 23
La-5FN Series 2 1943 (DLC) 25
German 27
Bf 109 E-7 1940 (BOM) 27
Bf 109 F-2 1941 (BOM) 29
MC 202 Series VIII 1942 (BOM) 31
Bf 109 F-4 1941 (BOS) 33
Bf 109 G-2 1942 (BOS) 35
Fw 190 A-3 1942 (BOS) 37
Bf 109 G-4 1943 (BOK) 39
Fw 190 A-5 1943 (BOK) 41

Bf 109 G-6 1943 (DLC) 43
Ground Attack/Heavy Fighters 45
Russian 45
IL-2 AM-38 model 1941 (BOM) 45
IL-2 AM-38 model 1942 (BOS) 47
IL-2 AM-38F 1943 (BOK) 49
A-20B 1942 (BOK) 51
German 53
Bf 110 E-2 1940 (BOM) 53
Ju 87 D-3 1942 (BOS) 55
Bf 110 G-2 1942 (BOK) 57
Hs 129 B-2 1942 (BOK) 59
Bombers/Utility 61
Russian 61
Pe-2 Series 35 1941 (BOM) 61
Pe-2 Series 87 1942 (BOS) 63
German 65
Ju 88 A-4 1941 (BOM) 65
He 111 H-6 1941 (BOS) 67
He 111 H-16 1943 (BOK) 69
Ju 52/3m 1936 (DLC) 71
Guides 73
Level Bombing Guide 73

Default key bindings

Game Settings

Mission briefing: O
Map mode: -------- M
Hide markers: ----- i
Hide hud: ---------- H
Pause: ---------- P
Accelerate Time:]
Decelerate Time: [
Enable recording: L_Crtl + R
FPS Counter: ----- Backspace
Menu: ---------- ESC
Lobby/Score: ---- tab
Chat all: ---------- Enter
Chat friendly: ---- R_Crtl + Enter

Engine difficulty settings

Disable automatic radiator: L_Shift + R
Disable automatic engine: L_Shift + M
Disable RPM limiter: -------- L_Shift + N

Gear/ Flaps and other Controls

Toggle landing gear: --- G
Flaps Up: ---------- LShift + F
Down: ---------- F
Toggle air brakes: ------- RAlt + B
Toggle tail wheel lock: - LShift + G
Toggle parking brake: -- LShift + /
Wheel brakes: ---------- /
Open/Close canopy: ---- RAlt + C
Toggle landing lights: --- RShift + L
Toggle navigation lights: RCrtl + L
Toggle cockpit lights: --- L
Eject: ---------- LCrtl + E

Engine Controls

Start/Stop engine: ---- E
Select All engines: ----- 0
Select engine 1: -------- 1
Select engine 2: -------- 2
Select engine 3: -------- 3
Throttle control Up: --- **-**
Down: --- **=**
RPM Control Up: ------- R_Shift + =
Down: ------- R_Shift + **-**
Mixture Control Up: --- R_Alt + =
Down: --- R_Alt + **-**
Toggle super charger: - L_Shift + S
Toggle boost: ---------- L_Shift + B
Toggle auto prop pitch: R_Shit + P
Propeller pitch Up: ----- R_Shift + =
Down: ----- R_Shift + **-**
Feather propeller: ------ LCrtl + F
Toggle auto radiators: R_Shift + R
Water radiators Open: R_Crtl + =
Close: R_Crtl + **-**
Oil radiators Open: ----- R_Win + =
Close: ----- R_Win + **-**
Inlet cowl Open: -------- L_Crtl + =
Close: -------- L_Crtl + **-**
Outlet cowl Open: ----- L_Alt + =
Close: ----- L_Alt + **-**

Bomb/Rocket Controls

Bomb sight: ---------- V
Bomb mode toggle: ---- L_Win + B
Delay between bombs: L_Crtl + B
Drop bombs/other: ----- B
Toggle bomb bay doors: N
Bomb safety switch: ---- L_Win + S
Rocket mode toggle: --- L_Win + R
Launch rockets: ---------- R
Reload guns: ---------- L_Alt + R

Default key bindings Continued

Player Gunner Controls

Switch gunner positions: ---------- L_Crtl + C
Switch between gun/firing points: L_Shift + C
Toggle gun sight: ---------- L_Shift + T
Take control of gun: ---------- T
Reload gun: ---------- L_Alt + R
Adjust Range: R_Alt + Comma & R_Alt + Slash

Gunner Orders

Fire at will : ---------- R_Alt + 1
Return fire: ---------- R_Alt + 2
Cease fire: ---------- R_Alt + 3
Cease heavy weapons fire: R_Alt + 4
Fire at balloons: ---------- R_Alt + 5
Attack ground targets: ----- R_Alt + 6
Fire at short range: --------- R_Alt + 7
Fire at normal range: ------ R_Alt + 8
Fire at long range: ---------- R_Alt + 9

Flares

Select red flare: --- L_Crtl + 1 L_Alt + R
Select green flare : L_Crtl + 2
Select white flare: L_Crtl + 3
Shoot flare: -------- L_Crtl + Space
Put flare away: ---- L_Crtl + ~
Open Canopy: ----- R_Alt + C
*Canopy may need to be open to shoot flare

Trim Controls

Reset timmers: ------ LCrtl + T
Yaw trim left: -------- LCrtl + Z
Right: -------- LCrtl + X
Pitch trim up: -------- RCrtl + CursorDown
Down: -------- RCrtl + CursorUp
Roll trim left: --------- RCrtl + CursorLeft
Right: --------- RCrtl + CursorRight
Fw190 Stabilizer up: RShift + CursorDown
Down: RShift + CursorUp

Squadron Orders

Attack nearest air target: ----- L_Alt + 1
Attack nearest ground target: L_Alt + 2
Return to mission: ---------- L_Alt + 3
Copy me: ---------- L_Alt + 4
Cover me: ---------- L_Alt + 5
Patrol the area: ---------- L_Alt + 6
Patrol for air targets: ---------- L_Alt + 7
Patrol for ground targets: ----- L_Alt + 8
Return to base: ---------- L_Alt + 0

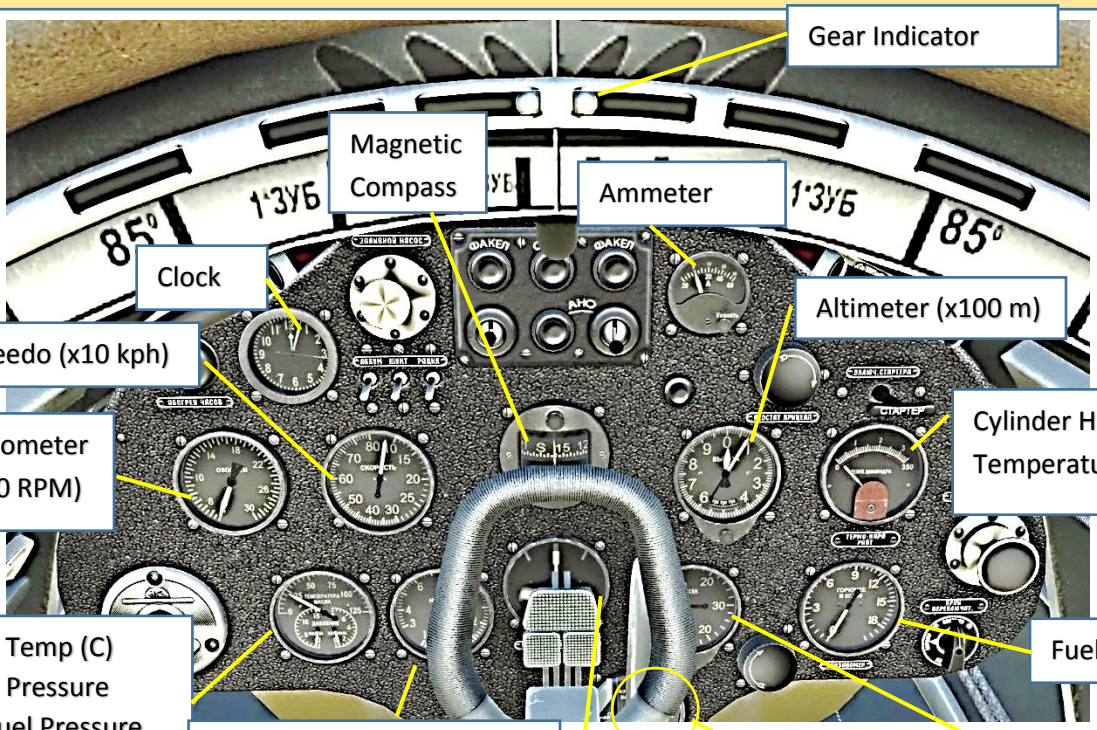
Formations

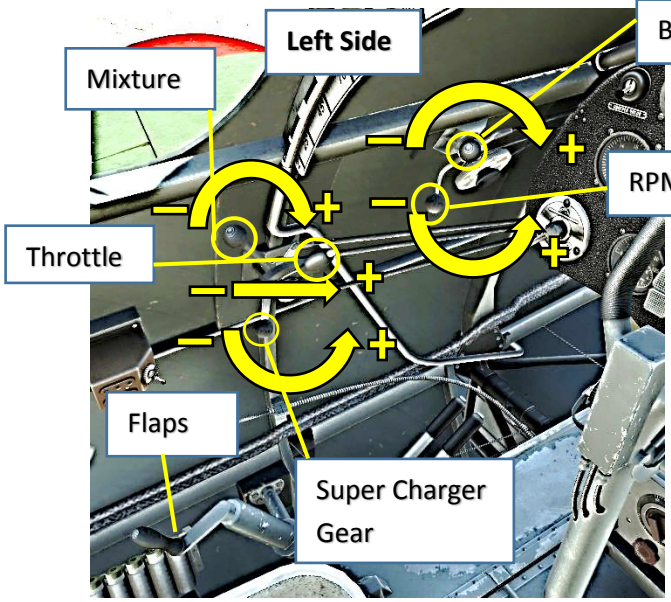
Form column: --- L_Crtl + 6
Form left edge: L_Crtl + 7
Form right edge: L_Crtl + 8
Form V: ---------- L_Crtl + 9

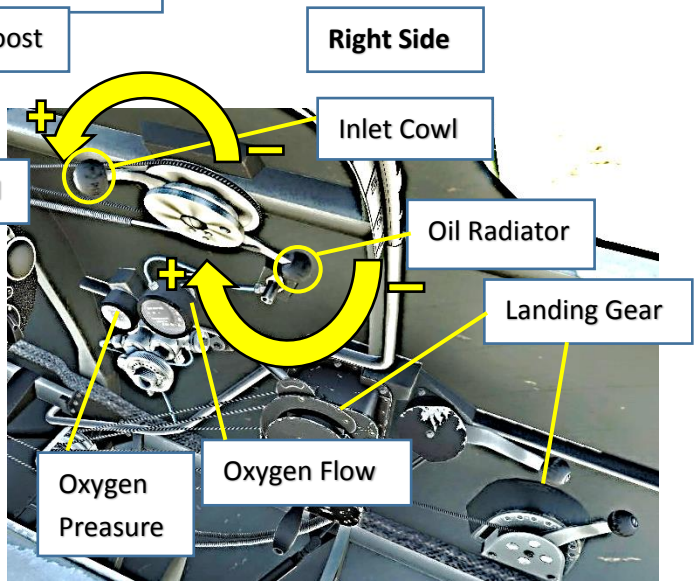
Camera Controls

Reset camera: ---------- Numpad 5
Reset free camera: ------- C
Slow free cam: ---------- Numpad 0
Camera Zoom in: ---------- Numpad +
Zoom away: ---------- Numpad –
Camera cockpit: ---------- F1
Free view player: ---------- F2
Free view enemy: --------- LCrtl + F2
Free view friendly: -------- LShift + F2
Free view ground unit: --- F5
Free view ground enemy: LCrtl + F5
Free view friendly: -------- LShift + F5
Bomb camera: ---------- F6
Bomb camera enemy: ---- LCrtl + F6
Bomb camera friendly: --- LShift + F6
Flyby camera: ---------- F3
Full free camera: ---------- F11

I-16 Ishak Type 24 1941 (BOM)







BOM I-16 Type 24(Rata) Procedures

Engine Start

1. Close oil radiator and cowl flaps
2. Set mixture to 100% and prop RPM to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 40 C and for the head temp to be above 100 C
5. Further tuning will be done in flight at full power

Engine Management

- Use RPM settings to control manifold pressure. For best results adjust RPM at full throttle
- Roughly ~93% RPM for continuous power
- (Optional) After RPM is set, lower the mixture until the RPM start to decrease to preserve fuel.
- Adjust the oil radiator and cowl flaps as needed
- Continuous power is **2200 RPM** with **915 mmHg** of manifold pressure
- Boost power is **2300 RPM** with **1065 mmHg** of manifold pressure with a **5 minute limit!**
- For boost increase mixture and RPM in combination with the boost button
- Use gear 2 of the super charger above 3,000m
- Keep oil temp between 55-90 C
- Keep head temp between 120-200 C

Take off

1. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
2. Set flaps to 20 deg and close cockpit.
3. Open Cowl and radiators
4. Apply throttle as needed
5. Apply rudder to correct a left hand pull during take off
6. Take off between 145-175 km/h
7. Raise gear and flaps
8. Set engine to desired power level

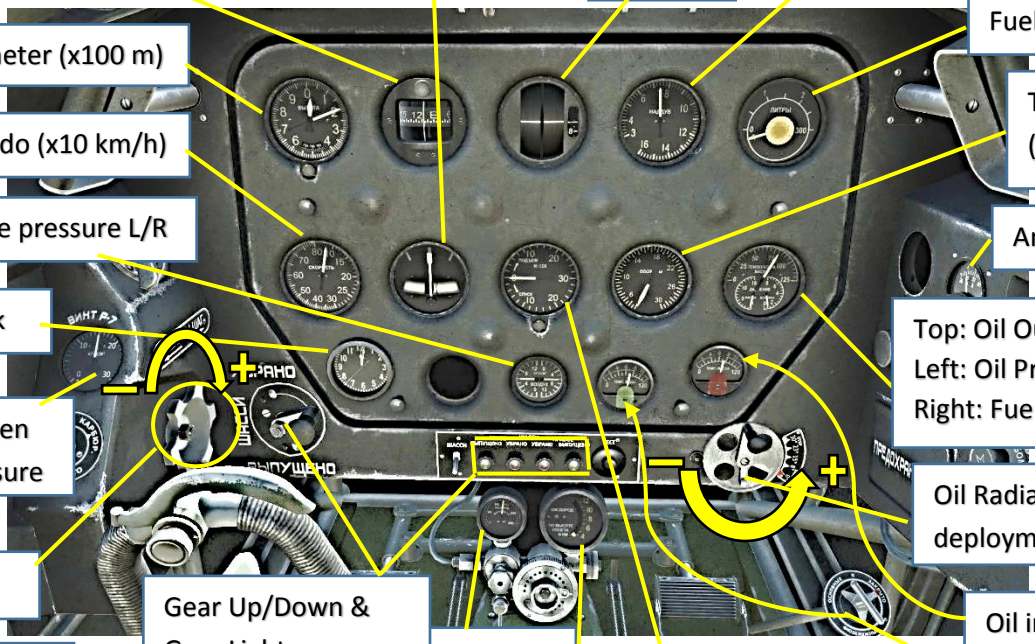
Landing

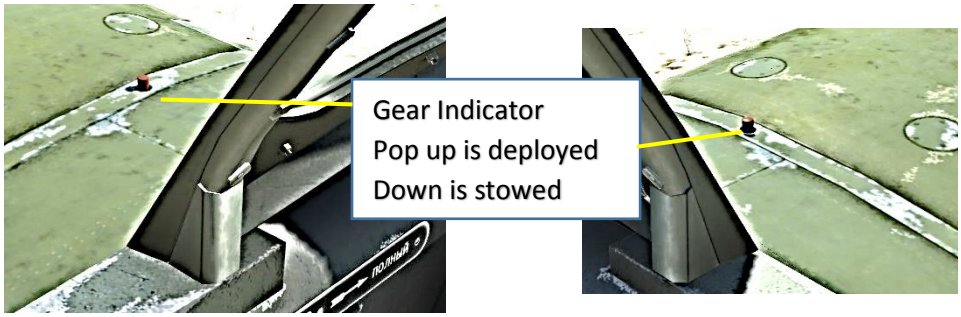
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 135-145 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder and R/L brakes to steer

Quirks and tips

- The fuel gauge only works when a primer to the upper right of it is moved in and out. This will happen automatically about once a minute.
- After it is primed you have a few second to read the fuel gauge
- Ideal Glide slope 185-195 km/h

MIG-3 Series 24 1941 (BOM)





BOM MIG-3 Series 24 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set mixture to 50% and prop RPM to 100%
3. Press E to start the motor
4. Wait for the oil in temp to be above 40 C and for the water temp to be above 70 C

Engine Management

- Keep RPM setting at full and use mixture for boost
- Use 50% mixture for continuous and 100% for boosted
- Adjust water and oil radiator as needed
- Continuous power is **2050 RPM** with **1040 mmHg** of manifold pressure
- Boost power is **2050 RPM** with **1240 mmHg** of manifold pressure. Limit of 10 minutes
- Keep water between 80-110 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 115 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% right rudder trim recommended
3. Open radiators
4. Apply throttle as needed
5. Apply rudder to correct a left hand pull during take off
6. Take off between 180-200 km/h
7. Raise gear
8. Set engine to desired power level

Landing

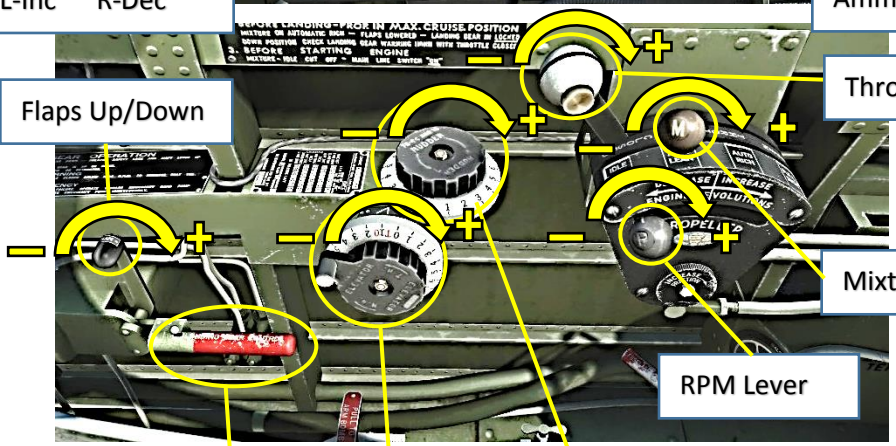
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 135-145 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

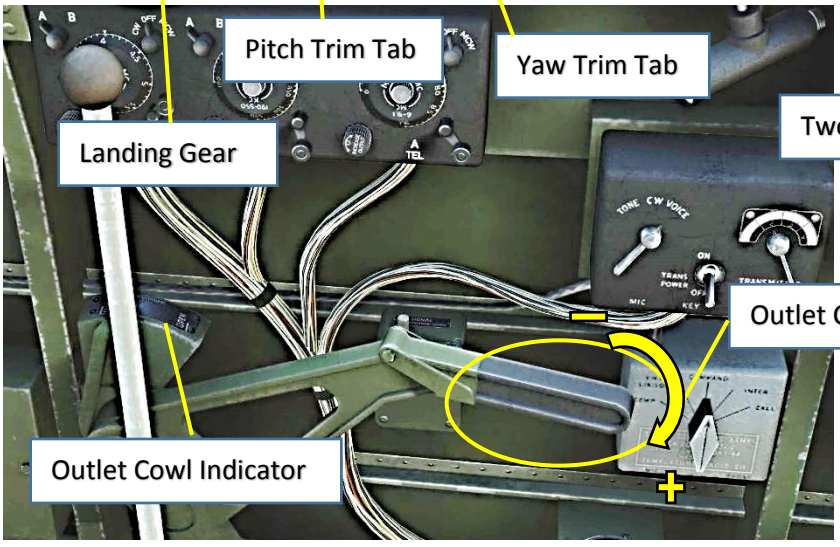
Quirks and tips

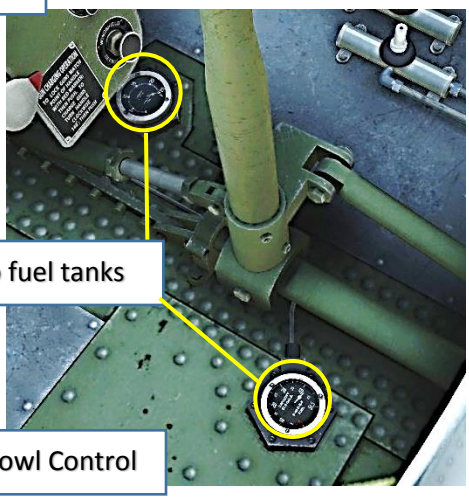
- Ideal Glide slope 195-205 km/h

P-40E-1 1941 (BOM)









P-40E-1 Procedures

Engine Start

1. Close outlet cowl
2. Set mixture to 66% or the third mark and prop RPM to roughly 80%
3. Press E to start the motor
4. Wait for the oil in temp to be above 60 C and for the water temp to be above 90 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- Use the third mark or 66% mixture for flight. Use the second mark to conserve fuel
- Adjust the cooling cowl as needed
- Continuous power is **2600 RPM** with **37.2 inHg** of manifold pressure
- Combat power is **3000 RPM** with **42 inHg** of manifold pressure. Limit of **5 minutes**
- Take off power is **3000 RPM** with **45.5 inHg** of manifold pressure. Limit of **2 minutes**
- Keep Oil temp between 70-85 C
- Keep Water temp between 105-115 C

Take off

1. Disengage Parking brake if needed
2. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
3. Set flaps to 20 deg and close cockpit.
4. Open radiators and cooling cowl
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off between 160-190 km/h or 100-120 mph
8. Watch engine power, make sure it's at a safe level
9. Raise gear and flaps
10. Set engine to desired power level

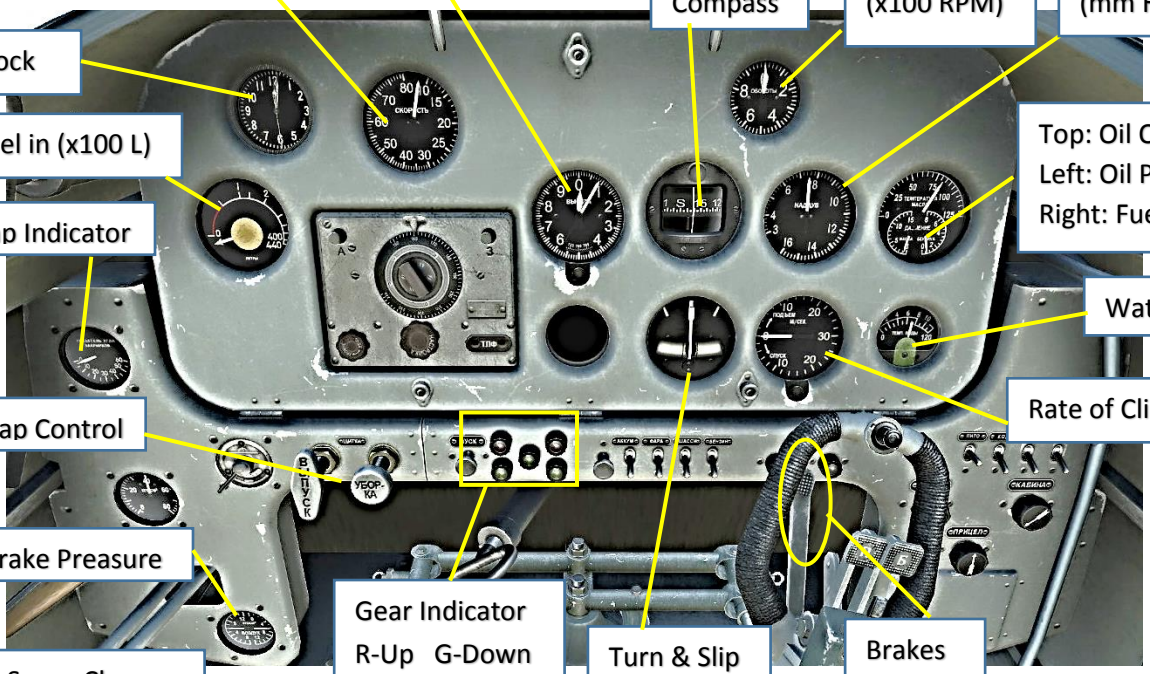
Landing

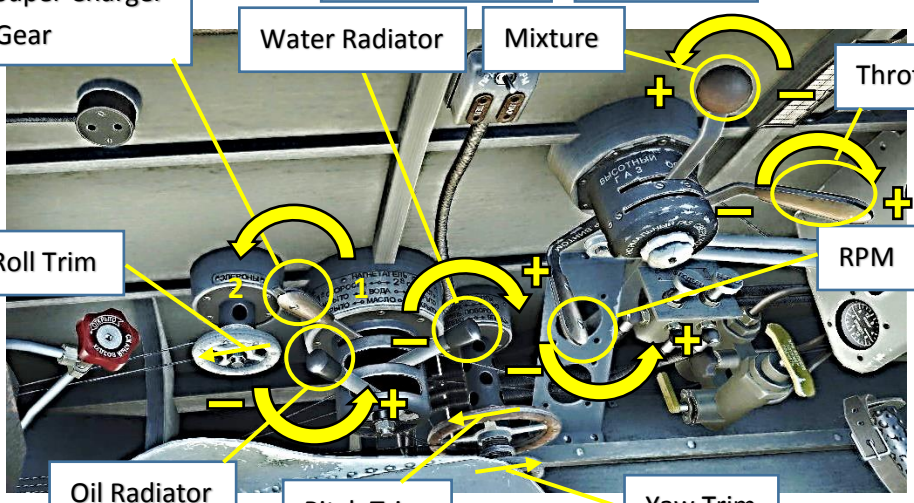
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and full flaps as needed
4. Aim to touch down 140-145 km/h or 87-93 mph
5. Once the tail wheel is down apply brakes as needed
6. Use rudder and R/L brakes to steer

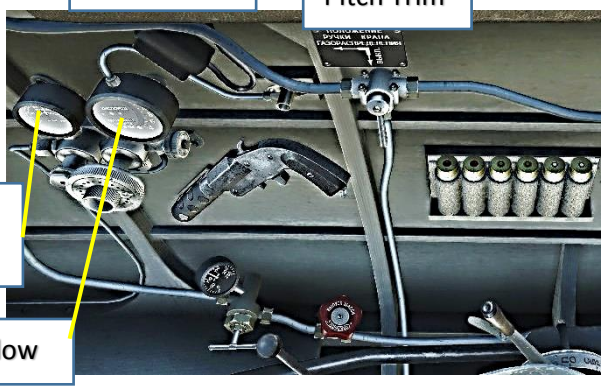
Quirks and tips

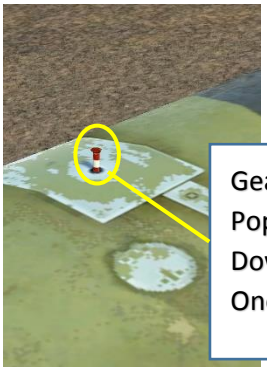
- Ideal Glide slope 210-220 km/h or 130-137 mph
- 1,000 Meters roughly equals 3,200 feet
- 100 Kph roughly equals 62 Mph

LaGG-3 Series 29 1942 (BOS)









LaGG-3 Series 29 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set prop RPM and mixtureto 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 80 C and for the water temp to be above 70 C

Engine Management

- Keep RPM setting at full 100% under normal conditions
- Lean the mixture with altitude to maintain the maximum RPM
- Adjust water and oil radiator as needed
- Nominal power is **2700 RPM** with **1050 mmHg** of manifold pressure
- Use gear 2 of the super charger above 2,500m
- Keep water between 70-100 C
- Keep Oil temp between 90-115 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 165-200 km/h
7. Raise gear

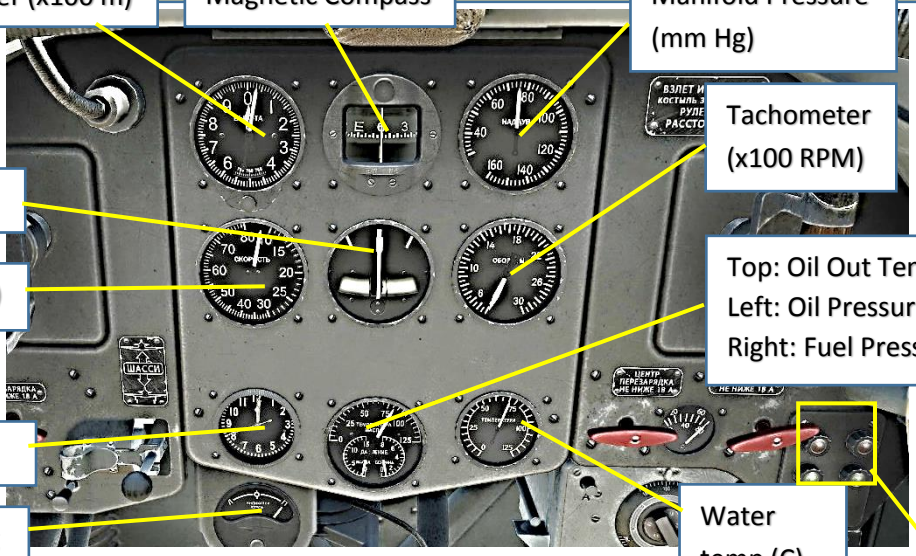
Landing

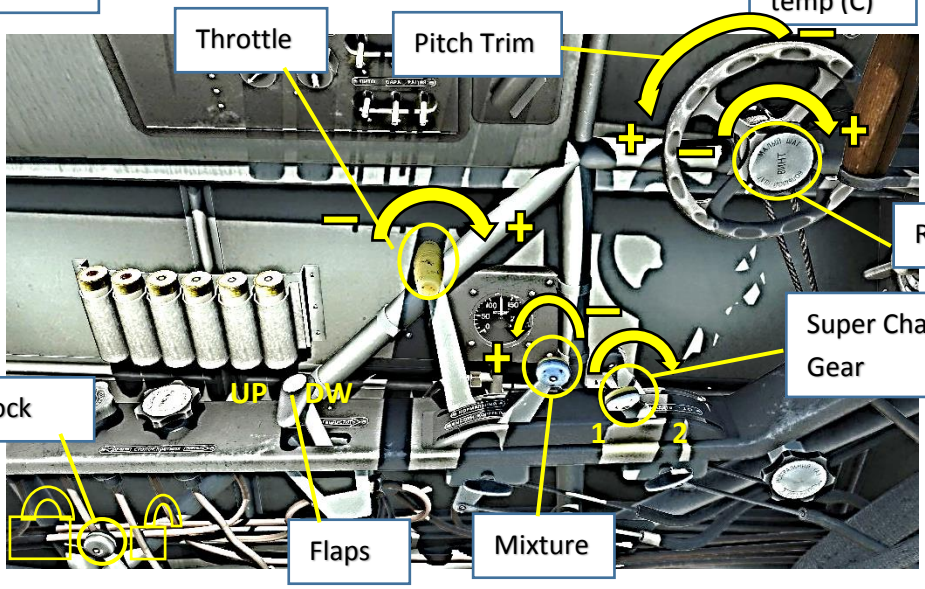
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 140-160 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

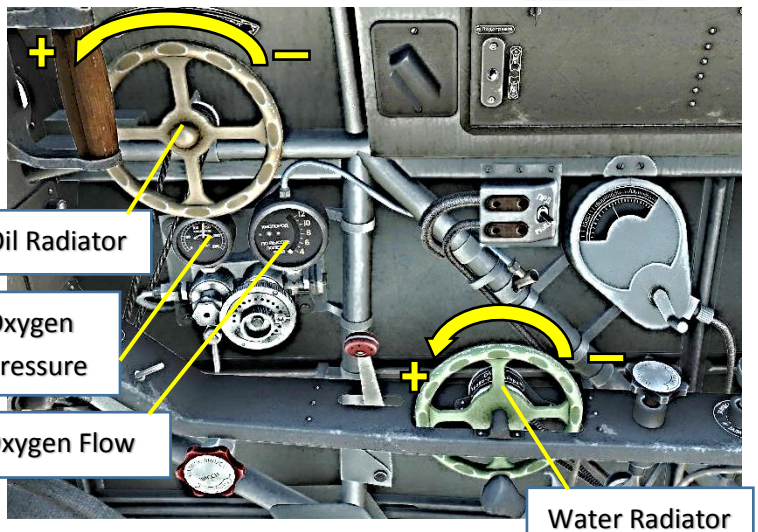
Quirks and tips

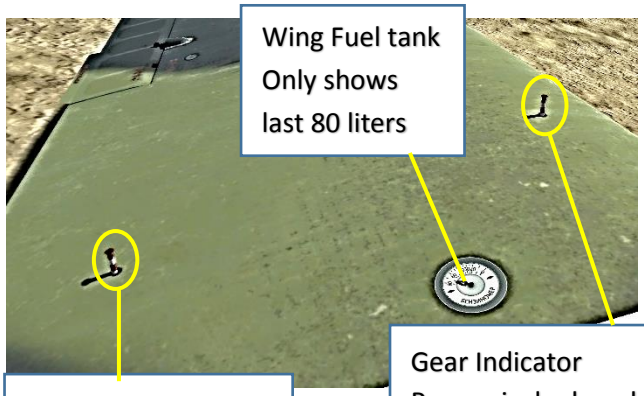
- Ideal Glide slope 200-210 km/h

Yak-1 Series 69 1942 (BOS)









Yak-1 Series 69 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set prop RPM and mixture to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 80 C and for the water temp to be above 65 C

Engine Management

- Keep RPM setting at full 100% under normal conditions
- Lean the mixture with altitude to maintain the maximum RPM
- Adjust water and oil radiator as needed
- Nominal power is **2700 RPM** with **1050 mmHg** of manifold pressure
- Use gear 2 of the super charger above 2,300m
- Keep water between 70-100 C
- Keep Oil temp between 90-115 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 160-190 km/h
7. Raise gear
8. Set engine to desired power level

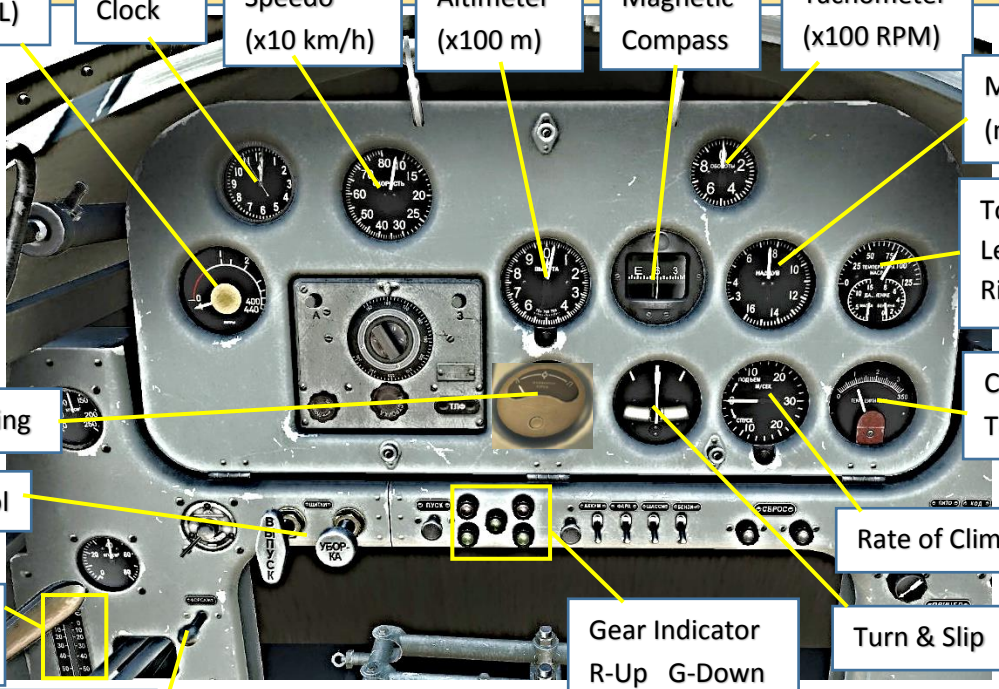
Landing

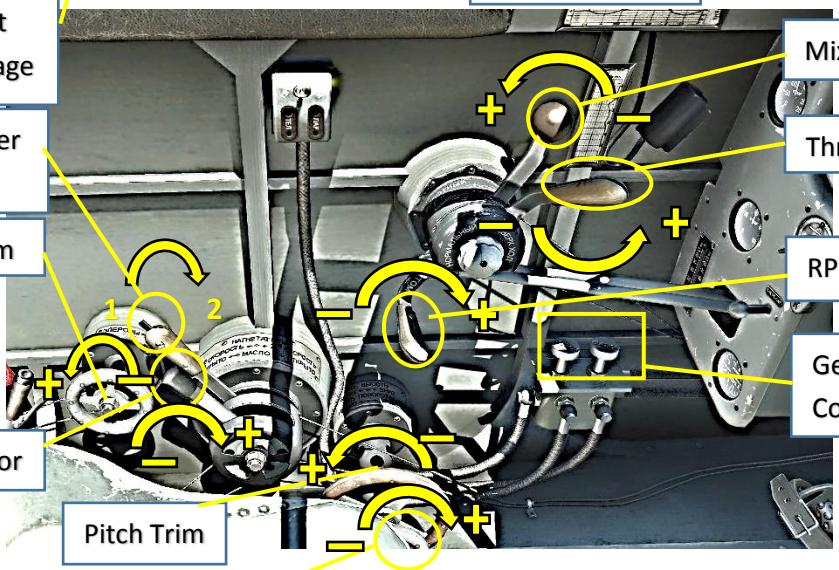
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 135-145 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

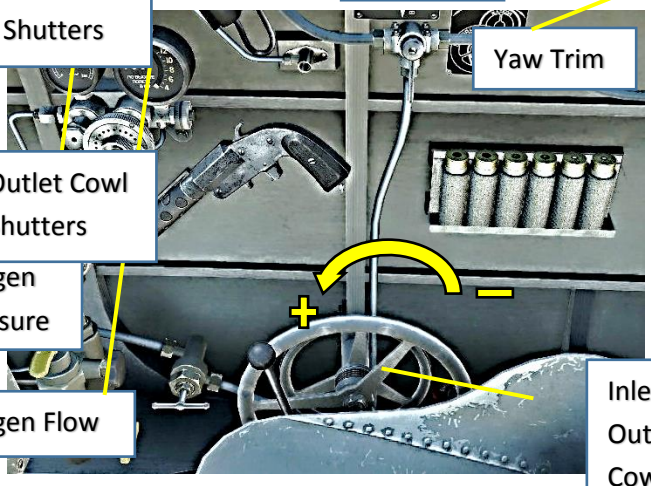
Quirks and tips

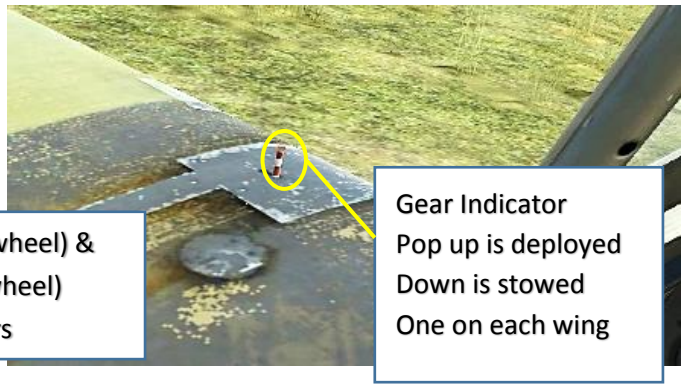
- Ideal Glide slope 195-205 km/h
- The tail wheel locks/unlocks automatically when the rudder is centered. Otherwise it’s unlocked.

La-5 Series 8 1942 (BOS)









La-5 Series 8 Procedures

Engine Start

1. Close oil radiator and cowl shutters
2. Set prop RPM and mixture to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 55 C and for the cylinder temp to be above 130 C

Engine Management

- Keep RPM setting at full 100% under normal conditions
- Lean the mixture with altitude to maintain the maximum RPM while conserving fuel
- Use the boost button to enable boost
- Adjust oil radiator and cowl shutters as needed.
- Keep intake shutter open if possible
- Nominal power is **2400 RPM** with **950 mmHg** of manifold pressure
- Boosted power is **2400 RPM** with **1140 mmHg.** Limit of 5 minutes unless engine mod is installed
- Use gear 2 of the super charger above 3,500m
- Keep cylinder temp between 140-215 C
- Keep Oil temp between 55-125 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators and cooling cowls
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 170-200 km/h
7. Raise gear
8. Set engine to desired power level

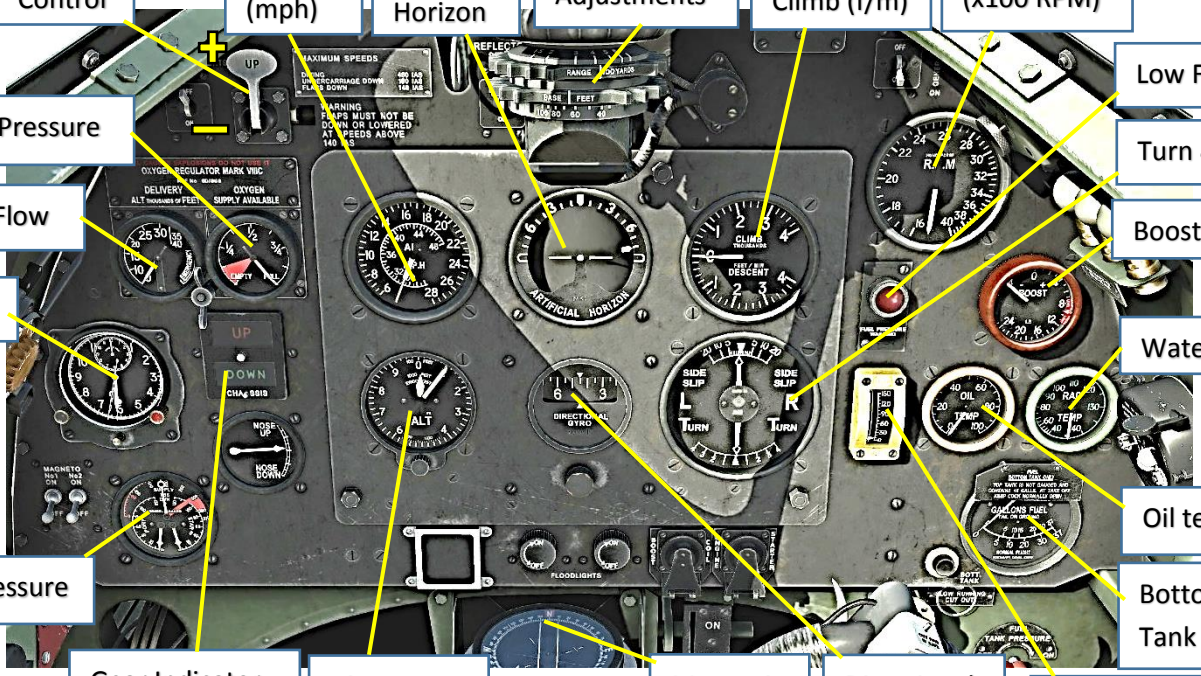
Landing

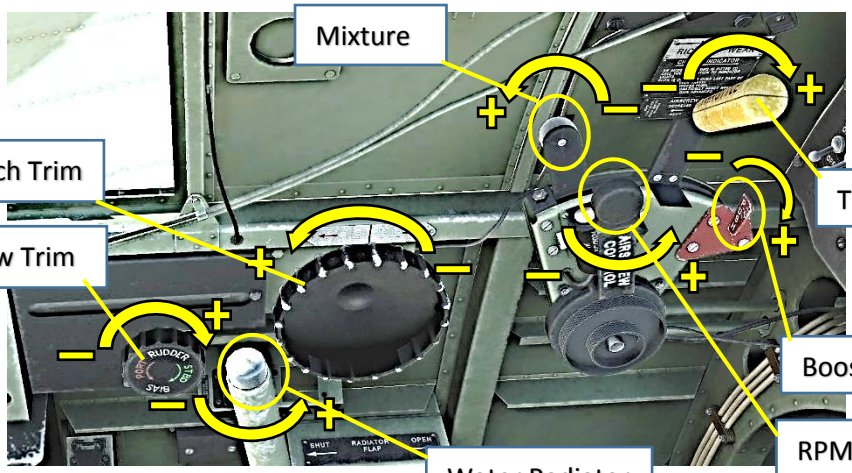
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 150-160 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

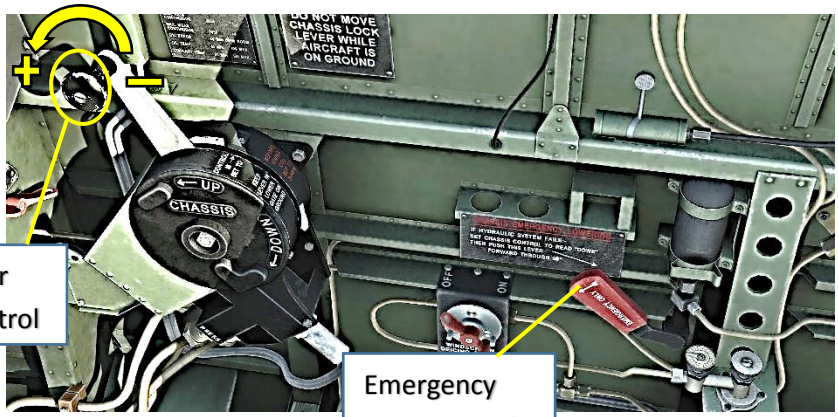
Quirks and tips

- Ideal Glide slope 200-210 km/h

Supermarine Spitfire Mk. VB 1941(BOK)









Supermarine Spitfire Mk. VB Procedures

Engine Start

1. Close water radiator
2. Set RPM to 100% and mixture to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 60 C and for water to be above 80 C
5. Reduce RPM to combat or cruising power, ~85% RPM

Engine Management

- Use both RPM control and throttle to control boost and rpm respectively.
- Use ~85% RPM and ~85% throttle to maintain combat power.
- Use the boost switch to enable boost
- Keep mixture lever at full, for automatic control in combat. If desired it can be leaned to save fuel.
- Adjust the water radiator as needed
- No oil radiator control
- Cruising power is **2650 RPM** with **7 PSI** of boost
- Combat power is **2850 RPM** with **9 PSI** of boost**.** Limit of 30 minutes
- Emergency power is **3000 RPM** with **16 PSI** of boost. Limit of 5 minutes
- Keep water temp between 105-125 C
- Keep Oil temp between 70-105 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Open water radiator
3. Apply throttle as needed
4. Apply rudder to correct a left hand pull during take off
5. Take off between 160-170 km/h or 100-105 mph
6. Raise gear
7. Set engine to desired power level, check RPM and boost

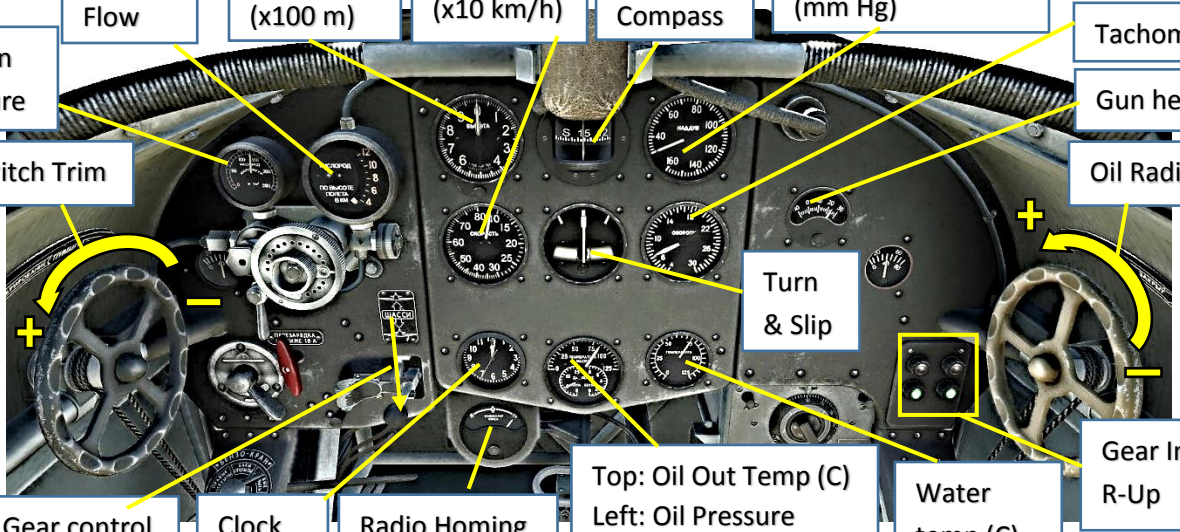
Landing

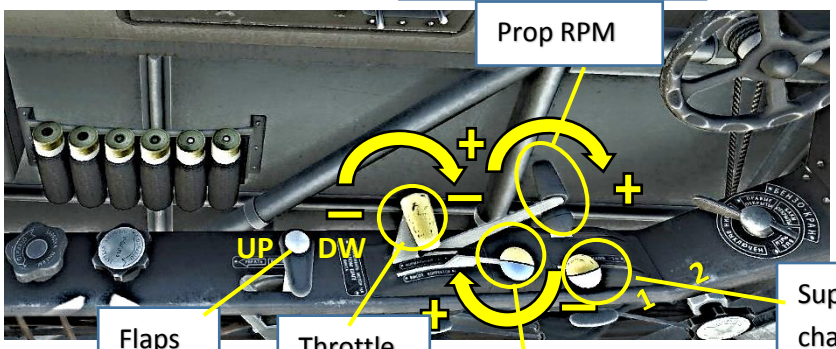
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 130-135 km/h or 80-85 mph
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

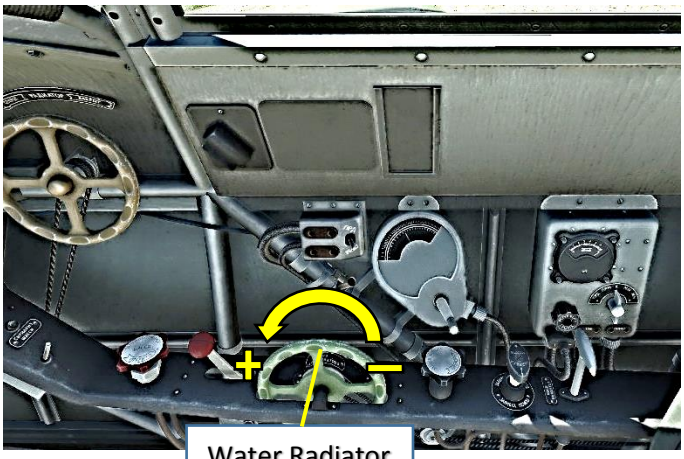
Quirks and tips

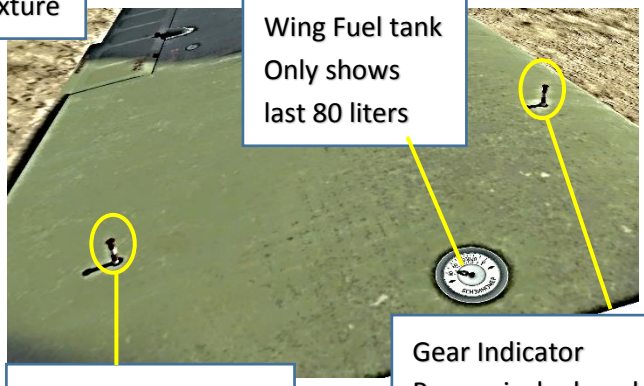
- Ideal Glide slope 145-160 km/h or 90-100 mph
- 1,000 Meters roughly equals 3,200 feet
- 100 Kph roughly equals 62 Mph

Yak-1b Series 127 1943 (DLC)









Yak-1b Series 127 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set prop RPM and mixture to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 80 C and for the water temp to be above 65 C

Engine Management

- Keep RPM setting at full 100% under normal conditions
- Lean the mixture with altitude to maintain the maximum RPM
- Adjust water and oil radiator as needed
- Nominal power is **2700 RPM** with **1050 mmHg** of manifold pressure
- Use gear 2 of the super charger above 2,300m
- Keep water between 70-100 C
- Keep Oil temp between 90-115 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 160-190 km/h
7. Raise gear

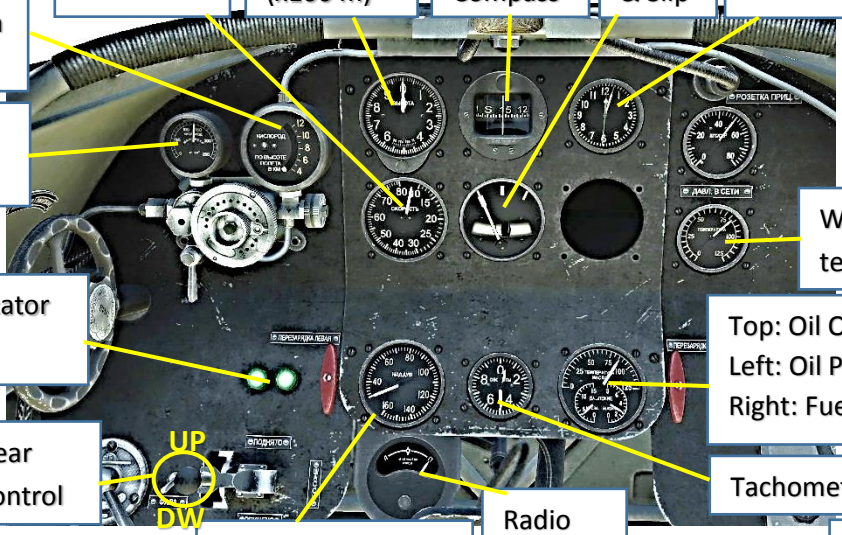
Landing

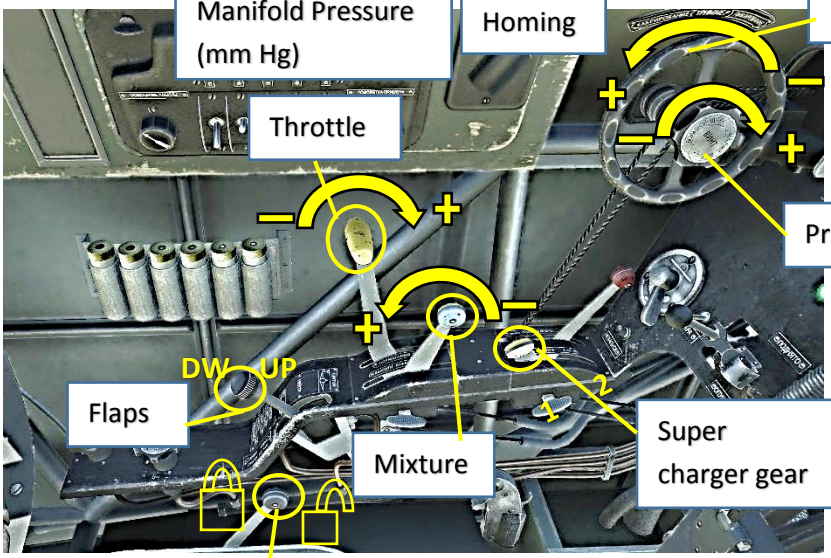
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 135-145 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

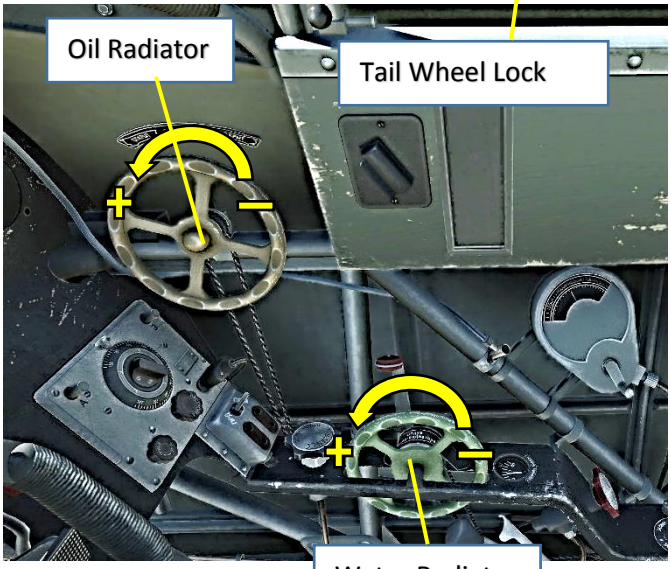
Quirks and tips

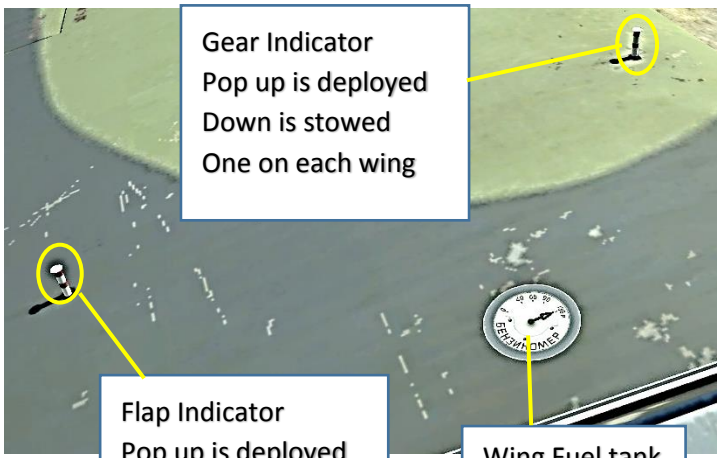
- Ideal Glide slope 195-205 km/h
- The tail wheel locks/unlocks automatically when the rudder is centered. Otherwise it's unlocked.

Yak-7B Series 36 1942 (BOK)









Yak-7B Series 36 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set prop RPM and mixture to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 80 C and for the water temp to be above 65 C

Engine Management

- Keep RPM setting at full 100% under normal conditions
- Lean the mixture with altitude above 3 km to maintain the maximum RPM
- Adjust water and oil radiator as needed
- Nominal power is **2700 RPM** with **1050 mmHg** of manifold pressure
- Use gear 2 of the super charger above 2,000m
- Keep water between 70-100 C
- Keep Oil temp between 90-115 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 170-175 km/h
7. Raise gear

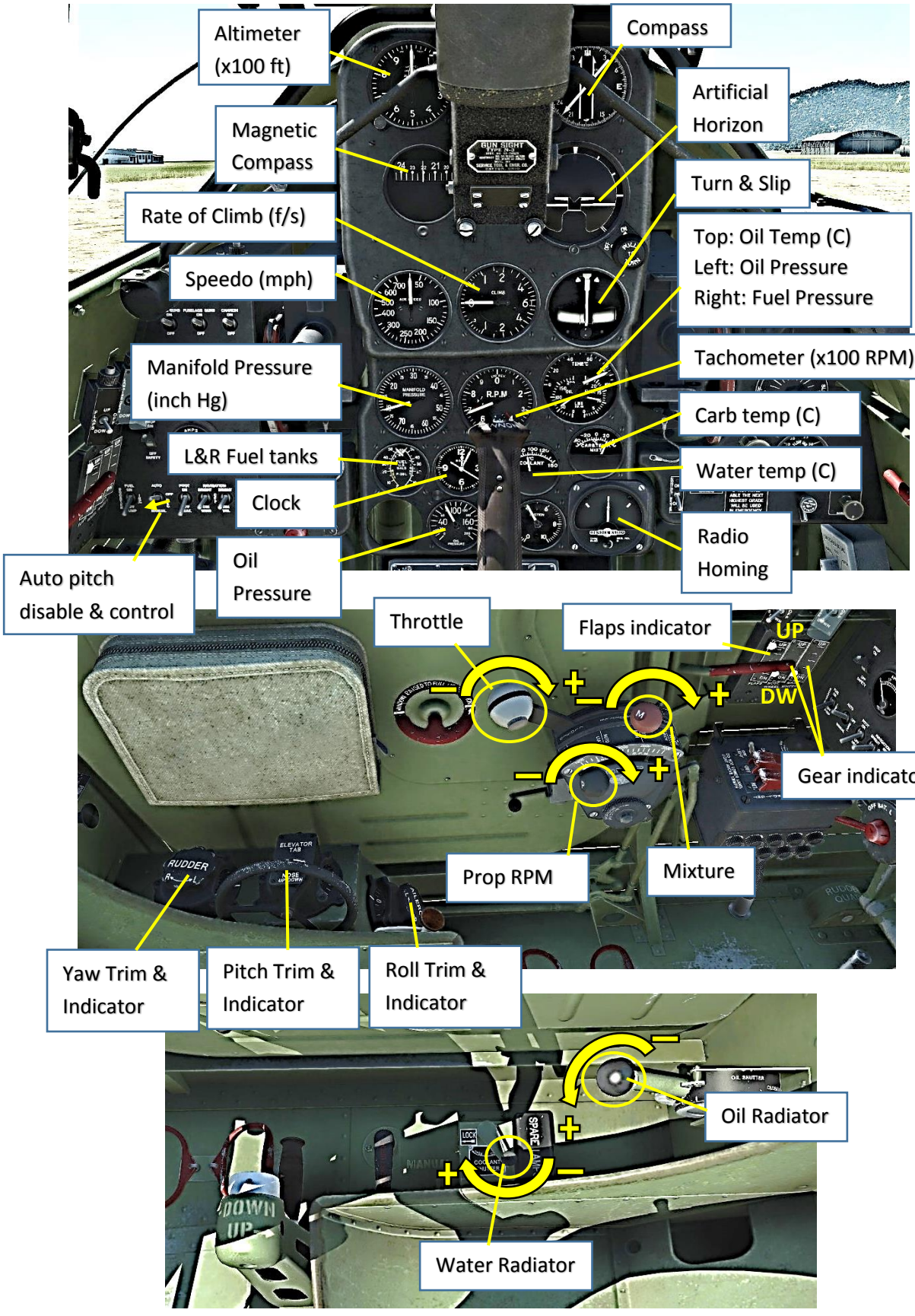
Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 145-165 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

Quirks and tips

- Ideal Glide slope 200km/h
- Fuel gauges are outside the cockpit on the wings. The gauges only start working when there is less than 130 liters in the tank

P-39L-1 1943 (BOK)



P-39L-1 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set prop RPM to 100% and mixture to 66%
3. Press E to start the motor
4. Wait for the oil temp to be above 80 C and for the water temp to be above 65 C

Engine Management

- Lower RPM to use normal power. To use military power and above use the max RPM setting
- Use throttle to control the manifold pressure.
- A combination of throttle control and RPM control is needed
- Avoid rapid throttle spikes, they can cause an over-rev situation to kill the engine
- Adjust water and oil radiator as needed
- Norminal power is **2600 RPM** with **37 inHg** of manifold pressure
- Military power is **3000 RPM** with **42 inHg** of manifold pressure. Limit of 15 minutes
- Take off power is **3000 RPM** with **51 inHg** of manifold pressure. Limit of 5 minutes
- Maximum power is **3000 RPM** with **60 inHg** of manifold pressure. Limit of 2 minutes

  ***** In game techno chat will not show the difference between take off and maximum power

- Keep water between 100-125 C
- Keep Oil temp between 70-90 C

Take off

1. Slowly move to the run-way using rudder and wheel brakes to steer
2. Open radiators
3. Apply throttle as needed
4. Apply rudder to correct a right hand pull during take off
5. Take off between 150-180 km/h (95-110 mph)
6. Raise gear

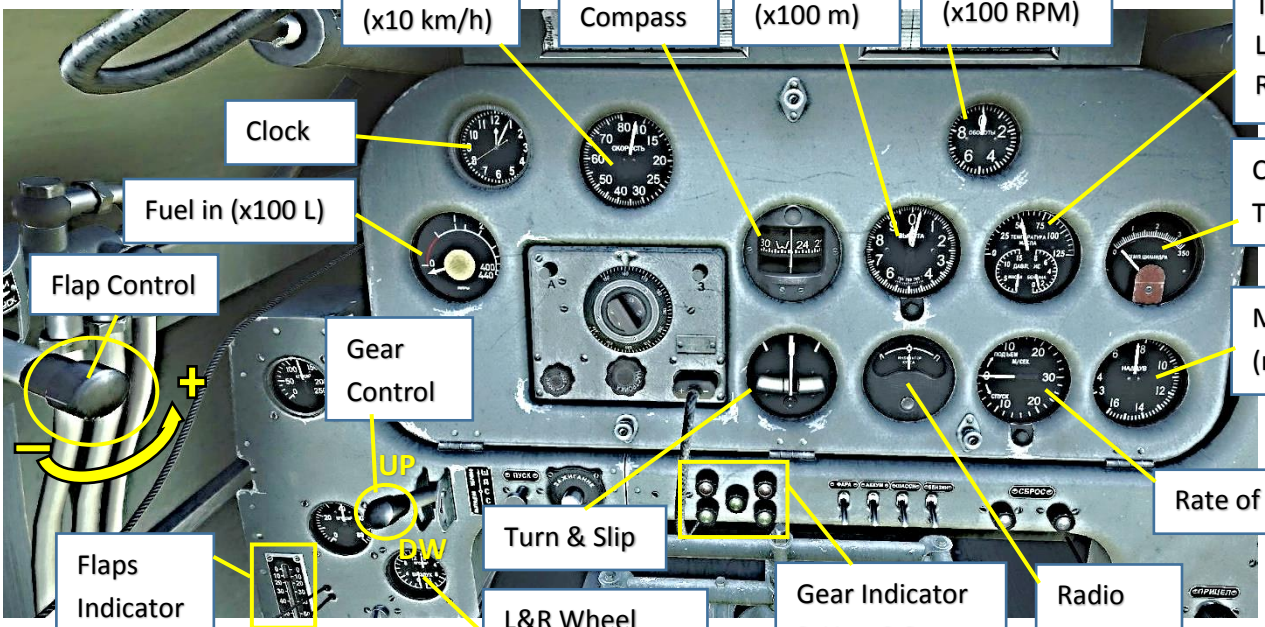
Landing

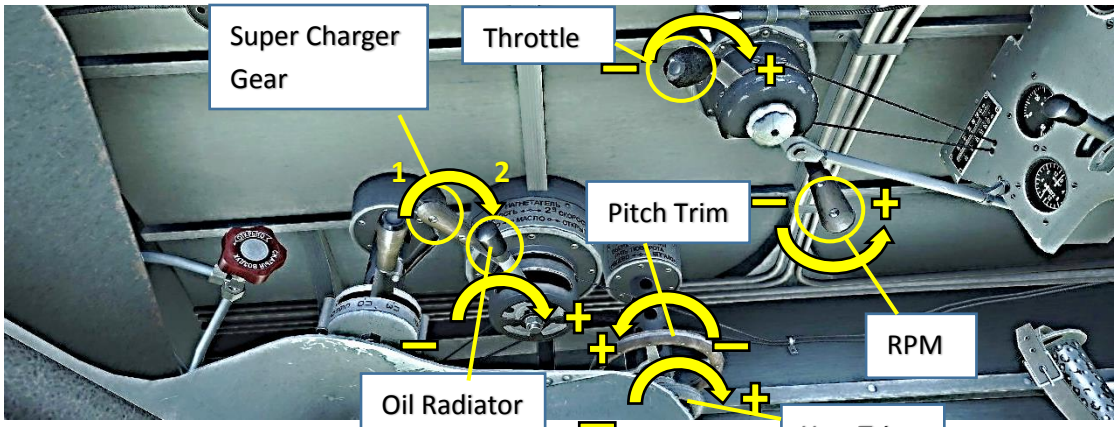
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 155-160 km/h (97-100 mph)
5. Once all three wheels are down apply brakes as needed
6. Use rudder to steer

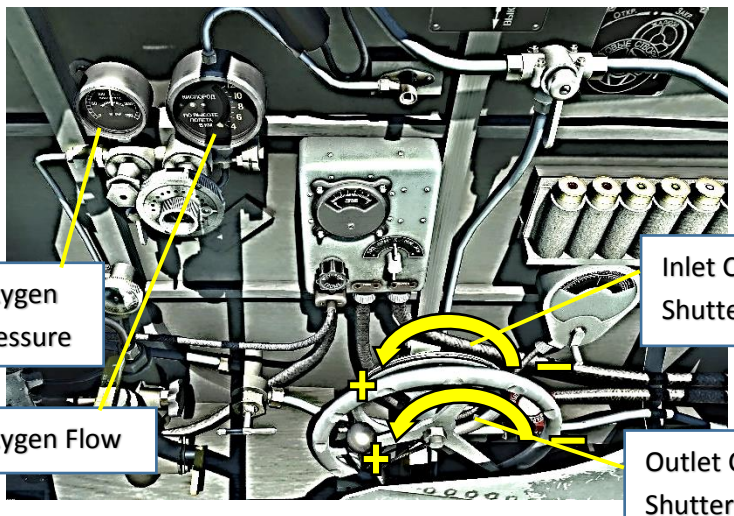
Quirks and tips

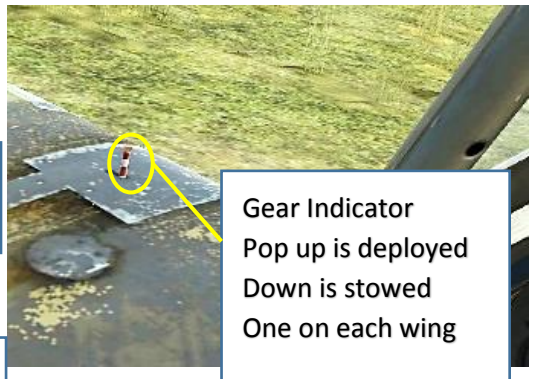
- Ideal Glide slope 180-210 km/h (110-130 mph)
- Avoid rapid throttle spikes, they can cause an over-rev situation to kill the engine

La-5FN Series 2 1943 (DLC)









La-5FN Series 2 Procedures

Engine Start

1. Close oil radiator and cowl shutters
2. Set prop RPM to 100%
3. Press E to start the motor
4. Wait for the oil temp to be above 55 C and for the cylinder temp to be above 170 C

Engine Management

- Use booth RPM and throttle at the same time to control power modes
- Mixture control is fully automatic
- Adjust oil radiator and cowl shutters as needed
- Keep intake shutter open if possible
- Nominal power is **2400 RPM** with **1000 mmHg** of manifold pressure
- Boosted power is **2500 RPM** with **1180 mmHg.** Limit of 10 minutes
- Use gear 2 of the super charger above 3,500m
- Keep cylinder temp between 180-250 C
- Keep Oil temp between 60-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. 40% Left rudder trim recommended
3. Open radiators and cooling cowls
4. Apply throttle as needed
5. Apply rudder to correct a right hand pull during take off
6. Take off between 175-195 km/h
7. Raise gear
8. Set engine to desired power level

Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 150-160 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

Quirks and tips

- Ideal Glide slope 200-210 km/h

Bf 109 E-7 1940 (BOM)

Magnetic Compass

Clock

Manifold Pressure (ATA)

Altimeter (x1000m)

Tachometer (x100 RPM)

Turn & Slip

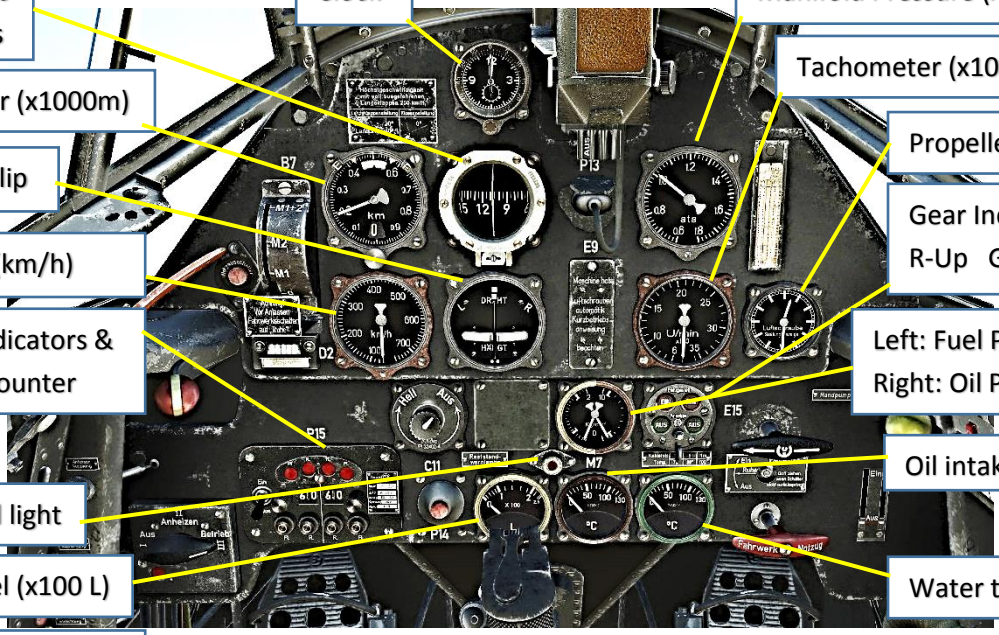
Propeller Pitch

Speedo (km/h)

Gear Indicator
R-Up G-Down

Firing indicators & ammo Counter

Left: Fuel Pressure
Right: Oil Pressure



Low Fuel light

Oil intake Temp

Fuel level (x100 L)

Water temp (C)

Tail Wheel Lock

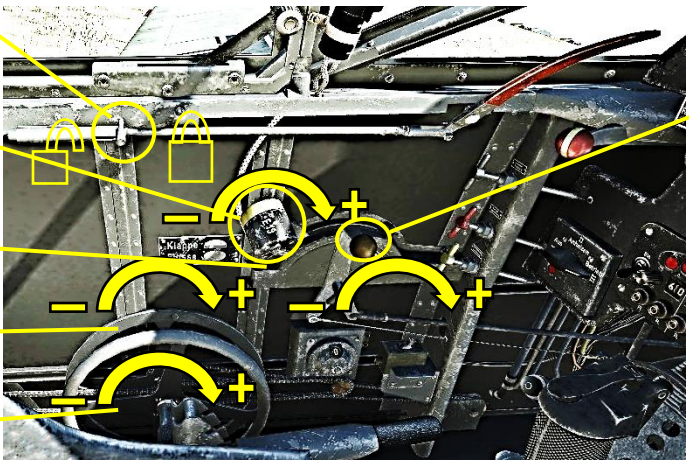
Throttle

Oil Radiator

Manual Pitch Controls

Flaps

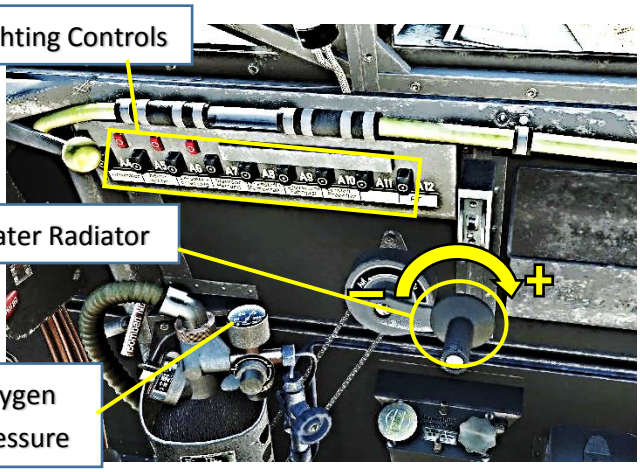
Stabilizer Trim



Lighting Controls

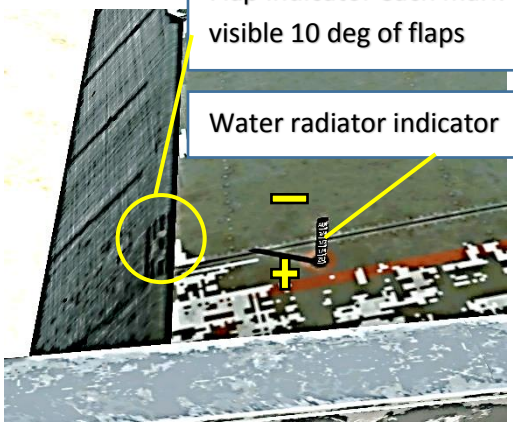
Water Radiator

Oxygen Pressure



Flap indicator each mark visible 10 deg of flaps

Water radiator indicator



Bf 109 E-7 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Press E to start the motor
3. Wait for the oil in temp to be above 30 C and for the water temp to be above 50 C

Engine Management

- The plane controls PRM and pitch automatically. Manual pitch control is available if needed.
- Open and close the oil and water radiators as needed
- Use throttle to regulate power settings
- Nominal power is **2200 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2300 RPM** with **1.23 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2400 RPM** with **1.3 ata** of manifold pressure. Limit of 5 minutes.
- Boosted power is **2400 RPM** with **1.4 ata** of manifold pressure. Limit of 1 minutes.
- Keep Water temp between 90-100 C
- Keep Oil intake between 30-80 C
- Keep Oil output less than 105 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 140-170 km/h
10. Raise gear and flaps
11. Set engine to desired power level

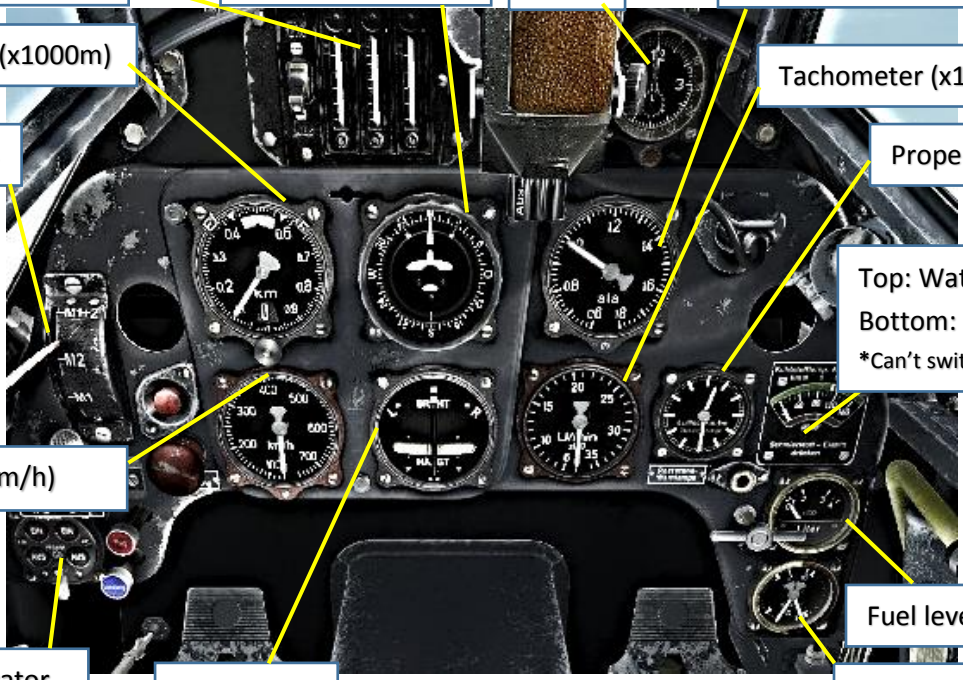
Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 130-140 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

Quirks and tips

- Ideal glide slope at 180-190 km/h

Bf 109 F-2 1941 (BOM)



Ammo Counters

Repeater Compass

Clock

Manifold Pressure (ATA)

Altimeter (x1000m)

Tachometer (x100 RPM)

Magnetos

Propeller Pitch

Top: Water Exit Temp
Bottom: Oil Intake Temp
*Can't switch so only shows water

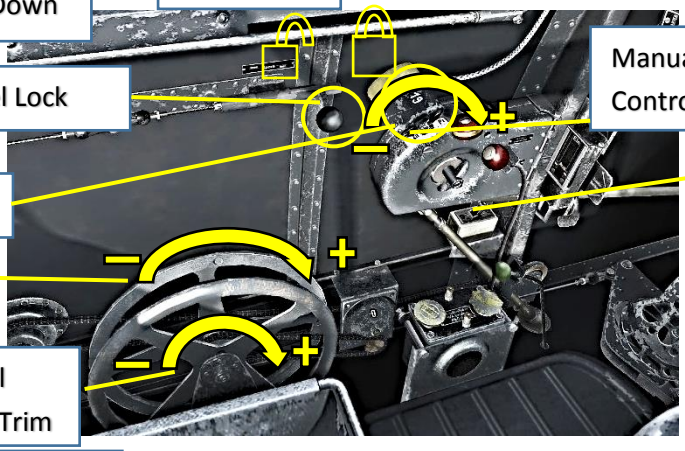
Speedo (km/h)

Fuel level (x100 L)

Gear Indicator
R-Up G-Down

Turn & Slip

Left: Fuel Pressure
Right: Oil Pressure



Manual Pitch
Control Rocker

Tail Wheel Lock

Throttle

Manual Pitch
Control Enable

Flaps

Horizontal
Stabilizer Trim



Lighting Controls



Oxygen
Pressure

Manual Radiator
Controls

Flap indicator each mark
visible 10 deg of flaps

Bf 109 F-2 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 30 C and for the water temp to be above 50 C

Engine Management

- The plane controls PRM and pitch automatically.
- The water and oil radiators are also controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2400 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2600 RPM** with **1.35 ata** of manifold pressure. Limit of 5 minutes.
- Boosted power is **2800 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minutes.
- Keep Water temp between 100-110 C
- Keep Oil intake between 70-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 145-175 km/h
10. Raise gear and flaps
11. Set engine to desired power level

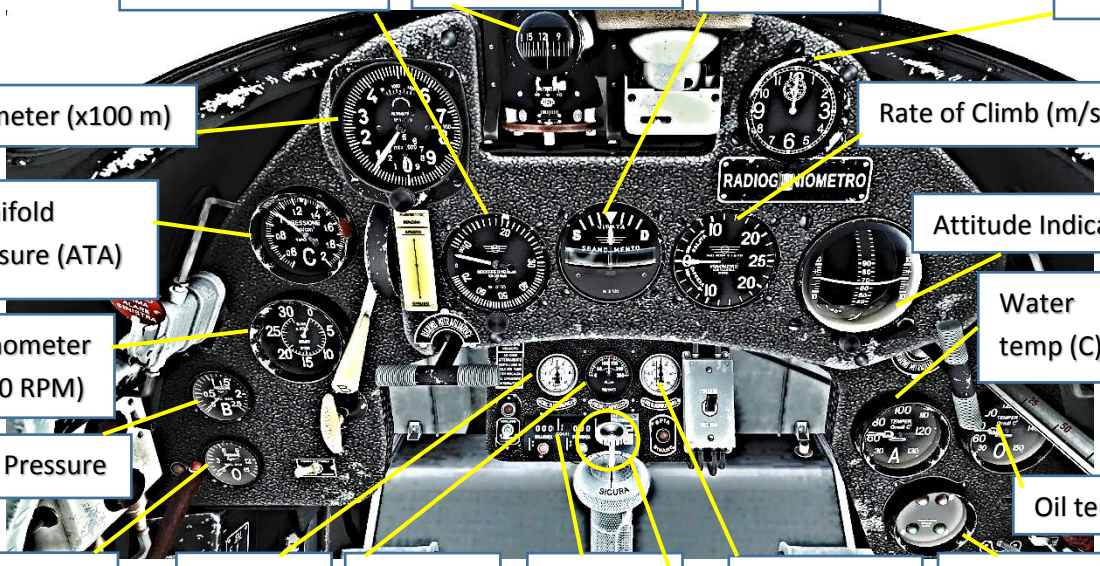
Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 135-145 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

Quirks and tips

- Ideal glide slope at 185-195 km/h

MC 202 Series VIII 1942 (BOM)



Speedo (km/h)

Magnetic Compass

Turn & Slip

Clock

Altimeter (x100 m)

Rate of Climb (m/s)

Manifold Pressure (ATA)

Attitude Indicator

Water temp (C)

Tachometer (x100 RPM)

Fuel Pressure

Oil temp (C)

Oil Pressure

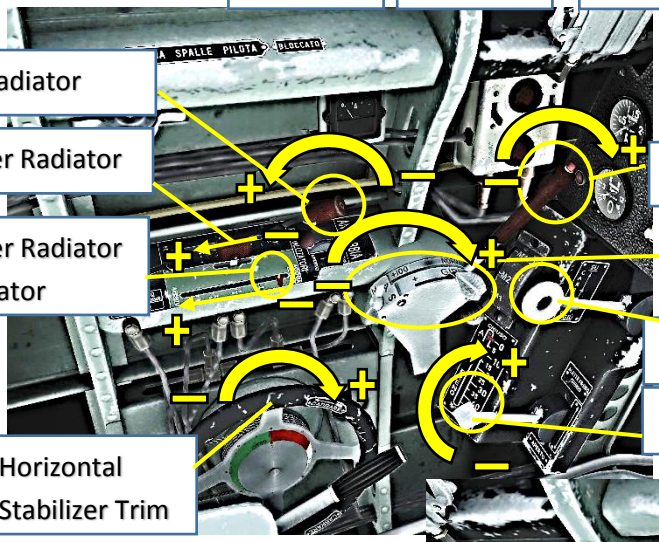
Brake Pressure

Hydraulic Pressure

Ammo Counters

Compressed Air

Gear Indicator R-Up G-Down



Oil Radiator

Water Radiator

Water Radiator Indicator

Brakes Button

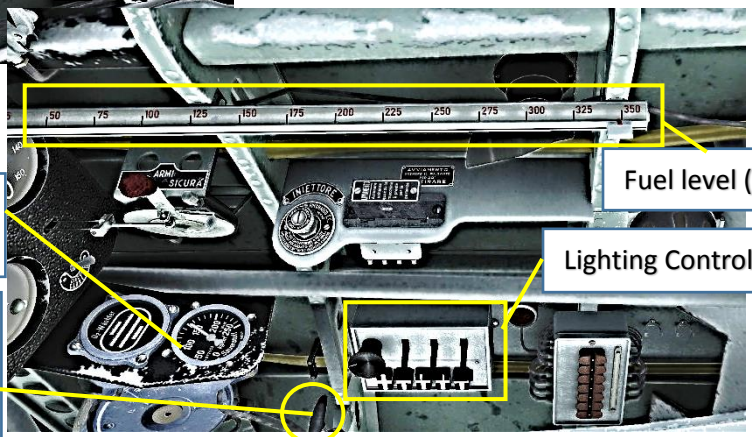
Throttle

RPM Lever M: Manual A: Automatic S: Boost

Gear Control

Flaps

Horizontal Stabilizer Trim



Fuel level (L)

Oxygen Pressure

Lighting Controls

Tail Wheel Lock Up: Locked Down: Unlocked

MC 202 Series VIII Procedures

Engine Start

1. Close oil radiator and water radiator
2. Press E to start the motor
3. Wait for the oil in temp to be above 60 C and for the water temp to be above 70 C

Engine Management

- The plane controls PRM and pitch automatically. Manual RPM control is available if needed.
- Open and close the oil and water radiators as needed
- Use throttle to regulate power settings
- Ata is more important than the RPM limits in game. Unless the engine is damaged you can ignore RPM
- Nominal power is **2200 RPM** with **1.23 ata** of manifold pressure
- Combat power is **2400 RPM** with **1.35 ata** of manifold pressure. Limit of 5 minutes
- Boosted power is **2500 RPM** with **1.45 ata** of manifold pressure. Limit of 1 minutes.
- Keep Water temp between 70-80 C
- Keep Water output less than 100 C
- Keep Oil intake between 60-85 C
- Keep Oil output less than 110 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Open radiators
6. Apply throttle as needed
7. Apply rudder to correct a left hand pull during take off
8. Take off between 160-190 km/h
9. Raise gear and flaps
10. Set engine to desired power level

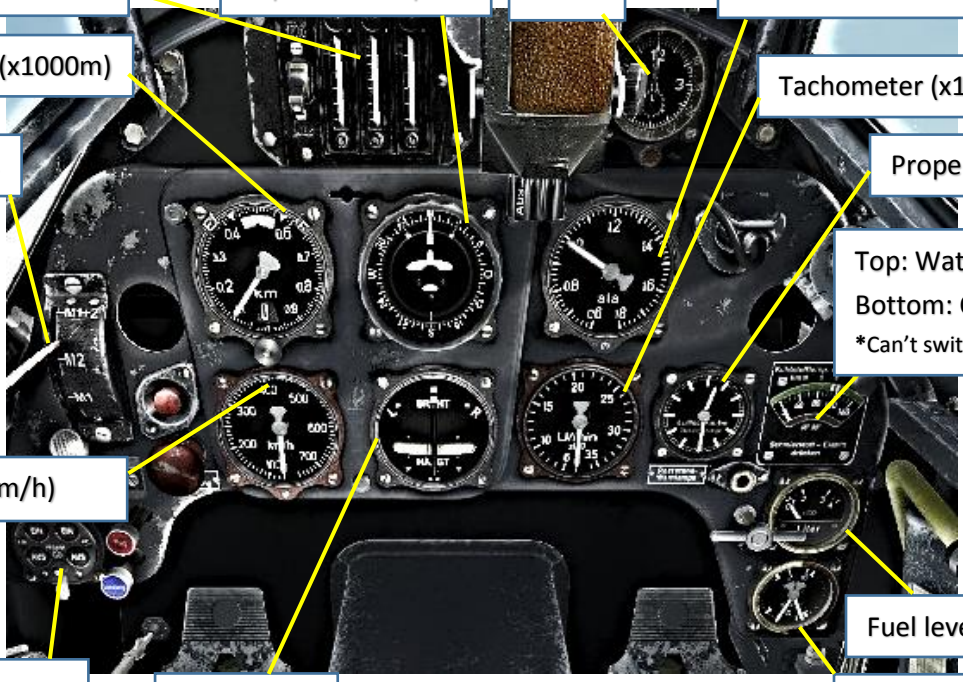
Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 140-150 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder to steer

Quirks and tips

- Ideal glide slope at 190-200 km/h

Bf 109 F-4 1941 (BOS)



Ammo Counters

Repeater Compass

Clock

Manifold Pressure (ATA)

Altimeter (x1000m)

Tachometer (x100 RPM)

Magnetos

Propeller Pitch

Top: Water Exit Temp
Bottom: Oil Intake Temp
*Can't switch so only shows water

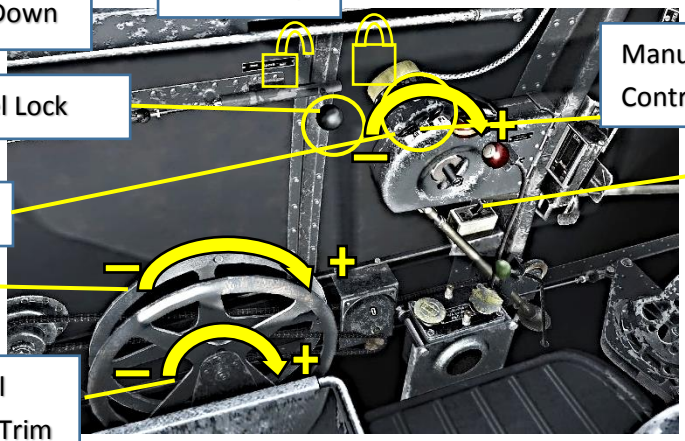
Speedo (km/h)

Fuel level (x100 L)

Gear Indicator
R-Up G-Down

Turn & Slip

Left: Fuel Pressure
Right: Oil Pressure



Manual Pitch
Control Rocker

Tail Wheel Lock

Manual Pitch
Control Enable

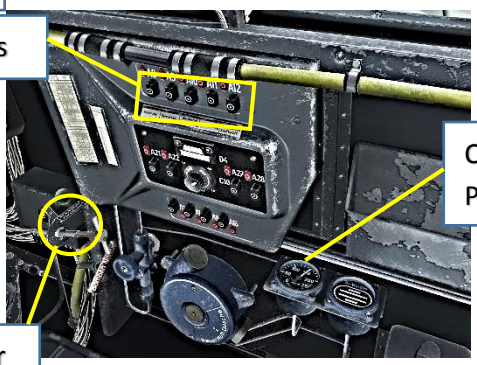
Throttle

Flaps

Horizontal
Stabilizer Trim



Lighting Controls



Oxygen
Pressure

Manual Radiator
Controls

Flap indicator each mark
visible 10 deg of flaps

Bf 109 F-4 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 70 C and for the water temp to be above 80 C

Engine Management

- The plane controls PRM and pitch automatically.
- The water and oil radiators are also controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2500 RPM** with **1.3 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2700 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minute.
- Keep Water temp between 100-115 C
- Keep Oil intake between 70-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 150-180 km/h
10. Raise gear and flaps
11. Set engine to desired power level

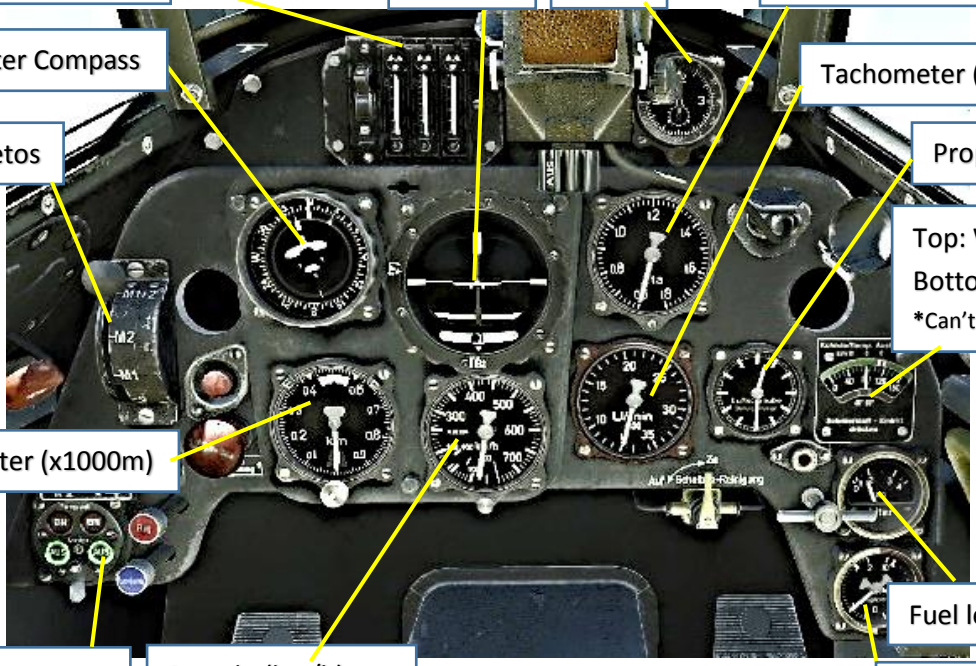
Landing

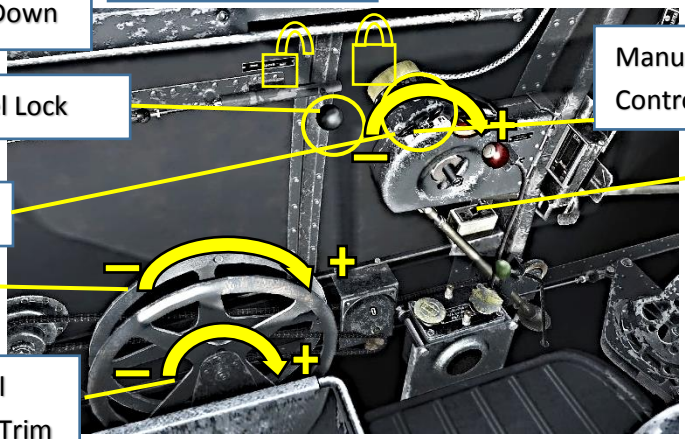
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 145-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

Quirks and tips

- Ideal glide slope at 190-200 km/h

Bf 109 G-2 1942 (BOS)









Bf 109 G-2 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 70 C and for the water temp to be above 80 C

Engine Management

- The plane controls PRM, mixture and pitch automatically.
- The water and oil radiators are also controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2600 RPM** with **1.3 ata** of manifold pressure. Limit of 30 minutes
- Keep Water temp between 100-115 C
- Keep Oil intake between 70-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 155-180 km/h
10. Raise gear and flaps
11. Set engine to desired power level

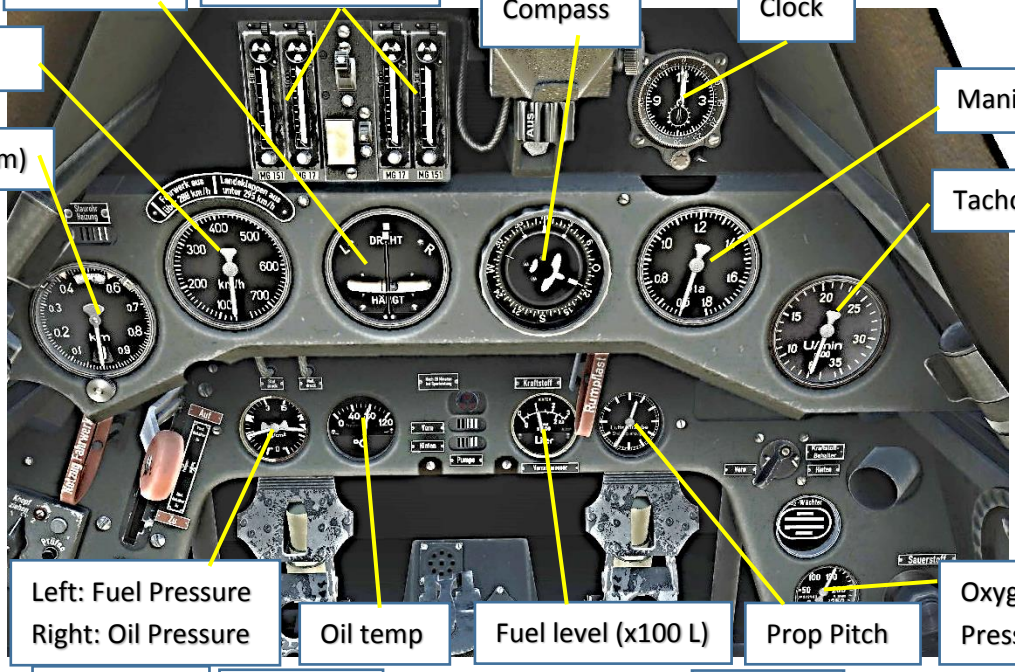
Landing

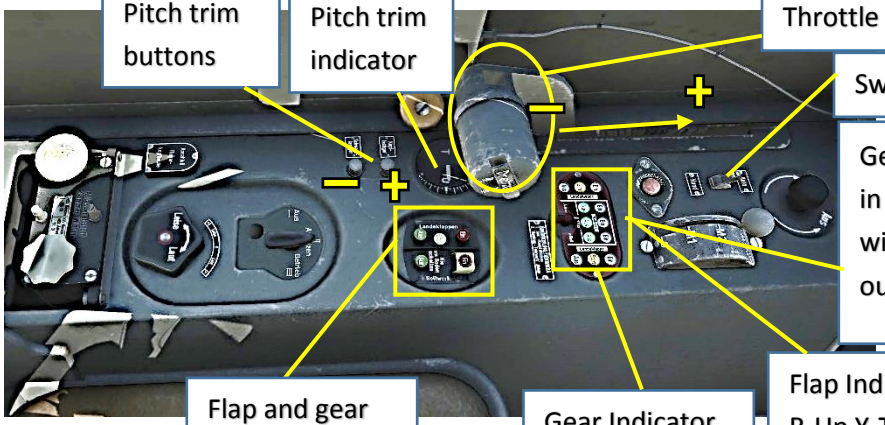
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 150-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

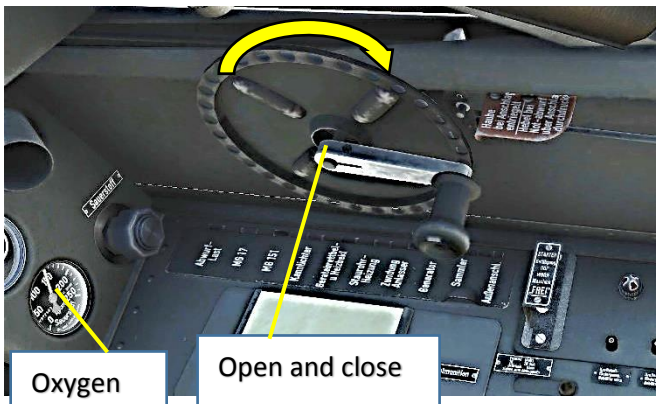
Quirks and tips

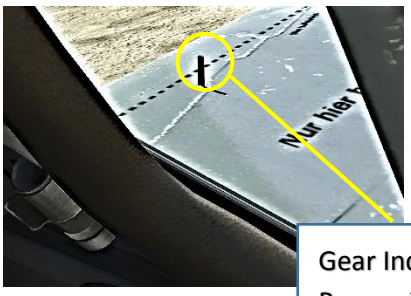
- Ideal glide slope at 195-205 km/h

Fw 190 A-3 1942 (BOS)









Fw 190 A-3 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 60 C

Engine Management

- The plane controls RPM, pitch and mixture automatically.
- The oil radiator is controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.2 ata** of manifold pressure
- Combat power is **2400 RPM** with **1.32 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2700 RPM** with **1.42 ata** of manifold pressure. Limit of 3 minutes.
- Keep cylinder temp between 180-220 C (no gauge so you can ignore this)
- Keep Oil intake between 60-85 C
- Keep Oil outtake less than 120 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Open radiators
6. Pull back on stick to lock tail wheel until 100 – 120 km/h
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 170-210 km/h
10. Raise gear and flaps
11. Set engine to desired power level

Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 160-170 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder and wheel brakes to steer

Quirks and tips

- Ideal glide slope at 205-215 km/h
- Pull back on stick to engage tail wheel lock

Bf 109 G-4 1943 (BOK)

Ammo Counters

Artificial Horizon

Clock

Manifold Pressure (ATA)

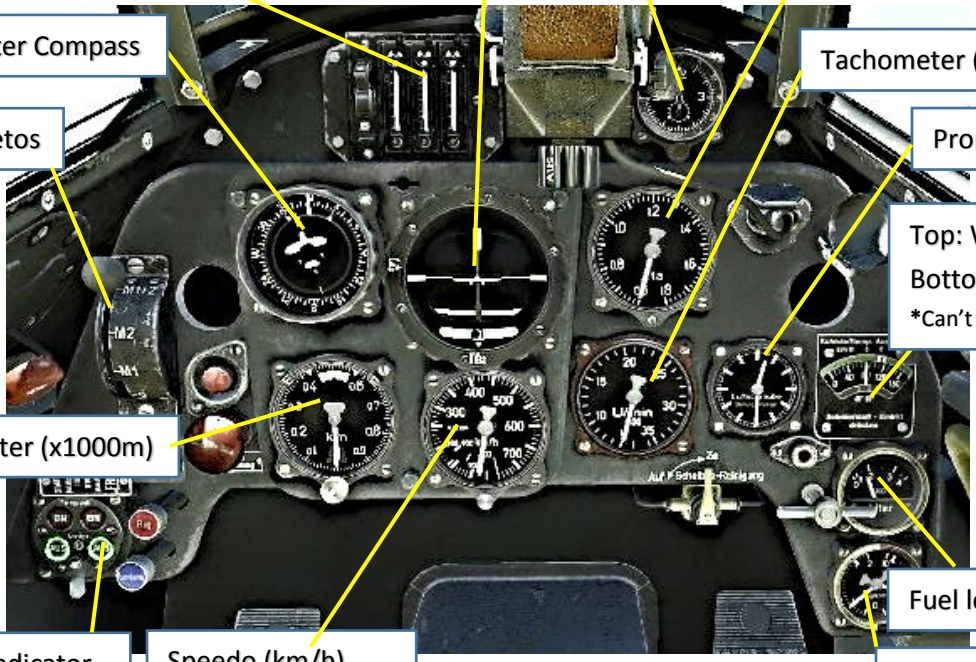
Repeater Compass

Tachometer (x100 RPM)

Magnetos

Propeller Pitch

Top: Water Exit Temp
Bottom: Oil Intake Temp
*Can't switch so only shows water



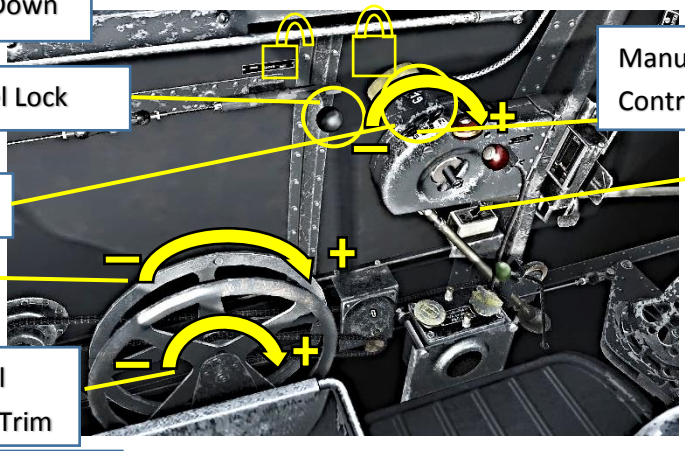
Altimeter (x1000m)

Fuel level (x100 L)

Gear Indicator
R-Up G-Down

Speedo (km/h)

Left: Fuel Pressure
Right: Oil Pressure



Tail Wheel Lock

Manual Pitch Control Rocker

Throttle

Manual Pitch Control Enable

Flaps



Horizontal Stabilizer Trim

Lighting Controls



Oxygen Pressure

Manual Radiator Controls

Flap indicator each mark visible 10 deg of flaps

Bf 109 G-4 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 70 C and for the water temp to be above 80 C

Engine Management

- The plane controls PRM, mixture and pitch automatically.
- The water and oil radiators are also controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2600 RPM** with **1.3 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2800 RPM** with **1.42 ata** of manifold pressure. Limit of **1 minute**.
- Keep Water temp between 100-115 C
- Keep Oil intake between 70-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 155-180 km/h
10. Raise gear and flaps
11. Set engine to desired power level

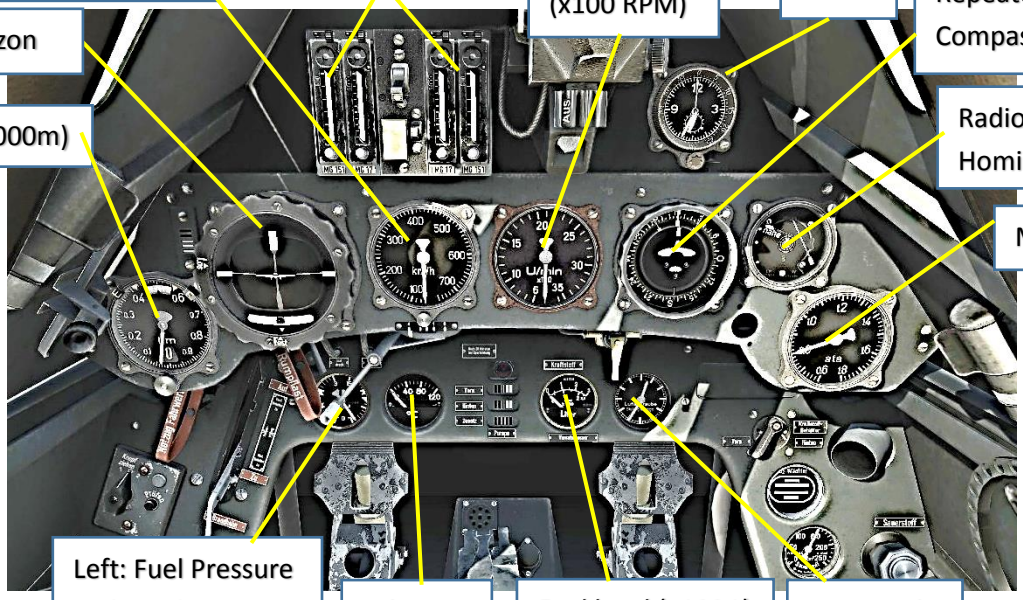
Landing

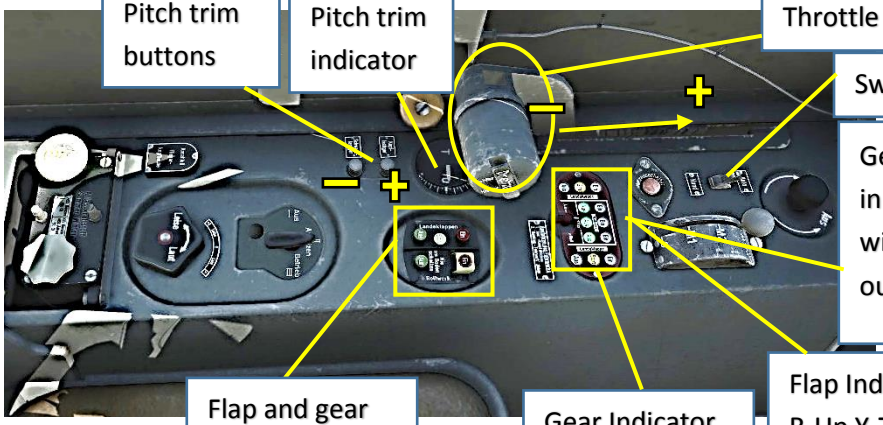
1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 150-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

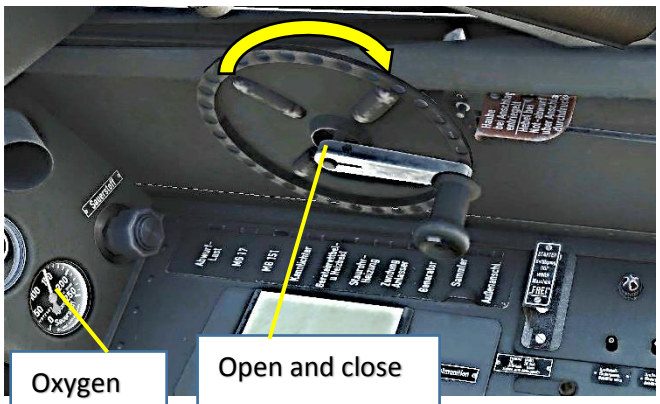
Quirks and tips

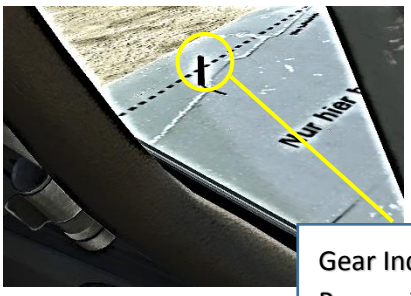
- Ideal glide slope at 195-205 km/h

Fw 190 A-5 1943 (BOK)









Fw 190 A-5 Procedures

Engine Start

4. No need to close radiators. This plane controls them automatically
5. Press E to start the motor
6. Wait for the oil in temp to be above 60 C

Engine Management

- The plane controls RPM, pitch and mixture automatically.
- The oil radiator is controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.2 ata** of manifold pressure
- Combat power is **2400 RPM** with **1.32 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2700 RPM** with **1.42 ata** of manifold pressure. Limit of 3 minutes.
- **Only with U17 strike modification** engage boost by using boost command at full throttle. Up to **1.65 ata** limit of 10 minutes. Must be below 1Km altitude.
- Keep cylinder temp between 180-220 C (no gauge so you can ignore this)
- Keep Oil intake between 60-85 C
- Keep Oil outtake less than 120 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Open radiators
6. Pull back on stick to lock tail wheel until 100 – 120 km/h
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 170-210 km/h
10. Raise gear and flaps
11. Set engine to desired power level

Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Gear down and flaps as needed
4. Aim to touch down 160-170 km/h
5. Once the tail wheel is down apply brakes as needed
6. Use rudder and wheel brakes to steer

Quirks and tips

- Ideal glide slope at 205-215 km/h
- Pull back on stick to engage tail wheel lock

Bf 109 G-6 1943 (DLC)

Ammo Counters

Artificial Horizon

Clock

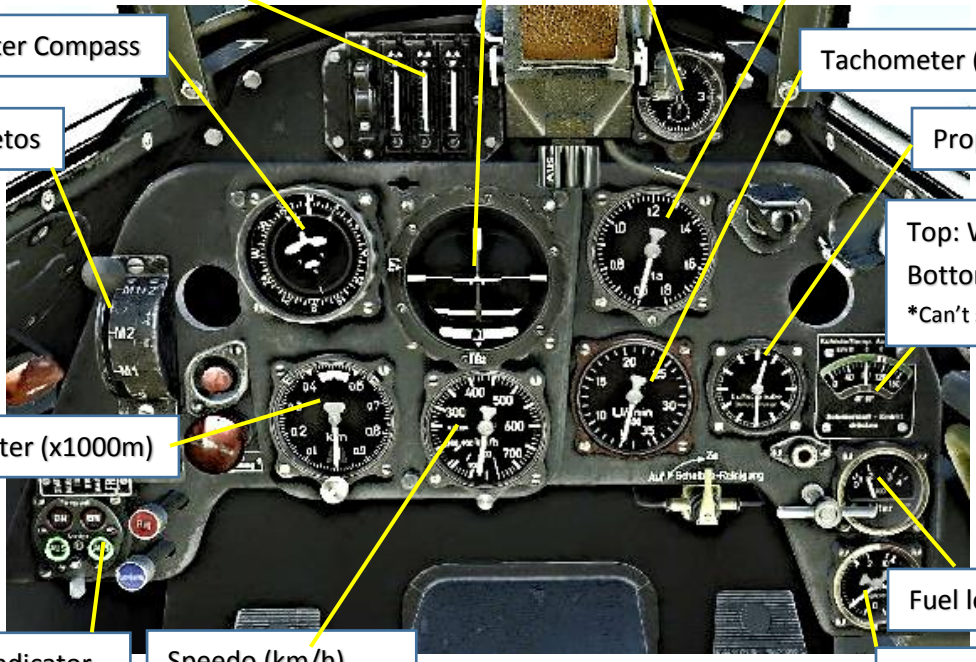
Manifold Pressure (ATA)

Repeater Compass

Tachometer (x100 RPM)

Magnetos

Propeller Pitch



Top: Water Exit Temp
Bottom: Oil Intake Temp
*Can't switch so only shows water

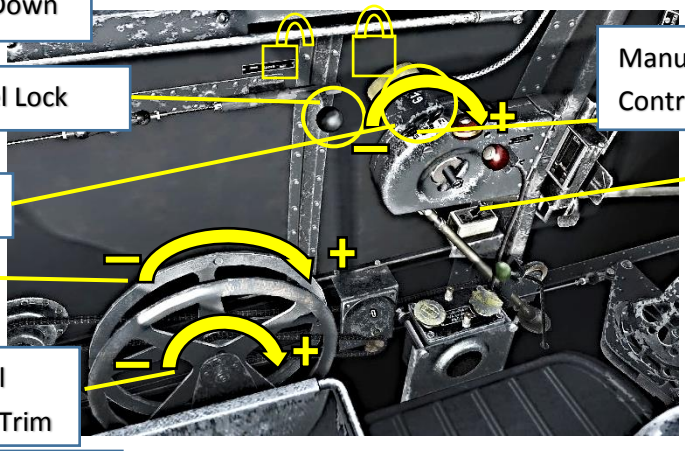
Altimeter (x1000m)

Fuel level (x100 L)

Gear Indicator
R-Up G-Down

Speedo (km/h)

Left: Fuel Pressure
Right: Oil Pressure



Tail Wheel Lock

Manual Pitch Control Rocker

Throttle

Manual Pitch Control Enable

Flaps



Horizontal Stabilizer Trim

Lighting Controls



Oxygen Pressure

Manual Radiator Controls

Flap indicator each mark visible 10 deg of flaps

Bf 109 G-6 Procedures

Engine Start

1. No need to close radiators. This plane controls them automatically
2. Press E to start the motor
3. Wait for the oil in temp to be above 70 C and for the water temp to be above 80 C

Engine Management

- The plane controls PRM, mixture and pitch automatically.
- The water and oil radiators are also controlled automatically
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2600 RPM** with **1.3 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2800 RPM** with **1.42 ata** of manifold pressure. Limit of **1 minute**.
- Keep Water temp between 100-115 C
- Keep Oil intake between 70-85 C

Take off

1. Slowly move to the run-way using the tail wheel and apply brakes as needed
2. Lock Tail wheel
3. Close canopy
4. Apply a small amount of flaps if needed
5. Recommended to set elevator trim to +1 degree
6. Open radiators
7. Apply throttle as needed
8. Apply rudder to correct a left hand pull during take off
9. Take off between 155-180 km/h
10. Raise gear and flaps
11. Set engine to desired power level

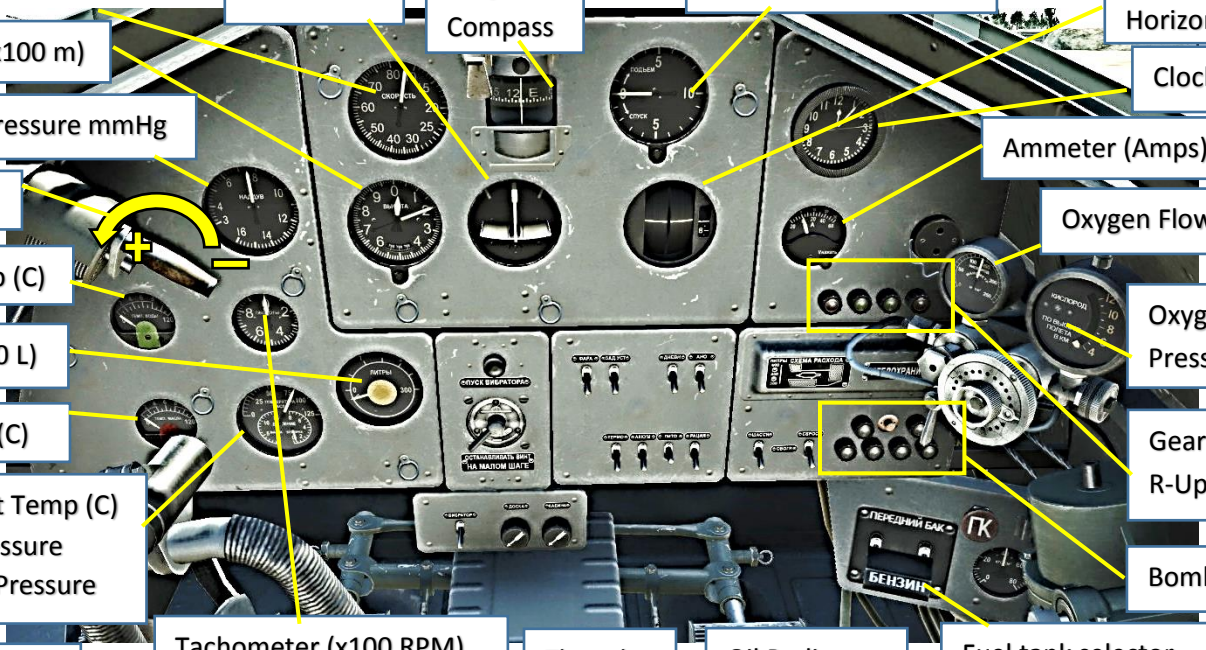
Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Recommended to set elevator trim to -4 degrees
4. Gear down and flaps as needed
5. Aim to touch down 150-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and wheel brakes to steer

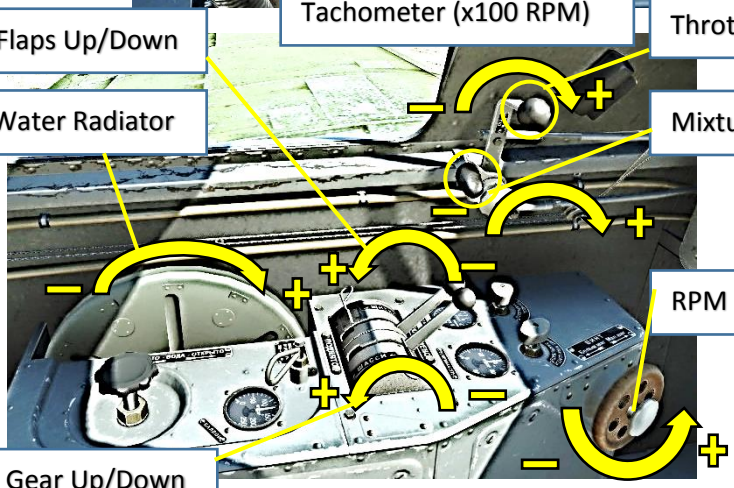
Quirks and tips

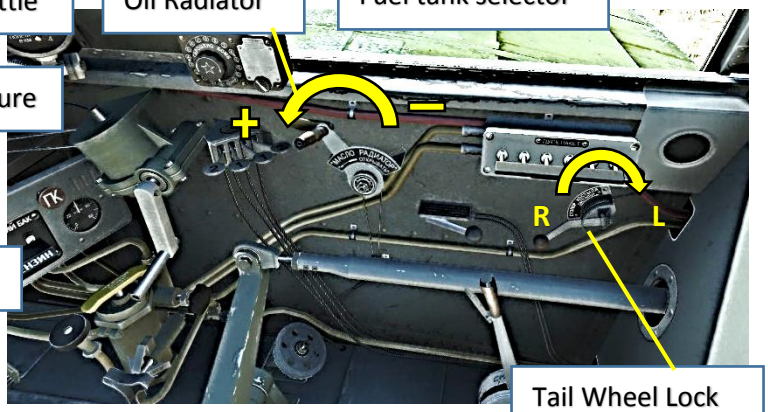
- Ideal glide slope at 195-205 km/h

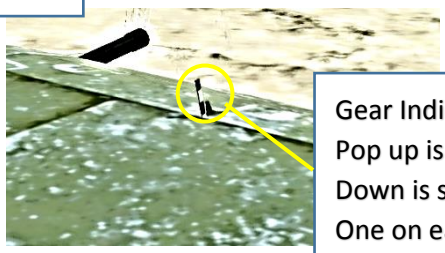
IL-2 AM-38 model 1941 (BOM)



Speedo (x10 km/h)
Turn & Slip
Magnetic Compass
Rate of Climb (m/s)
Artificial Horizon
Altimeter (x100 m)
Clock
Manifold Pressure mmHg
Ammeter (Amps)
Pitch Trim
Oxygen Flow
Water temp (C)
Oxygen Pressure
Fuel in (x100 L)
Oil in temp (C)
Gear Indicator R-Up G-Down
Top: Oil Out Temp (C)
Left: Oil Pressure
Right: Fuel Pressure
Bomb indicators
Tachometer (x100 RPM)
Throttle
Oil Radiator
Fuel tank selector
Flaps Up/Down
Water Radiator
Mixture
RPM
Tail Wheel Lock
Gear Up/Down







Gear Indicator
Pop up is deployed
Down is stowed
One on each wing

IL-2 AM-38 model 1941 Procedures

Engine Start

1. Close water and oil radiators
2. Set mixture to 50% and 90% RPM for continuous power or higher for boost.
3. Press E to start the motor
4. Wait for the oil in temp to be above 40 C and for the water temp to be above 80 C

Engine Management

- Use both RPM settings and/or throttle to control the manifold pressure and rpm ratio
- Use ~50% mixture and ~90% RPM for continuous power
- Adjust the radiators as needed
- Continuous power is **2050 RPM** with **1180 mmHg** of manifold pressure
- Combat power is **2150 RPM** with **1280 mmHg** of manifold pressure. Limit of **10 minutes**
- Keep Water temp between 80-110 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 115 C

Take off

1. Unlock the tail wheel to taxi.
2. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
3. Set flaps to down and close cockpit. And lock the tail wheel
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off above 150-190 km/h depending on the weight of loaded aircraft.
8. Watch engine power, make sure it's at a safe level
9. Raise gear and flaps
10. Set engine to desired power level

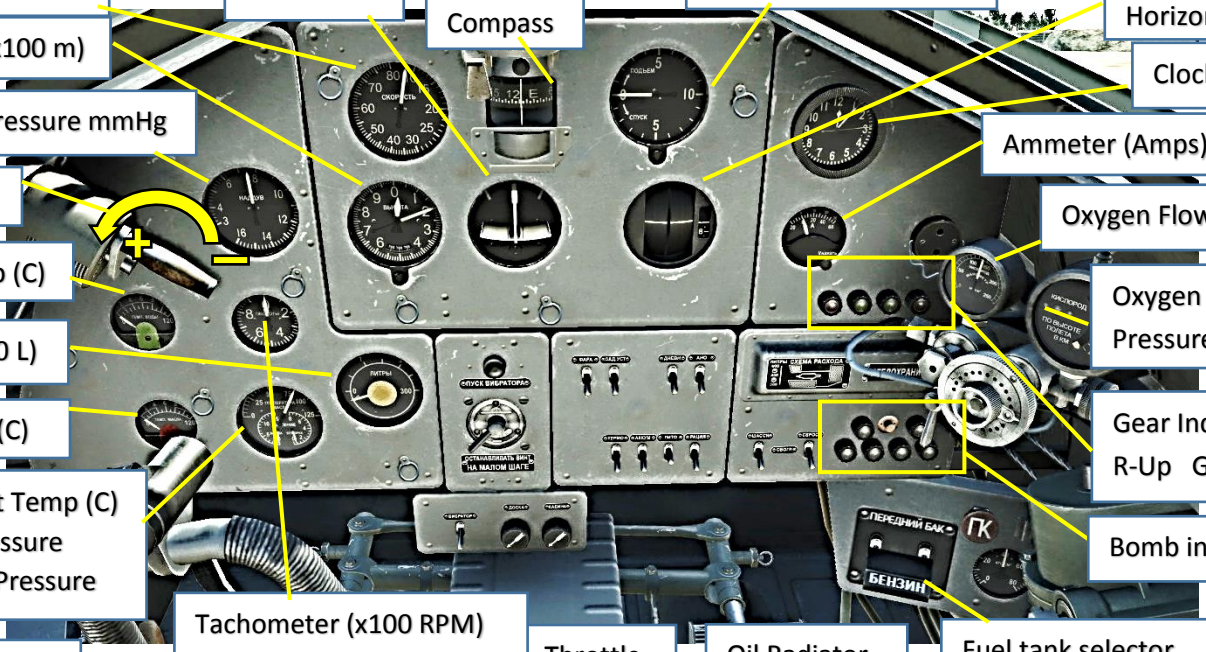
Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 130-140 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder to steer

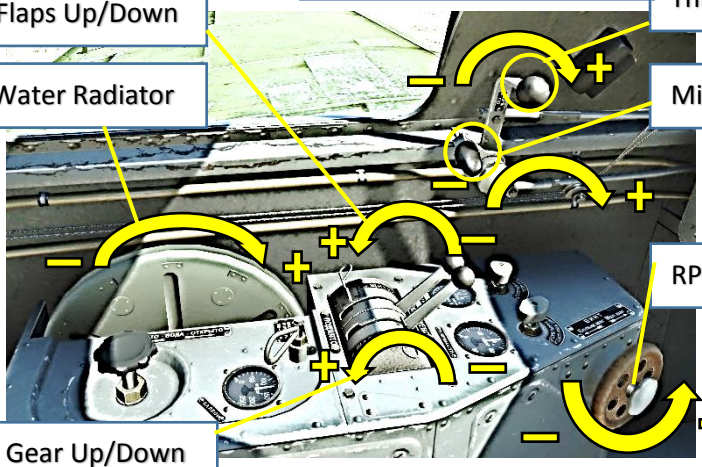
Quirks and tips

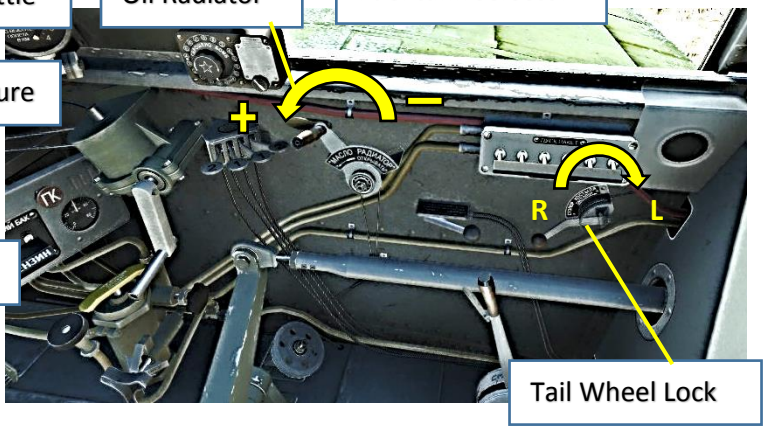
- The IL2 has multiple fuel tanks and uses the fuel tank selector to show the fuel in each tank.
- The game will move the fuel tank selector as needed
- Ideal glide slope at 185-195 km/h
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

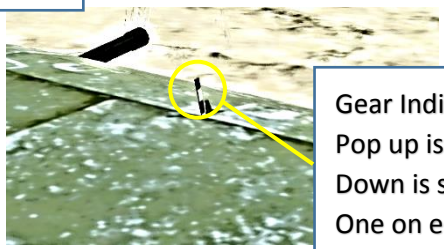
IL-2 AM-38 model 1942 (BOS)



Speedo (x10 km/h)
Altimeter (x100 m)
Manifold Pressure mmHg
Pitch Trim
Water temp (C)
Fuel in (x100 L)
Oil in temp (C)
Top: Oil Out Temp (C)
Left: Oil Pressure
Right: Fuel Pressure
Turn & Slip
Magnetic Compass
Rate of Climb (m/s)
Artificial Horizon
Clock
Ammeter (Amps)
Oxygen Flow
Oxygen Pressure
Gear Indicator
R-Up G-Down
Bomb indicators
Fuel tank selector
Tachometer (x100 RPM)
Throttle
Oil Radiator
Flaps Up/Down
Water Radiator
Mixture
RPM
Gear Up/Down
Tail Wheel Lock







Gear Indicator
Pop up is deployed
Down is stowed
One on each wing

IL-2 AM-38 model 1942 Procedures

Engine Start

1. Close water and oil radiators
2. Set mixture to 50% and 90% RPM for continuous power or higher for boost.
3. Press E to start the motor
4. Wait for the oil in temp to be above 40 C and for the water temp to be above 80 C

Engine Management

- Use both RPM settings and/or throttle to control the manifold pressure and rpm ratio
- Use ~50% mixture and ~90% RPM for continuous power
- Adjust the radiators as needed
- Continuous power is **2050 RPM** with **1180 mmHg** of manifold pressure
- Combat power is **2150 RPM** with **1280 mmHg** of manifold pressure. Limit of **10 minutes**
- Keep Water temp between 80-110 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 115 C

Take off

1. Unlock the tail wheel to taxi.
2. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
3. Set flaps to down and close cockpit. And lock the tail wheel
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off above 150-190 km/h depending on the weight of loaded aircraft.
8. Watch engine power, make sure it's at a safe level
9. Raise gear and flaps
10. Set engine to desired power level

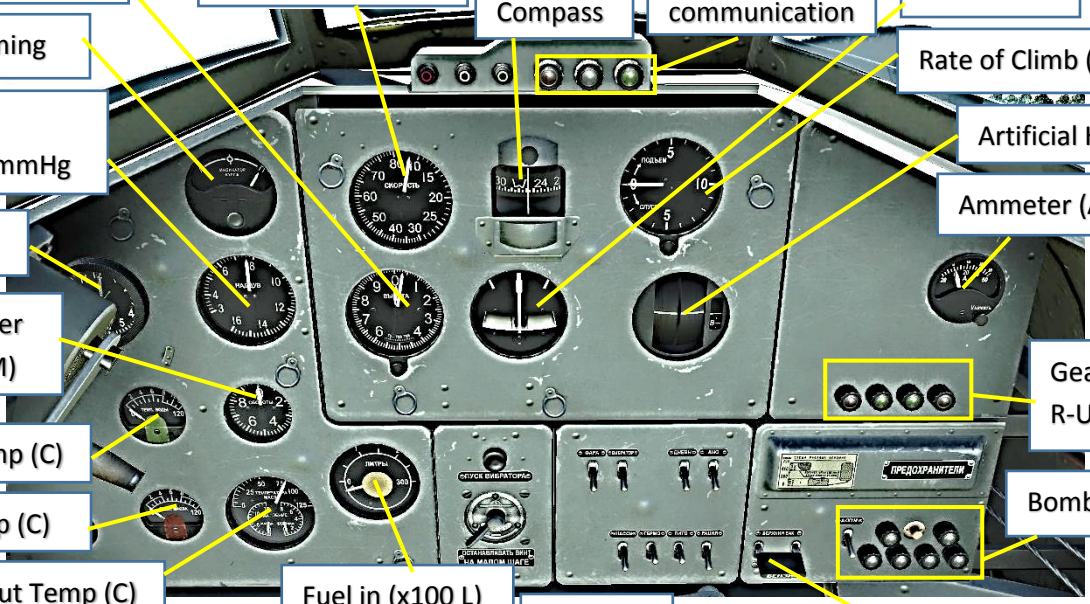
Landing

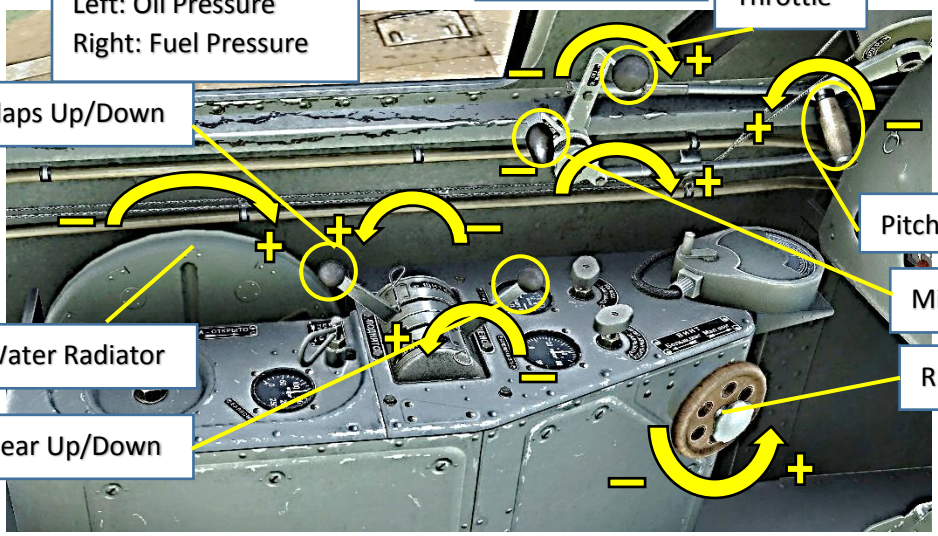
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 135-145 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder to steer

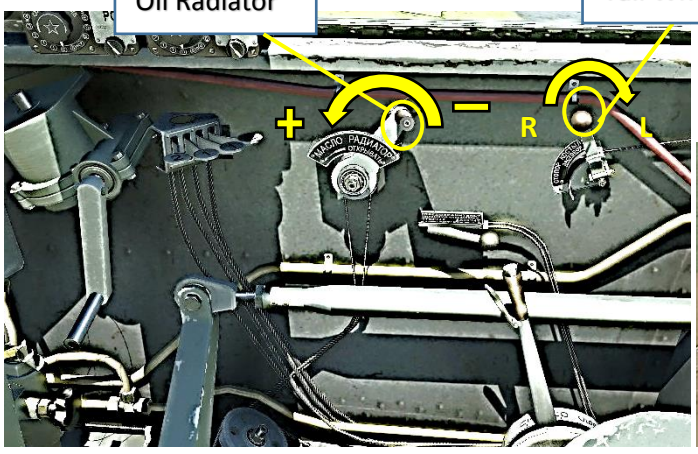
Quirks and tips

- The IL2 has multiple fuel tanks and uses the fuel tank selector to show the fuel in each tank.
- The game will move the fuel tank selector as needed
- Ideal glide slope at 185-195 km/h
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

IL-2 AM-38F 1943 (BOK)









IL-2 AM-38F 1943 Procedures

Engine Start

1. Close water and oil radiators
2. Set mixture to 50% and 90% RPM for continuous power or higher for boost.
3. Press E to start the motor
4. Wait for the oil in temp to be above 40 C and for the water temp to be above 80 C

Engine Management

- Use both RPM settings and/or throttle to control the manifold pressure and rpm ratio
- Use ~50% mixture and ~90% RPM for continuous power
- Adjust the radiators as needed
- Continuous power is **2050 RPM** with **1200 mmHg** of manifold pressure
- Boosted power is **2350 RPM** with **1360 mmHg** of manifold pressure. Limit of **5 minutes**
- Keep Water temp between 80-110 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 120 C

Gunner communication lights

Green: Target far away
White: No ammo left
Red: Being engaged

Flashing Green: intermediate flap stop engaged

Take off

1. Unlock the tail wheel to taxi.
2. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
3. Set flaps to down and close cockpit. And lock the tail wheel
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off above 160-200 km/h depending on the weight of loaded aircraft.
8. Watch engine power, make sure it's at a safe level
9. Raise gear and flaps
10. Set engine to desired power level

Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 145-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder to steer

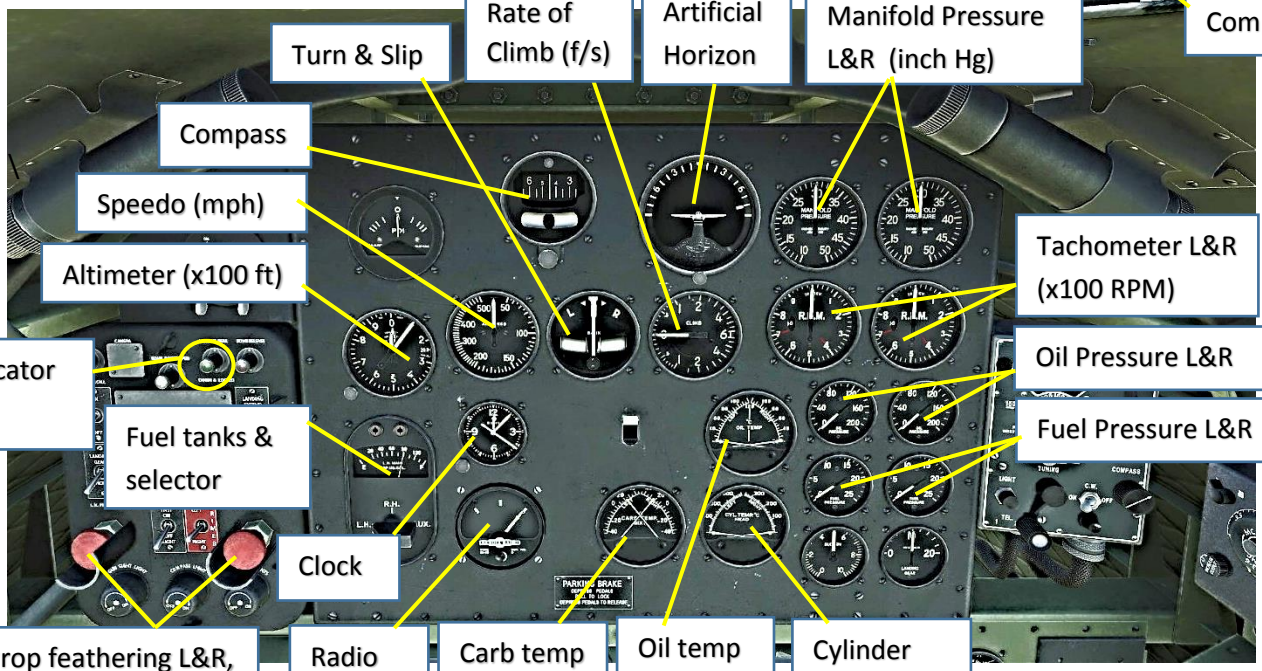
Quirks and tips

- The IL2 has multiple fuel tanks and uses the fuel tank selector to show the fuel in each tank.
- The game will move the fuel tank selector as needed
- Ideal glide slope at 185-205 km/h
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

A-20B 1942 (BOK)



Compass



Turn & Slip

Rate of Climb (f/s)

Artificial Horizon

Manifold Pressure L&R (inch Hg)

Compass

Speedo (mph)

Altimeter (x100 ft)

Tachometer L&R (x100 RPM)

Gear Indicator G-Down

Oil Pressure L&R

Fuel tanks & selector

Fuel Pressure L&R

Clock

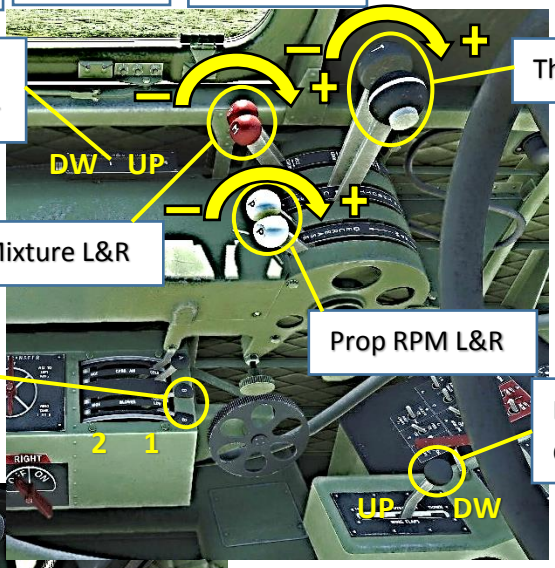
Prop feathering L&R, pull to feather

Radio Homing

Carb temp L&R (C)

Oil temp L&R (C)

Cylinder temp L&R



Flaps Indicator

Throttle L&R

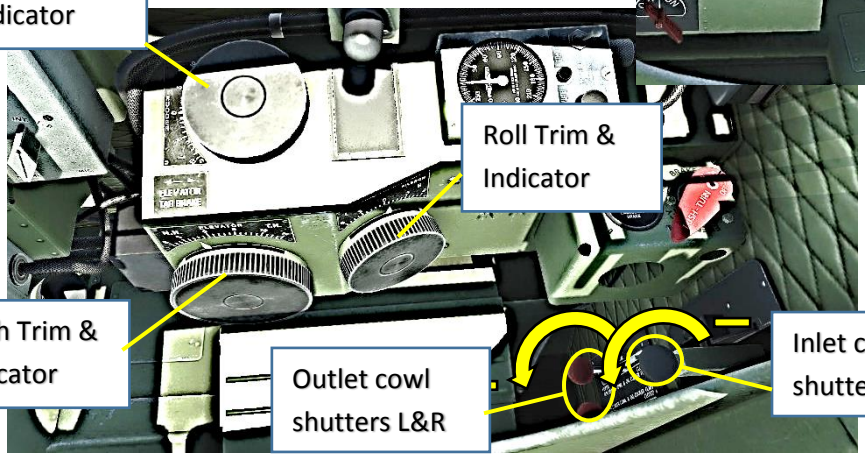
Mixture L&R

Prop RPM L&R

Super Charger Gear L&R

Flaps Control

Yaw Trim & Indicator



Roll Trim & Indicator

Pitch Trim & Indicator

Outlet cowl shutters L&R

Inlet cowl shutters

A-20B Procedures

Engine Start

1. Close both shutters
2. Set mixture to 66% and 90% RPM for continuous power or higher for boost.
3. Press E to start the motor
4. Wait for the oil temp to be above 65 C and for the cylinder temp to be above 120 C

Engine Management

- Use a lower RPM setting to use normal power. To use combat power use the max RPM setting
- Use throttle to control the manifold pressure.
- A combination of throttle control and RPM control is needed
- Keep mixture at 66% for normal operation.
- Set mixture to auto lean (33%) to save fuel if needed
- Adjust the outlet shutters as needed
- Power levels are dependent on super charger gear settings
- Nominal power is **2300 RPM** with **36 inHg** of manifold pressure with super charger gear **1** and **40 inHg** in gear **2**
- Combat power is **2400 RPM** with **43 inHg** of manifold pressure with super charger gear **1** and **41 inHg** in gear **2** Limit of 5 minutes
- Use gear 2 of the super charger above 2,900m (9,500 ft)
- Keep cylinder temp between 140-260 C
- Keep Oil temp between 80-105 C

Take off

1. Slowly move to the run-way using L/R wheel brakes and rudder to control direction
2. Set flaps partly down and close the cockpit.
3. Open outlet shutters
4. Apply throttle as needed
5. Apply rudder to correct a left hand pull during take off
6. Take off above 170-195 km/h (105-120 mph) depending on the weight of the loaded aircraft.
7. Watch engine power, make sure it's at a safe level
8. Raise gear and flaps
9. Set engine to desired power level

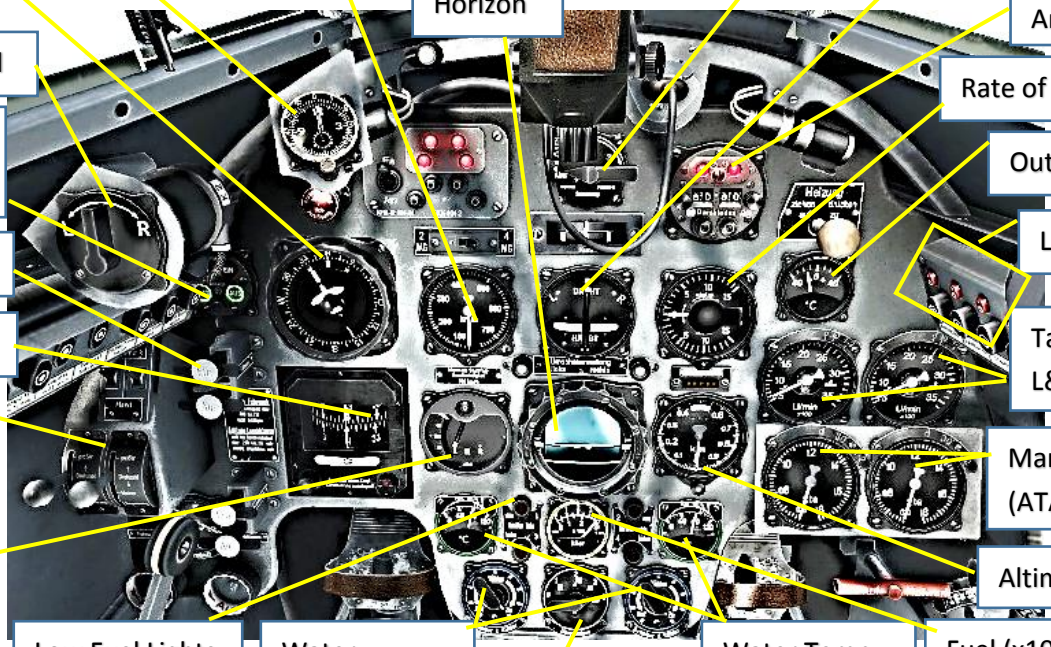
Landing

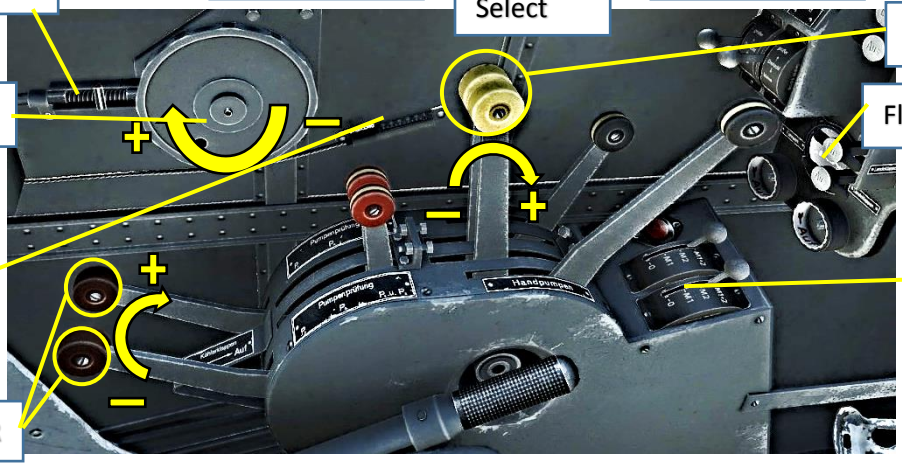
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 150-170 km/h (95-105 mph)
6. Once all three wheels are down apply brakes as needed

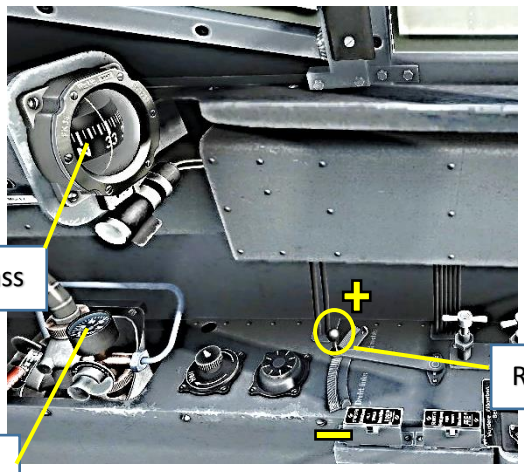
Quirks and tips

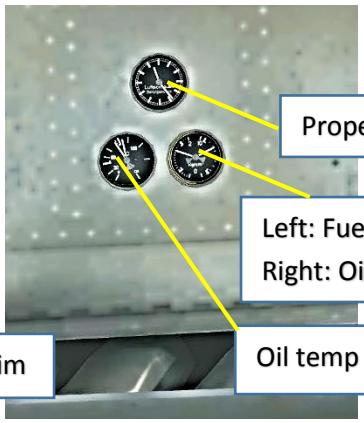
- Do not open the inlet shutters in flight. They will cause violent shaking
- The A-20B has multiple fuel tanks and uses the fuel tank selector to show the fuel in each tank.
- The game will move the fuel tank selector as needed
- Ideal glide slope at 185-225 km/h (115-140 mph)
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Bf 110 E-2 1940 (BOM)









Bf 110 E-2 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Press E to start both motors
3. Wait for the oil in temp to be above 30 C and for the water temp to be above 70 C

Engine Management

- The plane controls PRM and pitch automatically. Manual pitch control is available if needed.
- Open and close the oil and water radiators as needed.
- Use throttle to regulate power settings
- Nominal power is **2200 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2300 RPM** with **1.23 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2400 RPM** with **1.3 ata** of manifold pressure. Limit of 5 minutes.
- Boosted power is **2400 RPM** with **1.4 ata** of manifold pressure. Limit of 1 minute.
- Keep Water temp between 90-100 C
- Keep Oil intake between 30-80 C
- Keep Oil output less than 105 C

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off between 180-220 km/h
8. Raise gear and flaps
9. Set engine to desired power level
10. Climb at 260 km/h

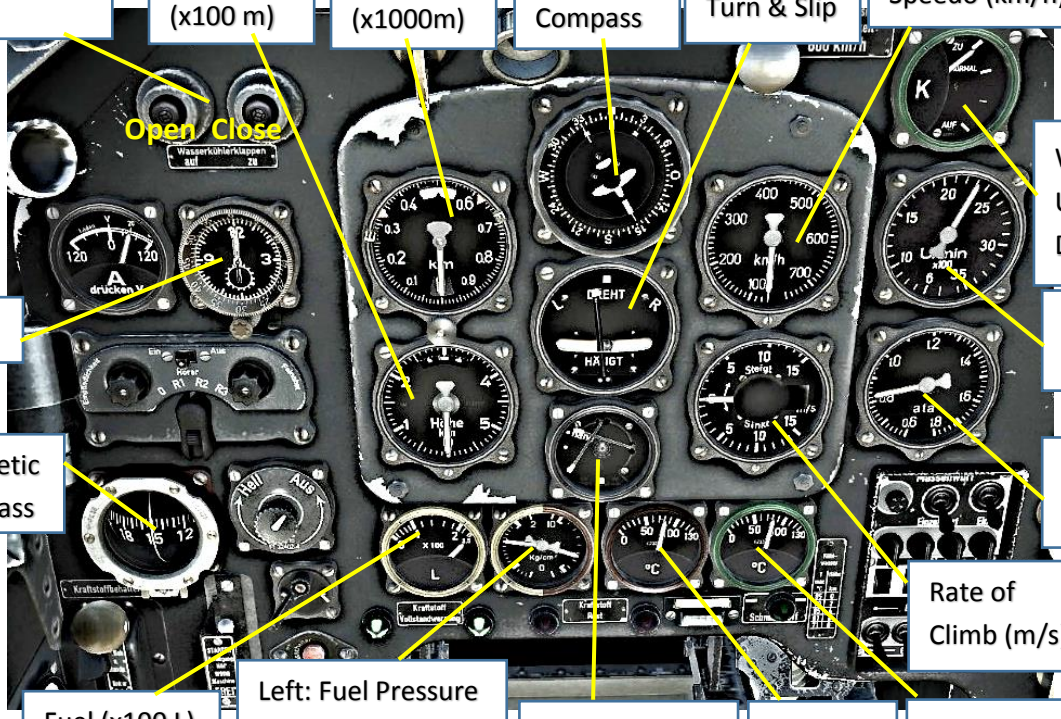
Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 140-160 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

Quirks and tips

- Ideal glide slope at 200-220 km/h
- The Cannons need to be reloaded every 60 rounds
- In case of single engine failure feather the prop of the failed engine
- You can fly on a single engine. **Do not use flaps**. Too many bullet holes or compounding damage may make this impossible.
- This plane has multiple fuel tanks. The selector will switch tanks automatically
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Ju 87 D-3 1942 (BOS)



Water Radiator Control

Contact Altimeter (x100 m)

Altimeter (x1000m)

Repeater Compass

Turn & Slip

Speedo (km/h)

Water rad status
UP: Closed
DW: Open

Clock

Tachometer (x100 RPM)

Magnetic Compass

Manifold Pressure

Rate of Climb (m/s)

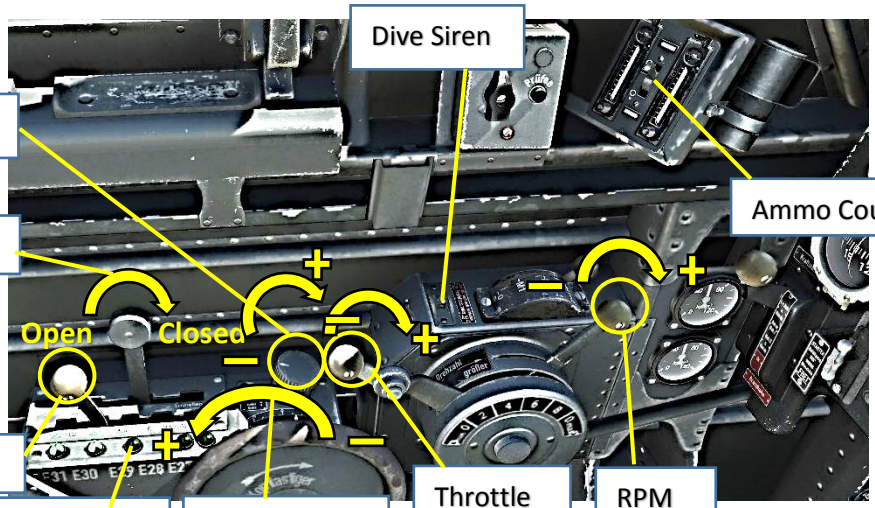
Fuel (x100 L)

Left: Fuel Pressure
Right: Oil Pressure

Radio Homing

Oil temp

Water temp



Dive Siren

Yaw Trim

Ammo Counters

Air brakes

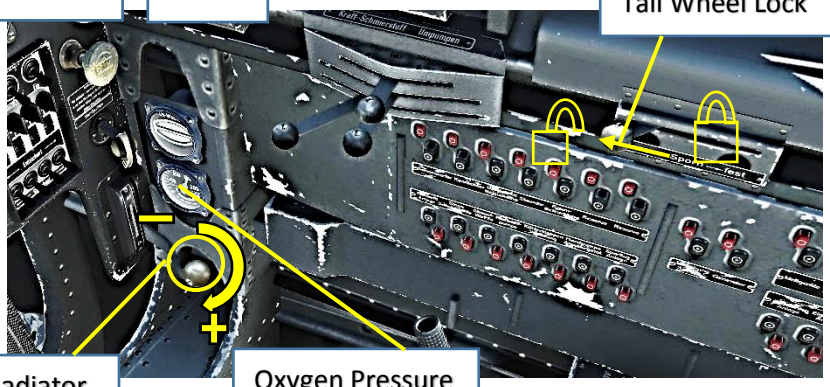
Flap control

Throttle

RPM

Flap indicators

Pitch Trim and indicator



Tail Wheel Lock

Oil Radiator

Oxygen Pressure

Ju 87 D-3 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Press E to start both motors
3. Wait for the oil in temp to be above 80 C and for the water temp to be above 70 C

Engine Management

- The plane controls mixture and pitch automatically.
- Use both RPM and throttle at the same time to control the power setting.
- Open and close the oil and water radiators as needed
- Use throttle to regulate power settings
- Nominal power is **2250 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2400 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes
- Take-off power is **2600 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minute.
- Keep Water temp between 80-110 C
- Keep Oil between 90-105 C

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off between 140-170 km/h
8. Raise flaps
9. Set engine to desired power level

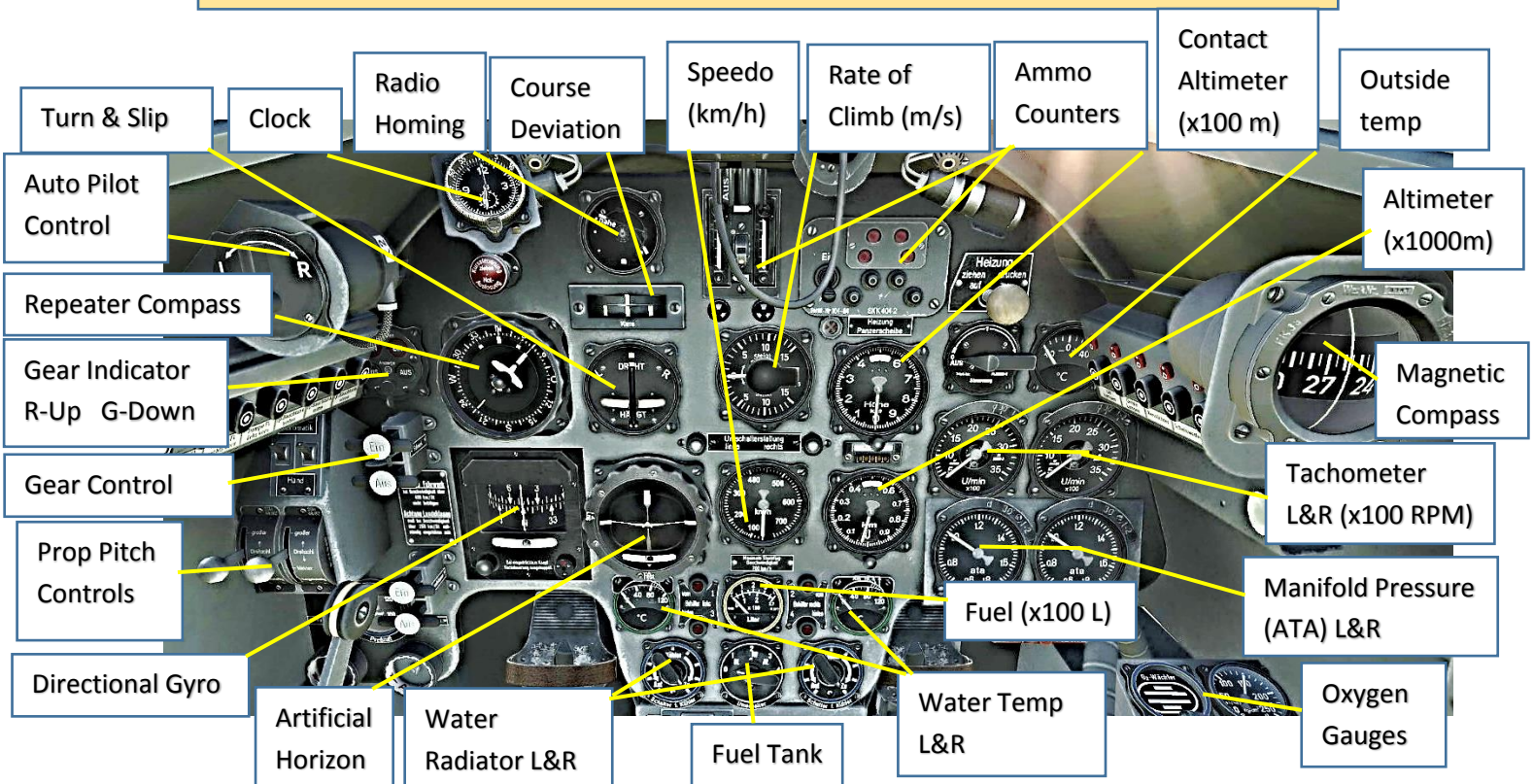
Landing

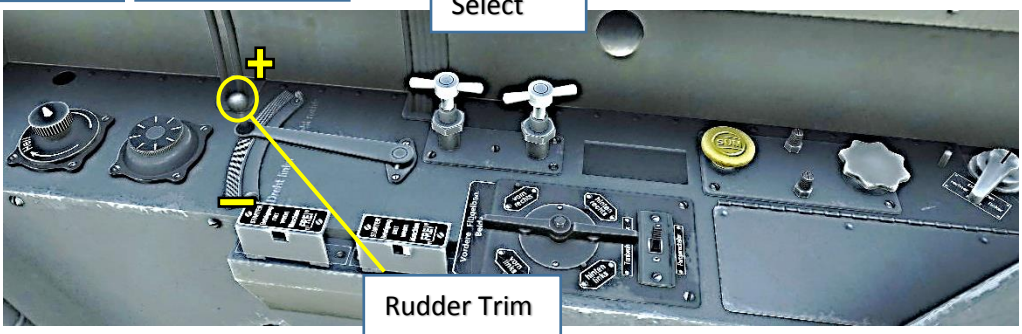
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 125-145 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

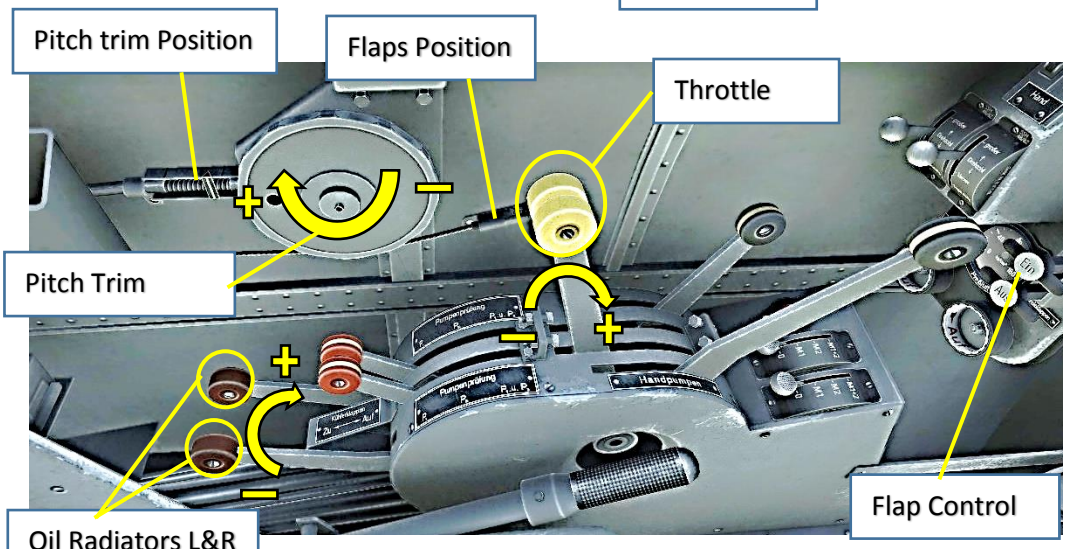
Quirks and tips

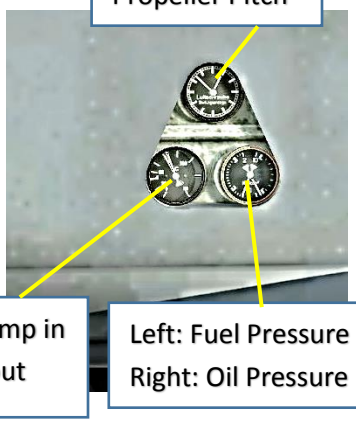
- Ideal glide slope at 180-195 km/h
- This plane has multiple fuel tanks. The selector will switch tanks automatically
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Bf 110 G-2 1942 (BOK)









Bf 110 G-2 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Press E to start both motors
3. Wait for the oil in temp to be above 55C C and for the water temp to be above 80 C

Engine Management

- The plane controls PRM and pitch automatically. Manual pitch control is available if needed.
- Open and close the oil and water radiators as needed.
- Use throttle to regulate power settings
- Nominal power is **2300 RPM** with **1.15 ata** of manifold pressure
- Combat power is **2600 RPM** with **1.3 ata** of manifold pressure. Limit of 30 minutes
- Emergency power is **2800 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minute.
- Keep Water temp between 90-115 C
- Keep Oil intake between 60-85 C

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a left hand pull during take off
7. Take off between 155-205 km/h
8. Raise gear and flaps
9. Set engine to desired power level

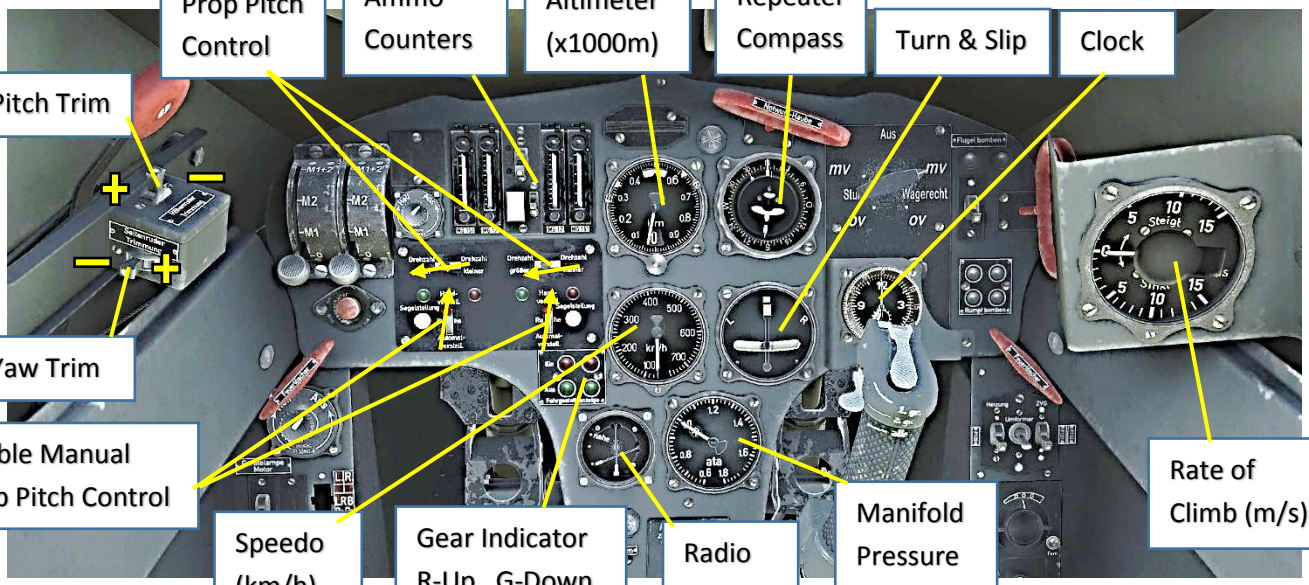
Landing

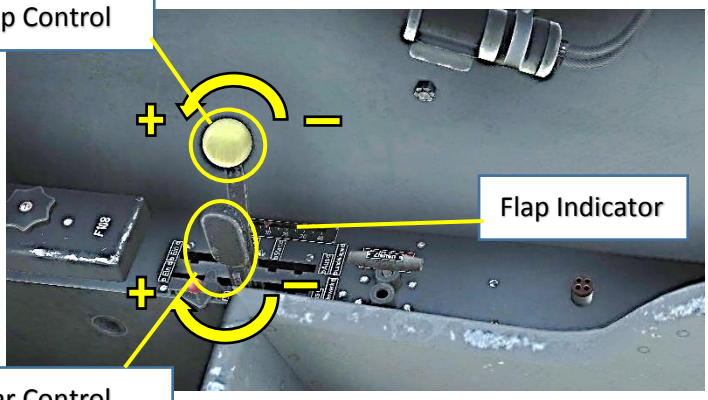
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 150-155 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

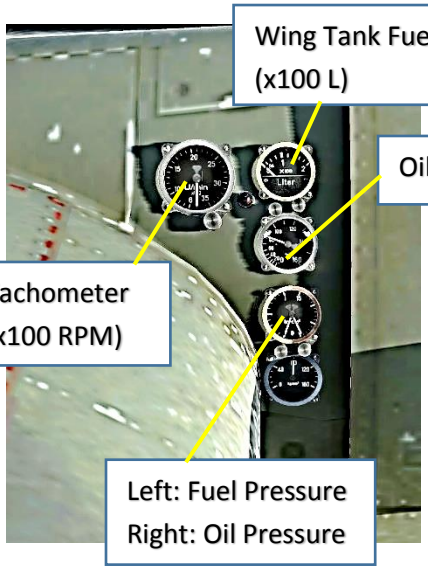
Quirks and tips

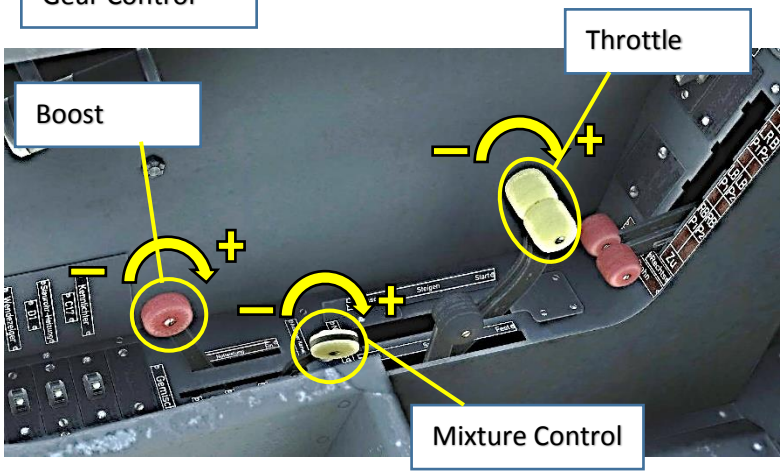
- Ideal glide slope at 195-205 km/h
- In case of single engine failure feather the prop of the failed engine. Close radiators of failed engine.
- You can fly on a single engine. **Do not use flaps**. Too many bullet holes or compounding damage may make this impossible.
- This plane has multiple fuel tanks. The selector will switch tanks automatically
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

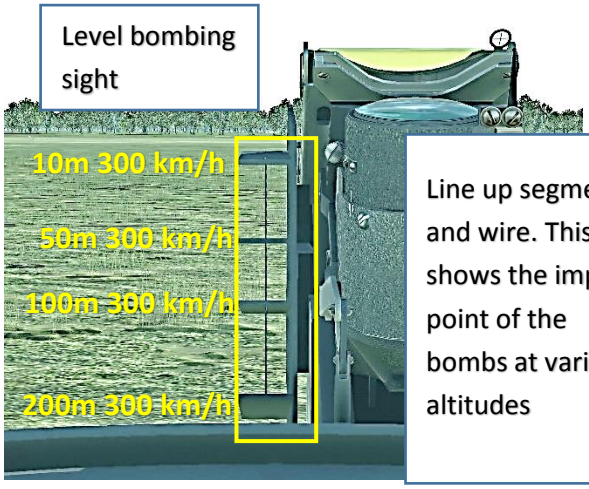
Hs 129 B-2 1942 (BOK)











Line up segment and wire. This shows the impact point of the bombs at various altitudes

Hs 129 B-2 Procedures

Engine Start

1. No radiators to close
2. Set mixture to 60%
3. Press E to start both motors
4. Wait for the oil in temp to be above 55C C

Engine Management

- Use throttle control to adjust ATA and pitch control to adjust RPM
- In combat mode use automatic pitch control.
- Use manual pitch control to lower RPM during cruise by raising the pitch as needed, this is needed to hit the proper power setting
- As long as mixture is set high enough it is automatic. ~60% recommended
- Mixture can be manually leaned to save fuel, lean until RPM suffers
- Use boost for take-off power
- The oil radiators are controlled automatically.
- Use throttle to regulate power settings
- Nominal power is **2350 RPM** with **1.1 ata** of manifold pressure
- Combat power is **2750 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes
- Take-off power is **3030 RPM** with **1.5 ata** of manifold pressure. Limit of 1 minute.
- Keep Oil intake between 60-125 C

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 1 notch or 35 degrees
4. Apply throttle as needed
5. Apply rudder to correct a very slight left hand pull during take off
6. Take off between 145-155 km/h
7. Raise gear and flaps
8. Set engine to desired power level

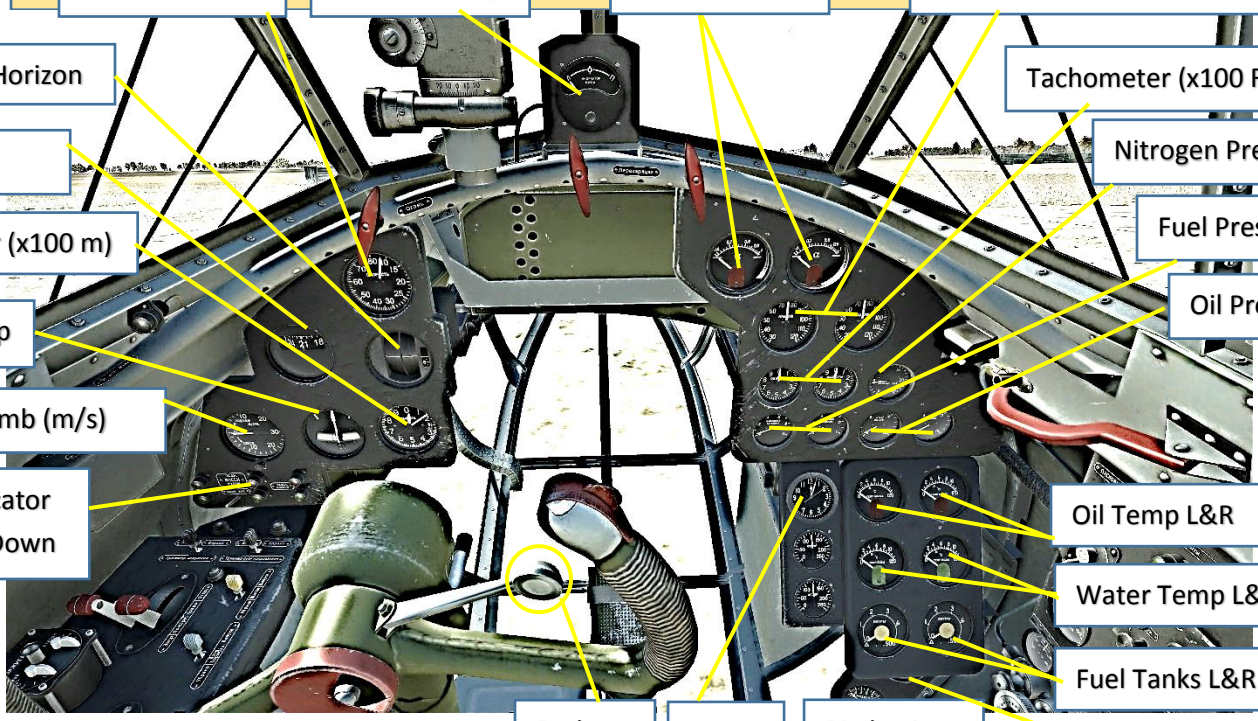
Landing

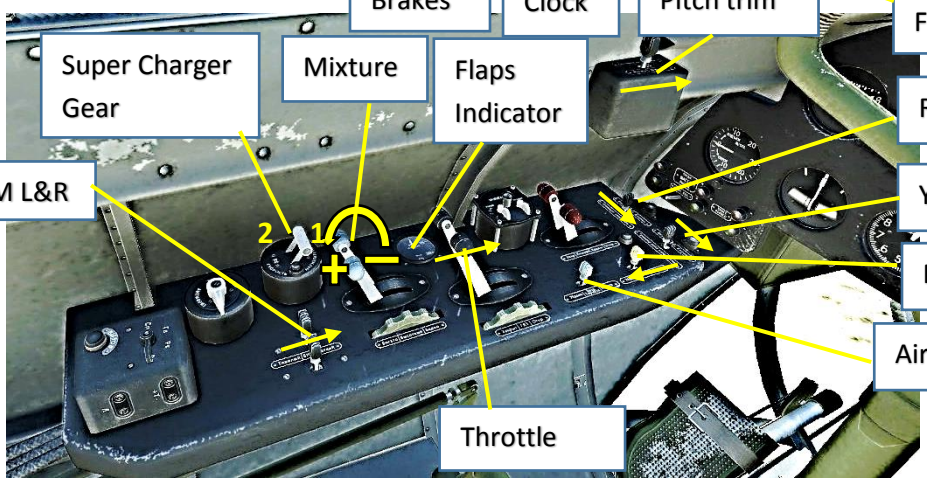
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 135-145 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

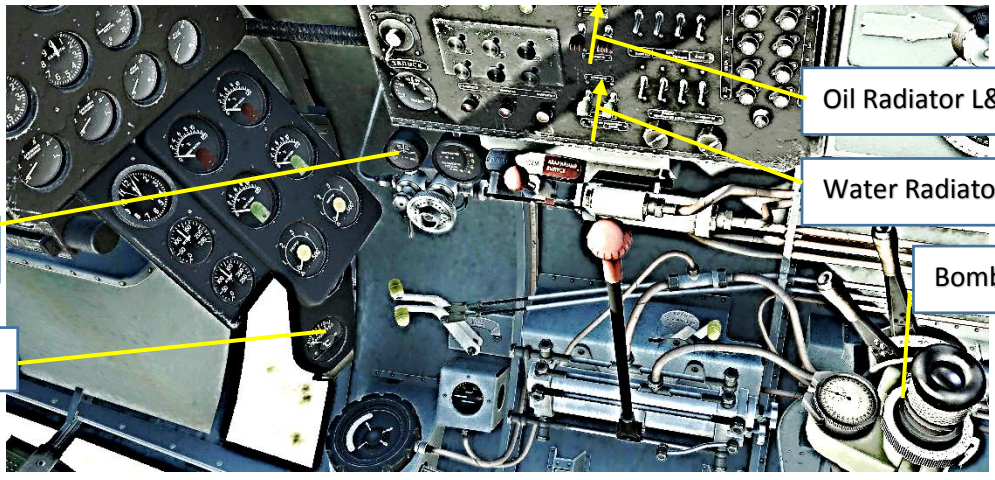
Quirks and tips

- Ideal glide slope at 180-200 km/h
- No oxygen system so stay below 4,000 meters
- In case of single engine failure feather the prop of the failed engine and drop bombs
- Depending on fuel load you **might** be able to fly on a single engine. **Do not use flaps**. Too many bullet holes or compounding damage will make this impossible.
- No fuel gauge for fuselage tank
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Pe-2 Series 35 1941 (BOM)







Pe-2 Series 35 Procedures

Engine Start

1. Close oil radiator and water radiator
2. Set full RPM (This may take a long time)
3. Set full rich (mixture)
4. Press E to start both motors
5. Wait for the oil in temp to be above 60 C and for the water temp to be above 60 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- RPM takes a long time to change
- RPM control may be bound to the prop pitch controls
- Use 100% RPM under normal conditions.
- Adjust the mixture so that the fuel air ratio reads around ~0.9.
- Continuous power is **2700 RPM** with **910 mmHg** of manifold pressure
- Keep Water temp between 70-100 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 110 C
- Use gear 2 of the super charger above 2,700m

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a right hand pull during take off
7. Take off between 160-200 km/h
8. Raise gear and flaps
9. Climb at 260 km/h

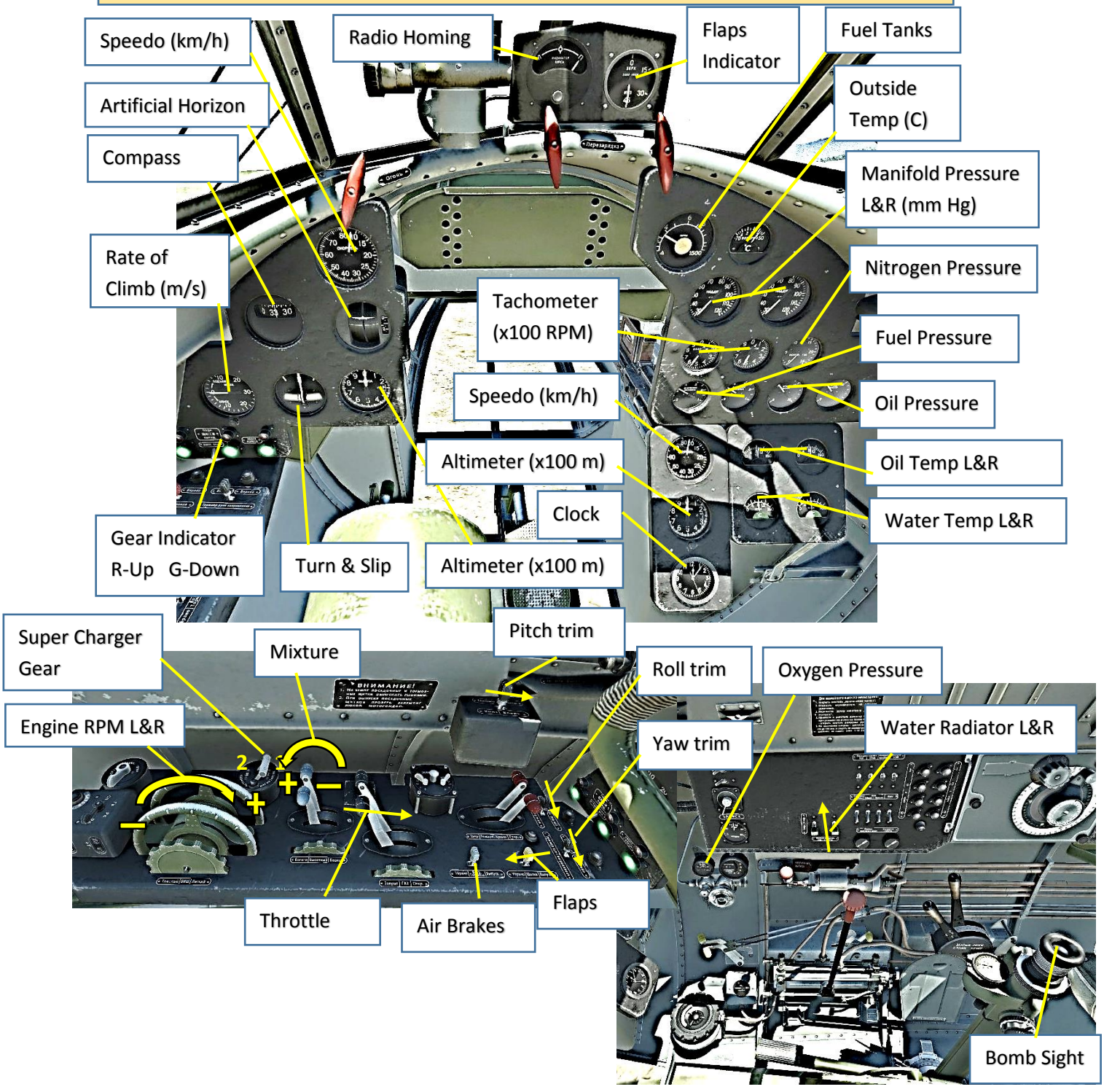
Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 155-165 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

Quirks and tips

- Ideal glide slope at 220-240 km/h
- You can fly reasonably well on a single engine depending on fuel load. **Do not use flaps.**
- In case of engine failure close all radiators for that engine.
- This plane has multiple fuel tanks. The selector will switch tanks automatically
- RPM control may be bound to the prop pitch controls in the game
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Pe-2 Series 87 1942 (BOS)



Pe-2 Series 87 Procedures

Engine Start

1. Close water radiator
2. Set full RPM (This may take a long time)
3. Set full rich (mixture)
4. Press E to start both motors
5. Wait for the oil in temp to be above 60 C and for the water temp to be above 60 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- RPM control may be bound to the prop pitch controls
- Use 100% RPM under normal conditions.
- Under 3 Km a mixture of 66% is recommended. Above 3 Km the mixture may need to be leaned.
- Lean mixture until RPM's drop to lower fuel usage.
- No Oil radiator control
- Continuous power is **2700 RPM** with **1050 mmHg** of manifold pressure
- Keep Water temp between 70-100 C
- Keep Oil intake temp between 40-80 C
- Keep Oil outtake temp less than 115 C
- Use gear 2 of the super charger above 2,300m

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply rudder to correct a right hand pull during take off
7. Take off between 160-200 km/h
8. Raise gear and flaps

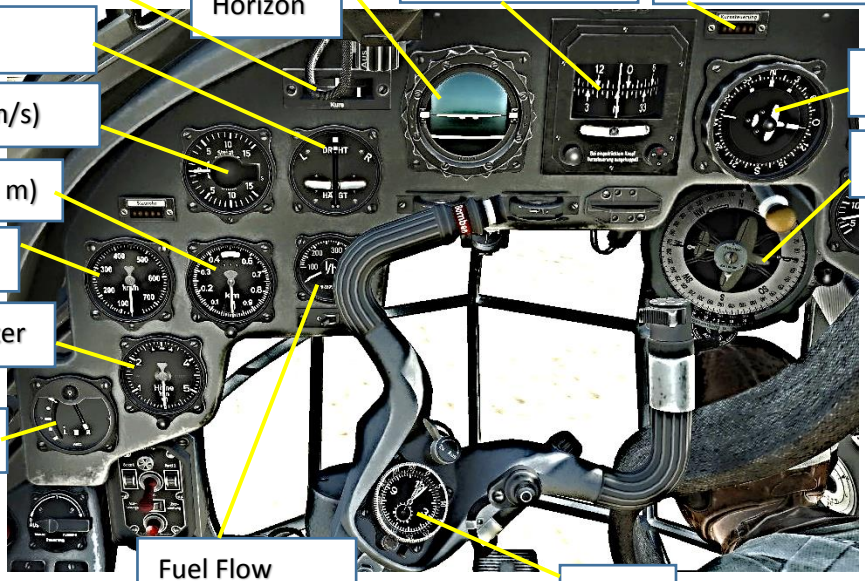
Landing

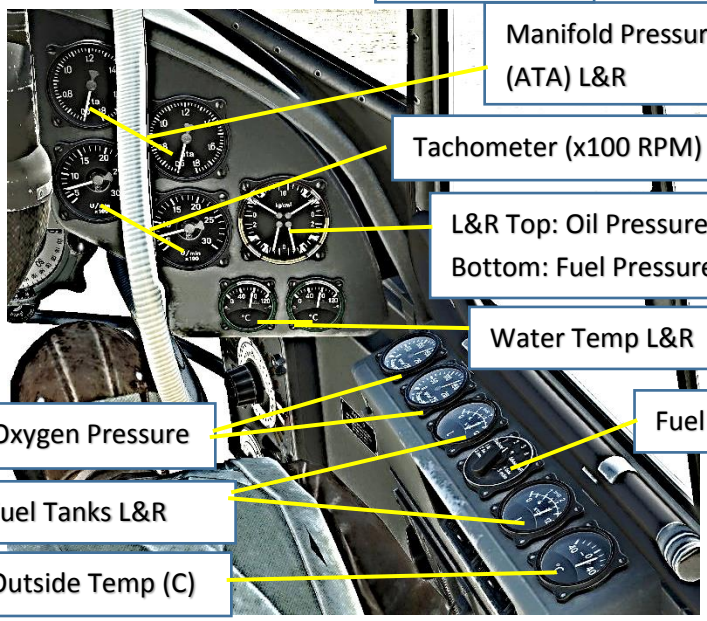
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 155-165 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

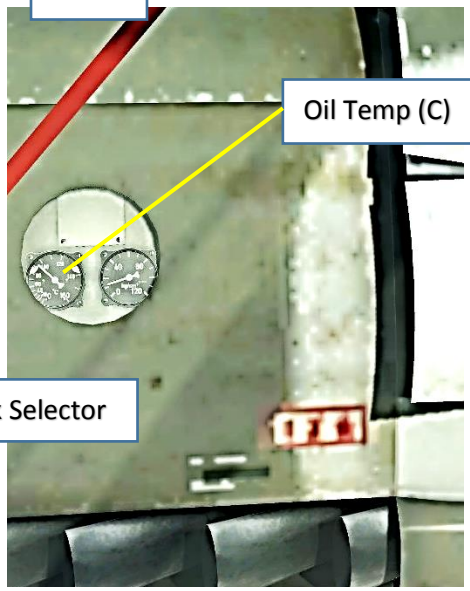
Quirks and tips

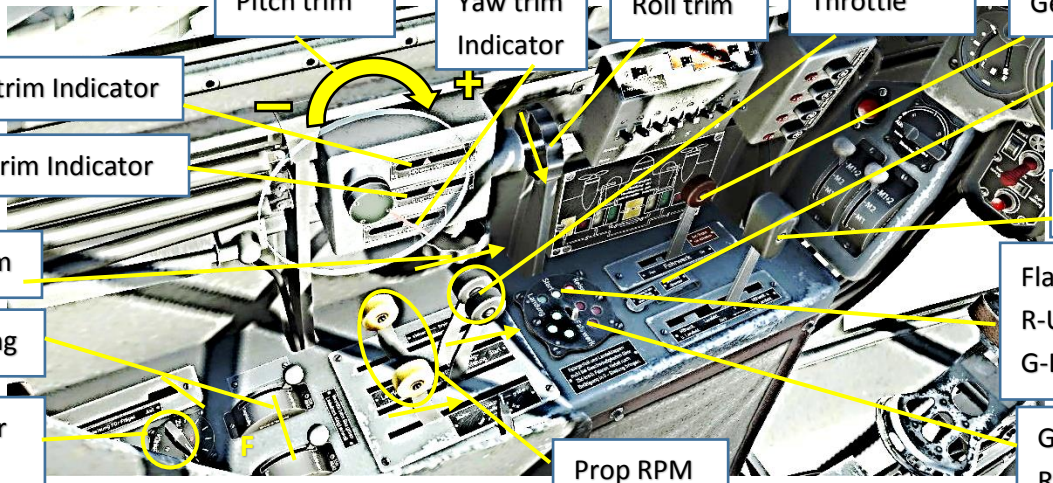
- Ideal glide slope at 220-240 km/h
- You can fly reasonably well on a single engine depending on fuel load. **Do not use flaps.**
- In case of engine failure close the radiator for that engine.
- RPM control may be bound to the prop pitch controls in the game
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Ju 88 A-4 1941 (BOM)









Ju 88 A-4 Procedures

Engine Start

1. Close cowl shutters
2. Press E to start both motors
3. Wait for the oil in temp to be above 80 C and for the water temp to be above 70 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- Its recommended to use throttle to set the ata to the desired power level than adjust RPM as needed
- Mixture is handled automatically
- Nominal power is **2250 RPM** with **1.15 ata** of manifold pressure
- Climb power is **2400 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes.
- Take-Off power is **2600 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minute
- Keep Water temp between 70-110 C
- Keep Oil output temp between 80-130 C
- Super charger gear changing is automatic

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open cooling cowls
5. Apply throttle as needed
6. Apply rudder to correct a right hand pull during take off
7. Take off between 170-210 km/h
8. Raise gear and flaps
9. Set engine to desired power level
10. Climb at 260 km/h

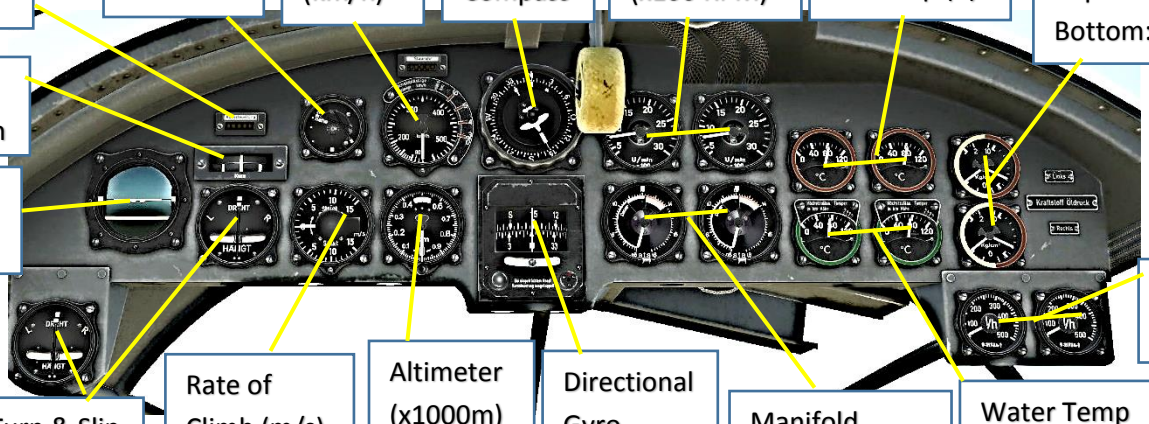
Landing

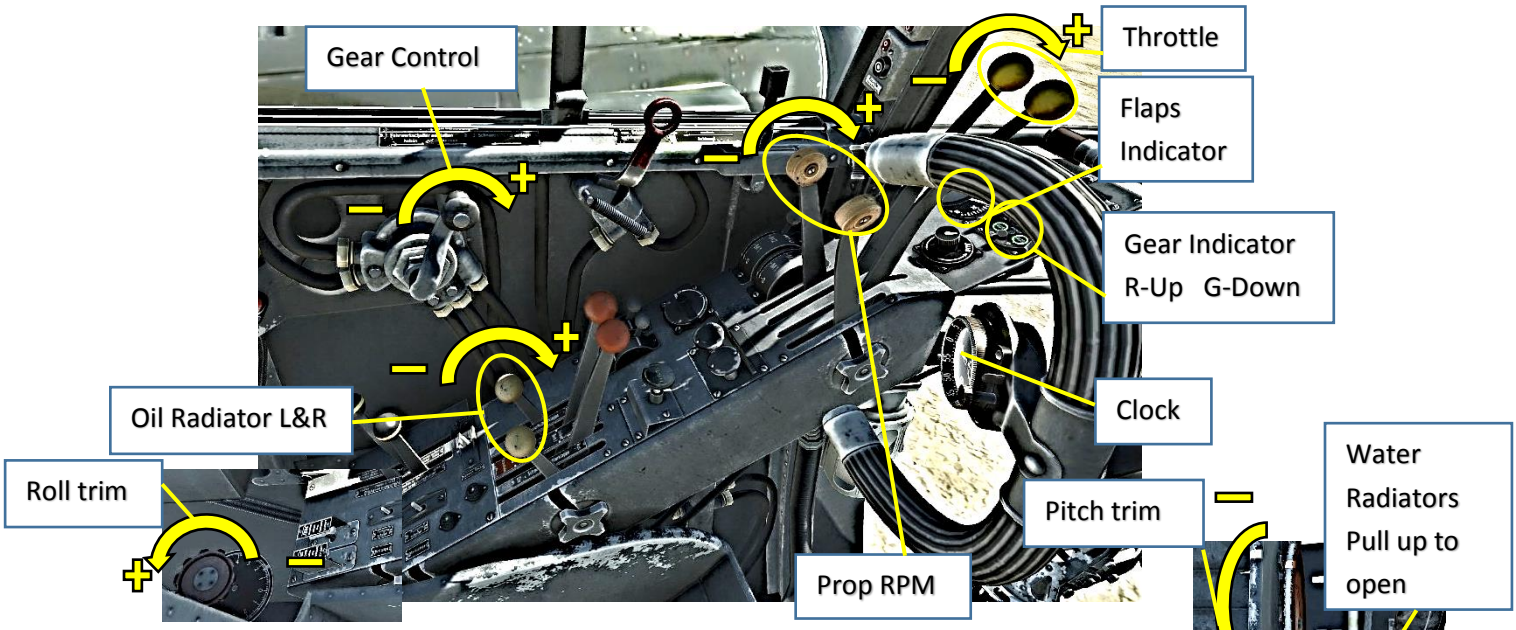
1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 150-160 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

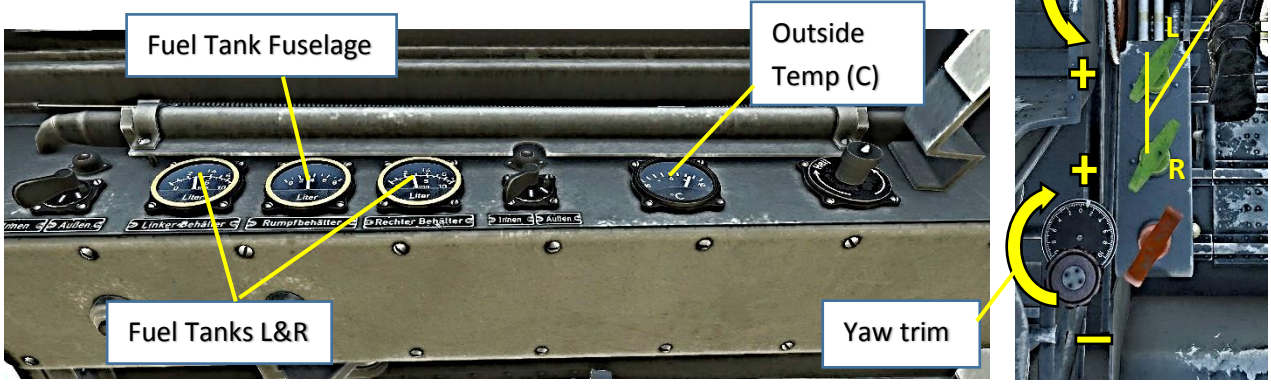
Quirks and tips

- Ideal glide slope at 210-220 km/h
- You may be able to fly on a single engine depending on fuel load. **Do not use flaps.**
- In case of engine failure close all cowls for that engine and feather the prop
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

He 111 H-6 1941 (BOS)







He 111 H-6 Procedures

Engine Start

1. Close all radiators
2. Press E to start both motors
3. Wait for the oil in temp to be above 80 C and for the water temp to be above 70 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- Its recommended to use throttle to set the ata to the desired power level than adjust RPM as needed
- Mixture is handled automatically
- Nominal power is **2250 RPM** with **1.15 ata** of manifold pressure
- Climb power is **2400 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes.
- Take-Off power is **2600 RPM** with **1.42 ata** of manifold pressure. Limit of 1 minute
- Keep Water temp between 70-110 C
- Keep Oil output temp between 90-105 C
- Super charger gear changing is automatic

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply light rudder to correct a very light right hand pull during take off
7. Take off between 170-210 km/h
8. Raise gear and flaps
9. Set engine to desired power level

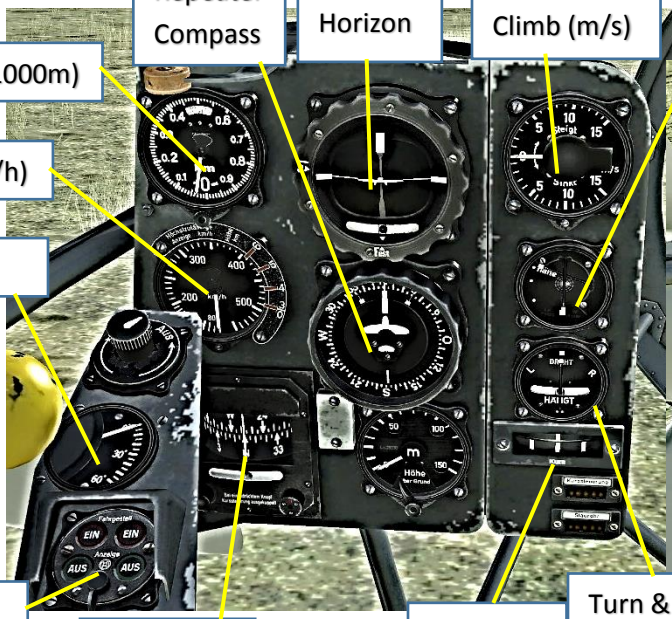
Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 125-150 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

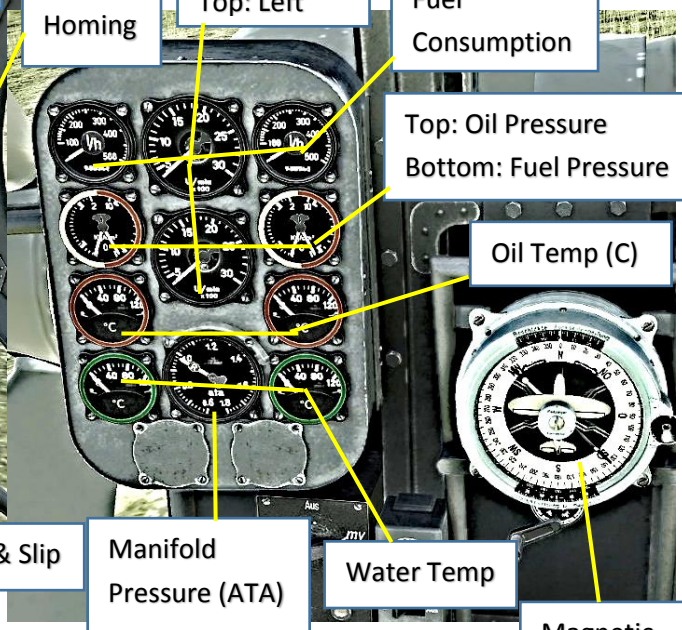
Quirks and tips

- Ideal glide slope at 180-200 km/h
- You may be able to fly on a single engine depending on fuel load. **Do not use flaps.**
- In case of engine failure close all radiators for that engine and feather the prop
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

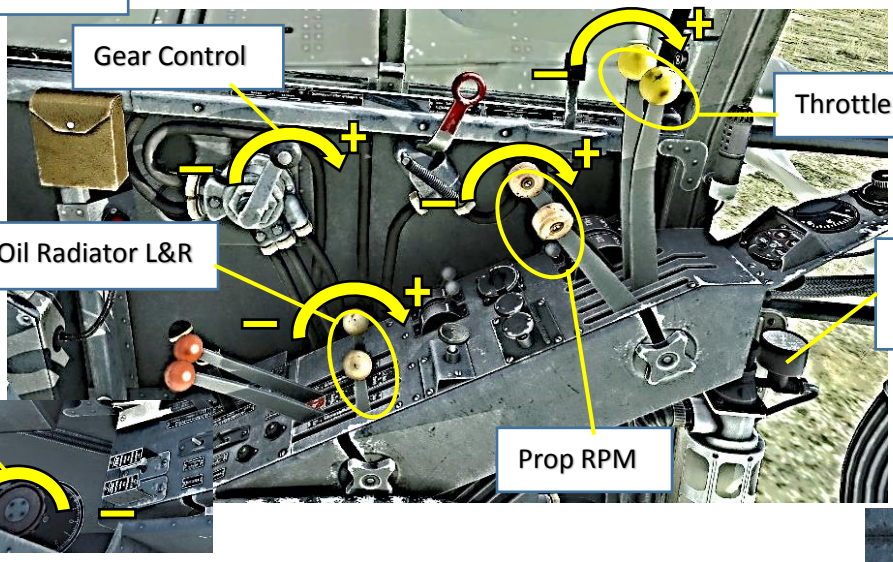
He 111 H-16 1943 (BOK)



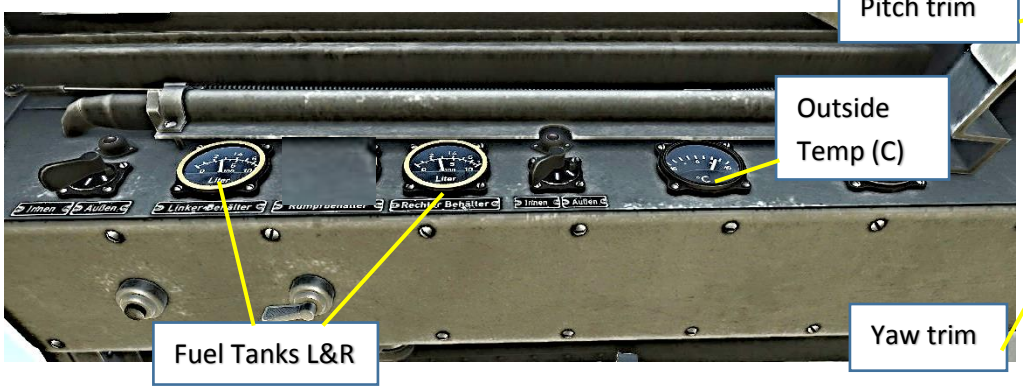
Repeater Compass
Artificial Horizon
Rate of Climb (m/s)
Altimeter (x1000m)
Speedo (km/h)
Flap degrees
Gear Indicator R-Up G-Down
Directional Gyro
Course Deviation
Turn & Slip



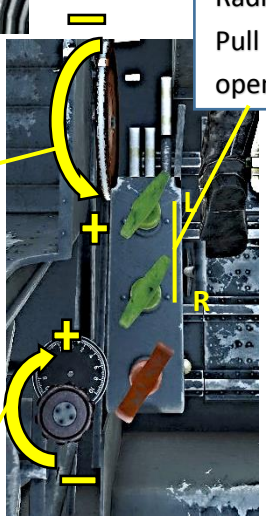
Radio Homing
Tachometer (x100 RPM) Top: Left
Fuel Consumption
Top: Oil Pressure Bottom: Fuel Pressure
Oil Temp (C)
Manifold Pressure (ATA)
Water Temp
Magnetic Compass



Gear Control
Throttle
Oil Radiator L&R
Oxygen System
Roll trim
Prop RPM



Pitch trim
Outside Temp (C)
Fuel Tanks L&R
Yaw trim



Water Radiators Pull up to open

He 111 H-16 Procedures

Engine Start

1. Close all radiators
2. Press E to start both motors
3. Wait for the oil in temp to be above 80 C and for the water temp to be above 70 C

Engine Management

- Use both RPM settings and throttle to control the manifold pressure and rpm ratio
- Its recommended to use throttle to set the ata to the desired power level than adjust RPM as needed
- Mixture is handled automatically
- Nominal power is **2250 RPM** with **1.15 ata** of manifold pressure
- Climb power is **2400 RPM** with **1.25 ata** of manifold pressure. Limit of 30 minutes.
- Take-Off power is **2600 RPM** with **1.40 ata** of manifold pressure. Limit of 1 minute
- Keep Water temp between 70-110 C
- Keep Oil output temp between 90-105 C
- Super charger gear changing is automatic

Take off

1. Slowly move to the run-way using wheel brakes as needed
2. Close canopy
3. Set flaps to 20 degrees
4. Open all radiators
5. Apply throttle as needed
6. Apply light rudder to correct a very light right hand pull during take off
7. Take off between 170-210 km/h
8. Raise gear and flaps
9. Set engine to desired power level

Landing

1. Line up on approach
2. Ditch remaining bombs
3. Descend slowly and apply throttle as needed
4. Gear down and flaps down
5. Aim to touch down 125-150 km/h
6. Once the tail wheel is down apply brakes as needed
7. Use rudder and brakes to steer

Quirks and tips

- Ideal glide slope at 180-200 km/h
- You may be able to fly on a single engine depending on fuel load. **Do not use flaps.**
- In case of engine failure close all radiators for that engine and feather the prop
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off

Ju 52/3m 1936 (DLC)

Turn & Slip
Course Deviation
Clock
Radio Homing
Rate of Climb (m/s)
Tachometers (x100 RPM)
Oil pressure
Oil Temp out
Speedo (km/h)
Artificial Horizon
Altimeter (x1000m)
Magnetic Compass
Course Selector
L&R Brake Pressure
Oil Temp in
Fuel Pressure
Left and Right Yaw Trim
Throttles
Fuel Valves
Outside Temp (C)
Course Deviation
Rate of Climb (m/s)
Speedo (km/h)
Turn & Slip
Altimeter (x100 m)
Oil Radiator indicator Up is open
Oil Radiator control
Cowl Flaps indicator Up is open
Cowl Flaps Control
Parking Brake
Altitude Throttle (Mixture)
Pitch trim
Flap Control Pull up to turn on
Left: Flap indicator Right: Pitch Trim
Wing Fuel Tank
Oil Level, One per engine

Ju 52/3m Procedures

Engine Start

1. Close all radiators and cowls
2. Set all throttles to zero
3. Press E to start all motors
4. Wait for the oil in temp to be above 60 C

Engine Management

- There is no separate RPM control
- Climb and Take off power may not kick in at lower speeds
- It is extremely difficult to tell them apart from RPM alone. Techno chat is recommended. If not a throttle of 93% should never engage the high power modes in level flight
- The altitude throttle (uses mixture key bindings) can be leaned to save fuel or increased for higher power levels
- Nominal power is **1925 RPM**
- Climb power is **1975 RPM**
  Limit of 30 minutes.
- Take-Off power is **2050 RPM** with Limit of 5 minutes
- Keep Oil output temp between 70-100 C

Take off

1. Release parking brake if needed
2. Slowly move to the run-way using wheel brakes as needed (Brakes engage when throttle is less than 25%)
3. Close canopy if needed
4. Enable Flaps
5. Use Pitch trim to set flaps
6. Open all radiators
7. Apply throttle as needed
8. Take off between 100-120 km/h
9. Raise flaps using pitch trim
10. Disengage flaps control
11. Set engine to desired power level

Landing

1. Line up on approach
2. Descend slowly and apply throttle as needed
3. Switch on landing light if needed
4. Engaged flaps
5. Use pitch trim to set flaps
6. Keep throttle above 25% or else brakes engage
7. Aim to touch down 95-110 km/h
8. Once the tail wheel is down apply brakes as needed (Brakes engage when throttle is less than 25%)
9. Use rudder and brakes to steer

Quirks and tips

- Ideal glide slope at 140-155 km/h
- You can fly on two engines depending on fuel load. **Do not use flaps** and ditch cargo if losing altitude.
- In case of engine failure close all radiators and cowls for that engine
- If the plane is fully loaded on a short run way you can take off with closed radiators for a slight drag reduction, open immediately after take off
- When flaps are engaged they are controlled with pitch trim

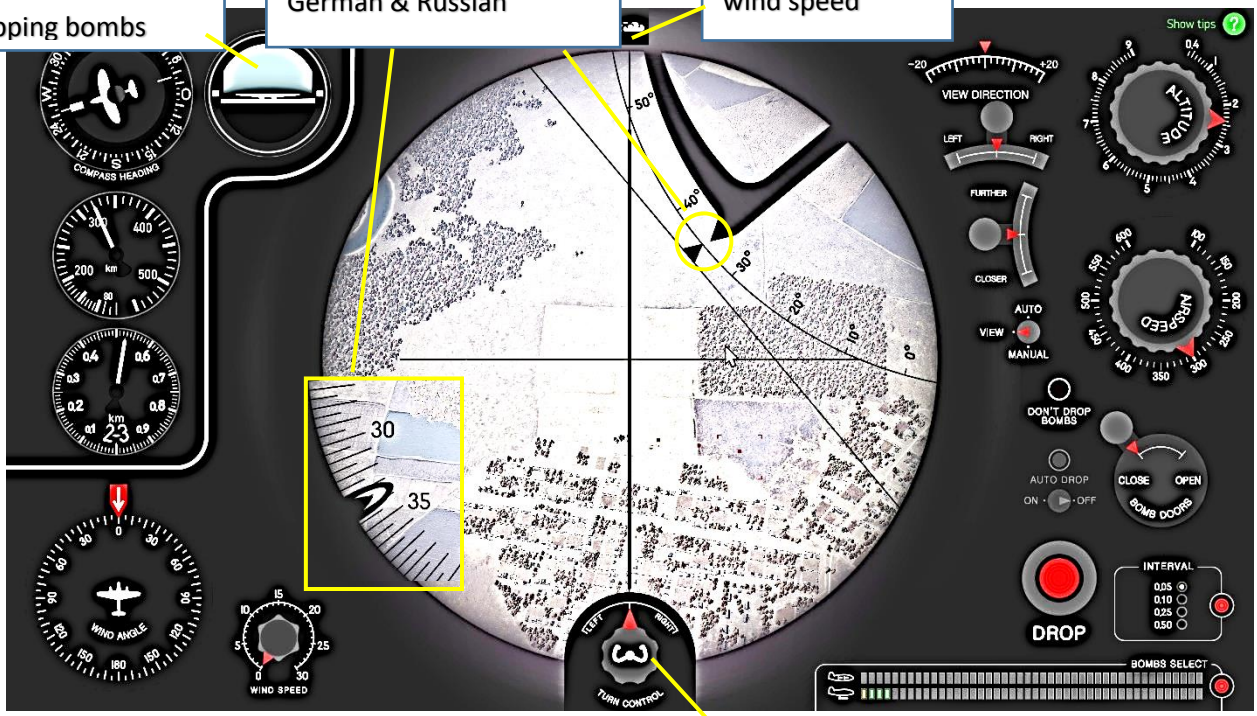
Thanks for xvii-Dietrich's help on a few issues with the Ju 52 guide

Level Bombing Guide

Make sure your plane is level when dropping bombs

Sight alignment indicators German & Russian

Click here to get wind speed



Use this to turn the aircraft

Lining up the run

1. Get to your target altitude well in advance and line up your run well ahead of time. Last minute adjustments have a huge accuracy penalty.
2. Enable auto level (Left_Shift+A) if needed
3. Set the view control to view. You can then adjust the view controls to look ahead and line up the target with the vertical line in the sight
4. The point of impact is where the arrow lines up with the indicator (Alignment indicators)
5. If bombs are in the bomb bay open doors ahead of time to account for speed changes
6. Using the gauges on the right set the speed and altitude on the right hand dials

Adjusting for wind

1. Click the top cloud button to read the current wind speeds and angle
2. Only use the wind speed closest to your attitude. Guestimate if needed.
3. The angle for the dial is wind angle minus your heading. If negative add 360. Set wind speed as well

Final Drop

1. Make sure bomb doors are open
2. Preform a last check of the dials
3. Set view to manual
4. Set drop interval (time between bombs) and use bomb select for how many to drop
5. Press drop when above target.
6. Wait anxiously to see if you hit