



4.09



**Forgotten Battles**

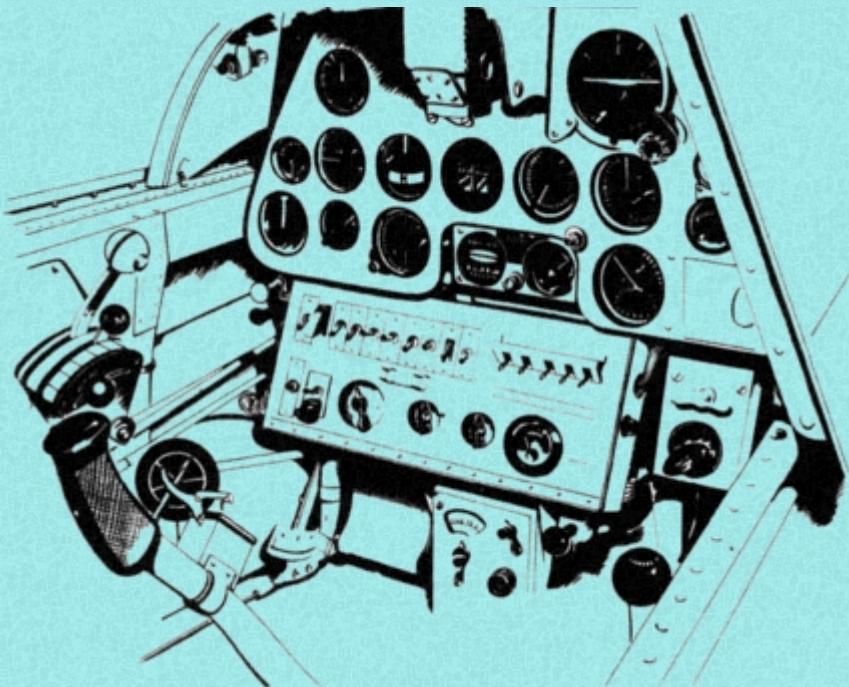
**Ace Expansion Pack**

**Pacific Fighter**

Pe-2 Peshka

Sturmoviks over Manchuria

1946



# Cockpit Arrangement Guide

Corsican Corsair

v.3.1

December 2010



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# Introduction

Index

This guide is an PDF file of 176 pages, which describes all the cockpits of the 1946 4.09 flyable aircraft with the 'in-game' controls and instruments.

It corrects several errors of the original game issued "Flyable Aircraft Guide" and completes the "4.09 Guide". It shows many cockpit photos, among which some are rare, of genuine or restored aircraft.

For more information, I suggest to refer to you to real pilot's manuals available on the web. For this purpose, a "Bibliography and Research Sources" section is provided at the end of the guide.

It can be printed on A4 paper size (native size), or on Letter paper size, in duplex mode (recto-verso) and high resolution (on heavy paper) then assembled with plastic or spiral binding.

A description of the methods of navigation in the document, particularly adapted to the full screen mode, is presented hereafter.

## Version history

### **v.3.1 Update - December 7, 2010**

- Modifications on the following aircraft:
  - ◊ Ar 234: engine instruments, instrument light switch.
  - ◊ Fw 190 D-9's: inversion of oil temperature and coolant temperature gages.
  - ◊ Ta 152's: inversion of oil temperature and coolant temperature gages.
  - ◊ Go 229: engine instruments.
  - ◊ He 162: exhaust temperature gage.
  - ◊ Me 262's: engine instruments.
  - ◊ N1K2: instrument light switch, normal level fuel indicator light, low fuel warning light.
  - ◊ Ki-84's: instrument light switch, landing light switch, navigation lights switch.
  - ◊ IAR's: screenshots updated.
  - ◊ Mosquito: bomb doors lever.
  - ◊ Tempest: landing light switch.
  - ◊ Seafire: arrester hook lever.
  - ◊ Buffalo's: tail wheel lock lever, version information added.
  - ◊ P-40 Warhawk: instrument light switch, navigation lights switches.
  - ◊ P-63: cockpit light switch, landing light switch, navigation lights switches.
  - ◊ YP-80: engine instruments.
  - ◊ La-5's: landing light switch, navigation lights switches.
  - ◊ La-7's: instrument light switch, landing light switch, navigation lights switches.
  - ◊ LaGG-3RD: engine instruments.
  - ◊ I-185's: instrument light switch, landing light switch, navigation lights switch.
  - ◊ Yak-15: fuel injection pressure gage.
- Update as follows:
  - ◊ Cover page.
  - ◊ "Introduction" section.
  - ◊ "Units of measurement" page.
  - ◊ Index pages.
  - ◊ "Aircraft & operational controls" pages – Gunsight column: type added and "Toggle Gunsight" control indicated in color (blue for "yes", red for "no").
  - ◊ "Bibliography and Research Sources" section.
  - ◊ Bookmarks.
- New photos for Fw 190 D-9 (1945), Me 262 A-2, C.R.42, A6M5/a, P-40 Hawk, I-185 M-82.

**v.3.0 Update - October 17, 2009**

- Addition of the 4.09 new flyable aircraft:
  - ◊ Avia B-534-IV.
  - ◊ Fokker D.XXI's.
  - ◊ Macchi M.C.200 VII's
  - ◊ Polikarpov I-16 type 5 & 6.
  - ◊ Savoia-Marchetti S.M.79.
- Addition of introduction section.
- Update as follows:
  - ◊ Cover page.
  - ◊ "Units of measurement" page.
  - ◊ Index pages.
  - ◊ List of the 'in-game' controls of aircraft.
  - ◊ "Bibliography and Research Sources" section.
- New high quality photos for He 162, I-153 and I-16's.
- Minor corrections.

**v.2.0 Upgrade - September 7, 2009**

- Strongly improved navigation in the document, particularly in full screen mode.
- New index page.
- New list of the 'in-game' controls of aircraft.
- Corrections and additions for most of the aircraft.
- Numerous new photos with links.

**v.1.0 Initial release - February 8, 2008****Credits and thanks:**

- Sidermax and Pe\_Mosor — "Cockpit reference guide" - January 2005.
- Shmulik Hen (AKA 101Hedgehog) — IL-2 Functions v.4.07.005 - January 2007.
- Great thanks to museums, to documents owners and to numerous photographers for the images.
- Tromplamort for his photos of the genuine WWII He 162 belonging to the French Musée de l'Air et de l'Espace and restored by the Memorial Flight Association.

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***Corsican Corsair***

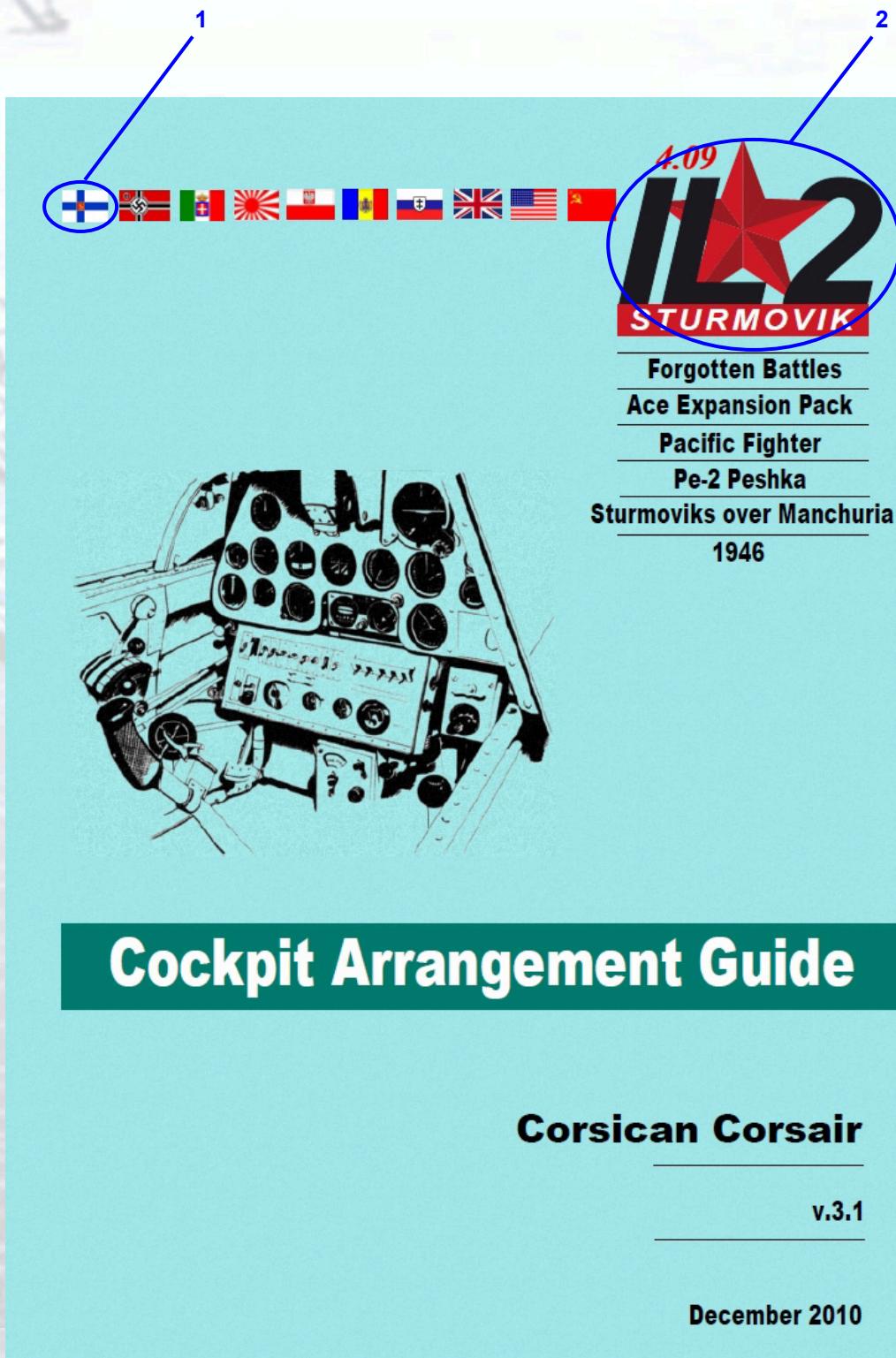
***Dedicated to my father Christian, 1933-2009***

## Navigation in the document

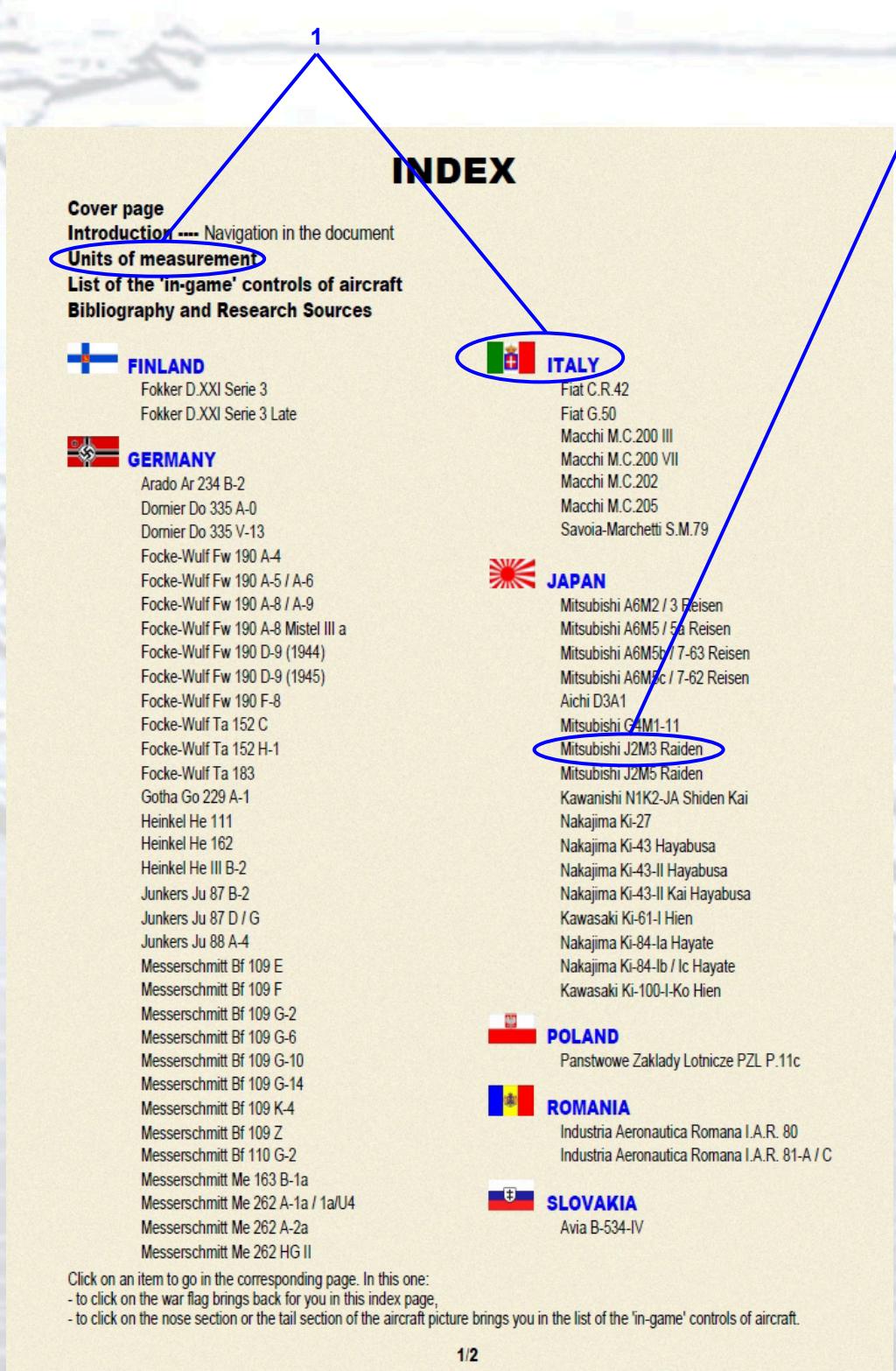
Index

In the cover page:

- To click on a war flag (1) brings you in the corresponding section.
- To click on the game logo (2) brings you in the index page.

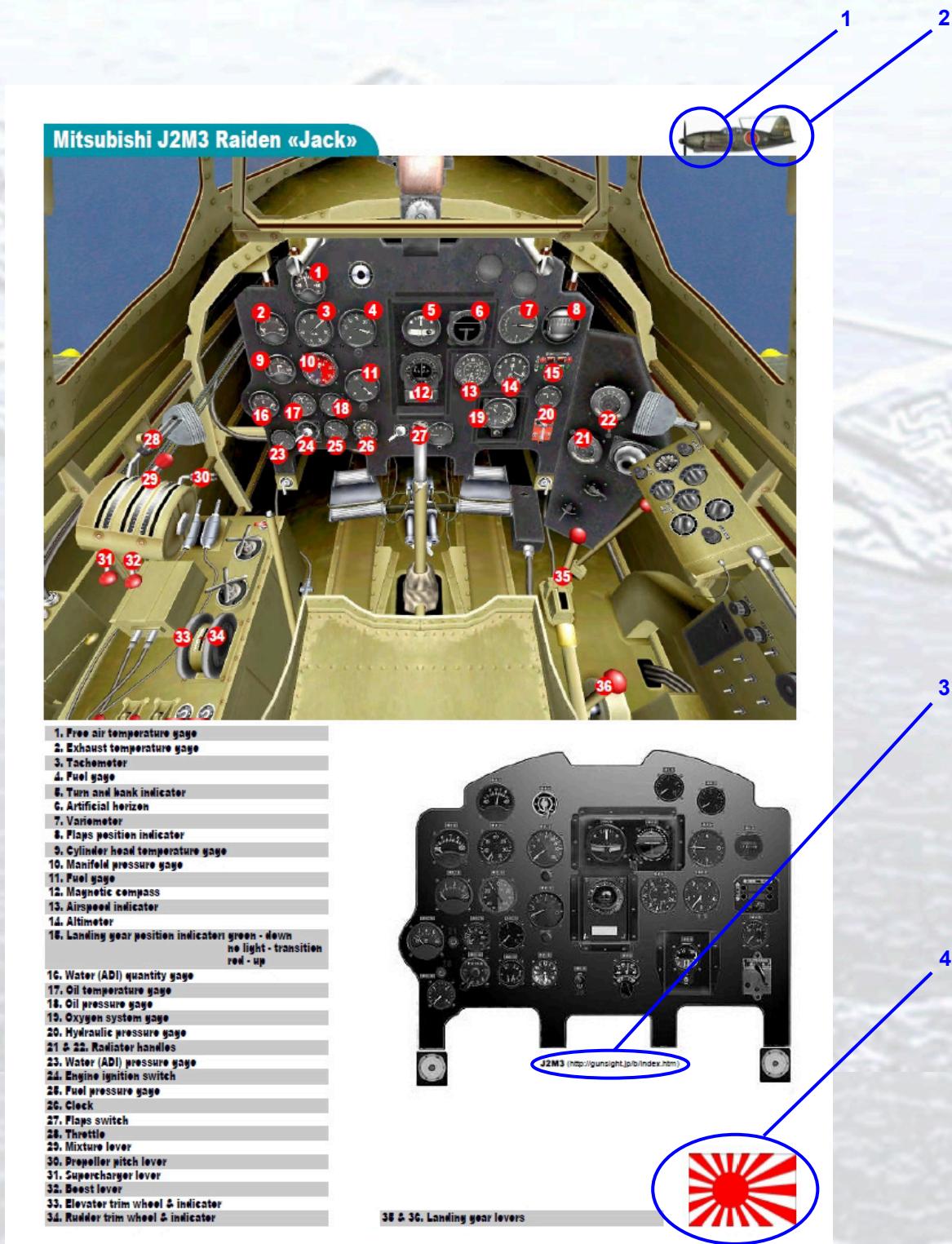


In the index page, clickable items bring you in the corresponding section (1) or aircraft page (2),



In an aircraft page:

- To click on the aircraft picture brings you in the list of the 'in-game' controls of aircraft. This list, split into "ENGINE CONTROLS" list and into "AIRCRAFT & OPERATIONAL CONTROLS" list, shows you what are, by aircraft, the controls - active or not - and their settings. The nose section (1) selects the "ENGINE CONTROLS" corresponding page and the tail section (2) selects the "AIRCRAFT & OPERATIONAL CONTROLS" corresponding page.
- Note:** In the Hurricane page, for the "Mk. I" controls, click on "Mk" in place of the nose section and on "I" in place of the tail section.
- To click on the link (3) beside a photograph, when existing, brings you in the website or the webpage lodging this one.
- Note:** Possible broken links are not of my fact.
- To click on the war flag (4) brings back for you in the index page.



In an 'in-game' controls of aircraft page, clickable items bring you in:

- the previously shown page (1) (Acrobat Reader & Foxit Reader feature),
- the index page (2),
- the corresponding section (3).

**Note:** These lists are based on the IL-2 Functions tables written by Shmulik Hen (AKA 101Hedgehog) in January 2007 and that I adapted.

**ENGINE CONTROLS**

Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
FW-190 A-8 (Mistel), 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	No
Fiat CR.42, 1938	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	No	No	No
Fiat G.50, 1938	0-110	No	0-100	0-120	4650	No		C, 2, 4, 6, 8, O	5 times	No	No
G4M1-11, 1941	0-110	No	0-100	0-120	6700	2 Stages	3000	C, 2, 4, 6, 8, O	No	Yes	No
Go-229 A-1, 1945	0-100	No	No	No		No		No	No	No	No
He-111H-2, 1941	0-110	No	0-100	0-120	4800	2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
He-111H-6, 1941	0-110	No	0-100	0-120	4700	2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
He-162 A-2	0-100	No	No	No		No		No	No	No	No
He-162C, 1946	0-110	No	No	No		No		No	No	No	No
He-162D, 1946	0-110	No	No	No		No		No	No	No	No
Heinkel Lerche III B-2, 1945	0-110	No	0-100	No		No		No	No	Yes	No
Hurricane Mk.I, 1938	0-110	No	0-100	100, 120		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 80, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 81a, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 81c, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
J2M3, 1944	0-110	Yes	0-100	0-120	6500	2 Stages	3000	C, 2, 4, 6, 8, O	No	No	No
J2M5, 1944	0-110	Yes	0-100	0-120	6500	3 Stages	3000 - 5500	C, 2, 4, 6, 8, O	No	No	No
J8A, 1937	0-110	No	0-120	4900		No		No	No	Yes	No
Ju-87B-2, 1941	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87D-3, 1942	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87D-5, 1942	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87G-1, 1943	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-88A-4, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
Ki-27 Ko, 1938	0-110	No	0-120	6000		No		C, 2, 4, 6, 8, O	No	No	No
Ki-27 Otsu, 1938	0-110	No	0-120	6000		No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ia, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ib, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ic, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-II, 1942	0-110	No	0-100	0-120	6400	2 Stages	3300	C, 2, 4, 6, 8, O	No	No	No
Ki-43-II, Kai, 1943	0-110	No	0-100	0-120	6400	2 Stages	3300	C, 2, 4, 6, 8, O	No	No	No
Ki-61-I Ko, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
Ki-61-I Hei, 1944	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	4 times	No	Yes
Ki-61-I Otsu, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Ki-84-Ia, 1944	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	No
Ki-84-Ib, 1944	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
Ki-84-Ic, 1945	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
Ki-100 Ko, 1945	0-110	Yes	0-100	0-120	6500	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	No
MC.200 Serie 3, 1940	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.200 Serie 7, 1941	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.200 Serie 7 FB, 1941	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.202 Serie III, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.202 Serie VII, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.202 Serie XII, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.205 V Serie I, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
MC.205 V Serie III, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
Me-163B-1a, 1944	0-110	No	No	No		No		No	No	No	No
Me-262A-1a, 1944	0-100	No	No	No		No		No	No	No	No

**Aircraft & Operational Controls (Axis)**



Click on the war flag to go in the corresponding page.

At last, you can use the bookmarks (1) to go anywhere in the guide.

**Cockpit Arrangement Guide 4.09 v3.0.pdf - Adobe Reader**

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  - Brewster Mk. I Buffalo
  - North American B-25J Mitchell
  - Grumman F4F Wildcat
  - Chance Vought F4U Corsair
  - Grumman F6F Hellcat
  - Lockheed P-38 Lightning
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  - Curtiss P-40 Warhawk
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  - North American P-51 Mustang B-NA / C-NT / Mustang Mk. III
  - North American P-51D-SNT Mustang
  - North American P-51D-20NA Mustang
  - Bell P-63C-5 Kingcobra
  - Douglas SBD Dauntless
  - Lockheed YP-80 Shooting Star
- USSR
- Bibliography and Research Sources

**Chance Vought F4U Corsair** 1A/1C/1D/Corsair Mk. I/Mk. II/Mk. IV

1. Water injection (ADI) warning light  
2. Stall warning light  
3. Altimeter  
4. Directional gyro  
5. Remote reading compass  
6. Artificial horizon  
7. Clock  
8. Oil temperature gage  
9. Tachometer  
10. Manifold pressure gage  
11. Airspeed indicator  
12. Turn and bank indicator  
13. Rate-of-climb indicator  
14. Cylinder head temperature gage  
15. Oil pressure gage  
16. Fuel pressure gage  
17. Fuel gage  
18. Hydraulic pressure gage  
19. Voltmeter  
20. Fuel tank pressure gage  
21. Cooling flaps levers  
22. Flaps lever  
23. Landing gear / Dive brake position indicator  
24. Throttle  
25. Mixture lever  
26. Supercharger lever  
27. Landing gear / Dive brake lever  
28. Propeller pitch lever  
29. Aileron trim wheel  
30. Elevator trim wheel  
31. Rudder trim wheel  
32. Wing fold lever  
33. Arrestor hook lever

F4U ([http://clubbox.free.fr/F4u\\_cockpit/page\\_01.htm](http://clubbox.free.fr/F4u_cockpit/page_01.htm))

## Units of measurement

### German aircraft:

- manifold pressure (absolute) - atmosphere (ata)
- altitude - meter (m)
- speed - kilometer per hour (km/h)
- vertical speed - meter per second (m/s)

### Italian aircraft:

- manifold pressure (absolute) - milimiter of mercury (mm Hg)
  - atmosphere (ata) for M.C.202's
  - kilogram per square centimeter ( $\text{kg}/\text{cm}^2$ ) for S.M.79
- altitude - meter (m)
- speed - kilometer per hour (km/h)
- vertical speed - meter per second (m/s)

### Japan aircraft:

- manifold pressure (relative -/+ ) - kilogram per square decimeter ( $\text{kg}/\text{dm}^2$ )
- altitude - meter (m)
- speed - Army - kilometer per hour (km/h)
  - Navy - knot (kt) except D3A1 and G4M1
- vertical speed - meter per second (m/s)

### Polish aircraft:

- manifold pressure (relative -/+ ) - kilogram per square centimeter ( $\text{kg}/\text{cm}^2$ )
- altitude - meter (m)
- speed - kilometer per hour (km/h)
- vertical speed - meter per second (m/s)

### British aircraft:

- manifold pressure (relative -/+ ) - pound per square inch (lb./sq. in. or PSI)
- altitude - foot (ft)
- speed - mile per hour (mph)
  - knot (kt) for Hurricane's
- vertical speed - foot per minute (fpm)

### American aircraft:

- manifold pressure (absolute) - inch of mercury (in. Hg)
- altitude - foot (ft)
- speed - Air Force - mile per hour (mph)
  - Navy - knot (kt)
- vertical speed - foot per minute (fpm)

### Finnish, Romanian, Slovakian and Soviet aircraft:

- manifold pressure (absolute) - milimiter or centimeter of mercury (mm Hg - cm Hg)
  - (relative -/+ ) - milimiter of mercury (mm Hg) for J8A
- altitude - meter (m)
- speed - kilometer per hour (km/h)
- vertical speed - meter per second (m/s)

1 ata = 760 mm Hg = 29.92 in. Hg

$\pm 10 \text{ kg}/\text{dm}^2 = \pm 0.1 \text{ kg}/\text{cm}^2 = \pm 1.4 \text{ lb}/\text{sq. in.}$

1000 m = 3280 ft

500 km/h = 310 mph = 270 kt

10 m/s = 1970 fpm



**Forgotten Battles**

**Ace Expansion Pack**

**Pacific Fighter**

Pe-2 Peshka

Sturmoviks over Manchuria

1946

"Cockpit Arrangement Guide" including cockpit screenshots, reference data, photos search and layout realized by [Corsican Corsair](#).  
This guide covers the flyable planes of IL-2 series up to no modded 1946 4.09.

The photos of the cockpits, from genuine or restored aircraft, were added **for curiosity** only. When a photo is clearly identified, its link and/or its photographer is indicated. Great thanks to museums, to documents owners and to numerous photographers for these images.

Note: Any reference to Nazi regime is purely and simply historical and has no political intention.

For any (welcome) suggestion, improvement, correction for this edition: [corsair58@wanadoo.fr](mailto:corsair58@wanadoo.fr)

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## FINLAND

- Fokker D.XXI Serie 3
- Fokker D.XXI Serie 3 Late



## GERMANY

- Arado Ar 234 B-2
- Dornier Do 335 A-0
- Dornier Do 335 V-13
- Focke-Wulf Fw 190 A-4
- Focke-Wulf Fw 190 A-5 / A-6
- Focke-Wulf Fw 190 A-8 / A-9
- Focke-Wulf Fw 190 A-8 Mistel III a
- Focke-Wulf Fw 190 D-9 (1944)
- Focke-Wulf Fw 190 D-9 (1945)
- Focke-Wulf Fw 190 F-8
- Focke-Wulf Ta 152 C
- Focke-Wulf Ta 152 H-1
- Focke-Wulf Ta 183
- Gotha Go 229 A-1
- Heinkel He 111
- Heinkel He 162
- Heinkel He III B-2
- Junkers Ju 87 B-2
- Junkers Ju 87 D / G
- Junkers Ju 88 A-4
- Messerschmitt Bf 109 E
- Messerschmitt Bf 109 F
- Messerschmitt Bf 109 G-2
- Messerschmitt Bf 109 G-6
- Messerschmitt Bf 109 G-10
- Messerschmitt Bf 109 G-14
- Messerschmitt Bf 109 K-4
- Messerschmitt Bf 109 Z
- Messerschmitt Bf 110 G-2
- Messerschmitt Me 163 B-1a
- Messerschmitt Me 262 A-1a / 1a/U4
- Messerschmitt Me 262 A-2a
- Messerschmitt Me 262 HG II



## ITALY

- Fiat C.R.42
- Fiat G.50
- Macchi M.C.200 III
- Macchi M.C.200 VII
- Macchi M.C.202
- Macchi M.C.205
- Savoia-Marchetti S.M.79



## JAPAN

- Mitsubishi A6M2 / 3 Reisen
- Mitsubishi A6M5 / 5a Reisen
- Mitsubishi A6M5b / 7-63 Reisen
- Mitsubishi A6M5c / 7-62 Reisen
- Aichi D3A1
- Mitsubishi G4M1-11
- Mitsubishi J2M3 Raiden
- Mitsubishi J2M5 Raiden
- Kawanishi N1K2-JA Shiden Kai
- Nakajima Ki-27
- Nakajima Ki-43 Hayabusa
- Nakajima Ki-43-II Hayabusa
- Nakajima Ki-43-II Kai Hayabusa
- Kawasaki Ki-61-I Hien
- Nakajima Ki-84-la Hayate
- Nakajima Ki-84-lb / Ic Hayate
- Kawasaki Ki-100-I-Ko Hien



## POLAND

- Panstwowe Zaklady Lotnicze PZL P.11c



## ROMANIA

- Industria Aeronautica Romana I.A.R. 80
- Industria Aeronautica Romana I.A.R. 81-A / C



## SLOVAKIA

- Avia B-534-IV

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Cover page

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Units of measurement

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Bibliography and Research Sources



### UNITED KINGDOM

Bristol Beaufighter Mk. 21  
De Havilland Mosquito FB.VI  
Gloster Gladiator J8A  
Hawker Hurricane  
Hawker Tempest Mk.V  
Supermarine Seafire Mk. III  
Supermarine Spitfire Mk. Vb / c  
Supermarine Spitfire Mk. VIII  
Supermarine Spitfire Mk. IX



### UNION OF SOVIET SOCIALIST REPUBLICS

Bereznyak-Isayev BI-1  
Bereznyak-Isayev BI-6  
Ilyushin IL-2 Sturmovik 1st / 2nd / 3rd / field mod  
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Ilyushin IL-10 Beast  
Lavochkin La-5  
Lavochkin La-5F / FN  
Lavochkin La-7  
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Lavochkin La-7R  
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Lavochkin/Gorbunov/Gudkov LaGG-3 series 66 / IT  
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Petlyakov Pe-2 Series 359  
Petlyakov Pe-3  
Petlyakov Pe-3bis  
Polikarpov I-153  
Polikarpov I-16 Type 5 & 6  
Polikarpov I-16 Type 18 & 24  
Polikarpov I-185 M-71  
Polikarpov I-185 M-82  
Tupolev TB-3  
Yakovlev Yak-1 / B  
Yakovlev Yak-3  
Yakovlev Yak-3R  
Yakovlev Yak-7A / B  
Yakovlev Yak-9  
Yakovlev Yak-9B / D  
Yakovlev Yak-9K / M / T  
Yakovlev Yak-9U / UT  
Yakovlev Yak-15



### UNITED STATES OF AMERICA

Douglas A-20C Havoc  
Douglas A-20G Havoc  
Brewster B239 Buffalo  
Brewster F2A-2 Buffalo  
Brewster Mk. I Buffalo  
North American B-25J Mitchell  
Grumman F4F Wildcat  
Chance Vought F4U Corsair  
Grumman F6F Hellcat  
Lockheed P-38 Lightning  
Bell P-39 Airacobra  
Curtiss P-40 Hawk / Tomahawk  
Curtiss P-40 Warhawk  
Republic P-47D-10 / D-22 Thunderbolt  
Republic P-47D / D-27 Thunderbolt  
North American P-51 Mustang B-NA / C-NT / Mustang Mk. III  
North American P-51D-5NT Mustang  
North American P-51D-20NA Mustang  
Bell P-63C-5 Kingcobra  
Douglas SBD Dauntless  
Lockheed YP-80 Shooting Star

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# List of the 'in-game' controls of aircraft

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Allied aircraft

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## AIRCRAFT & OPERATIONAL CONTROLS

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These lists are based on the IL-2 Functions tables written by [Shmulik Hen \(AKA 101Hedgehog\)](#) and adapted by Corsican Corsair.

## Aircraft &amp; Operational Controls (Allied)

Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
<b>Allied</b>											
A-20C, 1941	0-110	No	0-100	No		2 Stages	2200	C, 2, 4, 6, 8, O	3 times	Yes	No
A-20G, 1943	0-110	No	0-100	No		2 Stages	2200	C, 2, 4, 6, 8, O	3 times	Yes	No
B-25J-1NA, 1944	0-110	No	0-100	No		2 Stages	2700	C, 2, 4, 6, 8, O	3 times	Yes	No
Beaufighter MK21, 1944	0-110	No	0-100	0-120	5200	No		C, 2, 4, 6, 8, O	No	Yes	No
Bl-1, 1942	0-100	No	No	No		No		No	No	No	No
Bi-6, 1942	0-100	No	No	No		No		No	No	No	No
Buffalo MK.I	0-110	No	0-100	0-120	9400	2 Stages	3000	C, 2, 4, 6, 8, O	No	No	No
F2A-2, 1940	0-110	No	0-100	0-120	9300	2 Stages	3000	C, 2, 4, 6, 8, O	No	No	No
F4F-3, 1941	0-110	No	0-100	100, 120		3 Stages	2500 - 4800	C, 2, 4, 6, 8, O	No	No	Yes
F4F-4, 1942	0-110	No	0-100	100, 120		3 Stages	2500 - 4800	C, 2, 4, 6, 8, O	No	No	Yes
FM-2, 1943	0-110	Auto (> 100)	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
F4U-1A, 1943	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
F4U-1C, 1945	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
F4U-1D, 1944	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
Corsair MK.I, 1943	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
Corsair MK.II, 1943	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
Corsair MK.IV, 1944	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2600 - 8200	C, 2, 4, 6, 8, O	No	No	Yes
F6F-3 Late, 1943	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2500 - 8100	C, 2, 4, 6, 8, O	No	No	Yes
F6F-5, 1944	0-110	Auto (> 100)	0-100	100, 120		3 Stages	2500 - 8100	C, 2, 4, 6, 8, O	No	No	Yes
Hurricane Mk.IIb, 1940	0-110	Yes	0-100	100, 120		2 Stages	2800	C, 2, 4, 6, 8, O	No	No	No
Hurricane Mk.IIc, 1941	0-110	Yes	0-100	100, 120		2 Stages	2800	C, 2, 4, 6, 8, O	No	No	No
Hurricane Mk.II field mod.	0-110	Yes	0-100	100, 120		2 Stages	2800	C, 2, 4, 6, 8, O	No	No	No
I-153 M-62, 1939	0-110	No	0-100	0-120	4000	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	No
I-153P, 1939	0-110	No	0-100	0-120	4000	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	No
I-16 Type 5, 1935	0-100	No	No	0-120	4800	No		C, 2, 4, 6, 8, O	No	No	No
I-16 Type 5 (SPB), 1938	0-100	No	No	0-120	4800	No		C, 2, 4, 6, 8, O	No	No	No
I-16 Type 5 (skis), 1935	0-100	No	No	0-120	4800	No		C, 2, 4, 6, 8, O	No	No	No
I-16 Type 6, 1937	0-100	No	No	0-120	4800	No		C, 2, 4, 6, 8, O	No	No	No
I-16 Type 6 (skis), 1937	0-100	No	No	0-120	4700	No		C, 2, 4, 6, 8, O	No	No	No
I-16 Type 18, 1939	0-110	No	0-100	0-120	4900	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
I-16 Type 24, 1939	0-110	No	0-100	0-120	4800	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
I-16 Type 24 (SPB), 1939	0-110	No	0-100	0-120	4800	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	No
I-185 M-71, 1942	0-100	Yes	0-100	0-120	5000	3 Stages	2000 - 4200	C, 2, 4, 6, 8, O	No	No	No
I-185 M-82A, 1942	0-100	Yes	0-100	0-120	5000	3 Stages	2000 - 4200	C, 2, 4, 6, 8, O	No	No	No
I-250, 1946	0-100	No	0-100	0-120	5300	2 Stages	2000	No	No	No	No
IL-2, 1941 (1 series)	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2, 1941 (2 series)	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2, 1941 (3 series)	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2, 1941 field mod.	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2I, 1943	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2M, 1942 (first series)	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2M, 1942 (later series)	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2T, 1943	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2 Type 3, 1943	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No
IL-2 Type 3M, 1943	0-110	No	0-100	0-120	6850	No		C, 2, 4, 6, 8, O	No	No	No

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Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
IL-10	0-110	No	0-100	0-120	7000	No		C, 2, 4, 6, 8, O	No	No	No
LaGG-3, 1941 (4 series)	0-110	No	0-100	0-120	4700	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
LaGG-3, 1942 (29 series)	0-110	No	0-100	0-120	3200	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
LaGG-3, 1942 (35 series)	0-110	No	0-100	0-120	3200	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
LaGG-3 IT, 1943	0-110	No	0-100	0-120	3100	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	No
LaGG-3, 1943 (66 series)	0-110	No	0-100	0-120	3500	2 Stages	2200	C, 2, 4, 6, 8, O	No	No	Yes
LaGG-3 RD, 1944	0-100	No	No	No		No		No	No	No	No
La-5, 1942	0-100	Yes	0-100	0-120	5000	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	Yes
La-5F, 1943	0-100	Auto (At 100)	0-100	0-120	5000	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	Yes
La-5FN, 1943	0-110	Auto (> 100)	0-100	0-120	5000	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	Yes
La-7, 1944	0-110	Auto (> 100)	0-100	0-120	6000	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	Yes
La-7 3xB-20, 1944	0-110	Auto (> 100)	0-100	0-120	6000	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	Yes
La-7R, 1945	0-110	Auto (> 100)	0-100	0-120	6000	2 Stages	4500	C, 2, 4, 6, 8, O	No	No	Yes
MiG-3, 1940	0-110	No	0-100	0-120	6900	No		C, 2, 4, 6, 8, O	No	No	No
MiG-3ud, 1941	0-110	No	0-100	0-120	7000	No		C, 2, 4, 6, 8, O	No	No	No
MiG-3 2xUB, 1941	0-110	No	0-100	0-120	7000	No		C, 2, 4, 6, 8, O	No	No	No
MiG-3 2xShVAK, 1941	0-110	No	0-100	0-120	7000	No		C, 2, 4, 6, 8, O	No	No	No
MiG-3 AM-38, 1941	0-110	No	0-100	0-120	6800	No		C, 2, 4, 6, 8, O	No	No	No
MiG-3U, 1942	0-110	No	0-100	0-120	7100	No		C, 2, 4, 6, 8, O	No	No	No
MiG-9 (I-300), 1946	0-100	No	No	No		No		No	No	No	No
MiG-9FS, 1946	0-100	No	No	No		No		No	No	No	No
Mosquito FB.MK.VI, 1942	0-110	Yes	0-100	No		No		C, O	5 times	Yes	No
P.11c, 1939	0-110	No	No	0-120	4900	No		No	No	Yes	No
P-38J, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	Yes	Yes
P-38L, 1944	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	Yes	Yes
P-38L Late, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	Yes	Yes
P-400, 1941	0-100	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
P-39D-1, 1941	0-100	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-39D-2, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-39N-1, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
P-39Q-1, 1944	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
P-39Q-10, 1944	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Hawk 81A-2, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
P-40B, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
P-40C, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Tomahawk Mk.IIa, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Tomahawk Mk.IIb, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-40E, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-40E M-105 field mod.	0-110	No	0-100	0-120	5400	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
P-40M, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-47D-10, 1943	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-47D-22, 1943	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-47D-27, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-47D, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
P-51B-NA, 1943	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
P-51C-NT, 1943	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
P-51D-5NT, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes

Click on the war flag to go in the corresponding page.



Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
P-51D-20NA, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Mustang MK.III, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
P-63C-5, 1944	0-110	Auto (> 100)	0-100	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Pe-2, 1940 (1 series)	0-110	No	0-100	0-120	4900	2 Stages	3100	C, 2, 4, 6, 8, O	No	No	No
Pe-2, 1942 (84 series)	0-110	No	0-100	0-120	4900	2 Stages	3100	C, 2, 4, 6, 8, O	No	No	No
Pe-2, 1942 (110 series)	0-110	No	0-100	0-120	4900	2 Stages	3100	C, 2, 4, 6, 8, O	No	No	No
Pe-2, 1944 (359 series)	0-110	No	0-100	0-120	4900	2 Stages	2800	C, 2, 4, 6, 8, O	No	No	No
Pe-3, 1941	0-110	No	0-100	0-120	4900	2 Stages	3100	C, 2, 4, 6, 8, O	No	No	No
Pe-3 bis, 1941	0-110	No	0-100	0-120	4900	2 Stages	3100	C, 2, 4, 6, 8, O	No	No	No
SBD-3, 1942	0-110	No	0-100	0-120	9000	2 Stages	3200	C, 2, 4, 6, 8, O	No	No	No
SBD-5, 1943	0-110	No	0-100	0-120	9100	2 Stages	3200	C, 2, 4, 6, 8, O	No	No	No
Seafire L.MK.III, 1943	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Seafire F.MK.III, 1943	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Spitfire MK.Vb, 1941	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire MK.Vb (CW), 1943	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire L.F.Mk.Vb, 1942	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire L.F.Mk.Vb (CW)	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire MK.Vc(2), 1941	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire MK.Vc(4), 1941	0-100	Yes	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
Spitfire MK.VIII, 1943	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire MK.VIII(CW)	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire MK.IXc, 1943	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire L.F.MK.IXc (CW)	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire MK.IXe, 1944	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire L.F.MK.IXe (CW)	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire H.F.MK.IXe, 1944	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Spitfire MK.IX 25Lbs, 1944	0-100	Yes	0-100, Auto	No		No		No	No	No	Yes
Tempest MK.V, 1944	0-110	Yes	0-100	No		2 Stages	3000	C, 2, 4, 6, 8, O	No	No	Yes
TB-3 4M-17, 1933	0-100	No	No	No		No		C, 2, 4, 6, 8, O	5 times	No	No
TB-3 4M-34R, 1933	0-110	No	No	No		No		C, 2, 4, 6, 8, O	5 times	No	No
TB-3 4M-34R (SPB)	0-110	No	No	No		No		C, 2, 4, 6, 8, O	5 times	No	No
Yak-1, 1941	0-110	No	0-100	0-120	4800	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-1B, 1942	0-110	No	0-100	0-120	3600	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-3, 1944	0-110	No	0-100	0-120	4500	2 Stages	2000	C, 2, 4, 6, 8, O, Auto	No	No	No
Yak-3P, 1945	0-110	No	0-100	0-120	4500	2 Stages	2000	C, 2, 4, 6, 8, O, Auto	No	No	No
Yak-3 VK-107, 1945	0-110	No	0-100	0-120	5000	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-3R, 1944	0-100	No	0-100	0-120	4900	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-7A, 1941	0-110	No	0-100	0-120	4800	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-7B, 1941	0-110	No	0-100	0-120	4800	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-7B, 1942	0-110	No	0-100	0-120	3600	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9, 1942	0-110	No	0-100	0-120	3600	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9B, 1944	0-110	No	0-100	0-120	3700	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9D, 1943	0-110	No	0-100	0-120	3700	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9M, 1944	0-110	No	0-100	0-120	3600	2 Stages	2000	C, 2, 4, 6, 8, O, Auto	No	No	No
Yak-9K, 1944	0-110	No	0-100	0-120	3700	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9T, 1943	0-110	No	0-100	0-120	3700	2 Stages	2000	C, 2, 4, 6, 8, O	No	No	No
Yak-9U, 1944	0-110	No	0-100	0-120	4800	2 Stages	2000	C, 2, 4, 6, 8, O, Auto	No	No	No

Altitude in meters

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## ENGINE CONTROLS

Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
Yak-9UT, 1945	0-110	No	0-100	0-120	4800	2 Stages	2000	C, 2, 4, 6, 8, O, Auto	No	No	No
Yak-15, 1946	0-100	No	No	No		No		No	No	No	No
YP-80, 1944	0-100	No	No	No		No		No	No	No	No



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Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
<b>Axis</b>											
A6M2, 1940	0-110	No	0-100	0-120	6200	No		C, 2, 4, 6, 8, O	No	No	Yes
A6M2-21, 1941	0-110	No	0-100	0-120	6200	No		C, 2, 4, 6, 8, O	No	No	Yes
A6M2-N, 1942 (sea)	0-110	No	0-100	0-120	6200	No		C, 2, 4, 6, 8, O	No	No	No
A6M3, 1942	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M5, 1943	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M5a, 1944	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M5b, 1944	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M5c, 1944	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M7-62, 1945	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
A6M7-63, 1945	0-110	Yes	0-100	100, 120		2 Stages	3300	C, 2, 4, 6, 8, O	No	No	Yes
Ar-234B-2/lpr, 1944	0-100	No	No	No		No		No	No	No	Yes
B-239, 1939	0-110	No	0-100	0-120	9400	2 Stages	3000	C, 2, 4, 6, 8, O	No	No	No
B-534-IV, 1937	0-100	No	No	0-120	6400	No		C, 2, 4, 6, 8, O	1 time	No	No
Bf-109E-4, 1940	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109E-4/B, 1940	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109E-7/B, 1941	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109E-7/Z, 1941	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109F-2, 1941	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109F-4, 1941	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109G-2, 1942	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109G-6, 1943	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109G-6 Late, 1943	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109G-6/AS, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109G-10, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109G-14, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109K-4, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-109K-4 C3, 1945	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	Yes
Bf-109Z, 1944	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Bf-110G-2, 1942	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	Yes	Yes
D.XXI Serie 3, 1939	0-110	No	No	0-120	5100	No		No	3 times	No	No
D.XXI Serie 3 Late, 1941	0-110	No	No	0-120	5100	No		No	3 times	No	No
D3A1, 1939	0-110	No	0-100	0-120	6250	No		C, 2, 4, 6, 8, O	No	No	No
Do-335A-0, 1944	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	5 times	Yes	No
Do-335V-13, 1946	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	5 times	Yes	No
FW-190 A-4, 1942	0-110	No	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	Yes
FW-190 A-5, 1943	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	Yes
FW-190 A-5 1.65 Ata, 1943	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	Yes
FW-190 A-6, 1943	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	Yes
FW-190 A-8, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	No
FW-190 A-9, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	No
FW-190 D-9, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
FW-190 D-9, 1945	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Ta-152H-1, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
Ta-152C, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O, Auto	No	No	No
FW-190 F-8, 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	No

Click on the war flag to go in the corresponding page.



Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
FW-190 A-8 (Mistel), 1944	0-110	Yes	0-100, Auto	No		No		C, 2, 4, 6, 8, O	No	No	No
Fiat CR.42, 1938	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	No	No	No
Fiat G.50, 1938	0-110	No	0-100	0-120	4650	No		C, 2, 4, 6, 8, O	5 times	No	No
G4M1-11, 1941	0-110	No	0-100	0-120	6700	2 Stages	3000	C, 2, 4, 6, 8, O	No	Yes	No
Go-229 A-1, 1945	0-100	No	No	No		No		No	No	No	No
He-111H-2, 1941	0-110	No	0-100	0-120	4800	2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
He-111H-6, 1941	0-110	No	0-100	0-120	4700	2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
He-162 A-2	0-100	No	No	No		No		No	No	No	No
He-162C, 1946	0-110	No	No	No		No		No	No	No	No
He-162D, 1946	0-110	No	No	No		No		No	No	No	No
Heinkel Lerche III B-2, 1945	0-110	No	0-100	No		No		No	No	Yes	No
Hurricane Mk.I, 1938	0-110	No	0-100	100, 120		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 80, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 81a, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
I.A.R 81c, 1940	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
J2M3, 1944	0-110	Yes	0-100	0-120	6500	2 Stages	3000	C, 2, 4, 6, 8, O	No	No	No
J2M5, 1944	0-110	Yes	0-100	0-120	6500	3 Stages	3000 - 5500	C, 2, 4, 6, 8, O	No	No	No
J8A, 1937	0-110	No	No	0-120	4900	No		No	No	Yes	No
Ju-87B-2, 1941	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87D-3, 1942	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87D-5, 1942	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-87G-1, 1943	0-110	No	0-100	No		2 Stages	2800	C, 2, 4, 6, 8, O	No	Yes	No
Ju-88A-4, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
Ki-27 Ko, 1938	0-110	No	No	0-120	6000	No		C, 2, 4, 6, 8, O	No	No	No
Ki-27 Otsu, 1938	0-110	No	No	0-120	6000	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ia, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ib, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-Ic, 1941	0-110	No	0-100	0-120	6400	No		C, 2, 4, 6, 8, O	No	No	No
Ki-43-II, 1942	0-110	No	0-100	0-120	6400	2 Stages	3300	C, 2, 4, 6, 8, O	No	No	No
Ki-43-II, Kai, 1943	0-110	No	0-100	0-120	6400	2 Stages	3300	C, 2, 4, 6, 8, O	No	No	No
Ki-61-I Ko, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Ki-61-I Hei, 1944	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	4 times	No	Yes
Ki-61-I Otsu, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	Yes
Ki-84-Ia, 1944	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
Ki-84-Ib, 1944	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
Ki-84-Ic, 1945	0-110	Yes	0-100	100, 120		2 Stages	2500	C, 2, 4, 6, 8, O	No	No	Yes
Ki-100 Ko, 1945	0-110	Yes	0-100	0-120	6500	2 Stages	3500	C, 2, 4, 6, 8, O	No	No	No
MC.200 Serie 3, 1940	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.200 Serie 7, 1941	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.200 Serie 7 FB, 1941	0-110	No	0-100	0-120	4600	No		C, 2, 4, 6, 8, O	5 times	No	No
MC.202 Serie III, 1941	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.202 Serie VII, 1942	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.202 Serie XII, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	No	No
MC.205 V Serie I, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
MC.205 V Serie III, 1943	0-110	No	0-100	No		No		C, 2, 4, 6, 8, O	No	Yes	No
Me-163B-1a, 1944	0-110	No	No	No		No		No	No	No	No
Me-262A-1a, 1944	0-100	No	No	No		No		No	No	No	No

Click on the war flag to go in the corresponding page.

## ENGINE CONTROLS

Aircraft	Power	Boost	Prop Pitch	Mixture	Mixture Setting Alt	Supercharger	Alt S2-S3	Radiators Flaps	Fire Ext	Feather	Drop Tanks
Me-262A-1a/U4, 1945	0-100	No	No	No		No		No	No	No	No
Me-262A-2a, 1944	0-100	No	No	No		No		No	No	No	No
Me-262HG-II, 1946	0-110	No	No	No		No		No	No	No	No
N1K2-Ja, 1944	0-110	Yes	No	0-120	6400	2 Stages	4000	C, 2, 4, 6, 8, O	No	No	Yes
SM.79, 1936	0-110	No	0-50/50-100	0-120	5300	No		C, 2, 4, 6, 8, O	3 times	No	No
Ta-183, 1946	0-110	No	No	No		No		No	No	No	No



Click on the war flag to go in the corresponding page.





## AIRCRAFT &amp; OPERATIONAL CONTROLS

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Engine Controls  
(Allied)

Aircraft	E Trim	A Trim	R Trim	Flaps	Gear	Airbrake	Wheel Brakes	Lock Tail	Wing Fold	Hook	O/C Canopy	Seat	Bombsight	Bombsight Auto	Level Stab	Gunsight - Toggle - Yes / No	Reticle Dim	Cockpit Lights	Nav Lights	Land Lights	Mirror
Yak-3, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-3P, 1945	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-3 VK-107, 1945	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-3R, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-7A, 1941	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-7B, 1941	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-7B, 1942	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9, 1942	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9B, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9D, 1943	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9M, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9K, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9T, 1943	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9U, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-9UT, 1945	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
Yak-15, 1946	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	Reflector	No	Yes	Yes	Yes	No	
YP-80, 1944	Yes	No	Yes	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	Gyro	No	Yes	Yes	No	No	

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in the corresponding page.



## AIRCRAFT &amp; OPERATIONAL CONTROLS

Aircraft	E Trim	A Trim	R Trim	Flaps	Gear	Airbrake	Wheel Brakes	Lock Tail	Wing Fold	Hook	O/C Canopy	Seat	Bombsight	Bombsight Auto	Level Stab	Gunsight - Toggle - Yes / No	Reticle Dim	Cockpit Lights	Nav Lights	Land Lights	Mirror
J8A, 1937	Yes	Yes	Yes	R-L	No	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	No
Ju-87B-2, 1941	Yes	Yes	Yes	R-C-T/O-L	No	Yes	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ju-87D-3, 1942	Yes	Yes	Yes	R-C-T/O-L	No	Yes	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ju-87D-5, 1942	Yes	Yes	Yes	R-C-T/O-L	No	Yes	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ju-87G-1, 1943	Yes	Yes	Yes	R-C-T/O-L	No	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ju-88A-4, 1941	Yes	Yes	Yes	R-C-T/O-L-Auto	Auto	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Reflector	Yes	Yes	Yes	Yes	No
Ki-27 Ko, 1938	Yes	No	No	R-C-T/O-L	No	No	Yes	No	No	No	Yes	No	No	No	No	Telescope	Yes	Yes	Yes	No	No
Ki-27 Otsu, 1938	Yes	No	No	R-C-T/O-L	No	No	Yes	No	No	No	Yes	No	No	No	No	Telescope	Yes	Yes	Yes	No	Yes
Ki-43-Ia, 1941	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Telescope	Yes	Yes	Yes	No	No
Ki-43-Ib, 1941	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Telescope	Yes	Yes	Yes	No	No
Ki-43-Ic, 1941	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Telescope	Yes	Yes	Yes	No	No
Ki-43-II, 1942	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	No	No	Yes	No	No
Ki-43-III, Kai, 1943	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	No	No	Yes	No	No
Ki-61-I Ko, 1942	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	No	Yes	Yes	Yes	No
Ki-61-I Hei, 1944	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	No	Yes	Yes	Yes	No
Ki-61-I Otsu, 1943	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	No	Yes	Yes	Yes	No
Ki-84-Ia, 1944	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ki-84-Ib, 1944	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ki-84-Ic, 1945	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Ki-100 Ko, 1945	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	Yes	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
MC.200 Serie 3, 1940	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	No
MC.200 Serie 7, 1941	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	No
MC.200 Serie 7 FB, 1941	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	No
MC.202 Serie III, 1941	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	Yes
MC.202 Serie VII, 1942	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	Yes
MC.202 Serie XII, 1943	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	No	Yes	Yes	No	Yes
MC.205 V Serie I, 1943	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	No	Yes
MC.205 V Serie III, 1943	Yes	No	No	R-C-T/O-L	Auto	No	Yes	Yes	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	No	Yes
Me-163B-1a, 1944	Yes	No	No	R-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	No	No	No
Me-262A-1a, 1944	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	No	No
Me-262A-1a/U4, 1945	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
Me-262A-2a, 1944	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	No	No
Me-262HG-II, 1946	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	Yes	No
N1K2-Ja, 1944	Yes	Yes	Yes	R-C-T/O-L	Auto	No	Yes	No	Yes	No	Yes	No	No	No	No	Reflector	No	No	Yes	No	No
SM.79, 1936	Yes	No	Yes	Auto	Auto	No	Yes	Yes	No	No	Gunners	No	Bomb / Torp,	No	Yes	Ring	Yes	Yes	Yes	Yes	No
Ta-183, 1946	No	No	No	R-C-T/O-L	Auto	No	Yes	No	No	No	No	No	No	No	No	Reflector	Yes	Yes	Yes	No	No

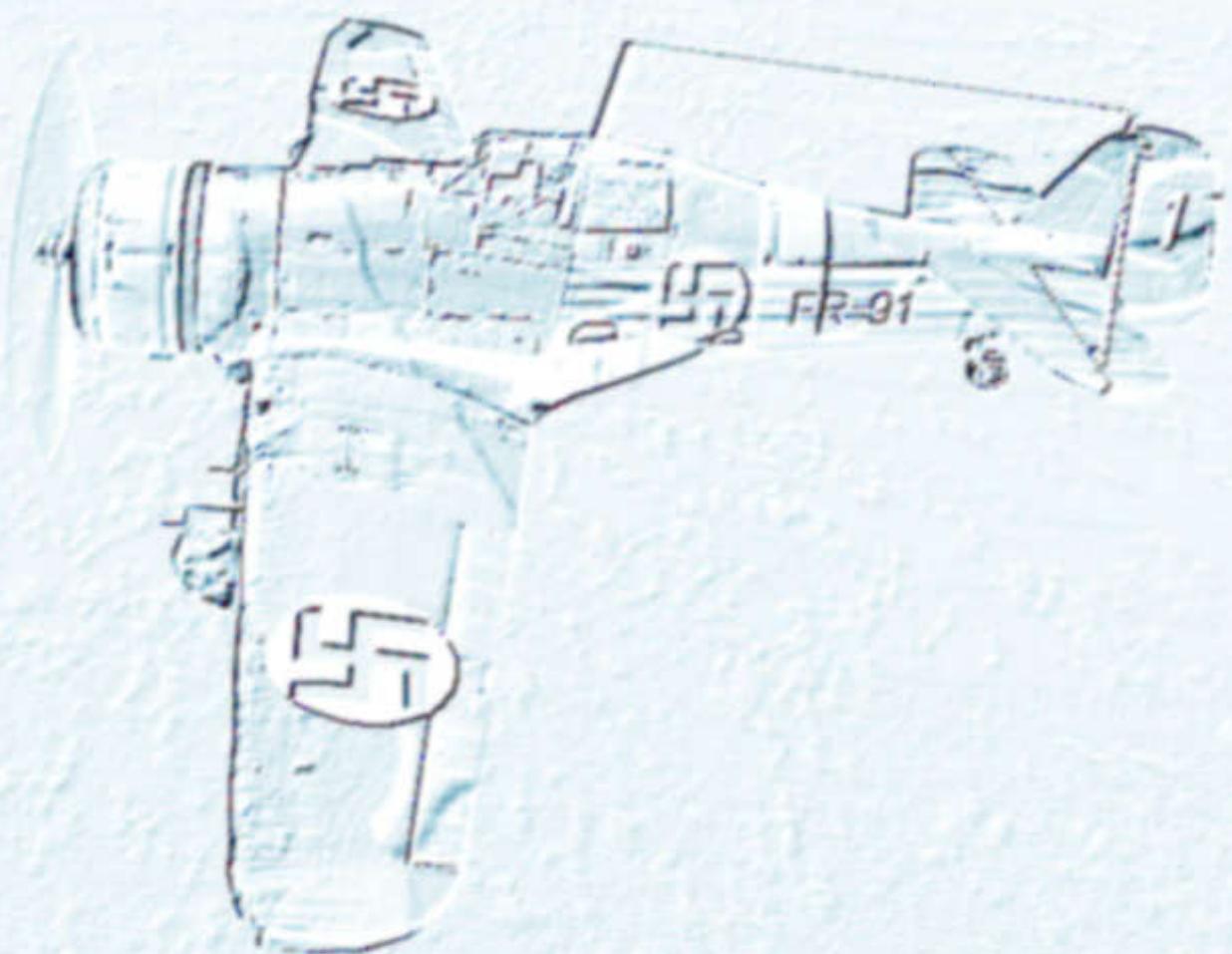
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Engine Controls  
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FINLAND

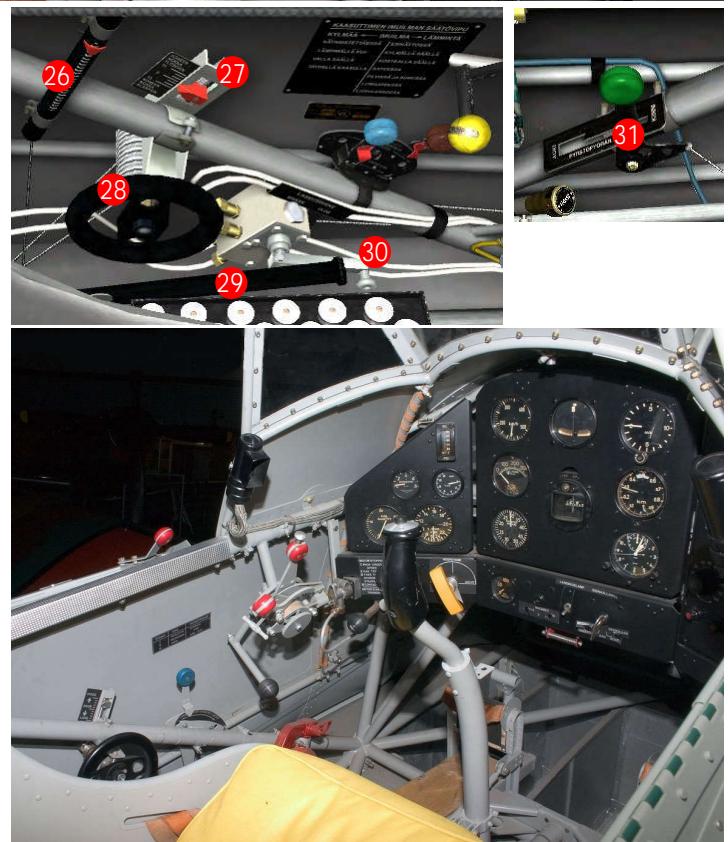


NETHERLANDS



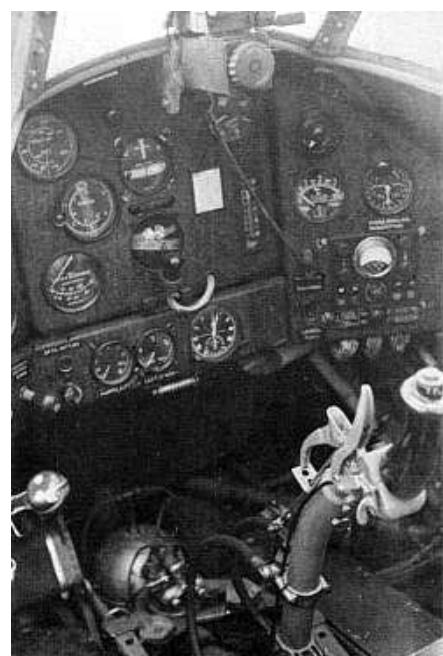
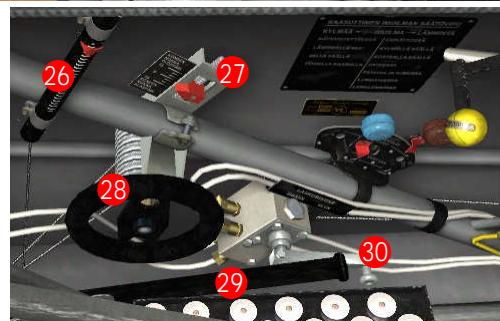


- 1.** Goertz gunsight
- 2.** Airspeed indicator
- 3.** Turn and bank indicator
- 4.** Variometer
- 5.** Fuel pressure gage
- 6.** Oil pressure gage
- 7.** Oil temperature gage
- 8.** Altimeter
- 9.** Pitch inclinometer
- 10.** Cylinder head temperature gage
- 11.** Brakes triple pressure gage: left & right brakes (top)  
storage cylinder (bottom)
- 12.** Manifold pressure gage
- 13.** Tachometer
- 14.** Fuel gage
- 15.** Directional gyro (upper half) / Magnetic compass (lower half)
- 16.** Mixture lever
- 17.** Throttle
- 18.** Engine ignition switch
- 19.** Oxygen pressure gage
- 20.** Oxygen quantity gage
- 21.** Clock
- 22.** Position lights switch
- 23.** Cockpit light switch
- 24.** Landing light switch
- 25.** Gear brakes lever
- 26.** Flaps position indicator
- 27.** Elevator trim indicator
- 28.** Elevator trim wheel
- 29.** Flaps handpump
- 30.** Flaps up-down lever
- 31.** Tail wheel lock lever

D.XXI - Dutch (<http://www.nederlandseluchtvart.nl/fotoboek/>)



- 1. Revi 3a gunsight
- 2. Airspeed indicator
- 3. Turn and bank indicator
- 4. Variometer
- 5. Fuel pressure gage
- 6. Oil pressure gage
- 7. Oil temperature gage
- 8. Altimeter
- 9. Pitch inclinometer
- 10. Cylinder head temperature gage
- 11. Brakes triple pressure gage: left & right brakes (top)  
storage cylinder (bottom)
- 12. Manifold pressure gage
- 13. Tachometer
- 14. Fuel gage
- 15. Directional gyro (upper half) / Magnetic compass (lower half)
- 16. Mixture lever
- 17. Throttle
- 18. Engine ignition switch
- 19. Oxygen pressure gage
- 20. Oxygen quantity gage
- 21. Clock
- 22. Position lights switch
- 23. Cockpit light switch
- 24. Landing light switch
- 25. Gear brakes lever
- 26. Flaps position indicator
- 27. Elevator trim indicator
- 28. Elevator trim wheel
- 29. Flaps handpump
- 30. Flaps up-down lever
- 31. Tail wheel lock lever





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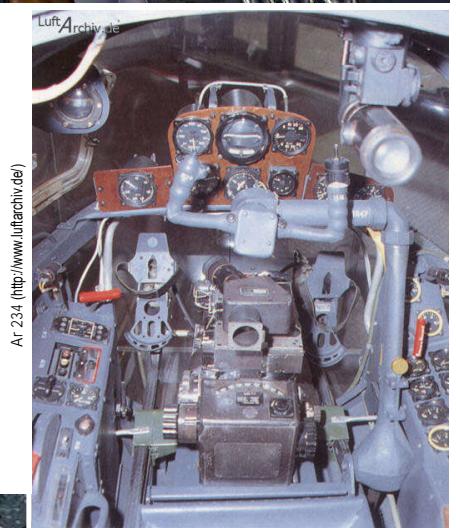
# GERMANY



# Arado Ar 234 B-2 «Blitz»



1. Magnetic compass
2. Airspeed indicator
3. Artificial horizon / turn and bank indicator
4. Variometer
5. Exhaust pitot pressure gage (left & right engine)
6. Stall warning light
7. Altimeter
8. Repeater compass
9. Left engine tachometer
10. Right engine tachometer
11. Landing gear & flaps actuators and indicators
12. Instrument light switch
13. Clock
14. Left engine gas pressure gage
15. Right engine gas pressure gage
16. Left engine oil pressure gage
17. Right engine oil pressure gage
18. Left engine fuel injection pressure gage
19. Right engine fuel injection pressure gage
20. Left engine gas temperature gage
21. Right engine gas temperature gage
22. Fuel gage (front)
23. Fuel gage (rear)
24. Low fuel warning light (front)
25. Low fuel warning light (rear)
26. Left engine throttle
27. Right engine throttle
28. Hydraulic pressure gage
29. Bombsight controls
30. Elevator trim lever & indicator
31. Rudder trim wheel & indicator
32. Outside temperature gage



copyright Brian M. Silcox



# Dornier Do 335 A-0 «Pfeil»



1. Clock
2. Outside temperature gage
3. Radio altimeter
4. Airspeed indicator
5. Stall warning light
6. Artificial horizon / turn and bank indicator
7. Variometer
8. Front propeller pitch indicator
9. Rear propeller pitch indicator
10. Front engine manifold pressure gage & tachometer
11. Rear engine manifold pressure gage & tachometer
12. Low fuel warning light
13. Left nose cannon warning light
14. Propeller cannon warning light
15. Right nose cannon warning light
16. Ammunition counter - left nose cannon
17. Ammunition counter - propeller cannon
18. Ammunition counter - right nose cannon
19. Altimeter
20. Repeater compass
21. Front engine coolant temperature gage
22. Front engine oil temperature gage
23. Rear engine coolant temperature gage
24. Rear engine oil temperature gage
25. Front engine fuel pressure gage
26. Front engine oil pressure gage
27. Rear engine fuel pressure gage
28. Rear engine oil pressure gage
29. Fuel gage
30. Engines fire warning lights
31. Front engine radiator lever
32. Rear engine radiator lever
33. Front engine throttle
34. Rear engine throttle
35. Magnetic compass
36. Front propeller pitch lever
37. Rear propeller pitch lever
38. Flaps position indicator
39. Landing gear position indicator
40. Flaps switch
41. Landing gear switch
42. Front engine ignition switch



43. Rear engine ignition switch

44. Elevator trim wheel



# Dornier Do 335 V-13 «Pfeil»



1. Clock
2. Outside temperature gage
3. Radio altimeter
4. Airspeed indicator
5. Stall warning light
6. Artificial horizon / turn and bank indicator
7. Variometer
8. Front propeller pitch indicator
9. Rear propeller pitch indicator
10. Front engine manifold pressure gage & tachometer
11. Rear engine manifold pressure gage & tachometer
12. Low fuel warning light
13. Left wing **cannon** warning light
14. Left nose **cannon** warning light
15. Propeller **cannon** warning light
16. Right nose cannon warning light
17. Right wing cannon warning light
18. **Ammunition counter** - left wing **cannon**
19. **Ammunition counter** - left nose **cannon**
20. **Ammunition counter** - propeller cannon
21. Ammunition counter - right nose cannon
22. Ammunition counter - right wing cannon
23. Altimeter
24. Repeater compass
25. Front engine coolant temperature gage
26. Front engine oil temperature gage
27. Rear engine coolant temperature gage
28. Rear engine oil temperature gage
29. Front engine fuel pressure gage
30. Front engine oil pressure gage
31. Rear engine fuel pressure gage
32. Rear engine oil pressure gage
33. Fuel gage
34. Engine fire warning lights
35. Front engine radiator lever
36. Rear engine radiator lever
37. Front engine throttle
38. Rear engine throttle
39. Magnetic compass
40. Front propeller pitch lever
41. Rear propeller pitch lever
42. Flaps position indicator



43. Landing gear **position indicator**

44. Flaps switch
45. Landing gear switch
46. Front engine ignition switch
47. Rear engine ignition switch
48. Elevator **trim wheel**

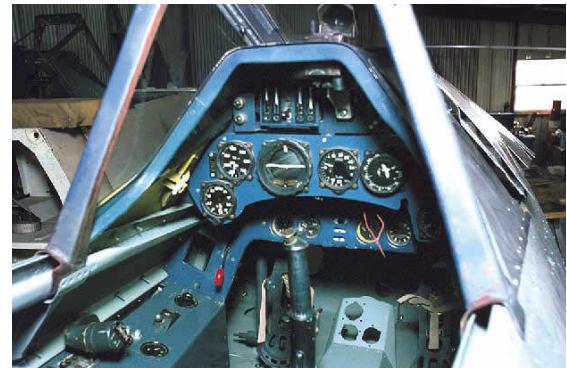
Do 335 (<http://www.cockpitinstrumente.de/>)



# Focke-Wulf Fw 190 A-4 «Würger»



1. Left MG warning light
2. Right MG warning light
3. Ammunition counter - inboard left wing cannon
4. Ammunition counter - left MG
5. Ammunition counter - right MG
6. Ammunition counter - inboard right wing cannon
7. Airspeed indicator
8. Artificial horizon / turn and bank indicator
9. Variometer
10. Repeater compass
11. Manifold pressure gage
12. Altimeter
13. Fuel and oil pressure gage
14. Oil temperature gage
15. Fuel gage
16. Propeller pitch indicator
17. Low fuel warning light (15 min at 2500 RPM)
18. Rear tank switchover light (switched off when total fuel < 50%)
19. Tachometer
20. Throttle
21. Engine ignition switch
22. Landing gear position indicator: green - down  
no light - transition  
red - up
23. Flaps pos. indicator: red - up  
red (middle) - combat and take-off position  
green - landing position
24. Elevator trim indicator
25. Landing gear and flaps actuators
26. Clock



Fw 190A3

(<http://www.warbirdsalive.com/wblist/german/fw190/fw190y9.htm>)



([http://www.warbirdsalive.com/wblist/german/fw190/fw190y9/coopit\\_2.jpg](http://www.warbirdsalive.com/wblist/german/fw190/fw190y9/coopit_2.jpg))

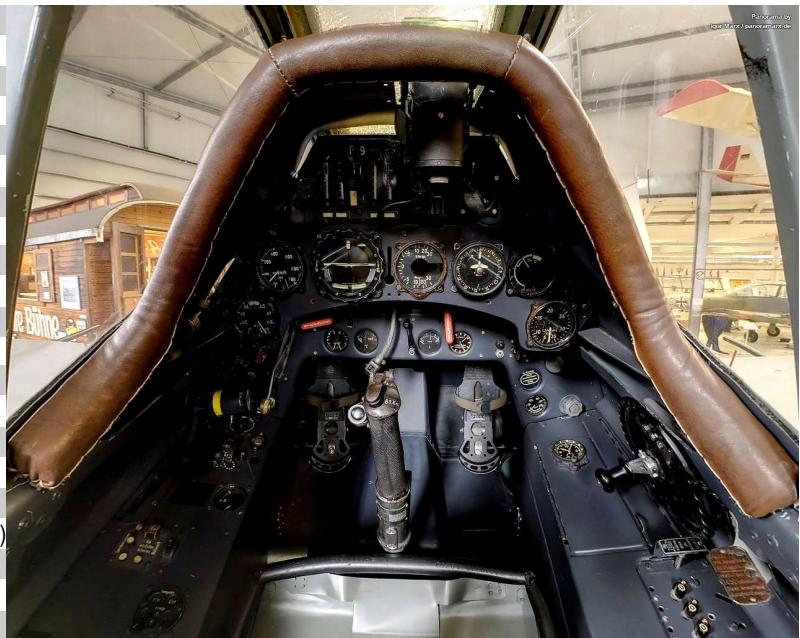


# Focke-Wulf Fw 190 A-5 «Würger»

A-5 1.65 ATA / A-6



- 1. Left MG warning light
- 2. Right MG warning light
- 3. Ammunition counter - inboard left wing cannon
- 4. Ammunition counter - left MG
- 5. Ammunition counter - right MG
- 6. Ammunition counter - inboard right wing cannon
- 7. Airspeed indicator
- 8. Artificial horizon / turn and bank indicator
- 9. Variometer
- 10. Repeater compass
- 11. Manifold pressure gage
- 12. Altimeter
- 13. Fuel and oil pressure gage
- 14. Oil temperature gage
- 15. Fuel gage
- 16. Propeller pitch indicator
- 17. Low fuel warning light (15 min at 2500 RPM)
- 18. Rear tank switchover light (switched off when total fuel < 50%)
- 19. Tachometer
- 20. Throttle
- 21. Engine ignition switch
- 22. Landing gear position indicator: green - down  
no light - transition  
red - up
- 23. Flaps pos. indicator: red - up  
red (middle) - combat and take-off position  
green - landing position
- 24. Elevator trim indicator
- 25. Landing gear and flaps actuators
- 26. External ordnance status: two inner lights - belly bombs/tanks  
two outer lights - wing bombs/tanks
- 27. Clock



Fw 190A (<http://www.360cities.net/image/luftfahrtmuseum-39>)





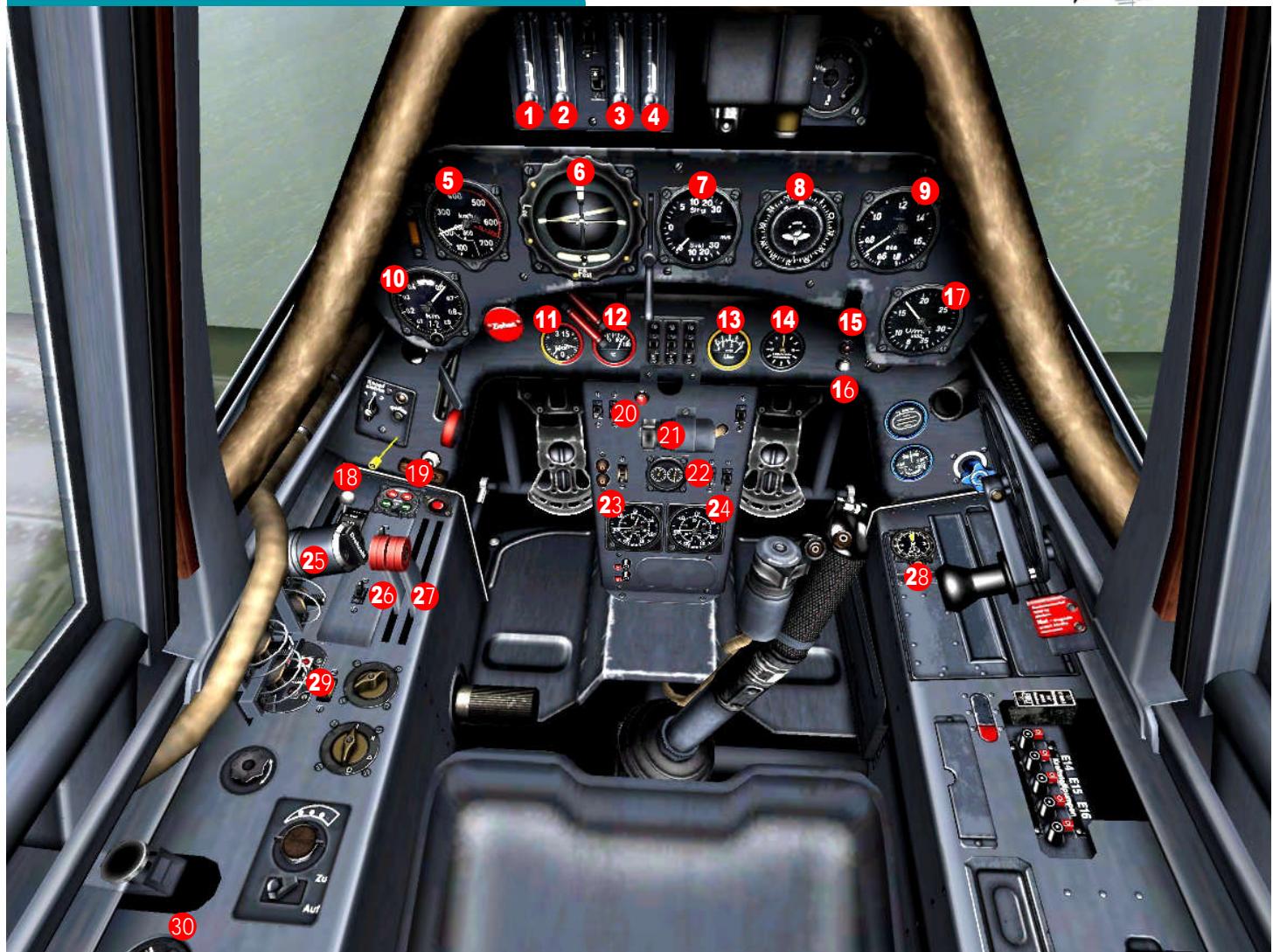
1. Ammunition counter - inboard left wing cannon
2. Ammunition counter - left MG
3. Ammunition counter - right MG
4. Ammunition counter - inboard right wing cannon
5. Airspeed indicator
6. Artificial horizon / turn and bank indicator
7. Variometer
8. Repeater compass
9. Manifold pressure gage
10. Altimeter
11. Fuel and oil pressure gage
12. Oil temperature gage
13. Fuel gage
14. Propeller pitch indicator
15. Low fuel warning light (15 min at 2500 RPM)
16. Rear tank switchover light (switched off when total fuel < 50%)
17. Tachometer
18. Throttle
19. Engine ignition switch
20. Landing gear position indicator: green - down  
no light - transition  
red - up
21. Elevator trim indicator
22. External ordnance status light
23. Clock
24. Landing gear and flaps actuators



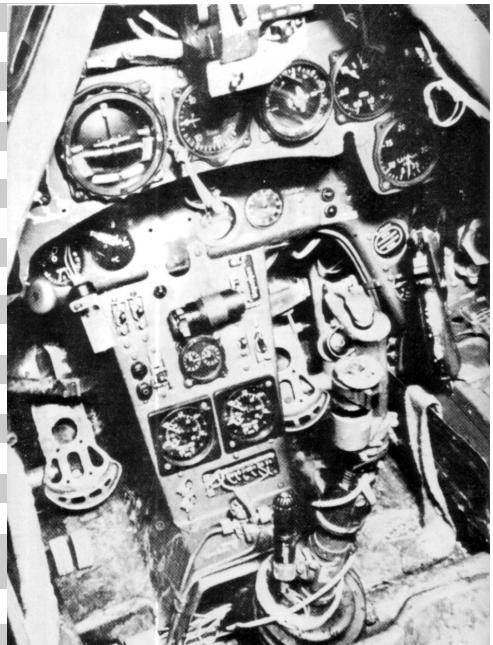
Fw 190A8 (<http://www.clubhyper.com/reference/fw190cockpit/CockPitMap.html>)



# Focke-Wulf Fw 190 A-8 Mistel III a



1. Ammunition counter - inboard left wing cannon
2. Ammunition counter - left MG
3. Ammunition counter - right MG
4. Ammunition counter - inboard right wing **cannon**
5. Airspeed indicator
6. Artificial horizon / turn and bank indicator
7. Variometer
8. Repeater compass
9. Manifold pressure gage
10. Altimeter
11. Fuel and oil pressure gage
12. Oil temperature gage
13. Fuel gage
14. Propeller pitch indicator
15. Low fuel warning light (15 min at 2500 RPM)
16. Rear tank switchover light (switched off when total fuel < 50%)
17. Tachometer
18. Engine ignition switch
19. Landing gear position indicator: green - down / red - up  
in composite mode for Ju 88 Mistel, once separated for Fw 190 A8
20. Ju 88 Mistel status light (switched off when released)
21. Ju 88 Mistel pitch control (synchronized with the control stick)
22. Propeller pitch indicator for left and right engine - Ju 88 Mistel
23. Left engine manifold pressure gage (big needle) and tachometer (small needle) - Ju 88 Mistel
24. Right engine manifold pressure gage (big needle) and tachometer (small needle) - Ju 88 Mistel
25. Throttle
26. Throttle - Ju 88 Mistel left engine
27. Throttle - Ju 88 Mistel right engine
28. Clock
29. Landing gear and flaps actuators
30. Elevator trim indicator



# Focke-Wulf Fw 190 D-9 «Dora» (1944)



**1. Ammunition counter - left wing cannon**

**2. Ammunition counter - left MG**

**3. Ammunition counter - right MG**

**4. Ammunition counter - right wing cannon**

**5. Airspeed indicator**

**6. Artificial horizon / turn and bank indicator**

**7. Variometer**

**8. Repeater compass**

**9. Manifold pressure gage**

**10. Altimeter**

**11. Fuel and oil pressure gage**

**12. Coolant temperature gage**

**13. Oil temperature gage**

**14. Fuel gage**

**15. Low fuel warning light (15 min at 2500 RPM)**

**15. Rear tank switchover light (switched off when total fuel < 50%)**

**17. Tachometer**

**18. Throttle**

**19. Engine ignition switch**

**20. Elevator trim indicator**

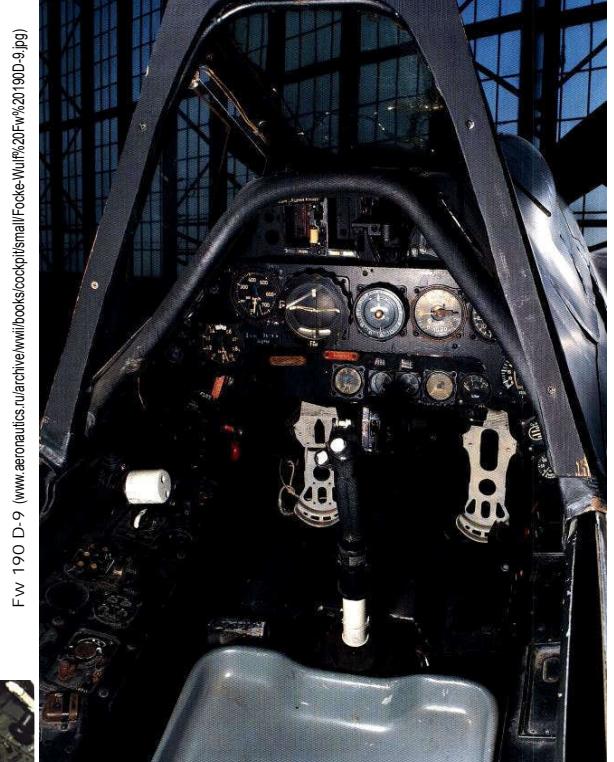
**21. Landing gear and flaps actuators**

**23. Landing gear position indicator: green - down**

**no light - transition**

**red - up**

**23. Clock**



©Don Randle, www.pressedaircraft.com



Copyright Don Randle



# Focke-Wulf Fw 190 D-9 «Dora» (1945)



1. Ammunition counter - left wing cannon
2. Ammunition counter - left MG
3. Ammunition counter - right MG
4. Ammunition counter - right wing cannon
5. Airspeed indicator
6. Artificial horizon / turn and bank indicator
7. Variometer
8. Repeater compass
9. Manifold pressure gage
10. Altimeter
11. Fuel and oil pressure gage
12. Coolant temperature gage
13. Oil temperature gage
14. MW-50 pressure gage
15. Fuel gage
16. Low fuel warning light (15 min at 2500 RPM)
17. Rear tank switchover light (switched off when total fuel < 50%)
18. Tachometer
19. Throttle
20. Engine ignition switch
21. Elevator trim indicator
22. Landing gear and flaps actuators
23. Landing gear position indicator: green - down  
no light - transition  
red - up
24. Clock



Fw 190 D-9 (<http://untoldvalor.blogspot.com/2007/08/wwii-aircraft-view-from-cockpit.html>)



Fw 190 D-9 (<http://www.largescaleplanes.com/index.php>)



# Focke-Wulf Fw 190 F-8 «Würger»



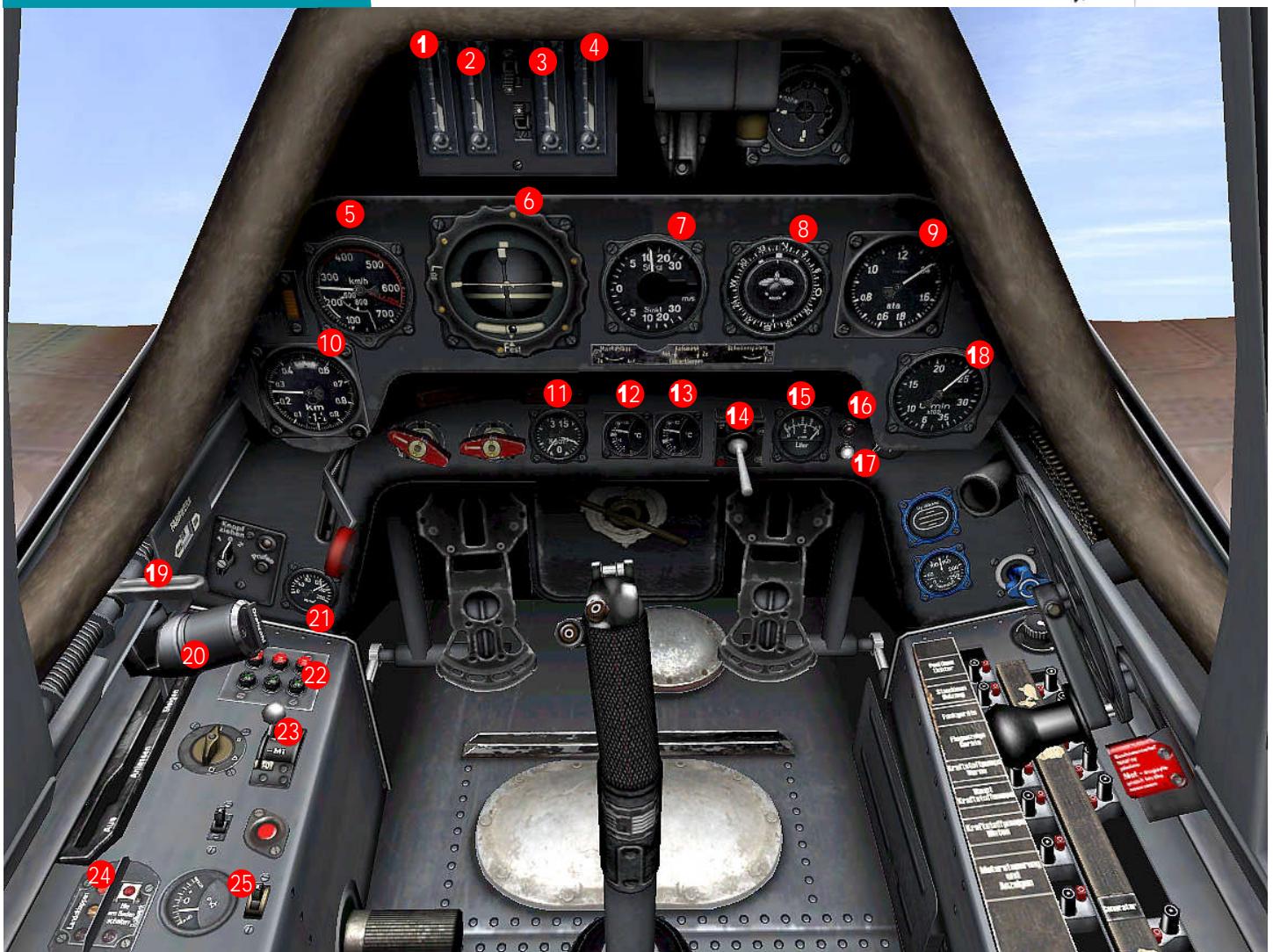
- 1. Ammunition counter - left wing cannon**
- 2. Ammunition counter - left MG**
- 3. Ammunition counter - right MG**
- 4. Ammunition counter - right wing cannon**
- 5. Airspeed indicator**
- 6. Artificial horizon / turn and bank indicator**
- 7. Variometer**
- 8. Repeater compass**
- 9. Manifold pressure gage**
- 10. Altimeter**
- 11. Fuel and oil pressure gage**
- 12. Oil temperature gage**
- 13. Fuel gage**
- 14. Propeller pitch indicator**
- 15. Low fuel warning light** (15 min at 2500 RPM)
- 16. Rear tank switchover light** (switched off when total fuel < 50%)
- 17. Tachometer**
- 18. Throttle**
- 19. Engine ignition switch**
- 20. Landing gear position indicator:** green - down  
no light - transition  
red - up
- 21. Elevator trim indicator**
- 22. Landing gear and flaps actuators**
- 23. Bombing panel:** upper row - wing bombs status  
lower row - fuselage bombs status
- 24. Clock**



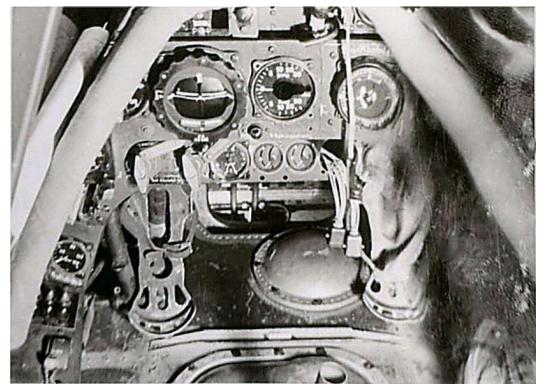
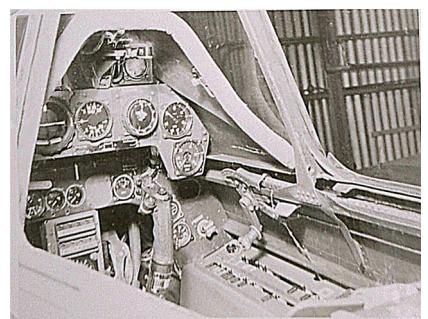
Fw 190F (©Don Randle, www.preservedaxisaircraft.com/)



# Focke-Wulf Ta 152 C



- 1. Ammunition counter - left wing cannon**
- 2. Ammunition counter - left nose cannon**
- 3. Ammunition counter - right nose cannon**
- 4. Ammunition counter - right wing cannon**
- 5. Airspeed indicator**
- 6. Artificial horizon / turn and bank indicator**
- 7. Variometer**
- 8. Repeater compass**
- 9. Manifold pressure gage**
- 10. Altimeter**
- 11. Fuel and oil pressure gage**
- 12. Coolant temperature gage**
- 13. Oil temperature gage**
- 14. X-4 missile guidance lever**
- 15. Fuel gage**
- 16. Low fuel warning light (15 min at 2500 RPM)**
- 17. Rear tank switchover light (switched off when total fuel < 50%)**
- 18. Tachometer**
- 19. Landing gear lever**
- 20. Throttle**
- 21. Hydraulic pressure gage**
- 22. Landing gear position indicator: green - down  
no light - transition  
red - up**
- 23. Engine ignition switch**
- 24. Flaps actuators**
- 25. Elevator trim indicator**



Ta 152 (<http://www.cockpitinstrumente.de>)



# Focke-Wulf Ta 152 H-1



**1. Ammunition counter - left wing cannon**

**2. Ammunition counter - right wing cannon**

**3. Airspeed indicator**

**4. Artificial horizon / turn and bank indicator**

**5. Variometer**

**6. Repeater compass**

**7. Manifold pressure gage**

**8. Altimeter**

**9. Fuel and oil pressure gage**

**10. Coolant temperature gage**

**11. Oil temperature gage**

**12. MW-50 pressure gage**

**13. Fuel gage**

**14. Low fuel warning light** (15 min at 2500 RPM)

**15. Rear tank switchover light** (switched off when total fuel < 50%)

**16. Tachometer**

**17. Landing gear lever**

**18. Hydraulic pressure gage**

**19. Throttle**

**20. Landing gear position indicator:** green - down

**no light - transition  
red - up**

**21. Engine ignition switch**

**22. Flaps actuator**

**23. Elevator trim indicator**



Ta 152 (<http://www.cockpitinstrumente.de>)



# Focke-Wulf Ta 183 «Huckebein»

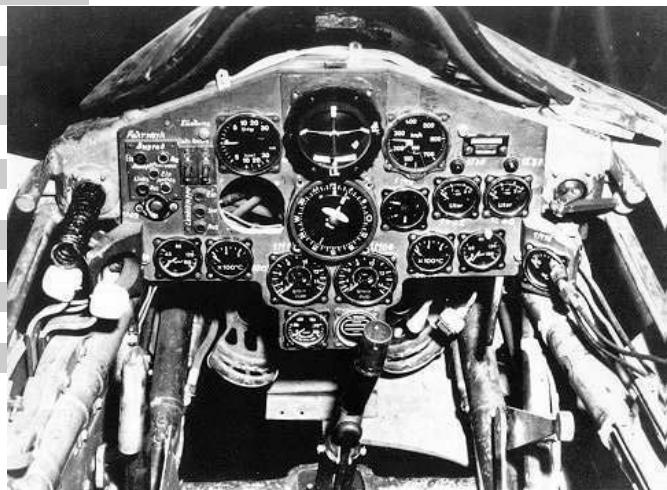
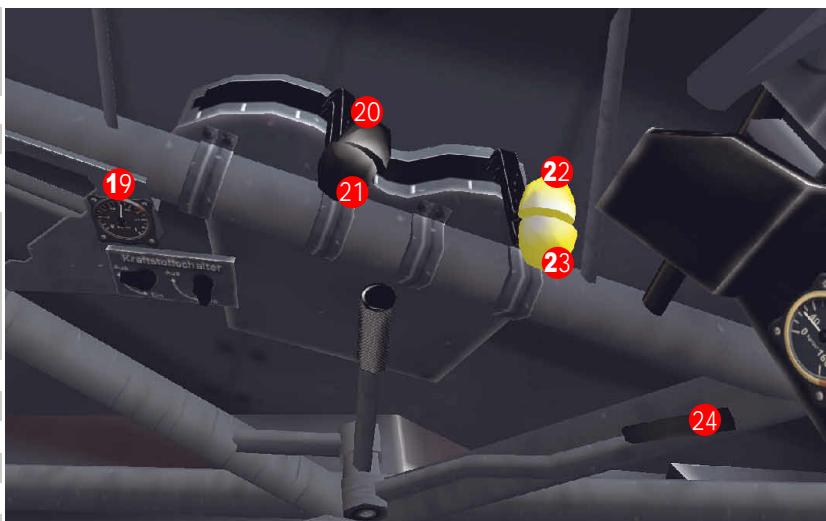


1. Clock
2. Variometer
3. Airspeed indicator
4. Artificial horizon / turn and bank indicator
5. X-4 missile guidance lever
6. Tachometer
7. Stall warning light
8. Altimeter
9. Repeater compass
10. Exhaust gas temperature gage
- 11. Exhaust pressure gage**
12. Oil pressure gage
13. Fuel gage
14. Low fuel warning light
15. Left and right cannons ammunition counters
16. Free air temperature gage
- 17. Compressed air pressure gage**
18. Landing gear lever
19. Flaps lever
20. Throttle
- 21. Elevator trim indicator**
- 22. Landing gear position indicator:** green - down  
no light - transition  
red - up
- 23. Exhaust nozzle control lever (front position at power > 100%)**





- 1.** Landing gear position indicator: green - down  
no light - transition  
red - up
- 2.** Variometer
- 3.** Artificial horizon / turn and bank indicator
- 4.** Airspeed indicator  
White needle - IAS up to 400 km/h, yellow needle - TAS with dual 400 km/h mark
- 5.** Flaps position indicator:  
upper red (Ein) - up and combat  
middle red (Start) - take-off  
lower green (Aus) - landing  
no light - transition
- 6.** Altimeter
- 7.** Repeater compass
- 8.** Left tank fuel gage
- 9.** Left tank low fuel warning light
- 10.** Right tank fuel gage
- 11.** Right tank low fuel warning light
- 12.** Left engine fuel injection pressure gage
- 13.** Left engine gas temperature gage
- 14.** Left engine tachometer
- 15.** Right engine tachometer
- 16.** Right engine gas temperature gage
- 17.** Right engine fuel injection pressure gage
- 18.** Outside temperature gage
- 19.** Exhaust pressure gage (left engine only)
- 20.** Landing gear lever
- 21.** Flaps lever
- 22.** Left engine throttle
- 23.** Right engine throttle
- 24.** Air brake lever



Go 229 (<http://www.cockpitinstrumente.de/index.htm>)

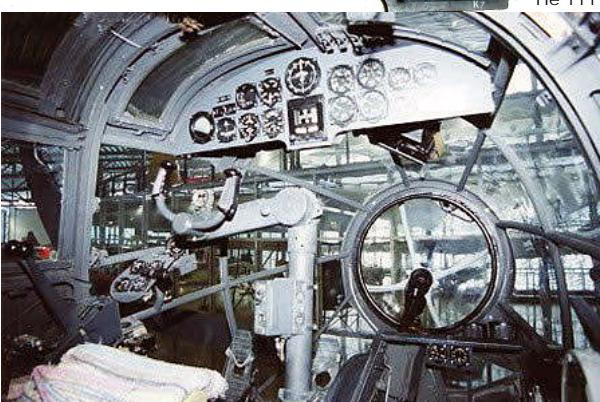
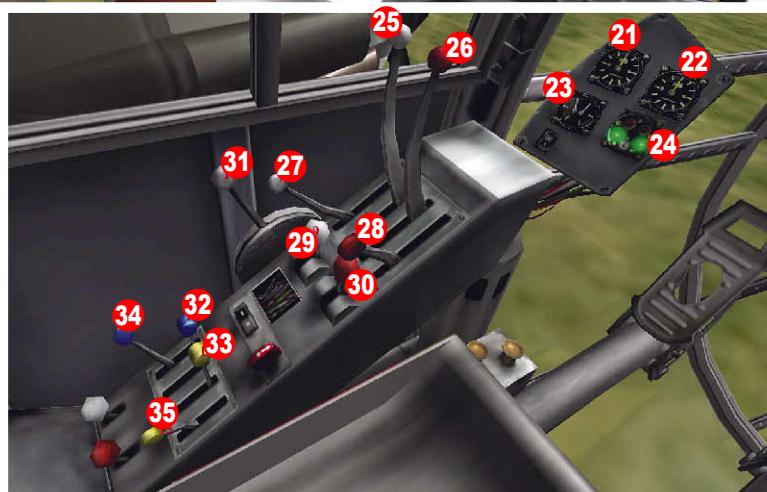


# Heinkel He 111

H-2 / H-6



1. Artificial horizon
2. Autopilot course pointer
3. Turn and bank indicator
4. Blind landing homing indicator
5. Variometer
6. Airspeed indicator
7. Altimeter
8. Repeater compass
9. Autopilot course indicator (top: selected course - bottom: gyro heading)
10. Left engine tachometer
11. Right engine tachometer
12. Left engine oil temperature gage
13. Right engine oil temperature gage
14. Left engine fuel and oil pressure gage
15. Left engine manifold pressure gage
16. Right engine manifold pressure gage
17. Left engine coolant temperature gage
18. Right engine coolant temperature gage
19. Right engine fuel and oil pressure gage
20. Clock
21. Left propeller pitch indicator
22. Right propeller pitch indicator
23. Flaps position indicator
24. Landing gear position indicator: green - down  
red - up
25. Left engine throttle
26. Right engine throttle
27. Left engine supercharger lever
28. Right engine supercharger lever
29. Left side propeller pitch lever
30. Right side propeller pitch lever
31. Flaps lever
32. Left engine mixture lever
33. Right engine mixture lever
34. Left engine oil radiator lever
35. Right engine oil radiator lever
36. Low fuel warning light for left wing tank
37. Left wing tank fuel gage
38. Right wing tank fuel gage
39. Low fuel warning light for right wing tank
40. Left engine fuel and oil pressure gage
41. Free air temperature gage
42. Right engine fuel and oil pressure gage



He 111 (<http://www.cockpitinstrumente.de>)





**1. Turn and bank indicator**

2. Airspeed indicator (white needle - IAS, yellow needle - TAS)  
Max IAS speed marks: 400 km/h-11000 m, 500 km/h-9000 m, 600 km/h-7000 m, 700 km/h-5000 m

**3. Variometer**

4. Exhaust gas **temperature** gage

**5. Tachometer**

**6. Altimeter**

7. Magnetic **compass**

8. Oil **pressure** gage

9. Fuel injection **pressure** gage

**10. Clock**

**11. Fuel gage**

**12. Ammunition counter - left cannon**

**13. Ammunition counter - right cannon**

**14. Nosewheel well window**

**15. Elevator trim lever**

**16. Landing gear lever** (indicator is located in front of the windshield)

**17. Throttle**



He 162 © Tromplamort – MAE Dugny 2009



He 162 © Tromplamort



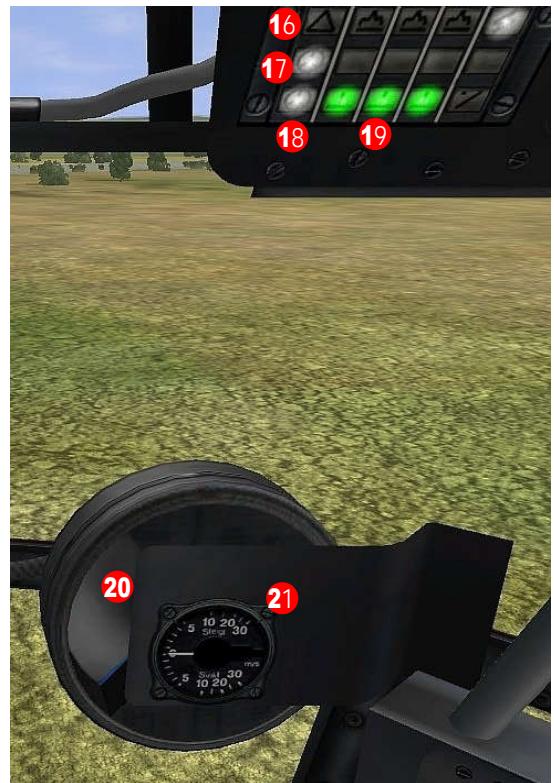
He 162 (http://memorial.flight.free.fr)



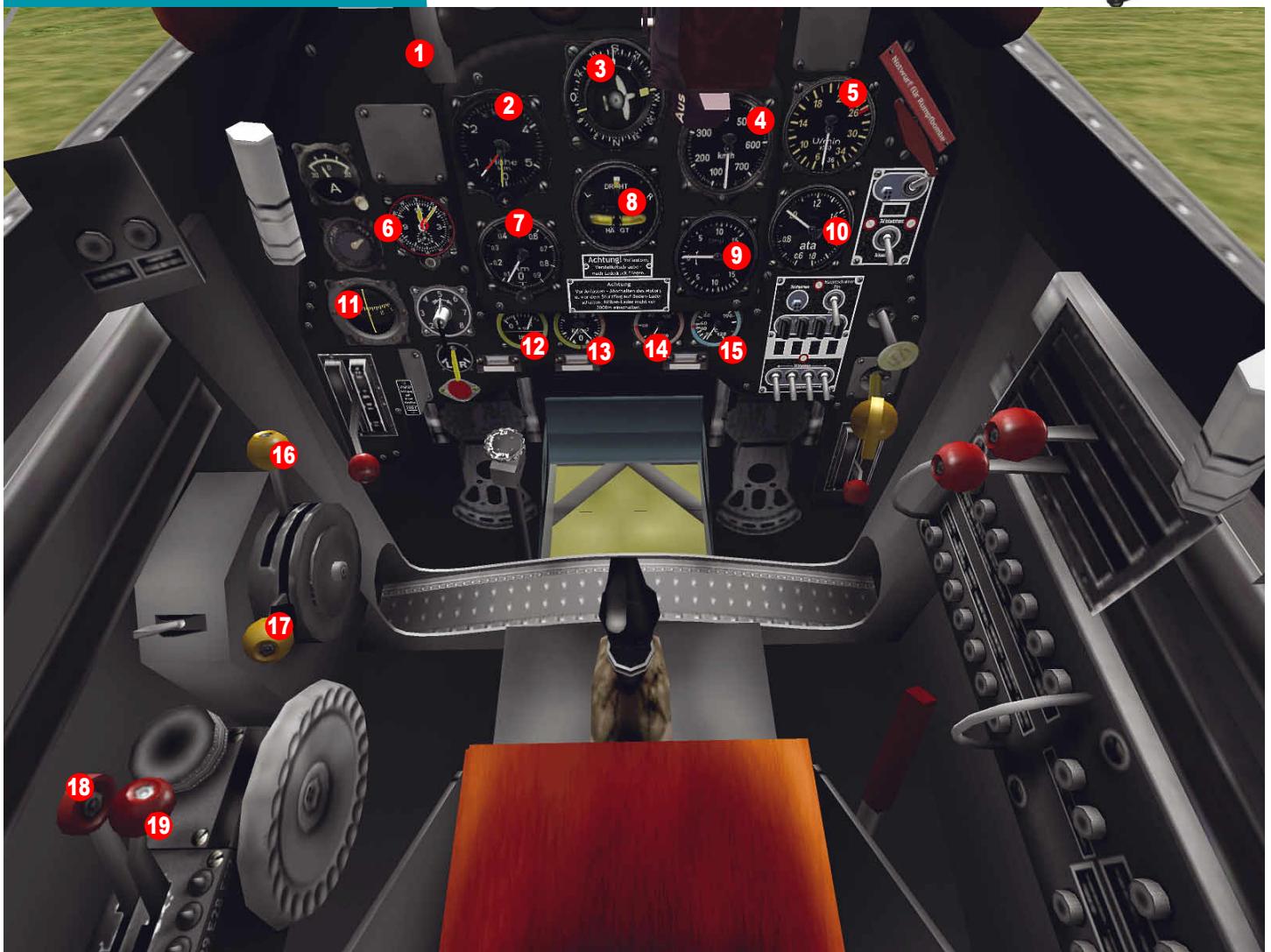
# Heinkel He III B-2 «Lerche»



1. Artificial horizon / turn and bank indicator
2. Airspeed indicator
3. Altimeter
4. X-4 missile guidance lever
5. Front engine coolant temperature gage
6. Front engine oil pressure gage
7. Rear engine coolant temperature gage
8. Rear engine oil pressure gage
9. Front engine manifold pressure gage & tachometer
10. Rear engine manifold pressure gage & tachometer
11. Electric generator indicator light
12. Stabilization autopilot: engines power effectiveness indicator light
13. Fuel gage
14. Front engine throttle
15. Rear engine throttle
16. Low fuel warning light
17. Stabilization autopilot: "Switched on" indicator light (control surfaces deployed)
18. Stabilization autopilot: "Engaged" indicator light (control surfaces active)
19. Landing sensing probe indicator lights: green - wheels on ground  
no light - in flight
20. Ultra-sound landing altimeter (0-300 m)
21. Variometer



# Junkers Ju 87 B-2 Stuka



**1. Supercharger lever: rear position - stage 1  
front position - stage 2**

**2. Contact altimeter**

(with adjustable altitude needle for automatic bomb drop & pull-up)

**3. Repeater compass**

**4. Airspeed indicator**

**5. Tachometer**

**6. Clock**

**7. Altimeter**

**8. Turn and bank indicator**

**9. Variometer**

**10. Manifold pressure gage**

**11. Magnetic compass**

**12. Fuel gage**

**13. Fuel and oil pressure gage**

**14. Oil temperature gage**

**15. Coolant temperature gage**

**16. Propeller pitch lever**

**17. Throttle**

**18. Dive brakes lever: rear position - deployed  
front position - stowed**

**19. Flaps lever**



Ju 87B1 (<http://www.cockpitinstrumente.de>)

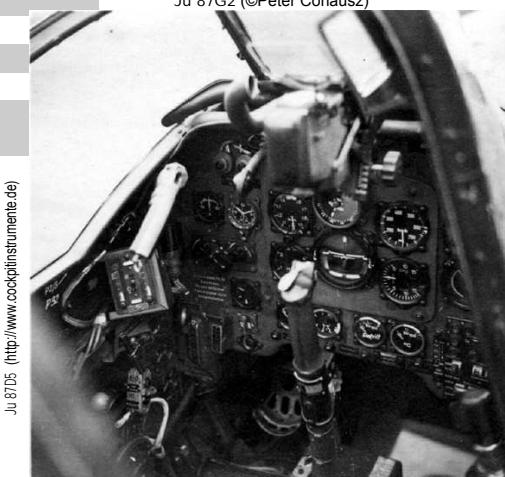
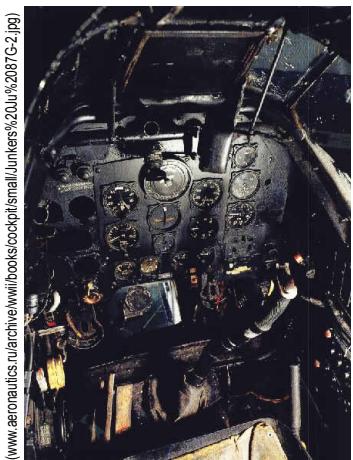


# Junkers Ju 87 D / G Stuka

## D-3 / D-5 / G-1



- 1. Clock**
- 2. Supercharger lever: rear position - stage 1  
front position - stage 2**
- 3. Altimeter**
- 4. Repeater compass**
- 5. Airspeed indicator**
- 6. Tachometer**
- 7. Left and right ammunition counters (MG in D-3, cannons in D-5 & G-1)**
- 8. Magnetic compass**
- 9. Contact altimeter  
(with adjustable altitude needle for bomb drop (automatic in D-3 only) & pull-up)**
- 10. Turn and bank indicator**
- 11. Variometer**
- 12. Manifold pressure gage**
- 13. Fuel gage**
- 14. Fuel and oil pressure gage**
- 15. Oil temperature gage**
- 16. Coolant temperature gage**
- 17. Propeller pitch lever**
- 18. Throttle**
- 19. Dive brakes lever: rear position - deployed  
(except in G-1) front position - stowed**
- 20. Flaps lever**



# Junkers Ju 88 A-4

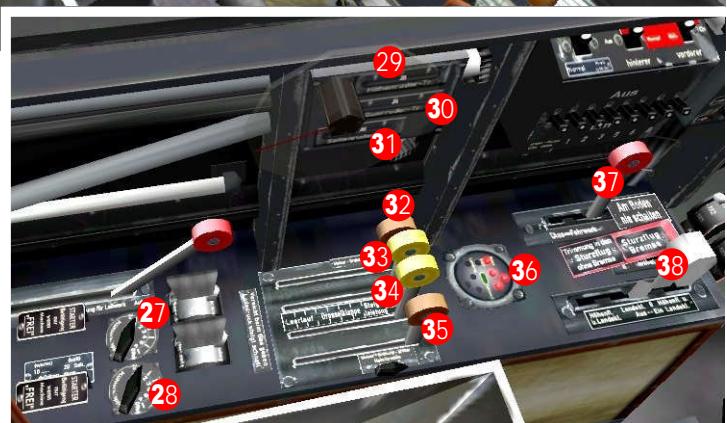


- 1. Variometer
- 2. Autopilot course pointer
- 3. Turn and bank indicator**
- 4. Artificial horizon
- 5. Autopilot course indicator (top: selected course - bottom: gyro heading)
- 6. Radio bearing indicator
- 7. Repeater compass
- 8. Left engine manifold pressure gage
- 9. Right engine manifold pressure gage
- 10. Left engine tachometer**
- 11. Right engine tachometer**
- 12. Left & right engine fuel and oil pressure gage
- 13. Left engine coolant temperature gage
- 14. Right engine coolant temperature gage
- 15. Fuel gage
- 16. Fuel gage
- 17. Free air temperature gage
- 18. Airspeed indicator
- 19. Altimeter
- 20. Contact altimeter  
(with adjustable altitude needle for bomb drop & pull-up)
- 21. Fuel consumption gage
- 22. Left engine ignition switch
- 23. Right engine ignition switch
- 24. Clock
- 25. True airspeed selector switch
- 26. True airspeed indicator
- 27. Left engine oil radiator selector switch
- 28. Right engine oil radiator selector switch
- 29. Elevator trim wheel and indicator**
- 30. Aileron trim indicator**
- 31. Rudder trim indicator
- 32. Left side propeller pitch lever
- 33. Left engine throttle
- 34. Right engine throttle
- 35. Right side propeller pitch lever



On engine nacelles

Ju 88 (<http://www.nationalmuseum.af.mil/photos>)



- 36. Landing gear & flaps position indicator
- 37. Landing gear lever
- 38. Flaps lever
- 39. Hydraulic oil pressure gage
- 40. Oil temperature gage





- 1. Clock**
- 2. Engine ignition switch**
- 3. Altimeter**
- 4. Repeater compass**
- 5. Manifold pressure gage**
- 6. Airspeed indicator**
- 7. Turn and bank indicator**
- 8. Tachometer**
- 9. Propeller pitch indicator**
- 10. Low fuel warning light**
- 11. Fuel and oil pressure gage**
- 12. Landing gear position indicator: green - down  
no light - transition  
red - up**

- 13. Fuel gage**
- 14. Oil temperature gage**
- 15. Coolant temperature gage**
- 16. Landing gear lever**
- 17. Throttle**



Bf 109E4 ©Rod Dermo. <http://www.airliners.net>



# Messerschmitt Bf 109 F «Friedrich»

F-2 / F-4



**1. Ammunition counter - left MG**

**2. Ammunition counter - cannon**

**3. Ammunition counter - right MG**

**4. Clock**

**5. Engine ignition switch**

**6. Altimeter**

**7. Repeater compass**

**8. Manifold pressure gage**

**9. Landing gear position indicator: green - down  
no light - transition  
red - up**

**10. Landing gear actuators**

**11. Airspeed indicator**

**12. Turn and bank indicator**

**13. Tachometer**

**14. Propeller pitch indicator**

**15. Coolant temperature gage**

**16. Low fuel warning light**

**17. Fuel gage**

**18. Fuel and oil pressure gage**

**19. Throttle**



Bf 109F4



# Messerschmitt Bf 109 G-2 «Gustav»



- 1. Ammunition counter - left MG**
- 2. Ammunition counter - cannon**
- 3. Ammunition counter - right MG**
- 4. Clock**
- 5. Engine ignition switch**
- 6. Repeater compass**
- 7. Artificial horizon / turn and bank indicator**
- 8. Manifold pressure gage**
- 9. Landing gear position indicator: green - down  
no light - transition  
red - up**
- 10. Landing gear actuators**
- 11. Altimeter**
- 12. Airspeed indicator**
- 13. Tachometer**
- 14. Propeller pitch indicator**
- 15. Coolant temperature gage**
- 16. Low fuel warning light**
- 17. Fuel gage**
- 18. Fuel and oil pressure gage**
- 19. Throttle**



Bf 109G2 (<http://www.360cities.net/image/luftfahrtmuseum-40>)



# Messerschmitt Bf 109 G-6 «Gustav»

G-6 late / G-6AS



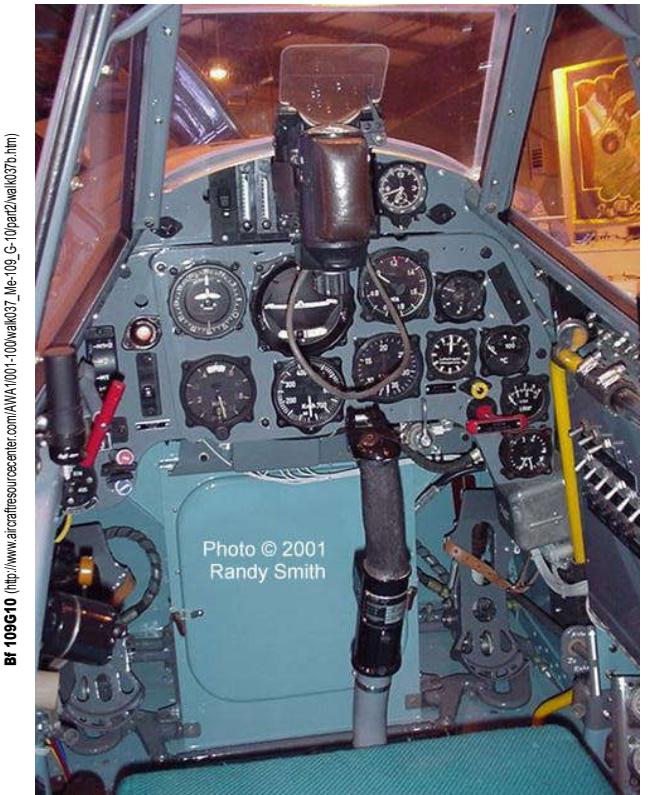
- 1. Ammunition counter - left MG
- 2. Ammunition counter - cannon
- 3. Ammunition counter - right MG
- 4. Clock
- 5. Engine ignition switch
- 6. Repeater compass
- 7. Artificial horizon / turn and bank indicator
- 8. Manifold pressure gage
- 9. Landing gear position indicator: green - down  
no light - transition  
red - up
- 10. Landing gear actuators
- 11. Altimeter
- 12. Airspeed indicator
- 13. Tachometer
- 14. Propeller pitch indicator
- 15. Coolant temperature gage
- 16. Low fuel warning light
- 17. Fuel gage
- 18. Fuel and oil pressure gage
- 19. Throttle



# Messerschmitt Bf 109 G-10 «Gustav»



1. Ammunition counter - left MG
2. Ammunition counter - cannon
3. Ammunition counter - right MG
4. Clock
5. Engine ignition switch
6. Repeater compass
7. Artificial horizon / turn and bank indicator
8. Manifold pressure gage
9. Landing gear position indicator: green - down  
no light - transition  
red - up
10. Landing gear actuators
11. Altimeter
12. Airspeed indicator
13. Tachometer
14. Propeller pitch indicator
15. Coolant temperature gage
16. Low fuel warning light
17. Fuel gage
18. Fuel and oil pressure gage
19. Throttle



Bf 109G10 ([http://www.aircraftresourcecenter.com/AVA1001-100WALK037\\_Me-109\\_G-10part2.html#375.htm](http://www.aircraftresourcecenter.com/AVA1001-100WALK037_Me-109_G-10part2.html#375.htm))



# Messerschmitt Bf 109 G-14 «Gustav»



1. Ammunition counter - left MG
2. Ammunition counter - cannon
3. Ammunition counter - right MG
4. Clock
5. Engine ignition switch
6. Repeater compass
7. Artificial horizon / turn and bank indicator
8. Manifold pressure gage
9. Landing gear position indicator: green - down  
no light - transition  
red - up
10. Landing gear actuators
11. Altimeter
12. Airspeed indicator
13. Tachometer
14. Propeller pitch indicator
15. Coolant temperature gage
16. Low fuel warning light
17. Fuel gage
18. Fuel and oil pressure gage
19. Throttle
20. MW-50 indicator



# Messerschmitt Bf 109 K-4 «Kurfürst»

C3



- 1. Ammunition counter - left MG**
- 2. Ammunition counter - right MG**
- 3. MW-50 pressure gage**
- 4. Clock**
- 5. Airspeed indicator**
- 6. Artificial horizon / turn and bank indicator**
- 7. Variometer**
- 8. Fuel and oil pressure gage**
- 9. Coolant temperature gage**
- 10. Oil temperature gage**
- 11. Altimeter**
- 12. Repeater compass**
- 13. Tachometer**
- 14. Propeller pitch indicator**
- 15. Landing gear actuators & position indicator: green - down  
no light transition  
red - up**
- 16. Engine ignition switch**
- 17. Manifold pressure gage**
- 18. Fuel gage**
- 19. Low fuel warning light**
- 20. Throttle**
- 21. MW-50 indicator**



Bf 109G14AS / K4



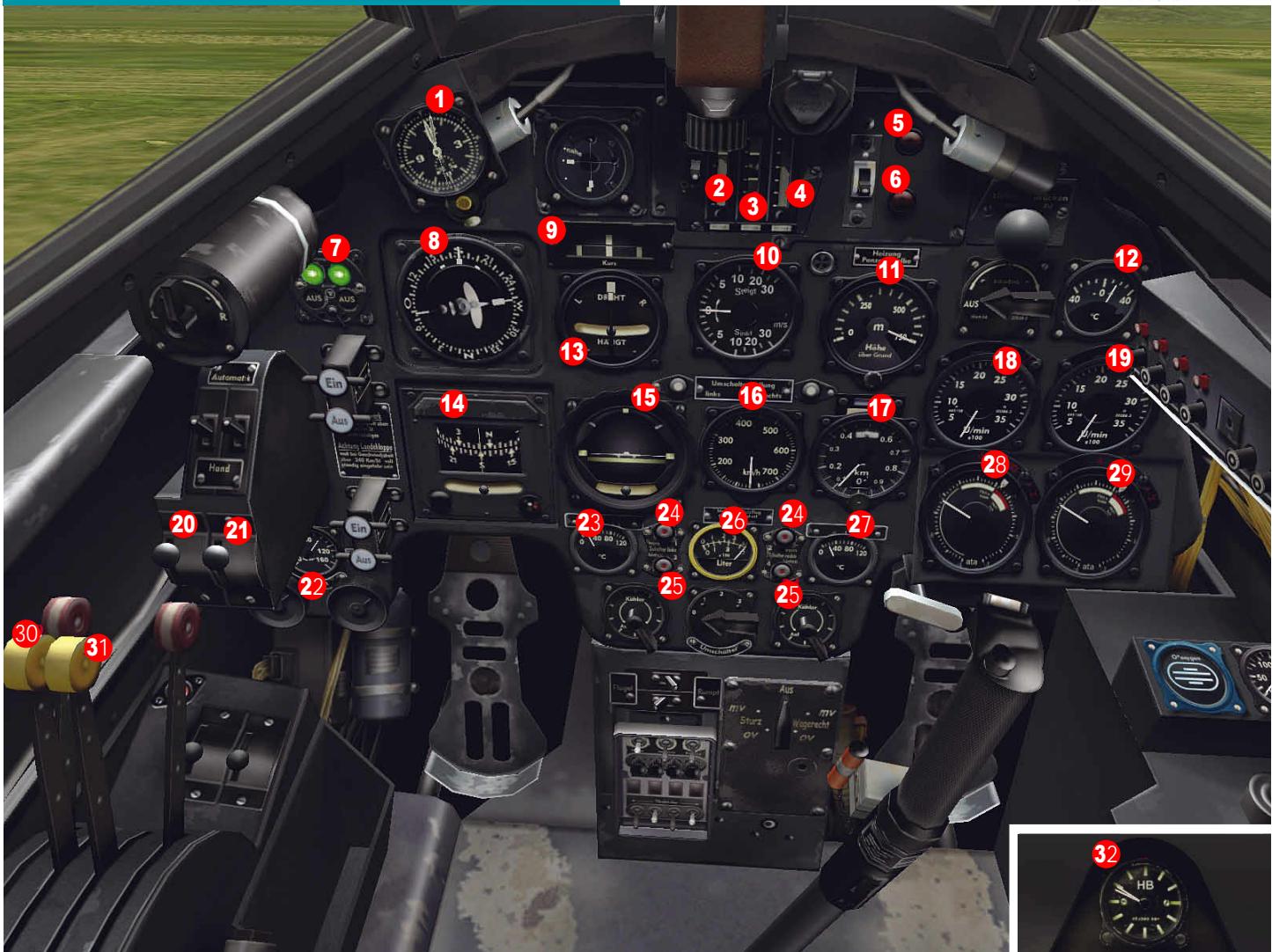
# Messerschmitt Bf 109 Z «Zwilling»



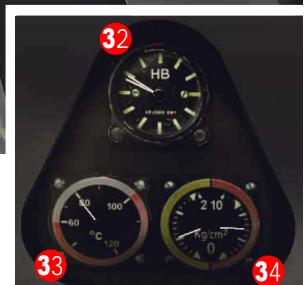
1. Ammunition counter - left cannon
2. Ammunition counter - optional MK103 gunpod
3. Ammunition counter - right cannon
4. Clock
5. Left engine ignition switch
6. Right engine ignition switch
7. Repeater compass
8. Artificial horizon / turn and bank indicator
9. Left engine manifold pressure gage (white needle) and tachometer (yellow needle)
10. Right engine manifold pressure gage (white needle) and tachometer (yellow needle)
11. Landing gear position indicator: green - down  
no light - transition  
red - up
12. Altimeter
13. Airspeed indicator
14. Left engine coolant temperature gage
15. Right engine coolant temperature gage
16. Left engine fuel and oil pressure gage
17. Right engine fuel and oil pressure gage
18. Low fuel warning light
19. Propeller pitch indicator for left and right engine
20. Fuel gage
21. Landing gear actuators
22. Left engine throttle
23. Right engine throttle



# Messerschmitt Bf 110 G-2 Zerstörer



- 1. Clock**
- 2. Ammunition counter - left cannon**
- 3. Ammunition counter - optional MK108 cannons**
- 4. Ammunition counter - right cannon**
- 5. Right cannon warning light**
- 6. Left cannon warning light**
- 7. Landing gear position indicator: green - down  
red - up**
- 8. Repeater compass**
- 9. Autopilot course pointer**
- 10. Variometer**
- 11. Radio altimeter**
- 12. Outside temperature gage**
- 13. Turn and bank indicator**
- 14. Autopilot course indicator: top: selected course  
bottom: gyro heading**
- 15. Artificial horizon**
- 16. Airspeed indicator**
- 17. Altimeter**
- 18. Left engine tachometer**
- 19. Right engine tachometer**
- 20. Left engine propeller pitch lever**
- 21. Right engine propeller pitch lever**
- 22. Compressed air pressure gage**
- 23. Left engine coolant temperature gage**
- 24. Low fuel warning light for left/right front fuel tank**
- 25. Low fuel warning light for left/right rear fuel tank**
- 26. Fuel gage**
- 27. Right engine coolant temperature gage**
- 28. Left engine manifold pressure gage**
- 29. Right engine manifold pressure gage**
- 30. Left engine throttle**
- 31. Right engine throttle**



On engine nacelles



Bf110G4 (<http://www.cockpitinstrumente.de>)

- 32. Propeller pitch indicator**
- 33. Oil temperature gage**
- 34. Fuel and oil pressure gage**



# Messerschmitt Me 163 B-1a «Komet»



**1.** Magnetic compass

**2.** Landing gear position indicator: green - down  
no light - transition  
red - up

**3.** Airspeed indicator

White needle - IAS up to 400 km/h, yellow needle - TAS with dual 400 km/h mark

**4.** Artificial horizon / turn and bank indicator

**5.** Variometer

**6.** Ammunition counter - left cannon

**7.** Ammunition counter - right cannon

**8.** Left cannon warning light

**9.** Right cannon warning light

**10.** Thrust gage (low power)

**11.** Thrust gage (high power)

**12.** Landing gear lever

**13.** Clock

**14.** Altimeter

**15.** Tachometer (in %)

**16.** Fuel consumption gage

**17.** Low fuel warning light

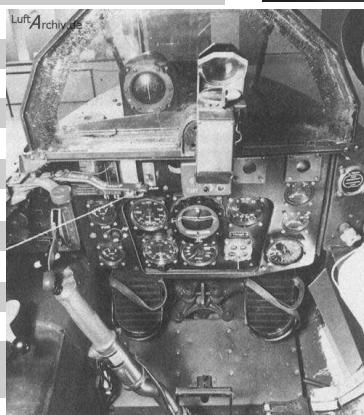
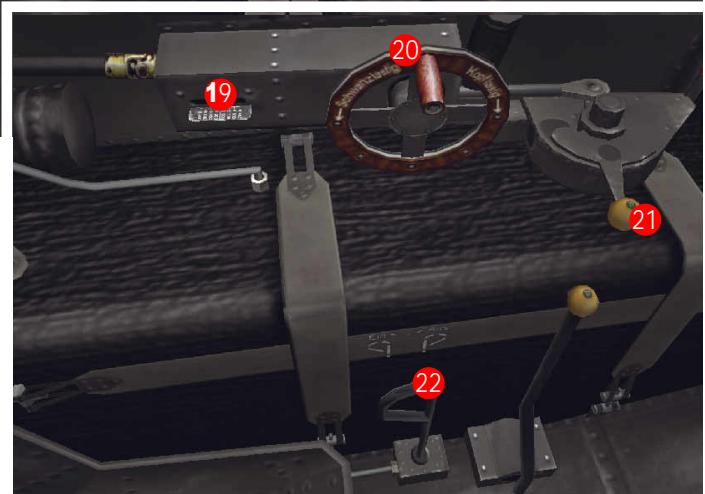
**18.** Exhaust temperature gage

**19.** Elevator trim indicator

**20.** Elevator trim wheel

**21.** Throttle - 4 settings:  
0 % - 35% - 65% - 100%

**22.** Flaps lever



Me 163 ([http://www.luftarchiv.de/lux2pics/Me163\\_Cockpit\\_040.jpg](http://www.luftarchiv.de/lux2pics/Me163_Cockpit_040.jpg))



Me163 ([http://www.airventure.de/lux2pics/Me163\\_Cockpit\\_040.jpg](http://www.airventure.de/lux2pics/Me163_Cockpit_040.jpg))




**1. Airspeed indicator**

White needle - IAS up to 400 km/h, yellow needle - TAS with dual 400 km/h mark

**2. Artificial horizon**
**3. Variometer**
**4. Overspeed warning light**
**5. Altimeter**
**6. Repeater compass**
**7. Clock**
**8. Cabin pressure warning light**
**9. Ammunition counter - left upper cannon** (not present on a1/U4)

**10. Ammunition counter - right upper cannon** (not present on a1/U4)

**11. Cannon warning lights** (not present on a1/U4)

**12. Left engine tachometer**
**13. Right engine tachometer**
**14. Left engine gas pressure gage**
**15. Left engine gas temperature gage**
**16. Right engine gas temperature gage**
**17. Right engine gas pressure gage**
**18. Left engine oil pressure gage**
**19. Left engine fuel injection pressure gage**
**20. Right engine fuel injection pressure gage**
**21. Right engine oil pressure gage**
**22. Low fuel warning light (front)**
**23. Fuel gage (front)**
**24. Fuel gage (rear)**
**25. Low fuel warning light (rear)**
**26. Left engine throttle**
**27. Right engine throttle**
**28. Flaps actuators**
**29. Landing gear actuators**
**30. Landing gear position: green - down / red - up**
**31. Elevator trim lever**


Me262 (http://www.brockenwelt.de/A-200/Braunharts\_Flugzeuge/Messerschmitt\_Me262\_Nr.32\_Codename-262\_0009.htm)



# Messerschmitt Me 262 A-2a «Sturmvogel»



**1. Airspeed indicator**

White needle - IAS up to 400 km/h, yellow needle - TAS with dual 400 km/h mark

**2. Artificial horizon**

**3. Variometer**

**4. Overspeed warning light**

**5. Altimeter**

**6. Repeater compass**

**7. Clock**

**8. Cabin pressure warning light**

**9. Ammunition counter - left upper cannon**

**10. Ammunition counter - right upper cannon**

**11. Cannon warning lights**

**12. Left engine tachometer**

**13. Right engine tachometer**

**14. Left engine gas pressure gage**

**15. Left engine gas temperature gage**

**16. Right engine gas temperature gage**

**17. Right engine gas pressure gage**

**18. Left engine oil pressure gage**

**19. Left engine fuel injection pressure gage**

**20. Right engine fuel injection pressure gage**

**21. Right engine oil pressure gage**

**22. Low fuel warning light (front)**

**23. Fuel gage (front)**

**24. Fuel gage (rear)**

**25. Low fuel warning light (rear)**

**26. Left engine throttle**

**27. Right engine throttle**

**28. Flaps actuators**

**29. Landing gear actuators**

**30. Landing gear position: green - down / red - up**

**31. Elevator trim lever**



Me 262 (<http://www.nasm.si.edu/exhibitions/gal21/athcontrols.htm>)



# Messerschmitt Me 262 HG II



**1. Airspeed indicator**

White needle - IAS up to 400 km/h, yellow needle - TAS with dual 400 km/h mark

**2. Artificial horizon**

**3. Variometer**

**4. Overspeed warning light**

**5. Altimeter**

**6. Repeater compass**

**7. Clock**

**8. Cabin pressure warning light**

**9. Ammunition counter - left upper cannon**

**10. Ammunition counter - right upper cannon**

**11. Cannon warning lights**

**12. Left engine tachometer**

**13. Right engine tachometer**

**14. Left engine gas pressure gage**

**15. Left engine gas temperature gage**

**16. Right engine gas temperature gage**

**17. Right engine gas pressure gage**

**18. Left engine oil pressure gage**

**19. Left engine fuel injection pressure gage**

**20. Right engine fuel injection pressure gage**

**21. Right engine oil pressure gage**

**22. Low fuel warning light (front)**

**23. Fuel gage (front)**

**24. Fuel gage (rear)**

**25. Low fuel warning light (rear)**

**26. Left engine throttle**

**27. Right engine throttle**

**28. Flaps actuators**

**29. Landing gear actuators**

**30. Landing gear position: green - down / red - up**

**31. Elevator trim lever**



Me 262 B-1a (<http://www.dvhaa.org/>)



ITALY



# Fiat C.R. 42 «Falco»



**1. Ammunition counter - left MG**

**2. Manifold pressure gage**

**3. Magnetic compass**

**4. Turn and bank indicator**

**5. Altimeter**

**6. Fuel pressure gage**

**7. Oil pressure gage**

**8. Tachometer**

**9. Airspeed indicator**

**10. Variometer**

**11. Ammunition counter - right MG**

**12. Engine ignition switch**

**13. Oil temperature gage**

**14. Mixture lever: rear position - richer mixture  
front position - leaner mixture**

**15. Throttle (100% in rear position)**

**16. Propeller pitch lever (100% in rear position)**

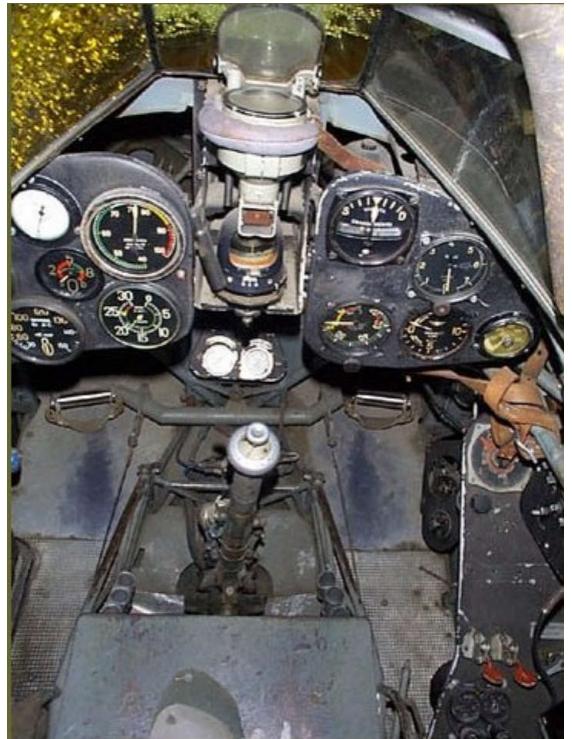
**17. Radiator levers**

**18. Fuel gage**

**19. Clock**



C.R.42 (<http://www.ww2aircraft.net/forum/>)



C.R. 42 ([http://surfcity.kund.dalnet.se/falco\\_sweden.htm](http://surfcity.kund.dalnet.se/falco_sweden.htm))



# Fiat G.50 «Freccia»



**1. Fuel pressure gage**

**2. Oil pressure gage**

**3. Tachometer**

**4. Altimeter**

**5. Airspeed indicator**

**6. Flaps lever**

**7. Landing gear lever**

**8. Manifold pressure gage**

**9. Airspeed indicator**

**10. Turn and bank indicator**

**11. Variometer**

**12. Oil temperature gage**

**13. Cylinder head temperature gage**

**14. Ammunition counter - left MG**

**15. Magnetic compass**

**16. Ammunition counter - right MG**

**17. Landing gear position indicator: green - down  
no light transition  
red - up**

**18. Clock**

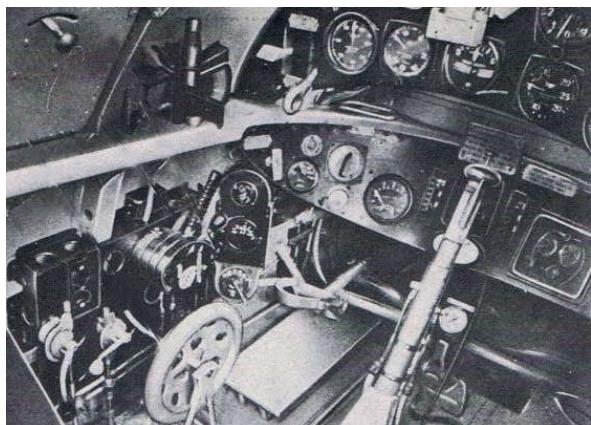
**19. Propeller pitch lever**

**20. Throttle**

**21. Mixture lever: rear position - leaner mixture  
front position - richer mixture**



G50 (<http://www.airwar.ru/aww2.html>)



# Macchi M.C.200 III «Saetta»



1. Turn and bank indicator
2. Magnetic compass
3. Altimeter
4. Manifold pressure gage
5. Airspeed indicator
6. Variometer
7. Airspeed indicator
8. Tachometer
9. Fuel pressure gage
10. Engine ignition switch
11. Cylinder head temperature gage
12. Oil pressure gage
13. Oil temperature gage
14. Landing gear control oil pressure gage
15. Brake pressure gage
16. Landing gear position indicator: green - down  
no light - transition  
red - up
17. Fuel gage
18. Radiator levers
19. Propeller pitch lever (100% in rear position)
20. Throttle (100% in rear position)
21. Mixture lever: rear position - richer mixture  
front position - leaner mixture
22. Elevator trim wheel
23. Flaps lever
24. Landing gear lever



MC 200 (<http://www.stormmagazine.com/ReferencePics/MC200/MC200igvAlve.html>)





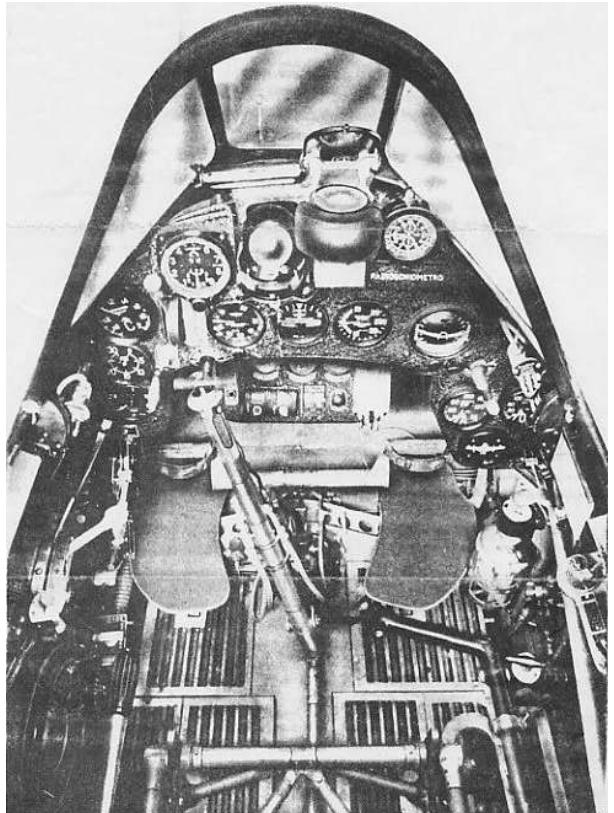
1. Turn and bank indicator
2. Magnetic compass
3. Altimeter
4. Manifold pressure gage
5. Airspeed indicator
6. Variometer
7. Airspeed indicator
8. Tachometer
9. Fuel pressure gage
10. Engine ignition switch
11. Cylinder head temperature gage
12. Oil pressure gage
13. Oil temperature gage
14. Landing gear control oil pressure gage
15. Brake pressure gage
16. Landing gear position indicator: green - down  
no light - transition  
red - up
17. Fuel gage
18. Radiator levers
19. Propeller pitch lever (100% in rear position)
20. Throttle (100% in rear position)
21. Mixture lever: rear position - richer mixture  
front position - leaner mixture
22. Elevator trim wheel
23. Flaps lever
24. Landing gear lever

M.C.200 ([http://www.57thfightergroup.org/reunions/2008\\_italy/index.html](http://www.57thfightergroup.org/reunions/2008_italy/index.html))



1. Altimeter
2. Magnetic compass
3. Clock
4. Manifold pressure gage
5. Airspeed indicator
6. Turn and bank indicator
7. Variometer
8. Artificial horizon
9. Tachometer
10. Oil pressure gage
11. Fuel pressure gage
12. Fuel gage
13. Brake pressure gage
14. Landing gear oil pressure gage
15. MG air pressure gage
16. Coolant temperature gage
17. Oil temperature gage
18. Throttle (100% in rear position)
19. Propeller pitch lever (100% in rear position)
20. Engine ignition switch
21. Landing gear lever
22. Nose MG ammunition counter & warning light
23. Wings MG ammunition counter
24. Landing gear position indicator: green - down  
no light - transition  
red - up
25. Flaps position indicator
26. Flaps lever
27. Radiator lever
28. Elevator trim wheel

M.C.202 (http://digilander.libero.it/ennidaranta/M.C202photole.htm)





1. Altimeter
2. Magnetic compass
3. Clock
4. Manifold pressure gage
5. Airspeed indicator
6. Turn and bank indicator
7. Variometer
8. Artificial horizon
9. Tachometer
10. Oil pressure gage
11. Fuel pressure gage
12. Brake pressure gage
13. Landing gear oil pressure gage
14. MG air pressure gage
15. Electric generator warning light
16. Coolant temperature gage
17. Oil temperature gage
18. Throttle (100% in rear position)
19. Propeller pitch lever (100% in rear position)
20. Engine ignition switch
21. Landing gear lever
22. Wings weapon ammunition counter & warning light
23. Nose MG ammunition counter & warning light
24. Landing gear position indicator: green - down  
no light - transition  
red - up
25. Flaps position indicator
26. Flaps lever
27. Fuel gage
28. Radiator lever
29. Elevator trim wheel



# Savoia-Marchetti S.M.79 «Sparviero»



1. Magnetic compass  
 2. Torpedo sight (only in torpedo configuration)  
 3. Directional gyro  
 4. Artificial horizon  
 5. Fuel gage  
 6. Altimeter  
 7. **Variometer**  
 8. Turn and bank indicator  
 9. Airspeed indicator  
 10. Clock  
**11. Left engine tachometer**  
 12. Central engine tachometer  
 13. Right engine tachometer  
 14. Left engine manifold pressure gage  
**15. Central engine manifold pressure gage**  
 16. Right engine manifold pressure gage  
 17. Left engine oil temperature gage: E needle - Oil-in  
    U needle - Oil-out  
 18. Central engine oil temperature gage (as before)  
 19. Right engine oil temperature gage (as before)  
 20. Left engine oil pressure gage  
 21. Central engine oil pressure gage  
 22. Right engine oil pressure gage  
 23. Left engine fuel pressure gage  
 24. Central engine fuel pressure gage  
 25. Right engine fuel pressure gage  
 26. Outside air temperature gage  
 27. Compressed air bottle pressure gage (brakes system)  
 28. Brakes pressure gage  
 29. Landing gear position indicator:  
     green - down and throttle <= 15%  
     red - up and throttle <= 15%  
 30. Propellers hydraulic drive pressure gage  
 31. Landing gear lever  
 32. Left engine ignition switch  
**33. Central engine ignition switch**

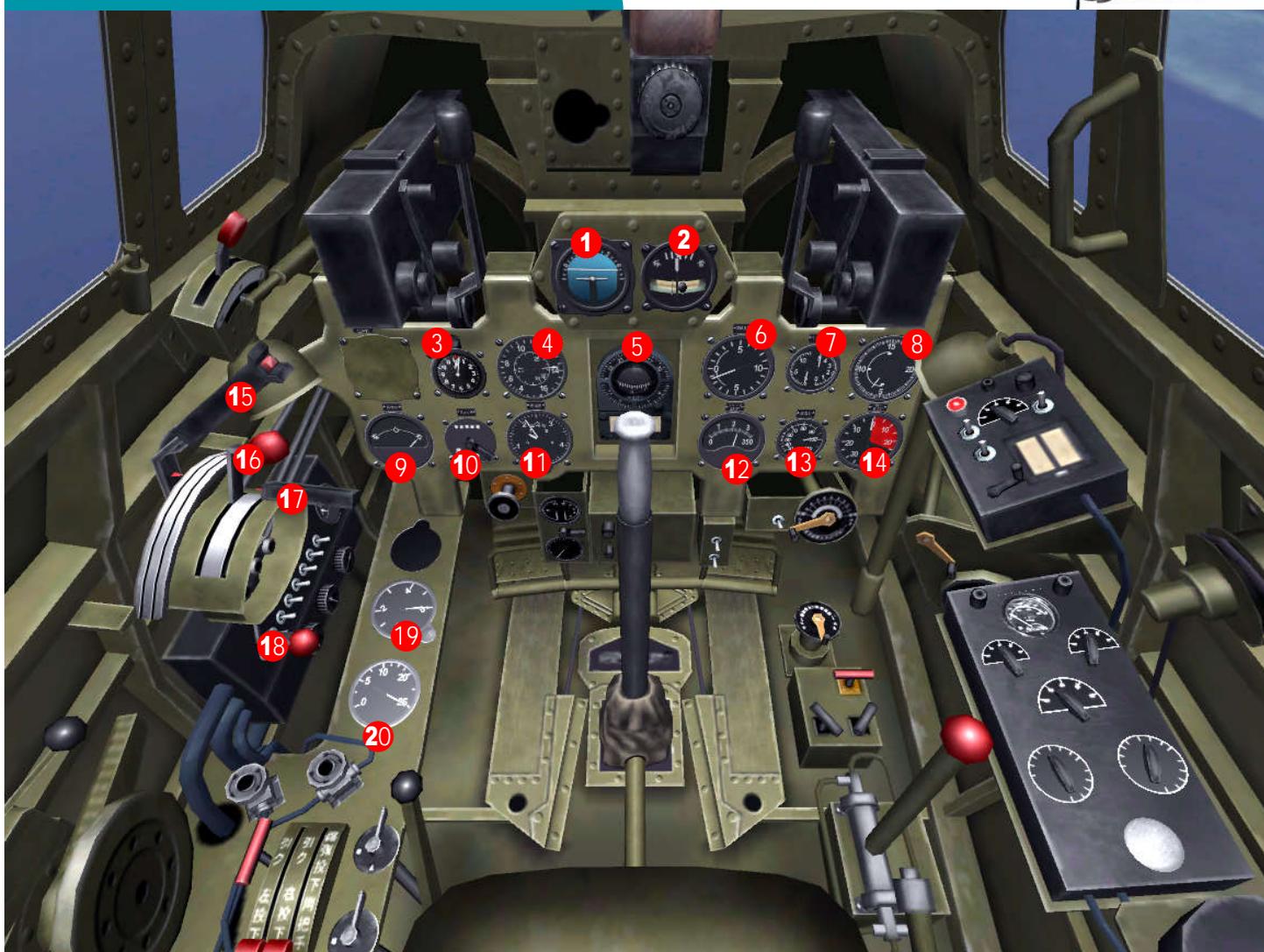


- S.M.79 (<http://www.dodecaneso.org/SM79cockpit.htm>)
34. Right engine ignition switch  
 35. Gear brakes lever  
 36. Mixture levers for left, central & right engines  
 37. Throttles for left, central & right engines  
**38. Propeller two-pitch levers** for left, central & right engines  
     front position - fine pitch (100 to 50%)  
     rear position - coarse pitch (0 to 50%)  
**39. Elevator trim handle & position indicator (located in the ceiling)**



JAPAN





- 1. Artificial horizon**
- 2. Turn and bank indicator**
- 3. Clock**
- 4. Airspeed indicator**
- 5. Magnetic compass**
- 6. Variometer**
- 7. Fuel and oil pressure gage**
- 8. Tachometer**
- 9. Pilot's Direction Indicator**
- 10. Engine ignition switch**
- 11. Altimeter**
- 12. Cylinder head temperature gage**
- 13. Oil temperature gage**
- 14. Manifold pressure gage**
- 15. Throttle**
- 16. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 17. Propeller pitch lever**
- 18. Supercharger lever: (on A6M3)  
rear position - stage 1  
front position - stage 2**
- 19. Fuel gage (fuselage tank)**
- 20. Fuel gage (wing tanks)**

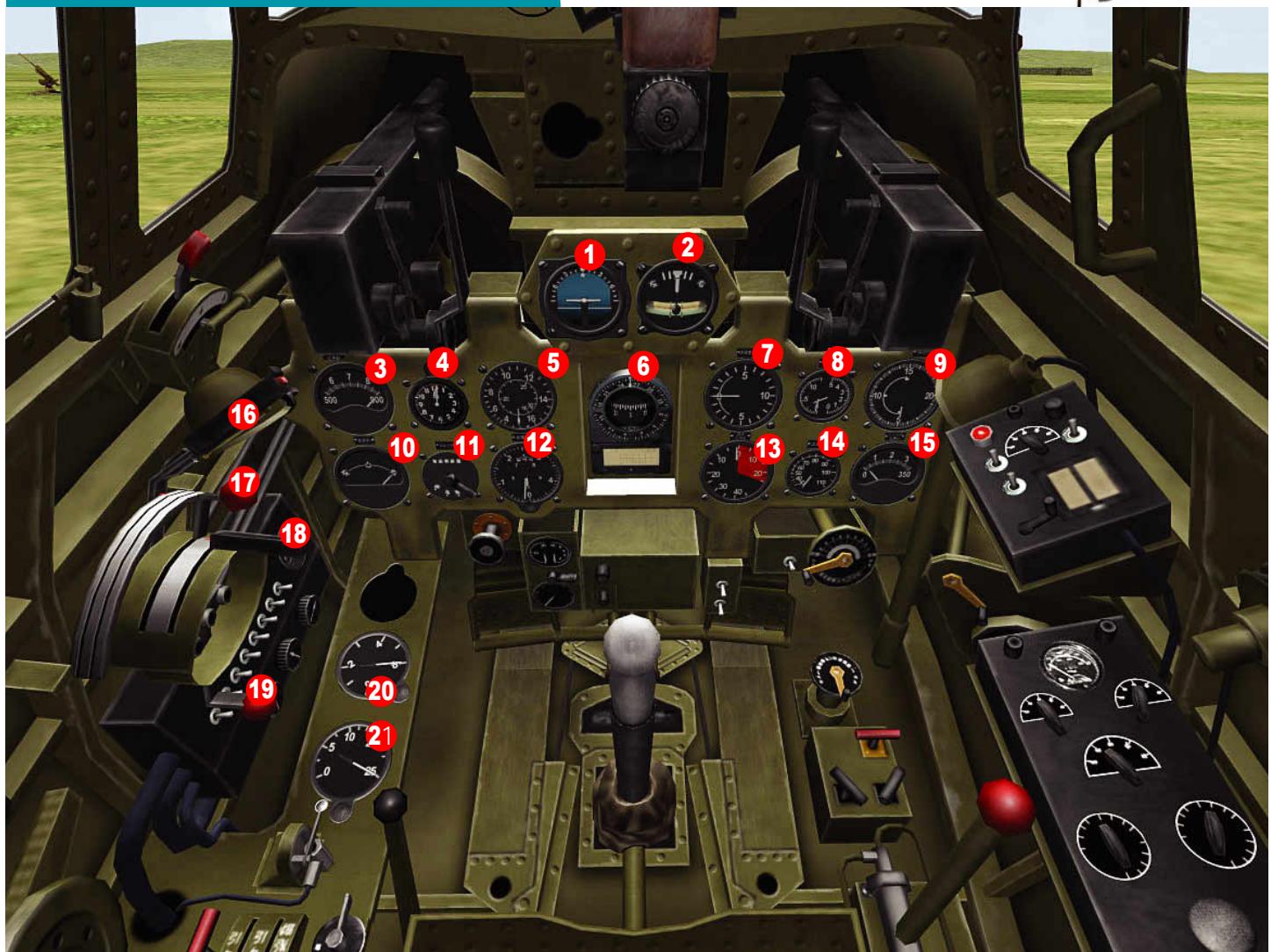


A6M2 (<http://www.warbirdphotographs.com/A6Zero/AU-19s.jpg>)

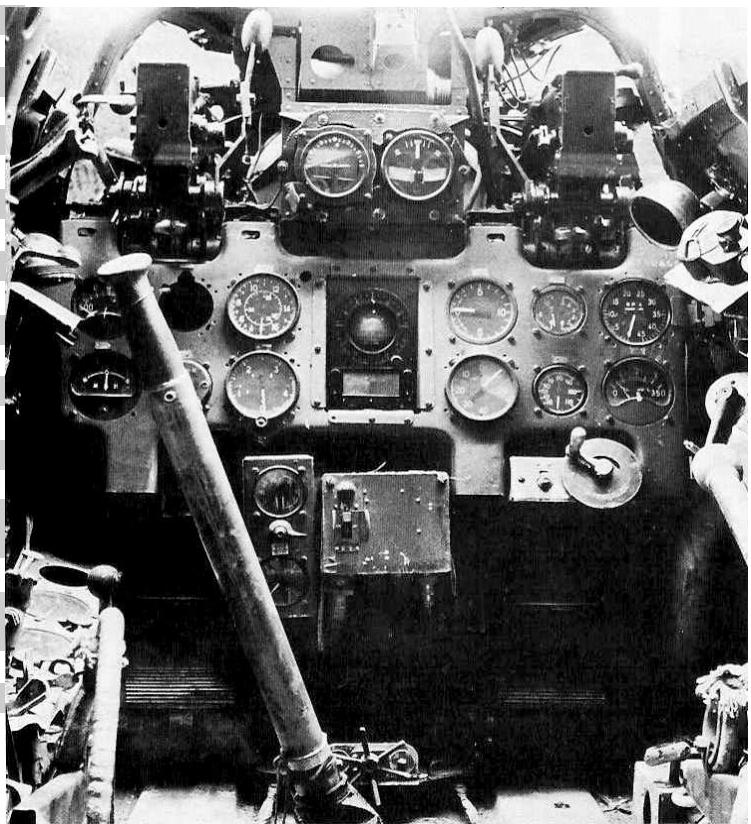


# Mitsubishi A6M5 Reisen «Zero»

5a



- 1. Artificial horizon**
- 2. Turn and bank indicator**
- 3. Exhaust temperature gage**
- 4. Clock**
- 5. Airspeed indicator**
- 6. Magnetic compass**
- 7. Variometer**
- 8. Fuel and oil pressure gage**
- 9. Tachometer**
- 10. Pilot's Direction Indicator**
- 11. Engine ignition switch**
- 12. Altimeter**
- 13. Manifold pressure gage**
- 14. Oil temperature gage**
- 15. Cylinder head temperature gage**
- 16. Throttle**
- 17. Mixture lever:** **rear position - leaner mixture**  
**front position - richer mixture**
- 18. Propeller pitch lever**
- 19. Supercharger lever:** **rear position - stage 1**  
**front position - stage 2**
- 20. Fuel gage (fuselage tank)**
- 21. Fuel gage (wing tanks)**



A6M5a



# Mitsubishi A6M5b / 7-63 Reisen «Zero»



- 1. Artificial horizon**
- 2. Turn and bank indicator**
- 3. Exhaust temperature gage**
- 4. Clock**
- 5. Airspeed indicator**
- 6. Magnetic compass**
- 7. Variometer**
- 8. Fuel and oil pressure gage**
- 9. Tachometer**
- 10. Pilot's Direction Indicator**
- 11. Engine ignition switch**
- 12. Altimeter**
- 13. Manifold pressure gage**
- 14. Oil temperature gage**
- 15. Cylinder head temperature gage**
- 16. Throttle**
- 17. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 18. Propeller pitch lever**
- 19. Supercharger lever: rear position - stage 1  
front position - stage 2**
- 20. Fuel gage (fuselage tank)**
- 21. Fuel gage (wing tanks)**



A6M5 (<http://hubpages.com/hub/WorldWar2-BestFighter-Planes>)



# Mitsubishi A6M5c / 7-62 Reisen «Zero»



**1. Water-methanol (ADI) tank gage**

**2. Artificial horizon**

**3. Turn and bank indicator**

**4. Exhaust temperature gage**

**5. Clock**

**6. Airspeed indicator**

**7. Magnetic compass**

**8. Variometer**

**9. Fuel and oil pressure gage**

**10. Tachometer**

**11. Pilot's Direction Indicator**

**12. Engine ignition switch**

**13. Altimeter**

**14. Manifold pressure gage**

**15. Oil temperature gage**

**16. Cylinder head temperature gage**

**17. Throttle**

**18. Mixture lever: rear position - leaner mixture  
front position - richer mixture**

**19. Propeller pitch lever**

**20. Supercharger lever: rear position - stage 1  
front position - stage 2**

**21. Fuel gage (fuselage tank)**

**22. Fuel gage (wing tanks)**



A6M7 ([http://www.j-aircraft.com/walk/masataka\\_Kumamoto/A6M7/a6m7\\_walkaround.html](http://www.j-aircraft.com/walk/masataka_Kumamoto/A6M7/a6m7_walkaround.html))



# Aichi D3A1 «Val»



- 1. Airspeed indicator**
- 2. Turn and bank indicator**
- 3. Altimeter**
- 4. Artificial horizon**
- 5. Variometer**
- 6. Clock**
- 7. Repeater compass (upper half)**  
Magnetic compass (lower half)
- 8. Magnetic compass**
- 9. Fuel and oil pressure gage**
- 10. Oil temperature gage**
- 11. Pilot's Direction Indicator**
- 12. Manifold pressure gage**
- 13. Tachometer**
- 14. Fuel Air ratio gage**
- 15. Cylinder head temperature gage**
- 16. Throttle**
- 17. Propeller pitch lever**
- 18. Mixture lever:** rear position - leaner mixture  
front position - richer mixture
- 19. Fuel gage (wing tanks)**
- 20. Fuel gage (fuselage tank)**



D3A1 (<http://gunsight.jp/b/index.htm>)



# Mitsubishi G4M1-11 «Betty»



- 1. Clock**
- 2. Altimeter**
- 3. Turn and bank indicator**
- 4. Airspeed indicator**
- 5. Tachometers for left/right engine**
- 6. Manifold pressure gages for left/right engine**
- 7. Fuel and oil pressure gages for left/right engine**
- 8. Exhaust temperature gages for left/right engine**
- 9. Oil temperature gages for left/right engine**
- 10. Cylinder head temperature gages for left/right engine**
- 11. Mixture levers for left/right engine**
- 12. Throttles for left/right engine**
- 13. Propeller pitch levers for left/right engine**
- 14. Magnetic induction compass**
- 15. Magnetic compass**
- 16. Autopilot directional gyro & bank indicator**
- 17. Autopilot artificial horizon**
- 18. Landing gear & flaps position indicator: green - down  
no light - in transition  
red - up**
- 19. Airspeed indicator**
- 20. Turn and bank indicator**
- 21. Variometer**
- 22. Altimeter**
- 23. Magnetic compass**
- 24. Artificial horizon**
- 25. Free air temperature gages for left/right engine**
- 26. Flaps position indicator**
- 27. Variometer**
- 28. Fuel gage (left wing outboard & inboard tank, fuselage tank,  
right wing outboard & inboard tank)**



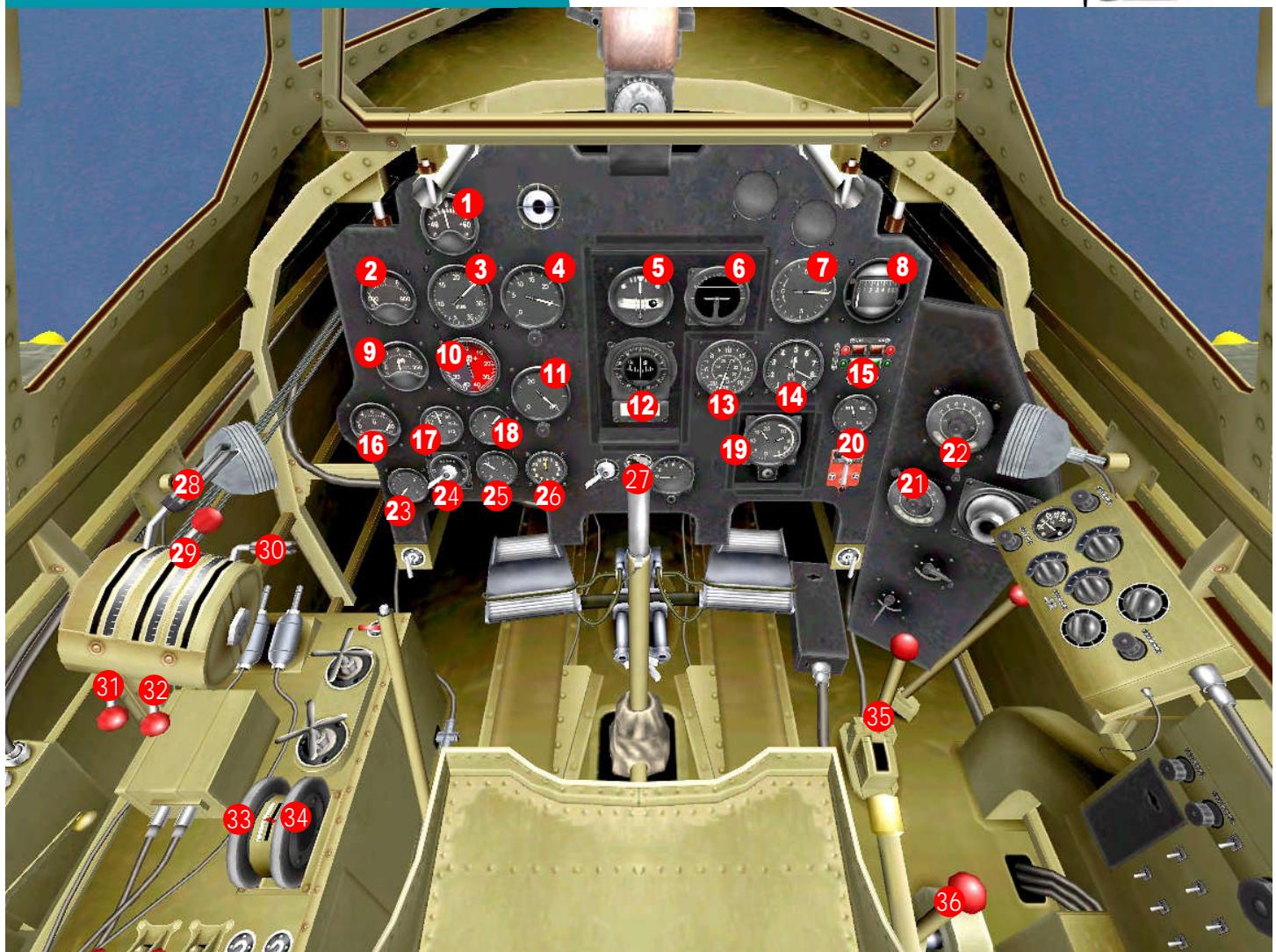
G4M1 (<http://www.airwar.ru/aww2.html>)



G4M1 (<http://gunsight.jp/b/index.htm>)



# Mitsubishi J2M3 Raiden «Jack»



- 1. Free air temperature gage
- 2. Exhaust temperature gage
- 3. Tachometer
- 4. Fuel gage
- 5. Turn and bank indicator
- 6. Artificial horizon
- 7. Variometer
- 8. Flaps position indicator
- 9. Cylinder head temperature gage
- 10. Manifold pressure gage
- 11. Fuel gage
- 12. Magnetic compass
- 13. Airspeed indicator
- 14. Altimeter
- 15. Landing gear position indicator: green - down  
no light - transition  
red - up
- 16. Water (ADI) quantity gage
- 17. Oil temperature gage
- 18. Oil pressure gage
- 19. Oxygen system gage
- 20. Hydraulic pressure gage
- 21 & 22. Radiator handles
- 23. Water (ADI) pressure gage
- 24. Engine ignition switch
- 25. Fuel pressure gage
- 26. Clock
- 27. Flaps switch
- 28. Throttle
- 29. Mixture lever
- 30. Propeller pitch lever
- 31. Supercharger lever
- 32. Boost lever
- 33. Elevator trim wheel & indicator
- 34. Rudder trim wheel & indicator

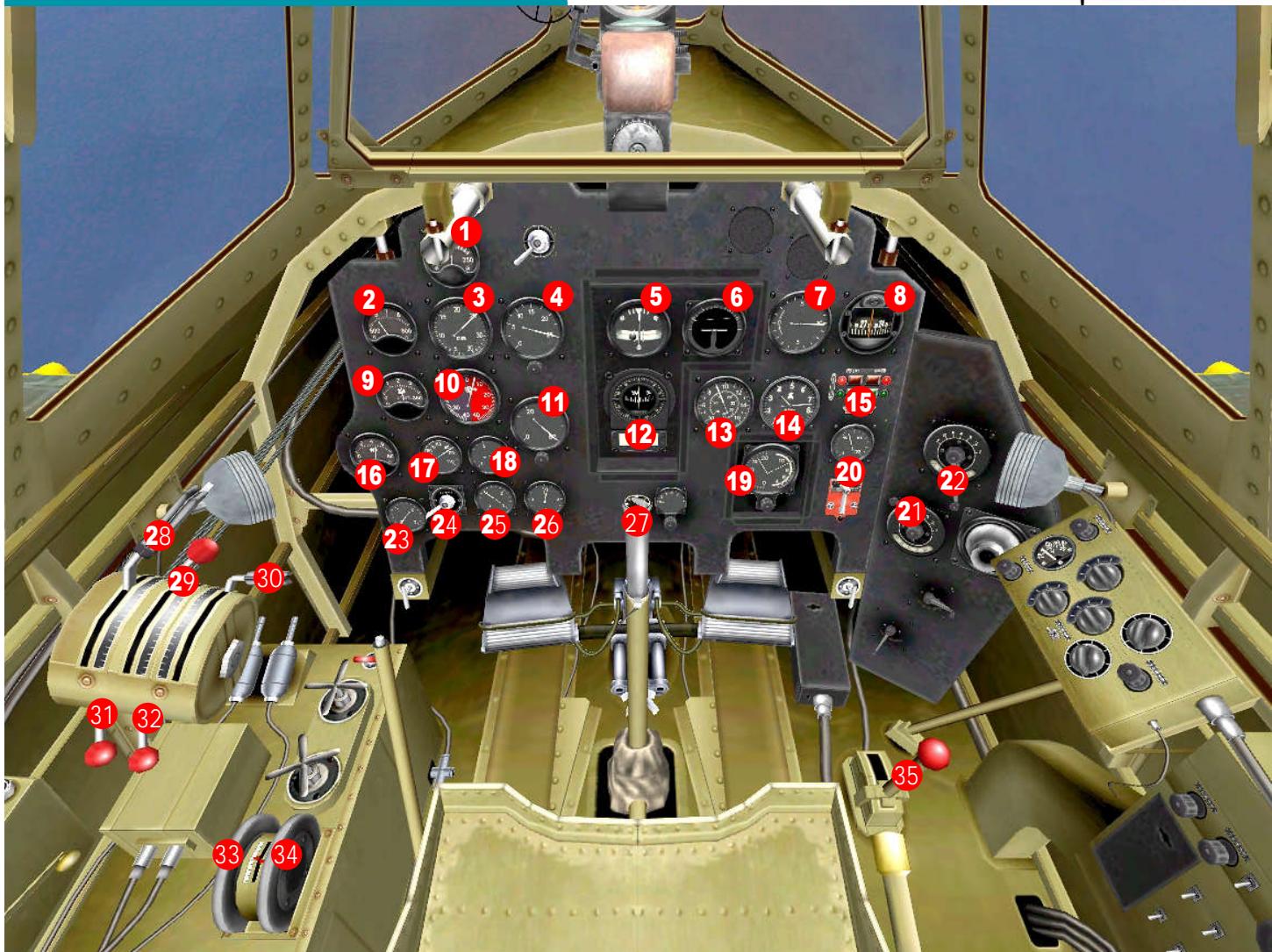


J2M3 (<http://günsight.jp/b/index.htm>)

35 & 36. Landing gear levers



# Mitsubishi J2M5 Raiden «Jack»



1. Free air temperature gage
2. Exhaust temperature gage
3. Tachometer
4. Fuel gage
5. Turn and bank indicator
6. Artificial horizon
7. Varioimeter
8. Magnetic compass
9. Cylinder head temperature gage
10. Manifold pressure gage
11. Fuel gage
12. Magnetic compass
13. Airspeed indicator
14. Altimeter
15. Landing gear position indicator: green - down  
no light - transition  
red - up
16. Water (ADI) quantity gage
17. Oil temperature gage
18. Oil pressure gage
19. Oxygen system gage
20. Hydraulic pressure gage
- 21 & 22. Radiator handles
23. Water (ADI) pressure gage
24. Engine ignition switch
25. Fuel pressure gage
26. Clock
27. Flaps switch
28. Throttle
29. Mixture lever
30. Propeller pitch lever
31. Supercharger lever
32. Boost lever
33. Elevator trim wheel & indicator
34. Rudder trim wheel & indicator
35. Landing gear lever

J2M5 (<http://www.warbirdphotographs.com/NavyJB&V2/J2M-34s.jpg>)



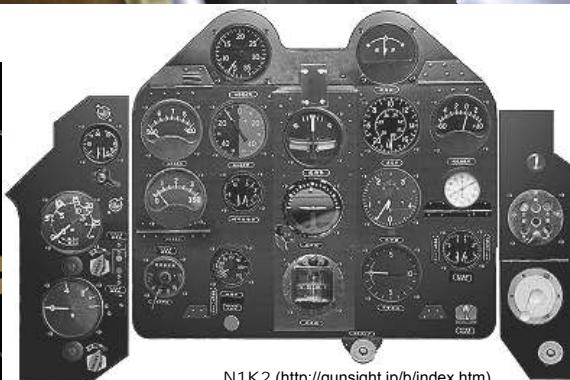
35. Landing gear lever



# Kawanishi N1K2-JA Shiden Kai «George»



- 1. Tachometer
- 2. Pilot's Direction Indicator
- 3. Oxygen system gage
- 4. Exhaust temperature gage
- 5. Manifold pressure gage
- 6. Turn and bank indicator
- 7. Airspeed indicator
- 8. Free air temperature gage
- 9. Instrument light switch
- 10. Cylinder head temperature gage
- 11. Oil & fuel pressure gage
- 12. Artificial horizon
- 13. Altimeter
- 14. Clock
- 15. Landing gear position: green - down  
indicator no light - transition  
red - up
- 16. Fuel gage (fuselage tank)
- 17. Operational fuel level indicator light
- 18. Low fuel warning light
- 19. Engine ignition switch
- 20. Oil temperature gage
- 21. Magnetic compass
- 22. Variometer
- 23. Water-methanol (ADI) pressure gage
- 24 & 25. Radiator handles
- 26. Throttle
- 27. Propeller pitch lever
- 28. Fuel gage (wing tanks)
- 29. Mixture lever
- 30 & 31. Supercharger levers
- 32. Flaps lever
- 33. Rudder trim wheel
- 34. Rudder trim indicator
- 35. Elevator trim wheel
- 36. Elevator trim indicator
- 37. Landing gear lever

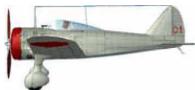


N1K2 (<http://gnsight.jp/b/index.htm>)



# Nakajima Ki-27 «Nate»

Ko / Otsu



- 1. Airspeed indicator
- 2. Radiator handle
- 3. Turn and bank indicator
- 4. Variometer
- 5. Oil pressure gage
- 6. Oil temperature gage
- 7. Tachometer
- 8. Manifold pressure gage
- 9. Magnetic compass
- 10. Altimeter
- 11. Fuel pressure gage
- 12. Coolant temperature gage
- 13. Engine ignition switch
- 14. Clock
- 15. Fuel gage
- 16. Throttle
- 17. Flaps handle
- 18. Elevator trim lever

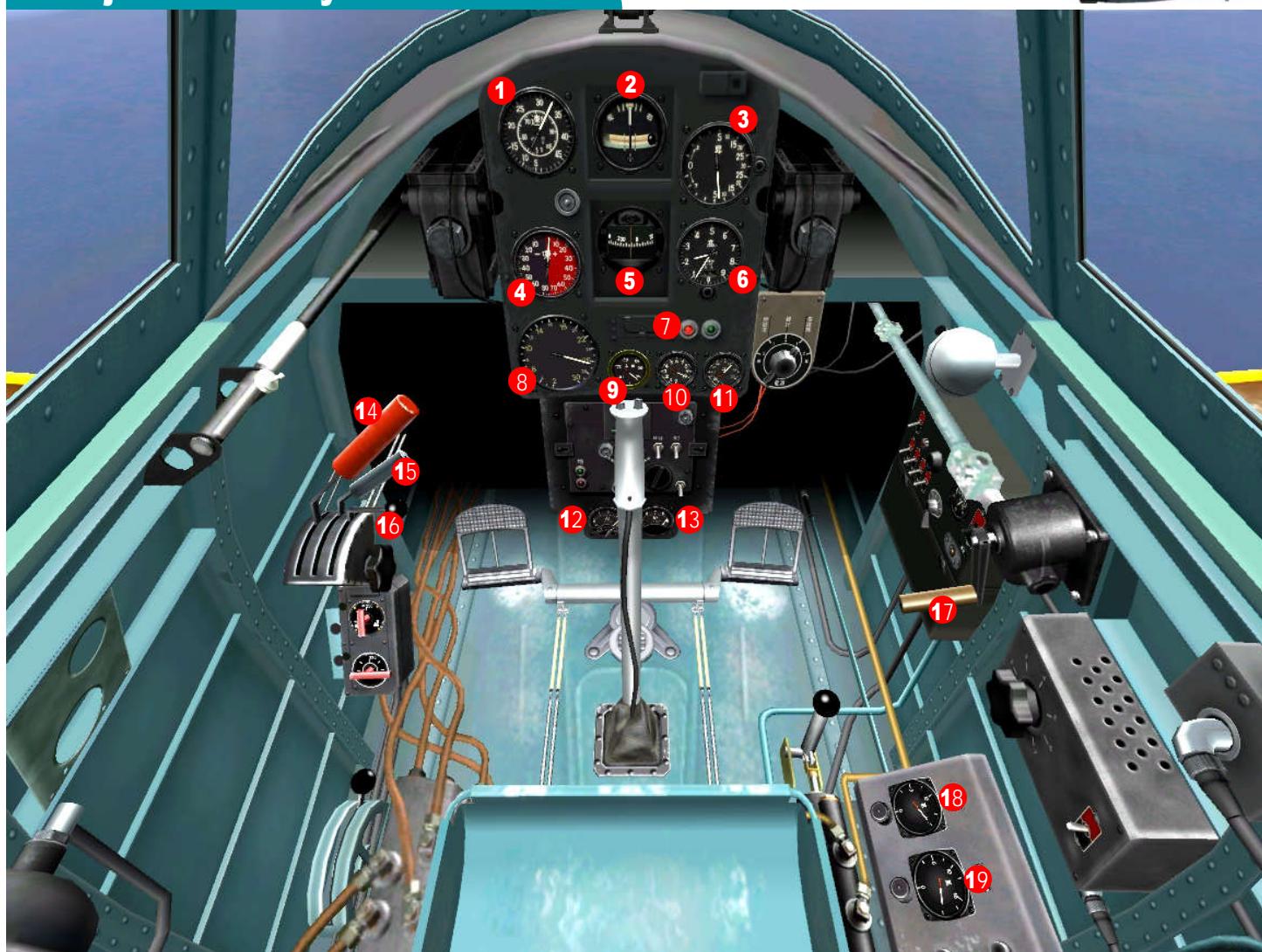


Ki-27 (<http://gunsight.jp/b/index.htm>)



# Nakajima Ki-43 Hayabusa «Oscar»

Ia / Ib / Ic



**1. Airspeed indicator**

**2. Turn and bank indicator**

**3. Variometer**

**4. Manifold pressure gage**

**5. Magnetic compass**

**6. Altimeter**

**7. Landing gear position indicator:** green - up  
no light - in transition  
red - down

**8. Tachometer**

**9. Fuel pressure gage**

**10. Oil pressure gage**

**11. Oil temperature gage**

**12. Cylinder head temperature gage**

**13. Exhaust temperature gage**

**14. Throttle**

**15. Propeller pitch lever**

**16. Mixture lever**

**17. Radiator handle**

**18. Fuel gage (front)**

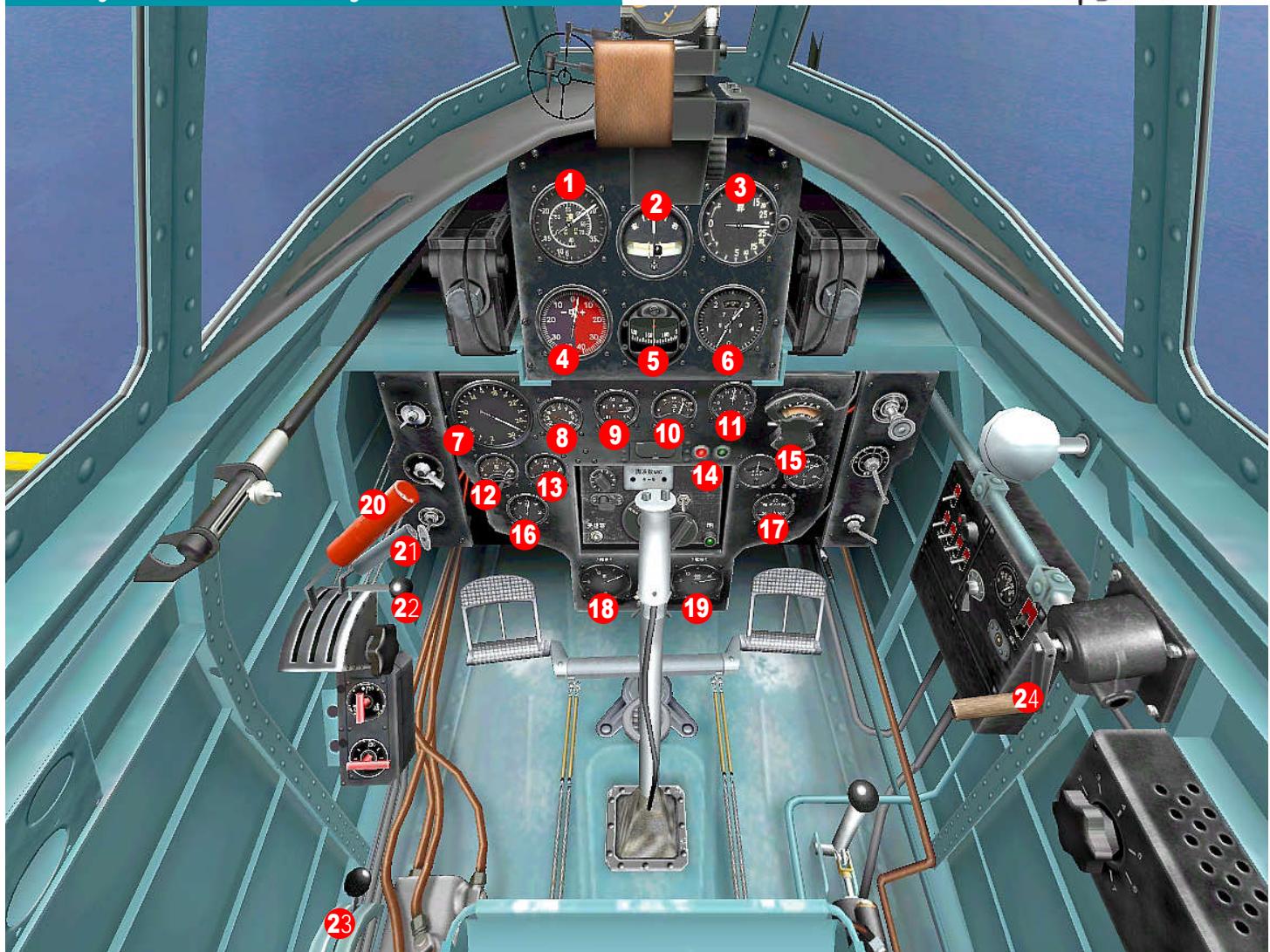
**19. Fuel gage (rear)**



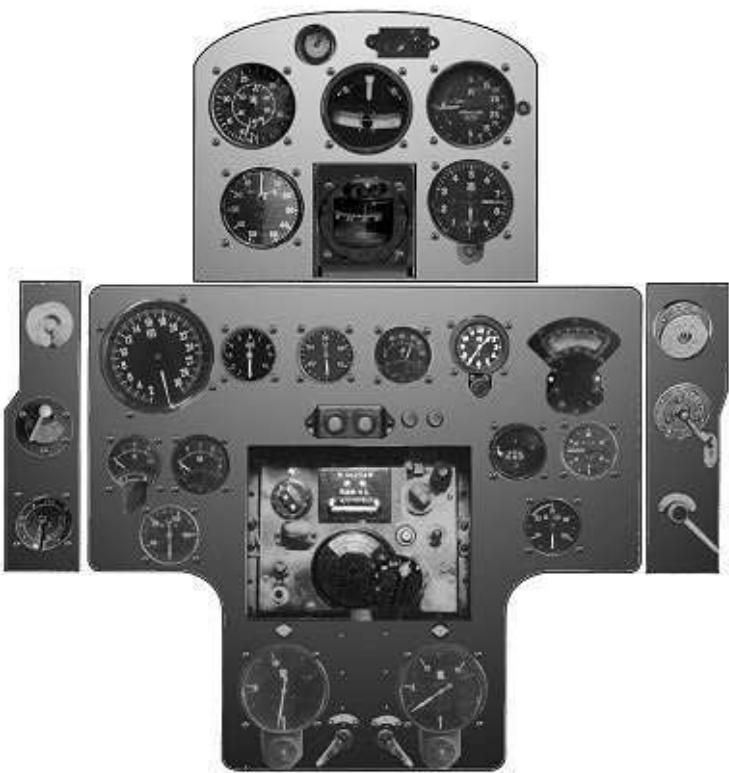
Ki-43 (<http://gunsight.jp/b/index.htm>)



# Nakajima Ki-43-II Hayabusa «Oscar»



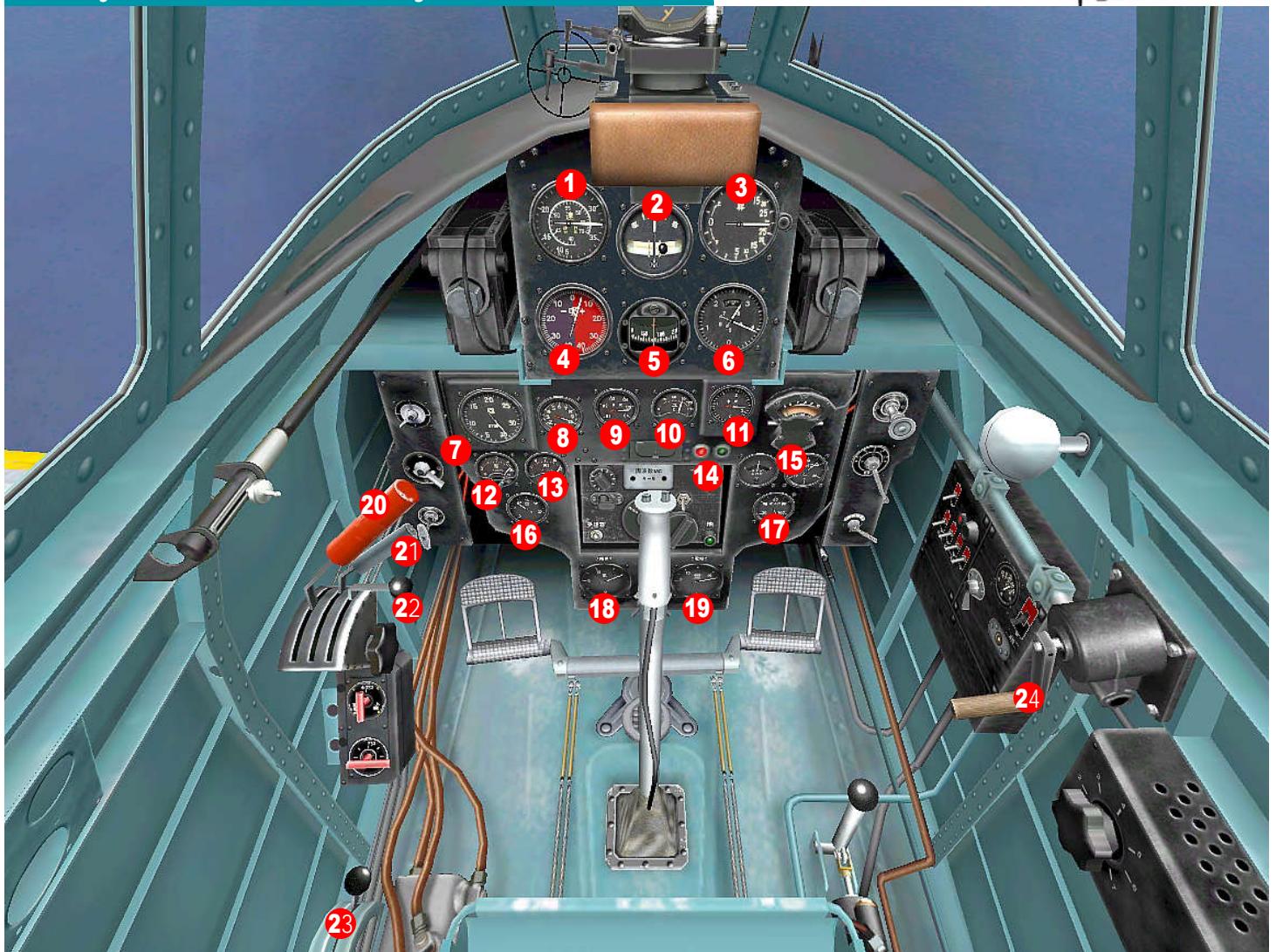
- 1. Airspeed indicator
- 2. Turn and bank indicator
- 3. Variometer
- 4. Manifold pressure gage
- 5. Magnetic compass
- 6. Altimeter
- 7. Tachometer
- 8. Oil pressure gage
- 9. Fuel pressure gage
- 10. Oil temperature gage
- 11. Clock
- 12. Cylinder head temperature gage
- 13. Exhaust temperature gage
- 14. Landing gear position indicator: green - down  
no light - transition  
red - up
- 15. Oxygen system gages (3)
- 16. Gun pressure gage
- 17. Hydraulic pressure gage
- 18. Fuel gage (front tank)
- 19. Fuel gage (rear tank)
- 20. Throttle
- 21. Propeller pitch lever
- 22. Mixture lever
- 23. Flaps lever
- 24. Radiator handle



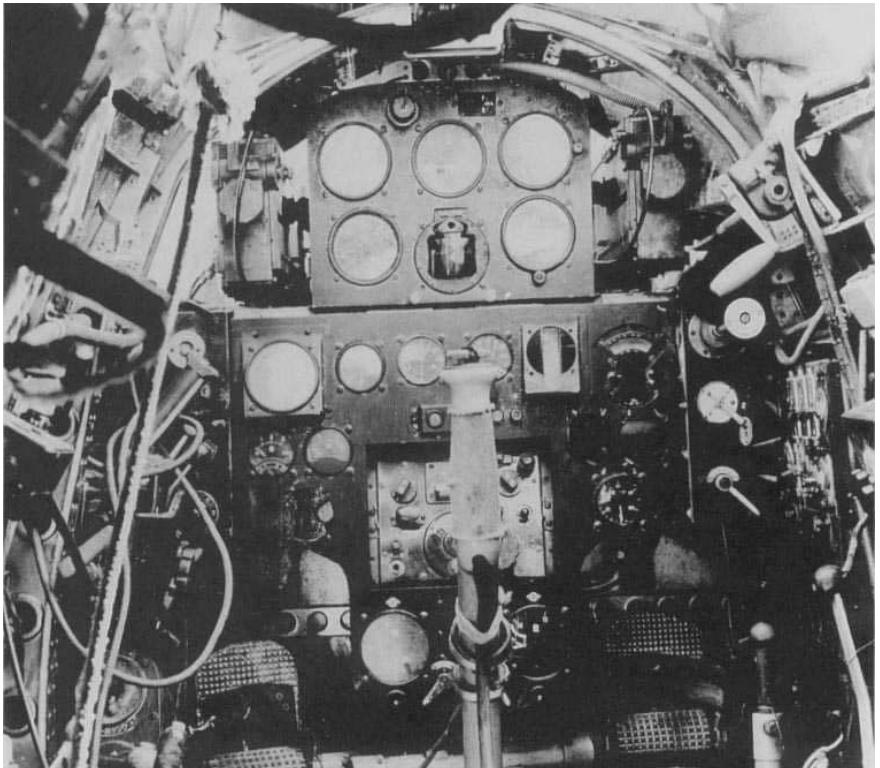
Ki-43-II (<http://gunsight.jp/b/index.htm>)



# Nakajima Ki-43-II Kai Hayabusa «Oscar»



- 1. Airspeed indicator
- 2. Turn and bank indicator
- 3. Variometer
- 4. Manifold pressure gage
- 5. Magnetic compass
- 6. Altimeter
- 7. Tachometer
- 8. Oil pressure gage
- 9. Fuel pressure gage
- 10. Oil temperature gage
- 11. Clock
- 12. Cylinder head temperature gage
- 13. Exhaust temperature gage
- 14. Landing gear position indicator: green - down  
no light - transition  
red - up
- 15. Oxygen system gages (3)
- 16. Gun pressure gage
- 17. Hydraulic pressure gage
- 18. Fuel gage (front tank)
- 19. Fuel gage (rear tank)
- 20. Throttle
- 21. Propeller pitch lever
- 22. Mixture lever
- 23. Flaps lever
- 24. Radiator handle



Ki-43 II Kai (<http://www.warbirdphotographs.com/ArmyJB&W3/Ki-43-Cockpit-112.jpg>)



# Kawasaki Ki-61 | Hien «Tony»

Ko / Otsu / Hei



**1. Turn and bank indicator**

**2. Variometer**

**3. Airspeed indicator**

**4. Magnetic compass**

**5. Altimeter**

**6. Clock**

**7. Free air temperature gage**

**8. Manifold pressure gage**

**9. Exhaust temperature gage**

**10. Tachometer**

**11. Coolant temperature gage**

**12. Oil temperature gage**

**13. Oil pressure gage**

**14. Fuel pressure gage**

**15. Flaps position indicator**

**16. Radiator position indicator**

**17. Landing gear position indicator:** green - up  
no light - in transition  
red - down

**18. Fuel gage**

**19. External weapons indicator light**

**20. Elevator trim indicator**

**21. Elevator trim lever**

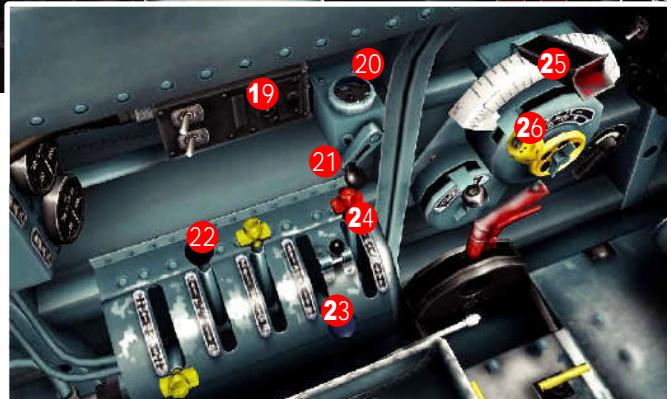
**22. Flaps lever**

**23. Radiator lever**

**24. Landing gear lever**

**25. Throttle**

**26. Propeller pitch lever**



Ki-61 (<http://gunsight.jp/b/index.htm>)



# Nakajima Ki-84-Ia Hayate «Frank»



**1. Turn and bank indicator**

**2. Artificial horizon**

**3. Variometer**

**4. Airspeed indicator**

**5. Magnetic compass**

**6. Altimeter**

**7. Tachometer**

**8. Manifold pressure gage**

**9. Clock**

**10. Engine ignition switch**

**11. Landing gear position indicator: green - down  
no light - transition  
red - up**

**12. Cylinder head temperature gage**

**13. Exhaust temperature gage**

**14. Oil temperature gage**

**15. Oil pressure gage**

**16. Fuel pressure gage**

**17. Water-methanol (ADI) pressure gage**

**18. Fuel gage with integrated low fuel warning light**

**19. Propeller pitch lever**

**20. Mixture lever: rear position - leaner mixture  
front position - richer mixture**

**21. Throttle**

**22. Landing gear lever**

**23. Flaps lever**

**24. Position lights switch**

**25. Landing light switch**

**26. Instrument light switch**

**27 & 28. Radiators levers**



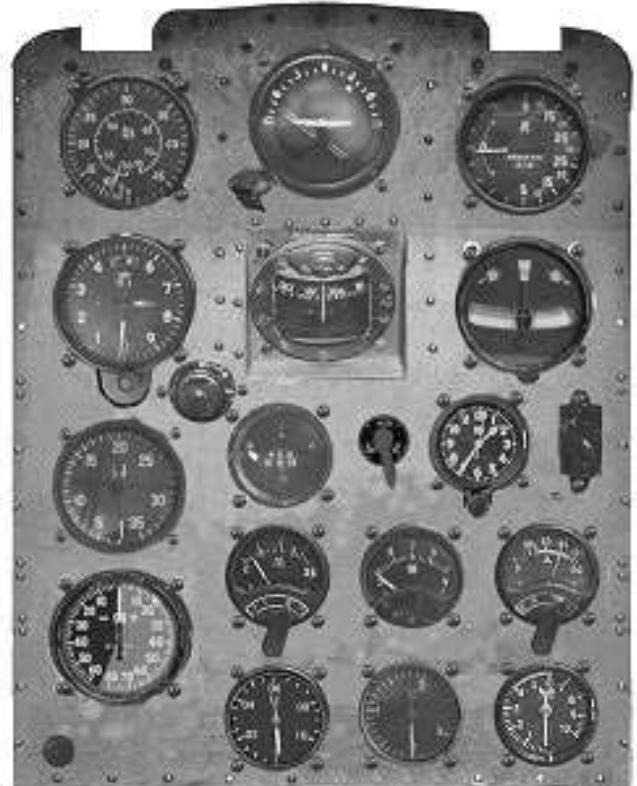
KI-84-Ia (<http://gunsight.jp/b/index.htm>)



# Nakajima Ki-84 Ib / Ic Hayate «Frank»



1. Airspeed indicator
2. Artificial horizon
3. Variometer
4. Altimeter
5. Magnetic compass
6. Turn and bank indicator
7. Tachometer
8. Clock
9. Engine ignition switch
10. Landing gear position indicator: green - down  
no light - transition  
red - up
11. Manifold pressure gage
12. Cylinder head temperature gage
13. Exhaust temperature gage
14. Oil temperature gage
15. Fuel pressure gage
16. Water-methanol (ADI) pressure gage
17. Oil pressure gage
18. Fuel gage with integrated low fuel warning light
19. Propeller pitch lever
20. Mixture lever: rear position - leaner mixture  
front position - richer mixture
21. Throttle
22. Landing gear lever
23. Flaps lever
24. Position lights switch
25. Landing light switch
26. Instrument light switch
- 27 & 28. Radiators levers



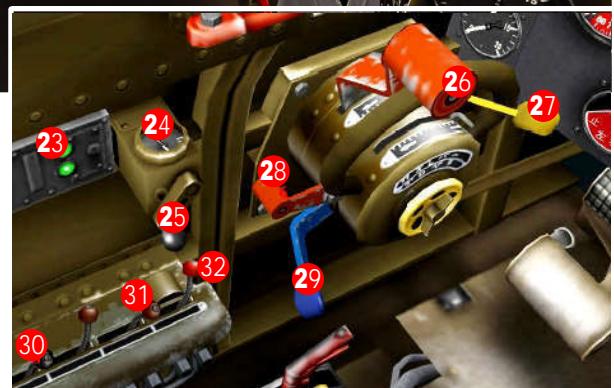
Ki-84-Ib (<http://gunsight.jp/b/index.htm>)



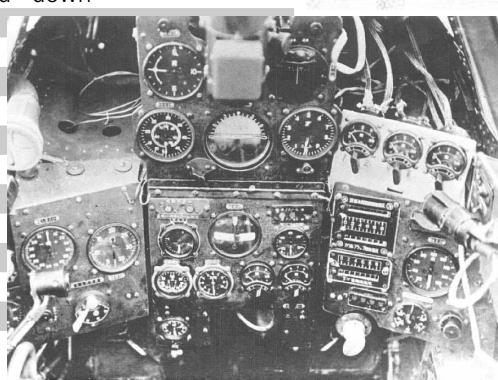
# Kawasaki Ki-100-I-Ko Hien Type 5 «Tony»



- 1. Variometer**
- 2. Magnetic compass**
- 3. Airspeed indicator
- 4. Artificial horizon
- 5. Altimeter
- 6. Manifold pressure gage
- 7. Tachometer
- 8. Water-methanol (ADI) pressure gage
- 9. Turn and bank indicator
- 10. Fuel pressure gage
- 11. Flaps position indicator
- 12. Radiator position indicator
- 13. Fuel gage with integrated low fuel warning light**
- 14. Gun pressure gage
- 15. Engine ignition switch
- 16. Oil pressure gage
- 17. Oil temperature gage
- 18. Cylinder head temperature gage
- 19. Exhaust temperature gage**
- 20. Landing gear position indicator: green - up  
no light - in transition  
red - down



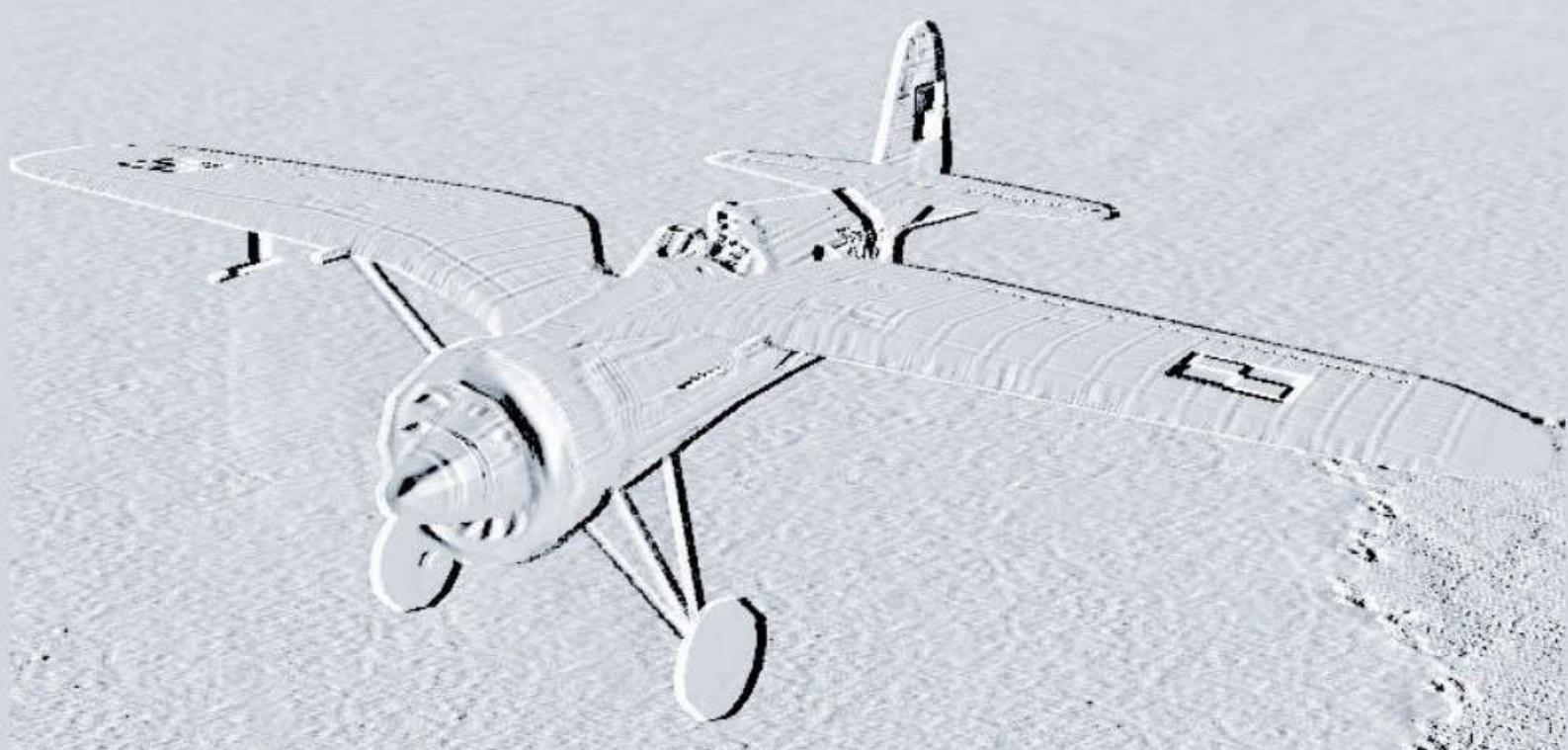
- 21. Clock
- 22. Magnetic compass
- 23. External weapons indicator light**
- 24. Elevator trim indicator**
- 25. Elevator trim lever**
- 26. Throttle**
- 27. Propeller pitch lever**
- 28. Mixture lever**
- 29. Boost lever**
- 30. Flaps lever**
- 31. Radiator lever**
- 32. Landing gear lever**

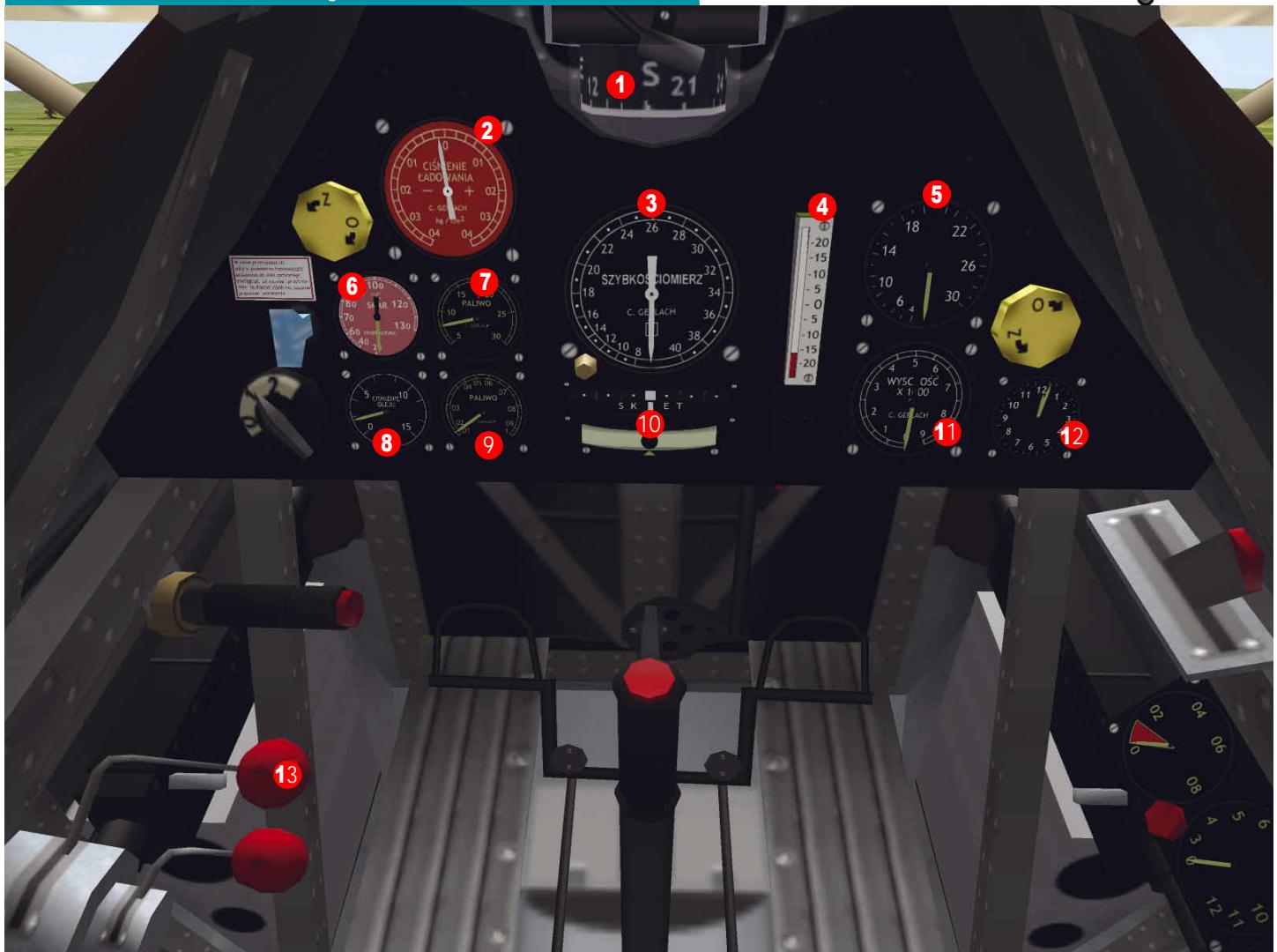


Ki-100 (<http://www.wabdrphotographs.com/Amy/BW/Ki-100-35s.jpg>)



**POLAND**





P11 (<http://img57.imageshack.us/my.php?image=1010118mi3.jpg>)



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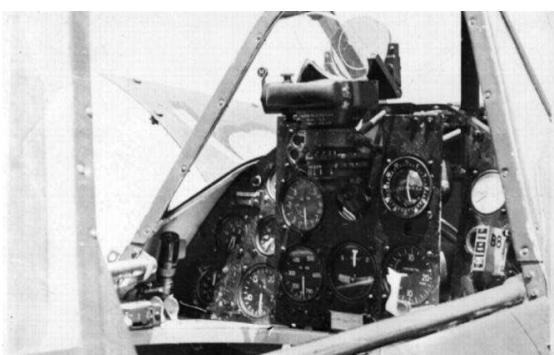
# ROMANIA





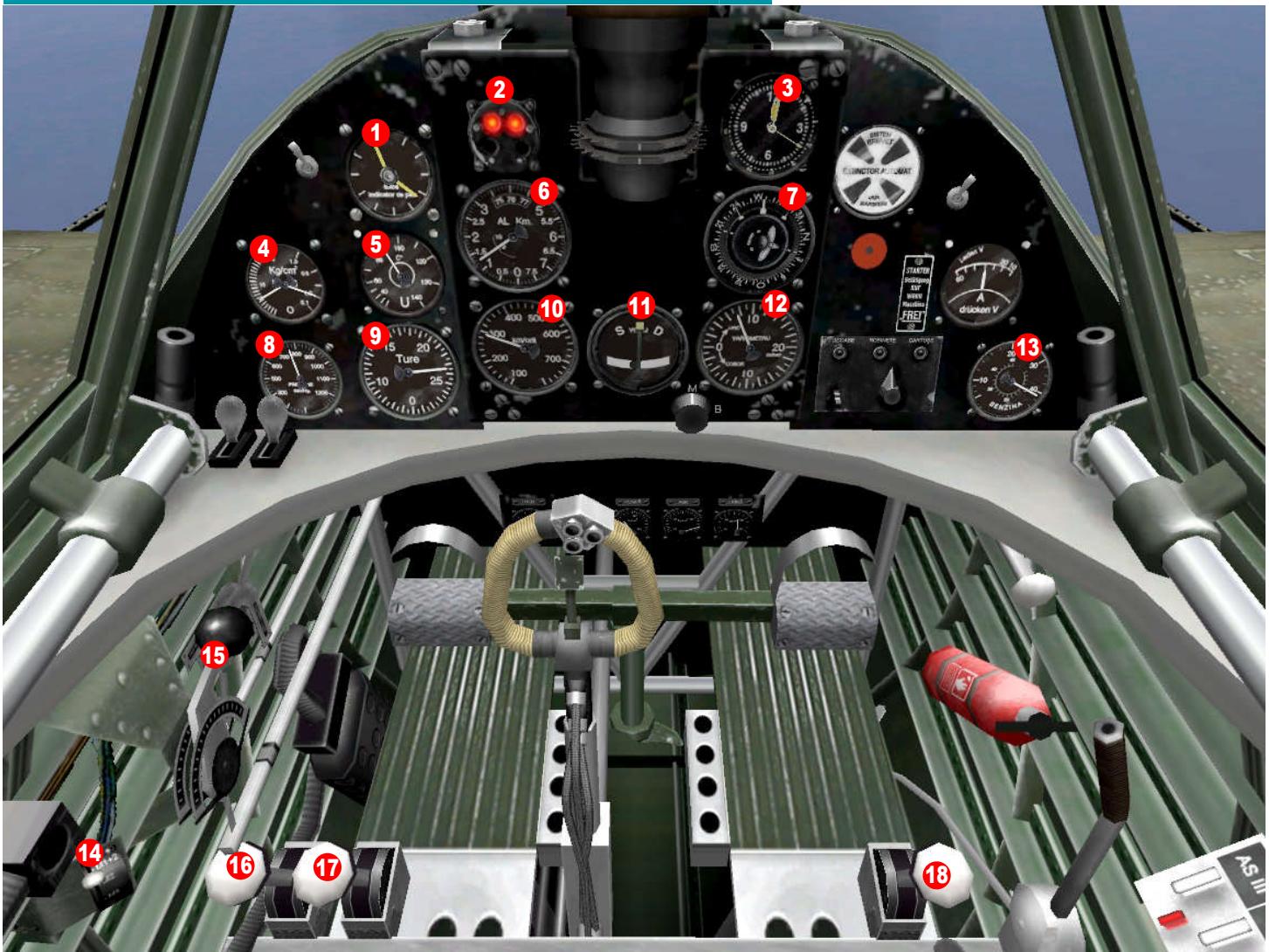
- 1. Propeller pitch indicator**
- 2. Altimeter**
- 3. Repeater compass**
- 4. Clock**
- 5. Fuel and oil pressure gage**
- 6. Oil temperature gage**
- 7. Airspeed indicator**
- 8. Turn and bank indicator**
- 9. Variometer**
- 10. Manifold pressure gage**
- 11. Tachometer**
- 12. Landing gear position indicator: green - down  
no light - transition  
red - up**

- 13. Fuel gage**
- 14. Engine ignition switch**
- 15. Throttle**
- 16. Flaps lever**
- 17. Landing gear lever**
- 18. Radiator lever**



IAR 80 (<http://www.rcgroups.com/forums/showthread.php?t=446637&page=11>)





**1. Propeller pitch indicator**

**2. Landing gear position indicator:** green - down  
no light - transition  
red - up

**3. Clock**

**4. Fuel and oil pressure gage**

**5. Oil temperature gage**

**6. Altimeter**

**7. Repeater compass**

**8. Manifold pressure gage**

**9. Tachometer**

**10. Airspeed indicator**

**11. Turn and bank indicator**

**12. Variometer**

**13. Fuel gage**

**14. Engine ignition switch**

**15. Throttle**

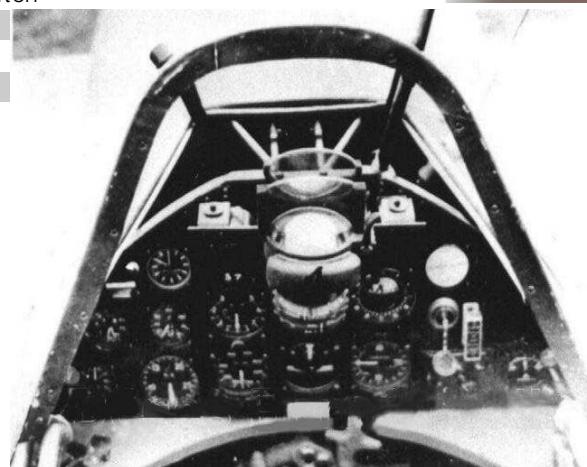
**16. Flaps lever**

**17. Landing gear lever**

**18. Radiator lever**



IAR 81 (<http://www.rcgroups.com/forums/showthread.php?t=446637&page=11>)





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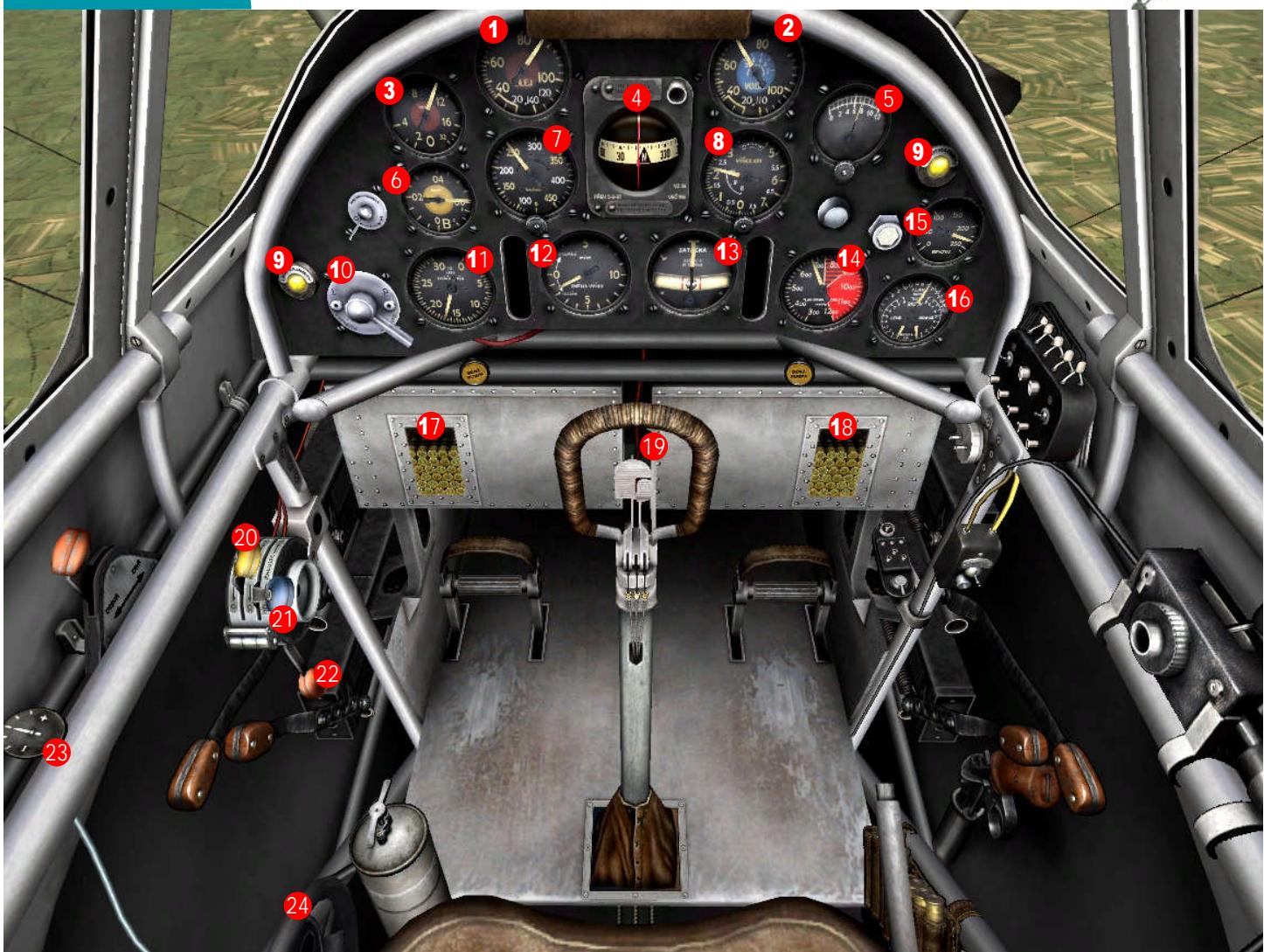
# SLOVAKIA



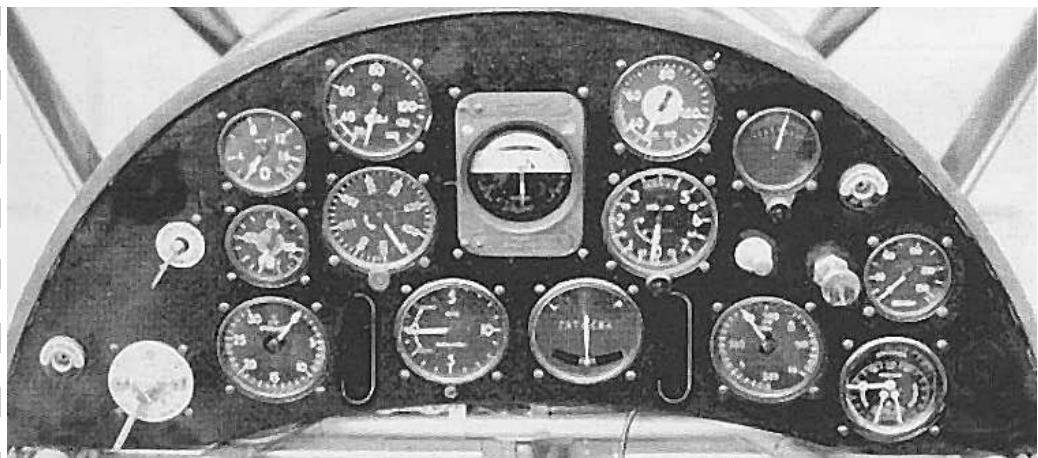
CZECHOSLOVAKIA



# Avia B-534-IV



1. Oil temperature gage
2. Coolant temperature gage
3. Oil pressure gage
4. Magnetic compass
5. Oxygen pressure gage
6. Fuel pressure gage
7. Airspeed indicator
8. Altimeter
9. MG charged indicator lights
10. Engine ignition switch
11. Tachometer
12. Variometer
13. Turn and bank indicator
14. Manifold pressure gage
15. Fuel gage
16. Brakes triple pressure gage:  
storage cylinder (top)  
left & right brakes (bottom)
17. Left lower MG ammunition box
18. Right lower MG ammunition box
19. Gear brakes lever
20. Throttle (100% in rear position)
21. Mixture lever: rear pos. - richer  
front pos. - leaner
22. Radiator lever
23. Elevator trim indicator
24. Elevator trim wheel



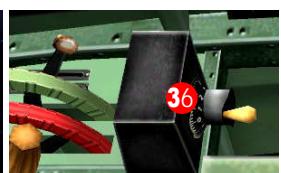
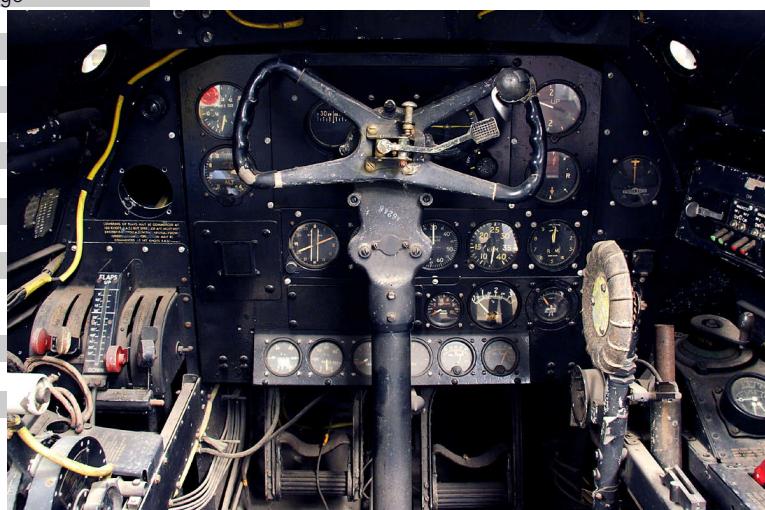
# UNITED KINGDOM



# Bristol Beaufighter Mk. 21



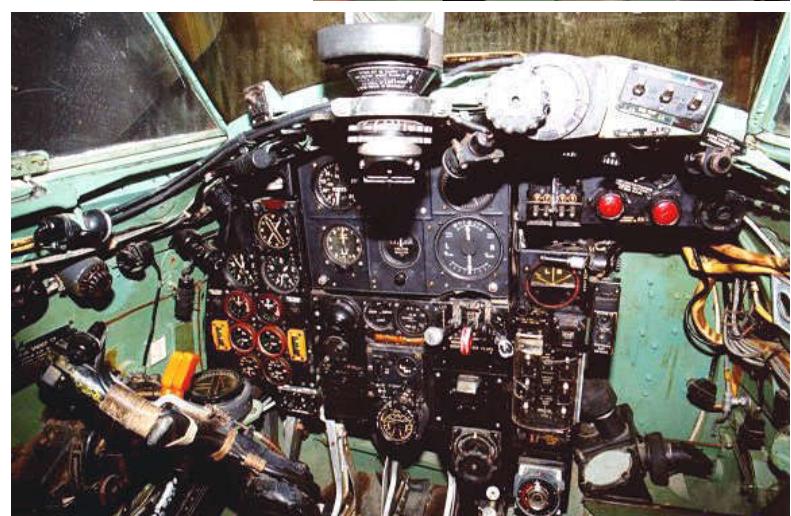
- 1. Clock
- 2. Airspeed indicator
- 3. Artificial horizon
- 4. Directional gyro
- 5. Rate-of-climb indicator
- 6. Radio altimeter
- 7. Altimeter
- 8. Turn and bank indicator
- 9. Pilot's Direction Indicator
- 10. Free air temperature gage
- 11. Radio compass
- 12. Left engine manifold pressure gage
- 13. Right engine manifold pressure gage
- 14. Left engine tachometer
- 15. Right engine tachometer
- 16. Left engine fuel pressure gage
- 17. Right engine fuel pressure gage
- 18. Suction gage
- 19. Gear brakes lever
- 20. Left engine coolant temperature gage
- 21. Right engine coolant temperature gage
- 22. Left engine oil pressure gage
- 23. Right engine oil pressure gage
- 24. Left engine oil temperature gage
- 25. Right engine oil temperature gage
- 26. Elevator trim wheel
- 27. Rudder trim wheel
- 28. Left tank fuel gage
- 29. Right tank fuel gage
- 30. Left propeller pitch lever
- 31. Right propeller pitch lever
- 32. Mixture lever: rear - leaner mixture  
front - richer mixture
- 33. Throttle
- 34. Flaps lever
- 35. Landing gear lever
- 36. Aileron trim wheel



# De Havilland Mosquito FB.VI Series I



- 1. Airspeed indicator
- 2. Artificial horizon
- 3. Rate-of-climb indicator
- 4. Rudder trim wheel & indicator
- 5. Remote reading compass
- 6. Altimeter
- 7. Directional gyro
- 8. Turn and bank indicator
- 9. Left **engine tachometer**
- 10. Right **engine tachometer**
- 11. Left engine low fuel press warning light
- 12. Left engine manifold gage
- 13. Right engine manifold gage
- 14. Right engine low fuel press warning light
- 15. Landing gear position indicator
- 16. Flaps position indicator
- 17. Bomb doors lever
- 18. Landing gear lever
- 19. Flaps lever
- 20. Left engine oil pressure gage
- 21. Front engine oil temperature gage
- 22. Right engine oil temperature gage
- 23. Right engine oil pressure gage
- 24. Left engine coolant temperature gage
- 25. Right engine coolant temperature gage
- 26. Gear brakes lever
- 27. Magnetic compass
- 28. Aileron trim indicator
- 29. Aileron trim wheel
- 30. Elevator trim indicator
- 31. Left engine throttle
- 32. Right engine throttle
- 33. Left propeller pitch lever
- 34. Right propeller pitch lever
- 35. Elevator trim wheel
- 36. Fuel gage - inner tanks
- 37. Fuel gage - center tanks
- 38. Fuel gage - outer tanks
- 39. Outside temperature gage



# Gloster Gladiator J8A

Swedish & Finnish variant



- 1. Rate-of-climb indicator
- 2. Oil temperature gage
- 3. Oil pressure gage
- 4. Tachometer
- 5. Angle of attack indicator
- 6. Airspeed indicator
- 7. Turn and bank indicator
- 8. Altimeter
- 9. Manifold pressure gage
- 10. Fuel gage
- 11. Clock
- 12. Magnetic compass
- 13. Mixture lever: rear position - leaner mixture  
front position - richer mixture
- 14. Throttle



J8A ([http://surfcity.kund.dalnet.se/gladiator\\_sweden.htm](http://surfcity.kund.dalnet.se/gladiator_sweden.htm))



# Hawker Hurricane

Mk. I / Mk. IIB / Mk. IIC / Mk. II field mod.



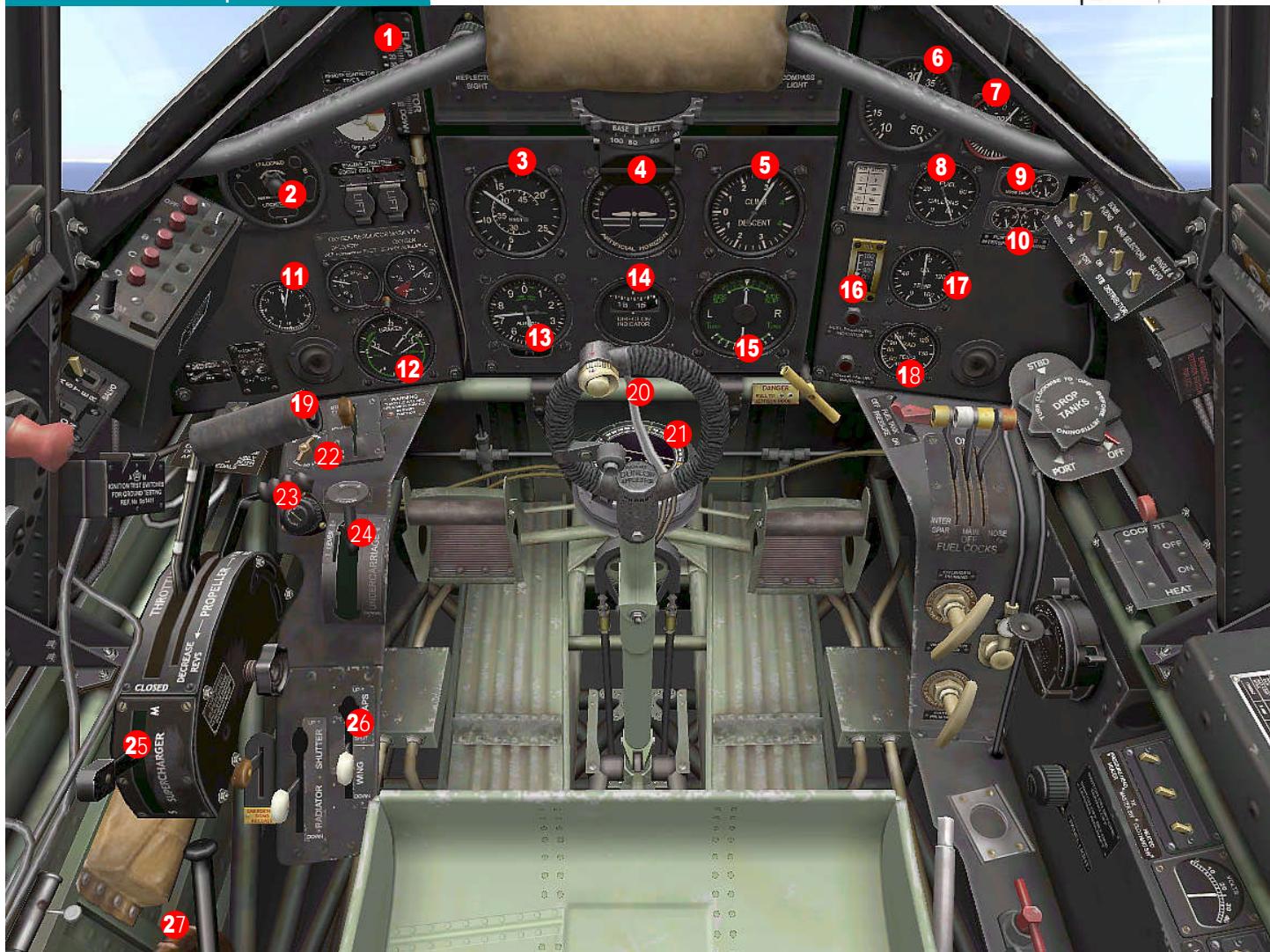
- 1.** Landing gear position: green - down  
no light - transition  
red - up
- 2.** Tachometer
- 3.** Airspeed indicator
- 4.** Artificial horizon
- 5.** Rate-of-climb indicator
- 6.** Manifold pressure gage
- 7.** Altimeter
- 8.** Directional gyro
- 9.** Turn and bank indicator
- 10.** Fuel pressure gage
- 11.** Fuel gage
- 12.** Oil temperature gage
- 13.** Coolant temperature gage
- 14.** Magnetic compass
- 15.** Propeller pitch lever
- 16.** Throttle
- 17.** Radiator flap position indicator
- 18.** Landing gear / flaps lever



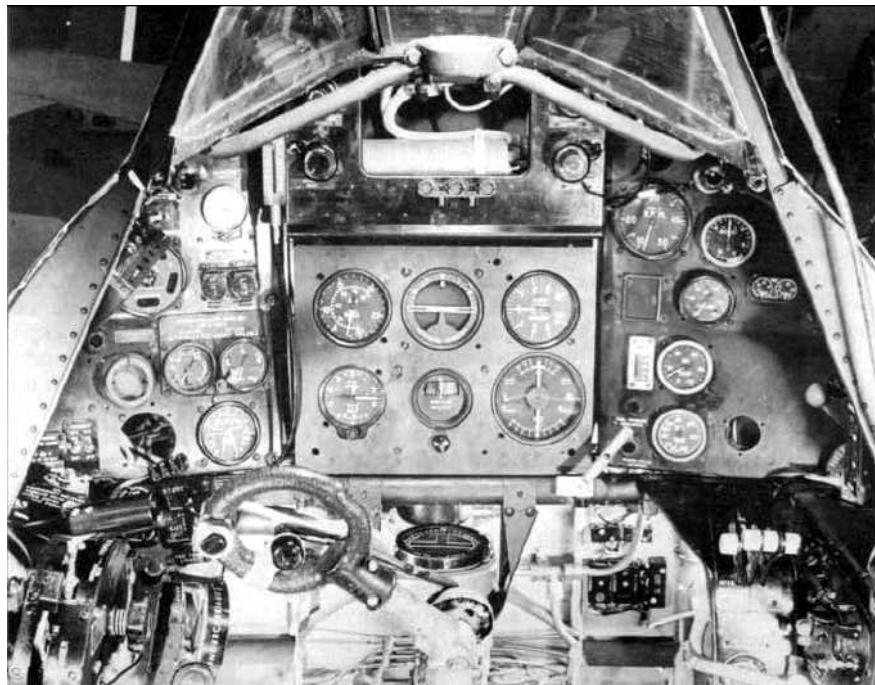
Hurri XII (<http://www.historicaircraftcollection.ltd.uk/>)



# Hawker Tempest Mk. V



- 1. Flaps position indicator
- 2. Landing gear position indicator: green - down  
no light - transition  
red - up
- 3. Airspeed indicator
- 4. Artificial horizon
- 5. Rate-of-climb indicator
- 6. Tachometer
- 7. Manifold pressure gage
- 8. Fuel gage (main tank)
- 9. Fuel gage (nose tank)
- 10. Fuel gage (wing tanks)
- 11. Clock
- 12. Brakes pressure gage
- 13. Altimeter
- 14. Directional gyro
- 15. Turn and bank indicator
- 16. Oil pressure gage
- 17. Oil temperature gage
- 18. Coolant temperature gage
- 19. Throttle
- 20. Gear brakes lever
- 21. Magnetic compass
- 22. Landing light switch
- 23. Propeller pitch lever
- 24. Landing gear lever
- 25. Supercharger lever - up: stage 1  
down: stage 2
- 26. Flaps lever
- 27. Elevator trim wheel

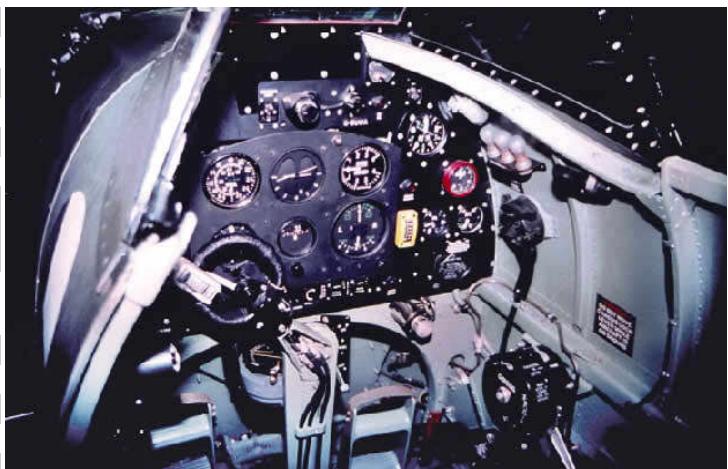


Tempest V (<http://www.ww2aircraft.net/>)





- 1. Flaps lever**
- 2. Airspeed indicator**
- 3. Artificial horizon**
- 4. Rate-of-climb indicator**
- 5. Tachometer**
- 6. Clock**
- 7. Landing gear position indicator: down - down  
no light - transition  
up - up**
- 8. Arresting hook indicator light: no light - up  
green - down**
- 9. Elevator trim indicator**
- 10. Altimeter**
- 11. Directional gyro**
- 12. Turn and bank indicator**
- 13. Low fuel warning light**
- 14. Manifold pressure gage**
- 15. Oil pressure gage**
- 16. Oil temperature gage**
- 17. Coolant temperature gage**
- 18. Fuel gage**
- 19. Throttle**
- 20. Propeller pitch lever**
- 21. Magnetic compass**
- 22. Gear brakes lever**
- 23. Landing gear lever**
- 24. Elevator trim wheel**
- 25. Rudder trim wheel**
- 26. Arrester hook lever**



Seafire MkIII (<http://www.fleetairarmarchive.net/Aircraft/Seafire.htm>)



# Supermarine Spitfire Mk. Vb / c

Mk. Vb (CW) / L.F. Mk. Vb / L.F. Mk. Vb (CW) / Mk. Vc2 / Mk. Vc4



- 1. Flaps lever**
- 2. Airspeed indicator**
- 3. Artificial horizon**
- 4. Rate-of-climb indicator**
- 5. Tachometer**
- 6. Clock**
- 7. Landing gear position indicator: down - down  
no light - transition  
up - up**
- 8. Elevator trim indicator**
- 9. Altimeter**
- 10. Directional gyro**
- 11. Turn and bank indicator**
- 12. Low fuel warning light**
- 13. Manifold pressure gage**
- 14. Oil pressure gage**
- 15. Oil temperature gage**
- 16. Coolant temperature gage**
- 17. Fuel gage**
- 18. Throttle**
- 19. Propeller pitch lever**
- 20. Gear brakes lever**
- 21. Magnetic compass**
- 22. Landing gear lever**
- 23. Elevator trim wheel**
- 24. Rudder trim wheel**

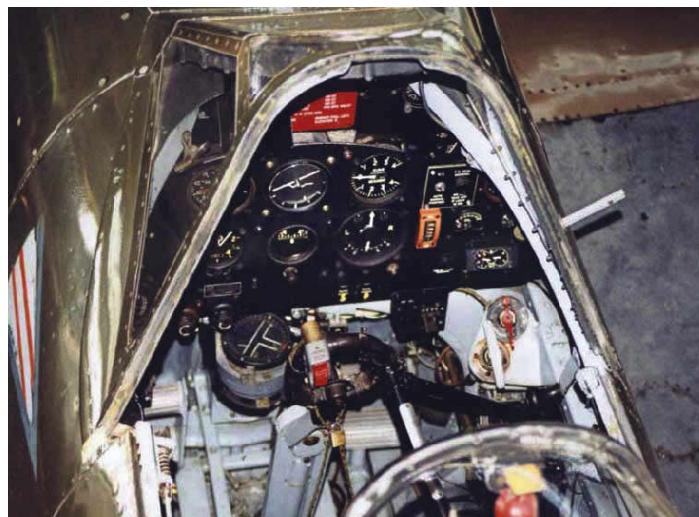


# Supermarine Spitfire Mk. VIII

## Mk. VIII / Mk. VIII (CW)



- 1. Flaps lever**
- 2. Airspeed indicator**
- 3. Artificial horizon**
- 4. Rate-of-climb indicator**
- 5. Tachometer**
- 6. Landing gear position indicator: down - down  
no light - transition  
up - up**
- 7. Elevator trim indicator**
- 8. Altimeter**
- 9. Directional gyro**
- 10. Turn and bank indicator**
- 11. Supercharger warning light**
- 12. Manifold pressure gage**
- 13. Oil pressure gage**
- 14. Oil temperature gage**
- 15. Coolant temperature gage**
- 16. Fuel gage**
- 17. Throttle**
- 18. Propeller pitch lever**
- 19. Magnetic compass**
- 20. Gear brakes lever**
- 21. Landing gear lever**
- 22. Elevator trim wheel**
- 23. Rudder trim wheel**



Spitfire (©Jan Jánský <http://www.valka.cz/galerie/thumbnails.php?album=19&page=30>)



# Supermarine Spitfire Mk. IX

Mk. IXc/L.F. Mk. IXc (CW)/Mk. IXe/L.F. Mk. IXe (CW)/H.F. Mk. IXe/Mk. IX 25 lbs



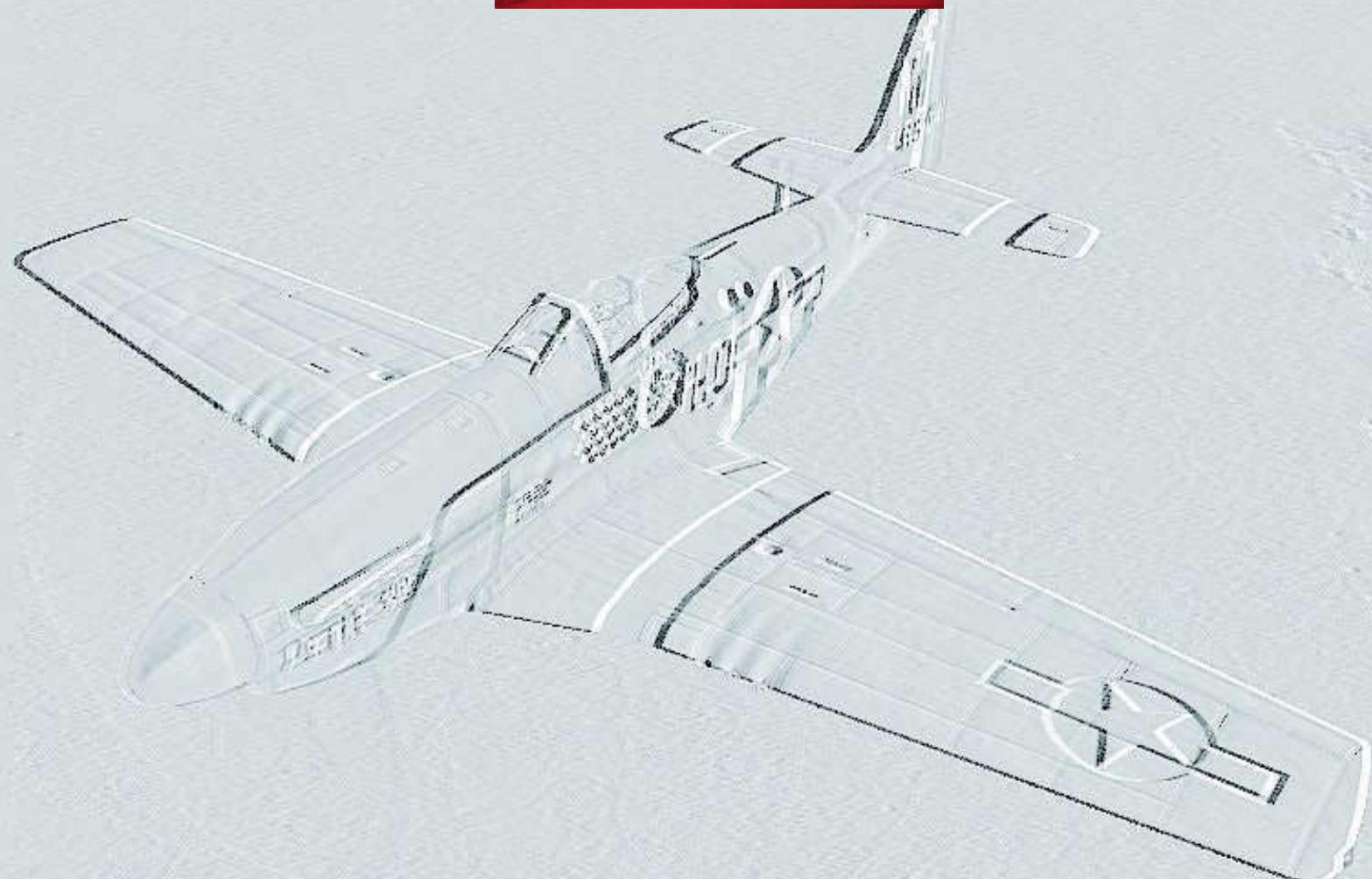
1. Flaps lever
2. Airspeed indicator
3. Artificial horizon
4. Rate-of-climb indicator
5. Tachometer
6. Clock
7. Landing gear position indicator: down - down  
no light - transition  
up - up
8. Elevator trim indicator
9. Altimeter
10. Directional gyro
11. Turn and bank indicator
12. Supercharger warning light
13. Manifold pressure gage
14. Oil pressure gage
15. Oil temperature gage
16. Coolant temperature gage
17. Low fuel warning light
18. Fuel gage
19. Propeller pitch lever
20. Throttle
21. Magnetic compass
22. Gear brakes lever
23. Landing gear lever
24. Elevator trim wheel
25. Rudder trim wheel



Spitfire Mk IX (<http://aircraftwalkaround.hobbyvista.com/spitfire/spitfire.htm>)



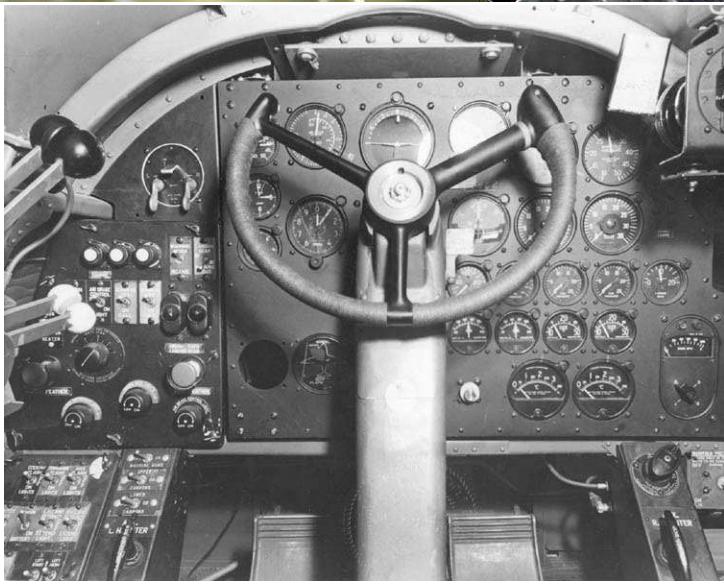
# UNITED STATES OF AMERICA



# Douglas A-20C Havoc



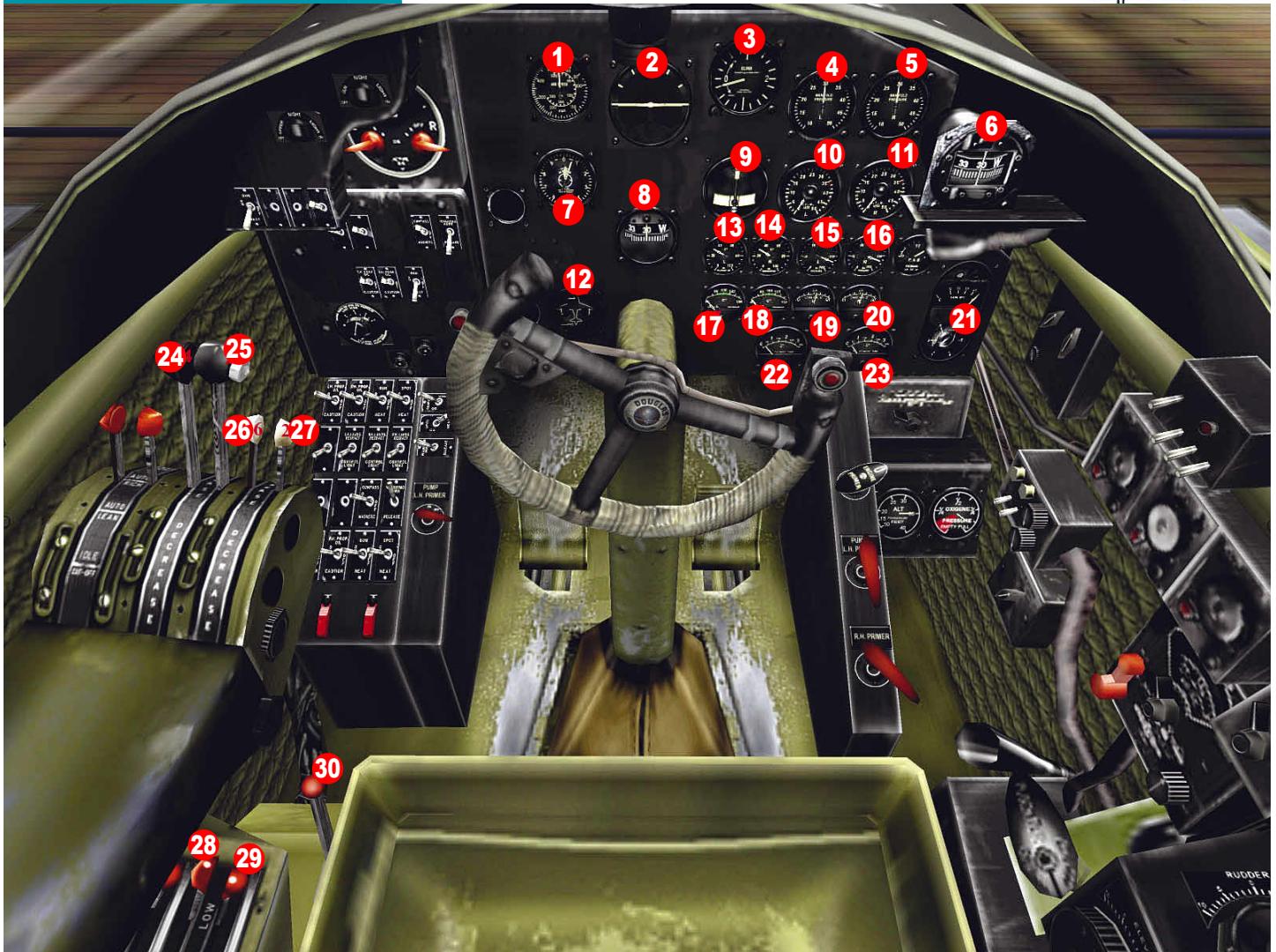
- 1. Free air temperature gage**
- 2. Airspeed indicator**
- 3. Artificial horizon**
- 4. Rate-of-climb indicator**
- 5. Left engine manifold pressure gage**
- 6. Right engine manifold pressure gage**
- 7. Clock**
- 8. Altimeter**
- 9. Turn and bank indicator**
- 10. Left engine tachometer**
- 11. Right engine tachometer**
- 12. Magnetic compass**
- 13. Suction gage**
- 14. Directional gyro**
- 15. Left engine oil pressure gage**
- 16. Right engine oil pressure gage**
- 17. Left engine fuel pressure gage**
- 18. Right engine fuel pressure gage**
- 19. Hydraulic pressure gage**
- 20. Fuel gage**
- 21. Flaps and gear position indicator**
- 22. Left engine oil temperature gage**
- 23. Right engine oil temperature gage**
- 24. Left engine carburetor air temperature gage**
- 25. Right engine carburetor air temperature gage**
- 26. Left (hidden) / right engine cylinder head temperature gages**
- 27. Left engine throttle**
- 28. Right engine throttle**
- 29. Left engine propeller pitch lever**
- 30. Right engine propeller pitch lever**
- 31. Left engine supercharger lever: down position - stage 1  
up position - stage 2**
- 32. Right engine supercharger lever: down position - stage 1  
up position - stage 2**
- 33. Bomb release lever**



A-20C (<http://uscockpits.com/Early%20Attack/Early%20Attack.html#A20>)



# Douglas A-20G Havoc



- 1. Airspeed indicator**
- 2. Artificial horizon**
- 3. Rate-of-climb indicator**
- 4. Left engine manifold pressure gage**
- 5. Right engine manifold pressure gage**
- 6. Magnetic compass**
- 7. Altimeter**
- 8. Directional gyro**
- 9. Turn and bank indicator**
- 10. Left engine tachometer**
- 11. Right engine tachometer**
- 12. Flaps and gear position indicator**
- 13. Left engine oil pressure gage**
- 14. Right engine oil pressure gage**
- 15. Left engine fuel pressure gage**
- 16. Right engine fuel pressure gage**
- 17. Left engine oil temperature gage**
- 18. Right engine oil temperature gage**
- 19. Left engine carburetor air temperature gage**
- 20. Right engine carburetor air temperature gage**
- 21. Fuel gage**
- 22. Left engine cylinder head temperature gage**
- 23. Right engine cylinder head temperature gage**
- 24. Left engine throttle**
- 25. Right engine throttle**
- 26. Left engine propeller pitch lever**
- 27. Right engine propeller pitch lever**
- 28. Left engine supercharger lever:** down position - stage 1  
up position - stage 2
- 29. Right engine supercharger lever:** down position - stage 1  
up position - stage 2
- 30. Bomb release lever**

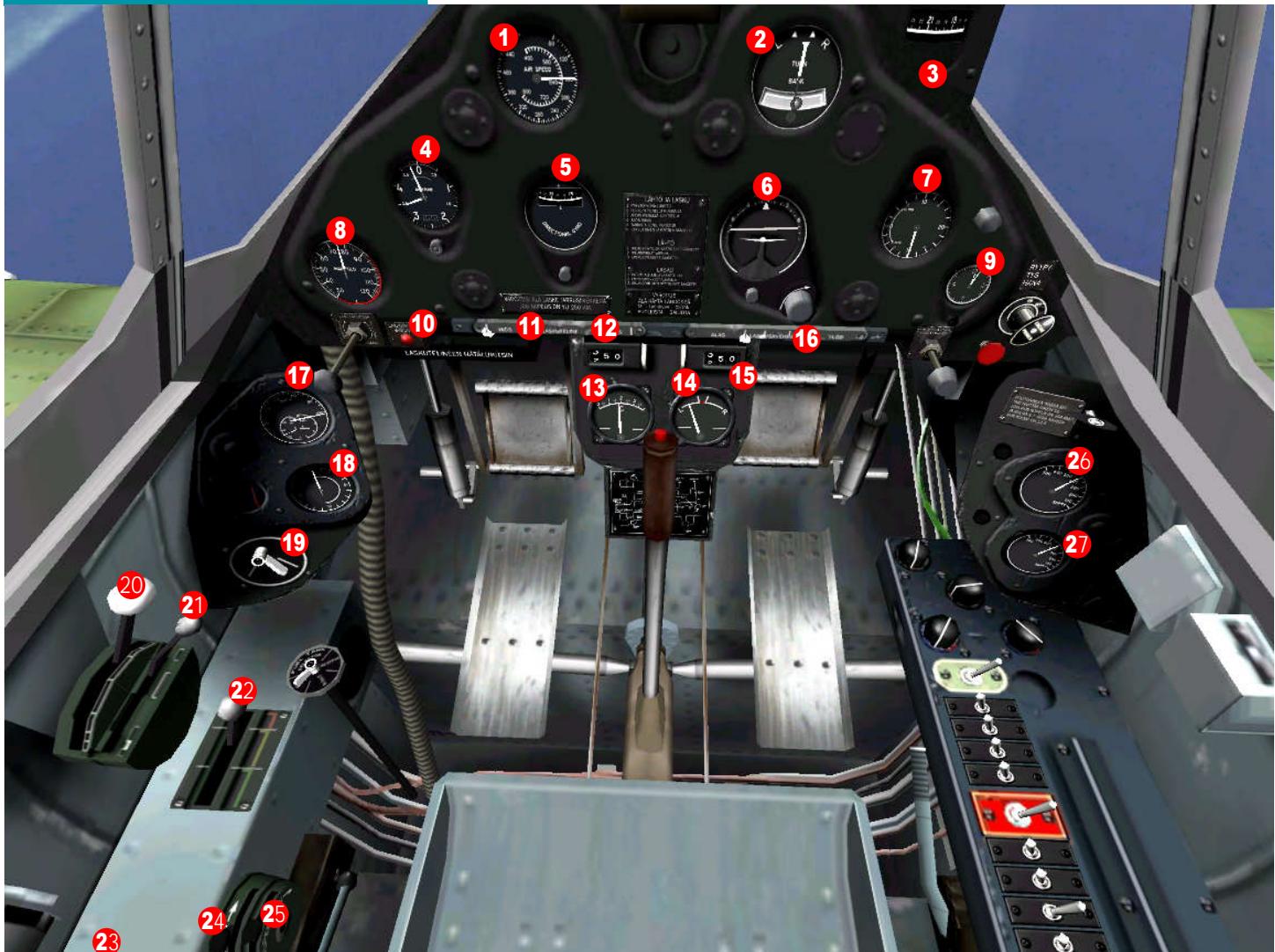


A-20G (<http://www.nationalmuseum.af.mil/photos/index.asp?galleryID=2283>)

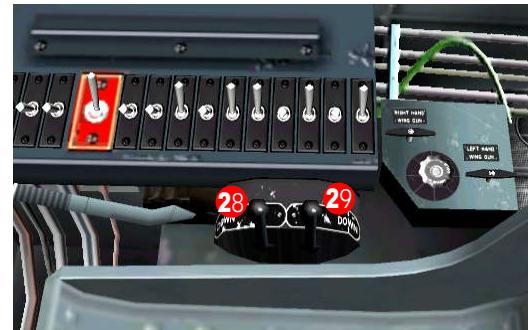


# Brewster B239 Buffalo

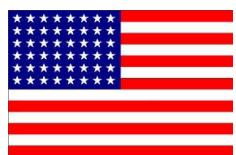
Denavalised export version - Finnish variant



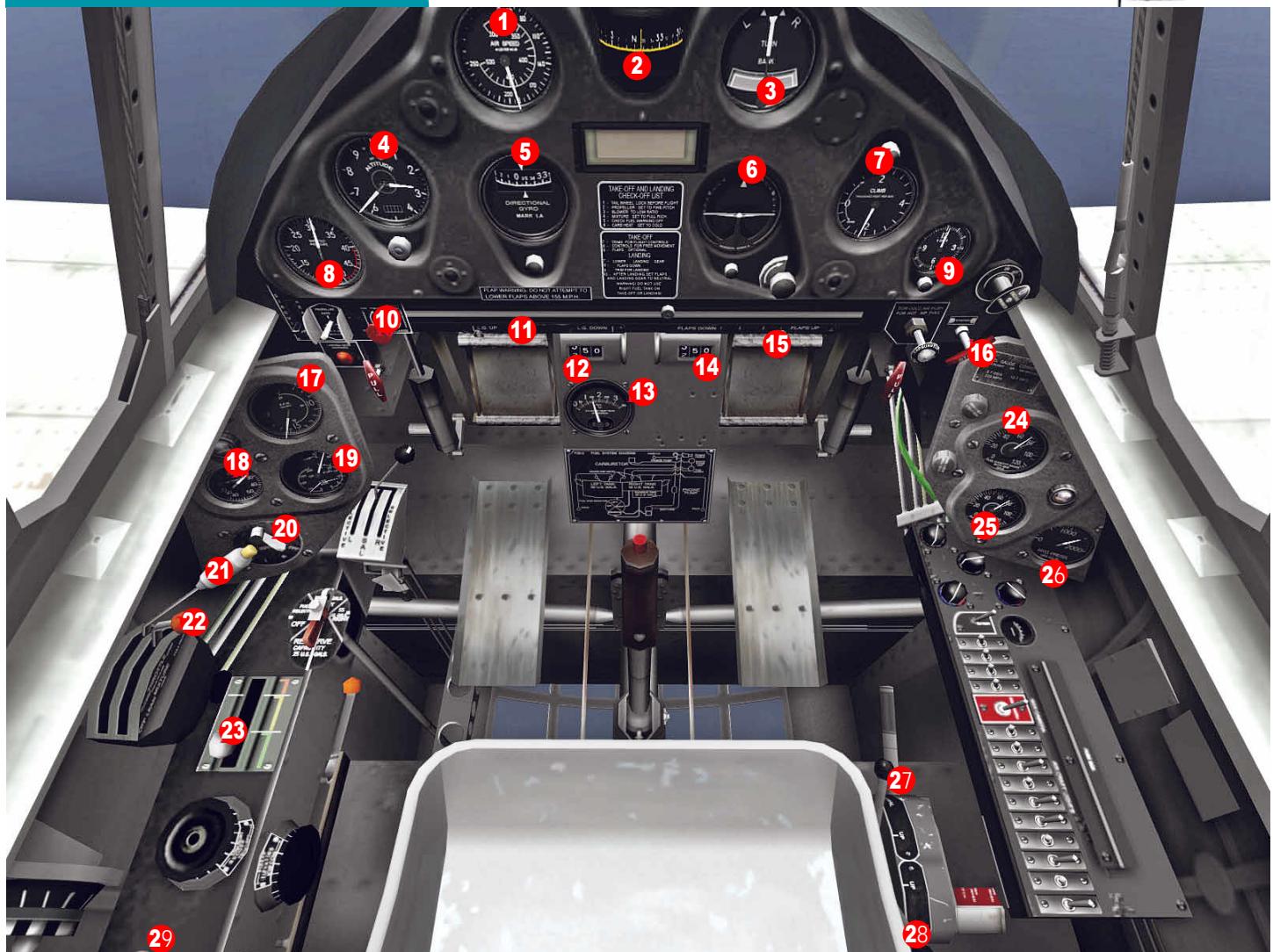
- 1. Airspeed indicator**
- 2. Turn and bank indicator**
- 3. Magnetic compass**
- 4. Altimeter**
- 5. Directional gyro**
- 6. Artificial horizon**
- 7. Rate-of-climb indicator**
- 8. Manifold pressure gage**
- 9. Clock**
- 10. Landing gear warning light**
- 11. Landing gear position indicator**
- 12. Left fuselage MG ammunition counter**
- 13. Cylinder head temperature gage**
- 14. Pilot's Direction Indicator**
- 15. Right fuselage MG ammunition counter**
- 16. Flaps position indicator**
- 17. Engine gage: oil temperature (top),  
oil pressure (left)  
fuel pressure (right)**
- 18. Tachometer**
- 19. Engine ignition & starter switch**
- 20. Throttle**
- 21. Propeller pitch lever**
- 22. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 23. Tail wheel lock lever (not visible)**
- 24. Elevator trim lever**
- 25. Rudder trim lever**
- 26. Fuel gage (left tank)**
- 27. Fuel gage (right tank)**
- 28. Landing gear lever**
- 29. Flaps lever**



B239 (<http://uscockpits.com/Early%20Fighters/F2A-1%20Buffalo.jpg>)

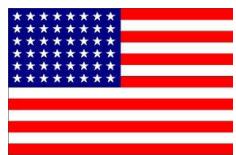
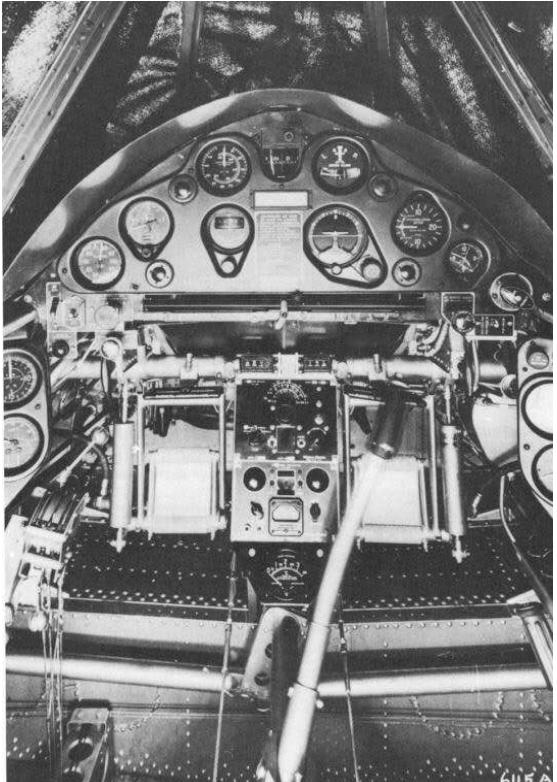


# Brewster F2A-2 Buffalo



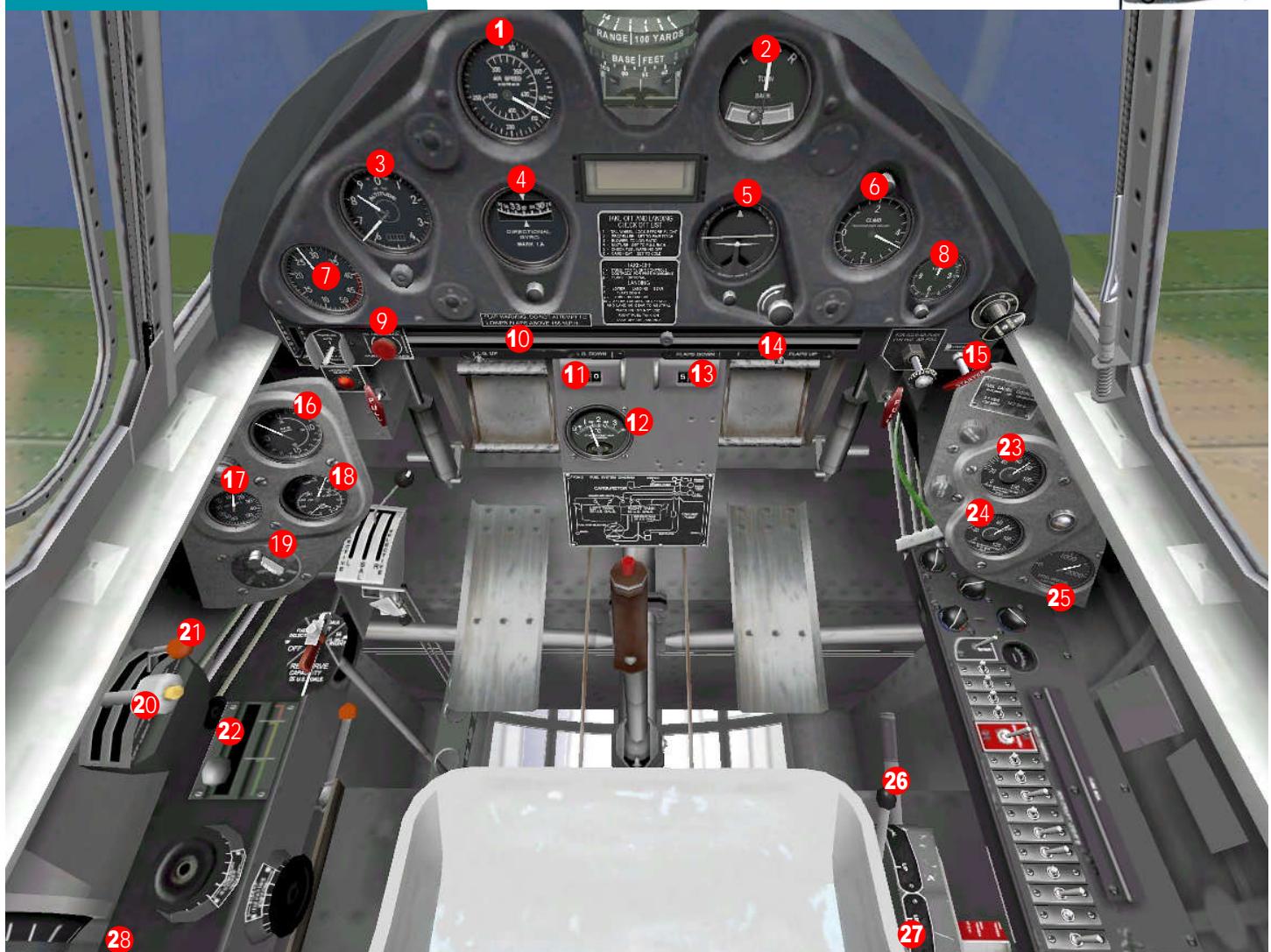
- 1. Airspeed indicator**
- 2. Magnetic compass**
- 3. Turn and bank indicator**
- 4. Altimeter**
- 5. Directional gyro**
- 6. Artificial horizon**
- 7. Rate-of-climb indicator**
- 8. Manifold pressure gage**
- 9. Clock**
- 10. Propeller pitch lever**
- 11. Landing gear position indicator**
- 12. Left fuselage MG ammunition counter**
- 13. Cylinder head temperature gage**
- 14. Right fuselage MG ammunition counter**
- 15. Flaps position indicator**
- 16. Engine starter**
- 17. Tachometer**
- 18. Free air temperature gage**
- 19. Engine gage: oil **temperature** (top) - oil pressure (left)  
fuel **pressure** (right)**
- 20. Engine ignition switch**
- 21. Throttle**
- 22. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 23. Supercharger lever: rear position - stage 1  
front position - stage 2**
- 24. Fuel gage (left tank)**
- 25. Fuel gage (right tank)**
- 26. Hydraulic pressure gage**
- 27. Landing gear lever**
- 28. Flaps lever**
- 29. Tail wheel lock lever (not visible)**

F2A-2 (<http://uscockpits.com/Easy%20FightersDutch%20B-339D%20Buffalo.JPG>)

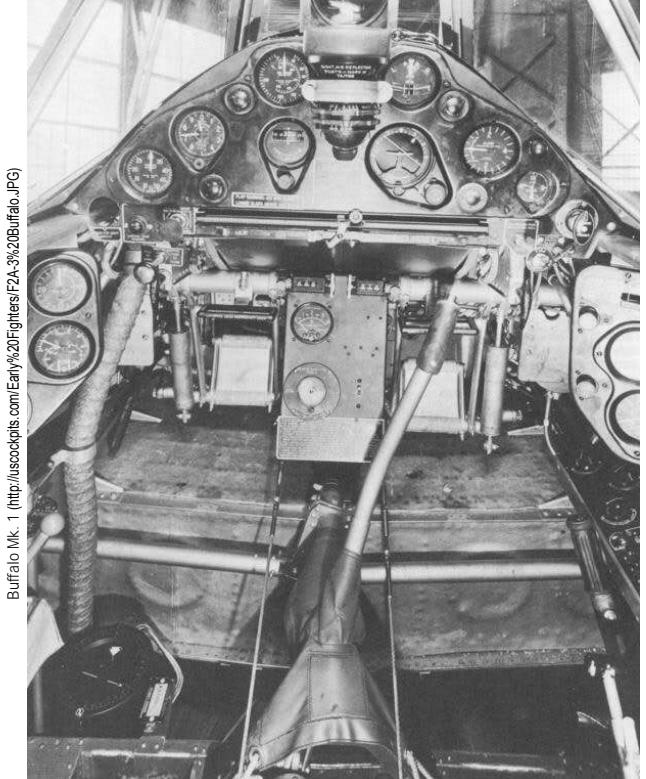


# Brewster Mk. I Buffalo

British Commonwealth variant



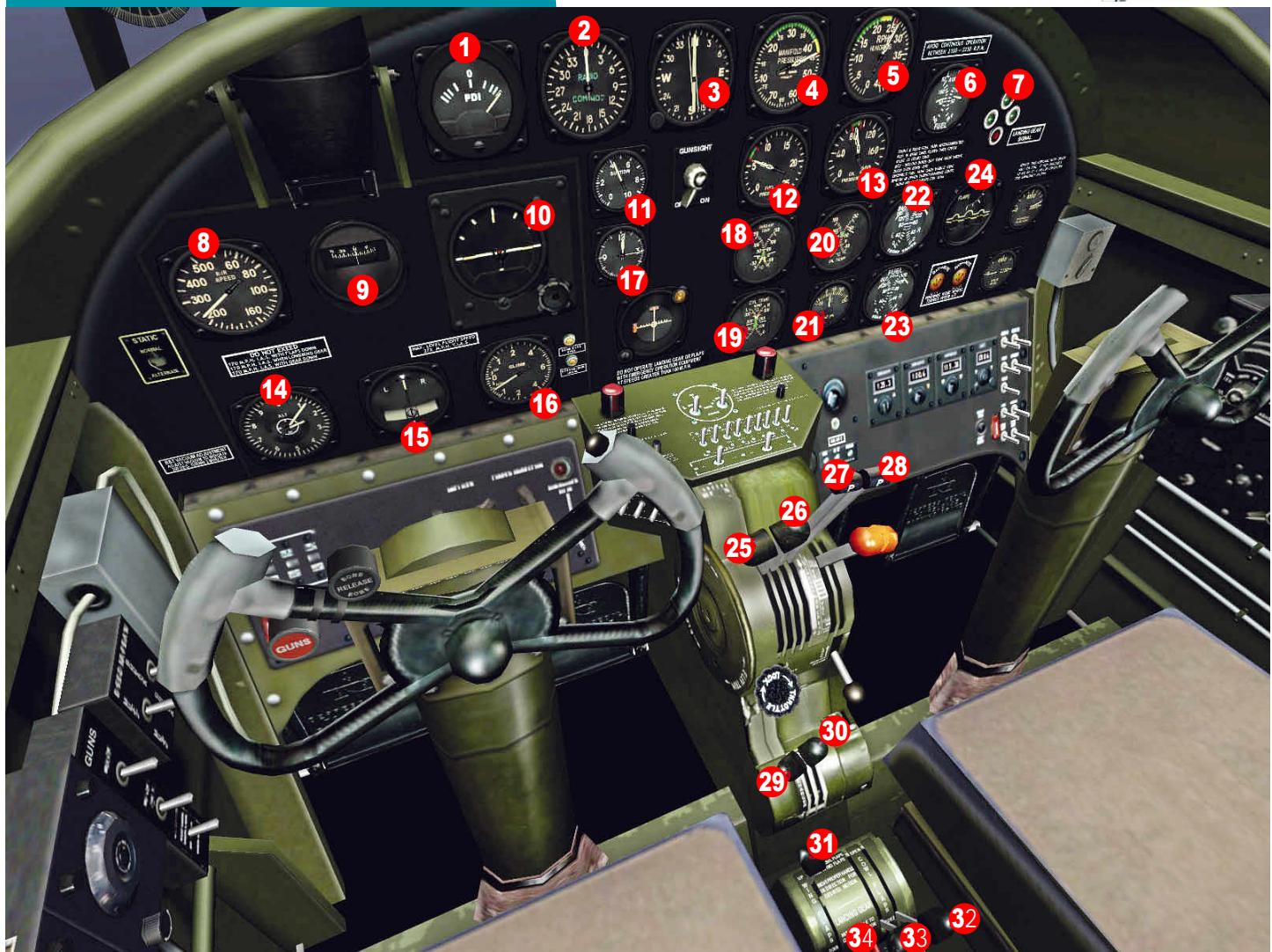
- 1. Airspeed indicator**
- 2. Turn and bank indicator**
- 3. Altimeter**
- 4. Directional gyro**
- 5. Artificial horizon**
- 6. Rate-of-climb indicator**
- 7. Manifold pressure gage**
- 8. Clock**
- 9. Propeller pitch lever**
- 10. Landing gear position indicator**
- 11. Left fuselage MG ammunition counter**
- 12. Cylinder head temperature gage**
- 13. Right fuselage MG ammunition counter**
- 14. Flaps position indicator**
- 15. Engine starter**
- 16. Tachometer**
- 17. Free air temperature gage**
- 18. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 19. Engine ignition switch**
- 20. Throttle**
- 21. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 22. Supercharger lever: rear position - stage 1  
front position - stage 2**
- 23. Fuel gage (left tank)**
- 24. Fuel gage (right tank)**
- 25. Hydraulic pressure gage**
- 26. Landing gear lever**
- 27. Flaps lever**
- 28. Tail wheel lock lever (not visible)**



Buffalo Mk. I (<http://scococks.com/Early%20Fighters/FA-3%20Buffalo.JPG>)



# North American B-25J Mitchell



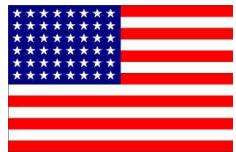
- 1. Pilot's Direction Indicator
- 2. Radio compass
- 3. Remote reading compass
- 4. Manifold pressure gage for left/right engine
- 5. Tachometer for left/right engine
- 6. Fuel gage (auxiliary tank)
- 7. Landing gear position indicator: green-down  
red-in transition  
no light-up

- 8. Airspeed indicator
- 9. Directional gyro
- 10. Artificial horizon
- 11. Suction gage
- 12. Fuel pressure gage for left/right engine
- 13. Oil pressure gage for left/right engine
- 14. Altimeter
- 15. Turn and bank indicator
- 16. Rate-of-climb indicator
- 17. Clock
- 18. Carburetor air temperature gage for left/right engine
- 19. Cylinder head temperature gage for left/right engine
- 20. Oil temperature gage for left/right engine
- 21. Free air temperature gage
- 22. Fuel gage (front tanks)
- 23. Fuel gage (rear tanks)
- 24. Flaps and landing gear position indicator
- 25. Left engine throttle
- 26. Right engine throttle
- 27. Left side propeller pitch lever
- 28. Right side propeller pitch lever
- 29. Left engine supercharger lever: down position - stage 1  
up position - stage 2
- 30. Right engine supercharger lever: down position - stage 1  
up position - stage 2



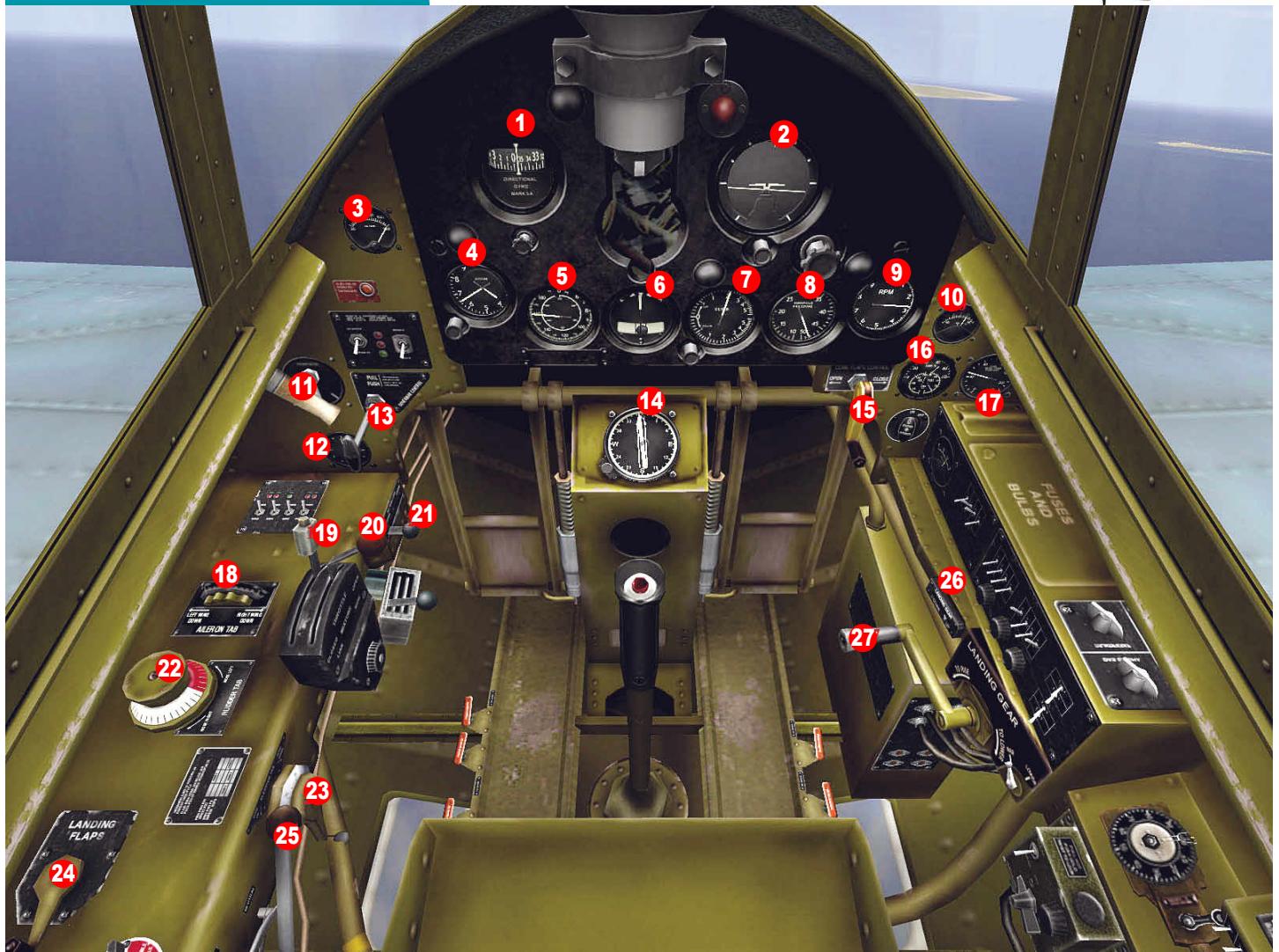
B-25J (<http://uscockpits.com/Early%20Bombers/B-25J%20Mitchell.jpg>)

- 31. Flaps lever
- 32. Right engine radiator lever: rear position - closed  
front position - open
- 33. Left engine radiator lever: rear position - closed  
front position - open
- 34. Landing gear lever



# Grumman F4F Wildcat

F4F-3 / F4F-4 / General Motors FM-2



1. Directional gyro
2. Artificial horizon
3. Engine oil temperature gage
4. Altimeter
5. Airspeed indicator
6. Turn and bank indicator
7. Rate-of-climb indicator
8. Manifold pressure gage
9. Tachometer
10. Outside temperature gage
11. Arrester hook lever
12. Clock
13. Propeller pitch lever
14. Remote reading compass
15. Radiator handle
16. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
17. Fuel gage
18. Aileron trim wheel
19. Throttle
20. Mixture lever
21. Tail wheel lock lever: front position - locked  
rear position - unlocked
22. Rudder trim wheel
23. Elevator trim lever
24. Flaps lever
25. Supercharger lever: front position - stage 1  
middle position - stage 2  
rear position - stage 3
26. Landing gear position indicator
27. Landing gear handle



F4F ([www.warbirdresourcegroup.org/NARG/wildcat.html](http://www.warbirdresourcegroup.org/NARG/wildcat.html))



# Chance Vought F4U Corsair

1A/1C/1D/Corsair Mk. I/Mk. II/Mk. IV



**1. Water injection (ADI) warning light**

**2. Stall warning light**

**3. Altimeter**

**4. Directional gyro**

**5. Remote reading compass**

**6. Artificial horizon**

**7. Clock**

**8. Oil temperature gage**

**9. Tachometer**

**10. Manifold pressure gage**

**11. Airspeed indicator**

**12. Turn and bank indicator**

**13. Rate-of-climb indicator**

**14. Cylinder head temperature gage**

**15. Oil pressure gage**

**16. Fuel pressure gage**

**17. Fuel gage**

**18. Hydraulic pressure gage**

**19. Voltmeter**

**20. Fuel tank pressure gage**

**21. Cooling flaps levers**

**22. Flaps lever**

**23. Landing gear / Dive brake position indicator**

**24. Throttle**

**25. Mixture lever**

**26. Supercharger lever**

**27. Landing gear / Dive brake lever**

**28. Propeller pitch lever**

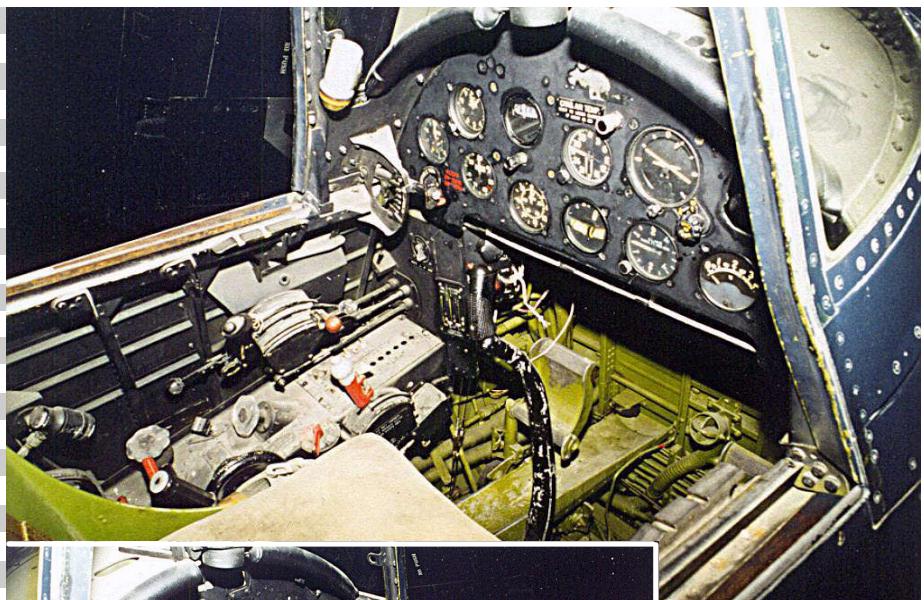
**29. Aileron trim wheel**

**30. Elevator trim wheel**

**31. Rudder trim wheel**

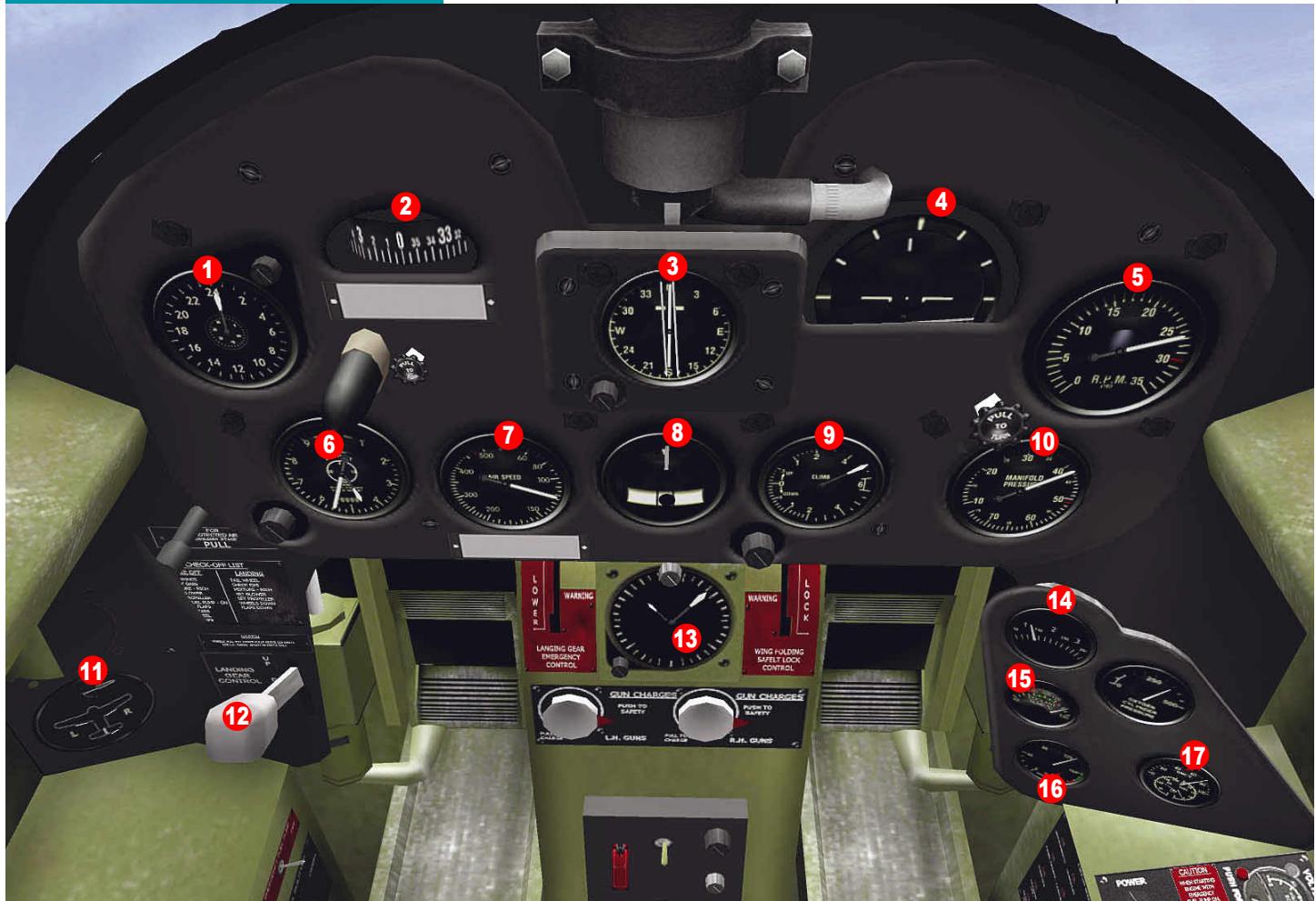
**32. Wing fold lever**

**33. Arrester hook lever**

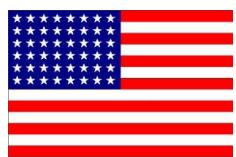
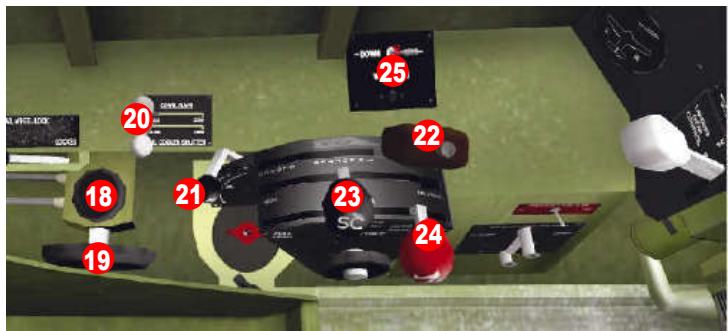


# Grumman F6F Hellcat

F6F-3 late / F6F-5



- 1. Clock**
- 2. Directional gyro**
- 3. Remote reading compass**
- 4. Artificial horizon**
- 5. Tachometer**
- 6. Altimeter**
- 7. Airspeed indicator**
- 8. Turn and bank indicator**
- 9. Rate-of-climb indicator**
- 10. Manifold pressure gage**
- 11. Flaps and landing gear position indicator**
- 12. Landing gear lever**
- 13. Ammunition counter**
- 14. Fuel gage**
- 15. Engine temperature gage**
- 16. Oil-in temperature gage**
- 17. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 18. Rudder trim wheel**
- 19. Elevator trim wheel**
- 20. Radiator levers**
- 21. Propeller pitch lever**
- 22. Throttle**
- 23. Supercharger lever: front position - stage 1  
middle position - stage 2  
rear position - stage 3**
- 24. Mixture lever: rear position - 100%  
front position - 120%**
- 25. Flaps switch**



# Lockheed P-38 Lightning

J / L / L Late



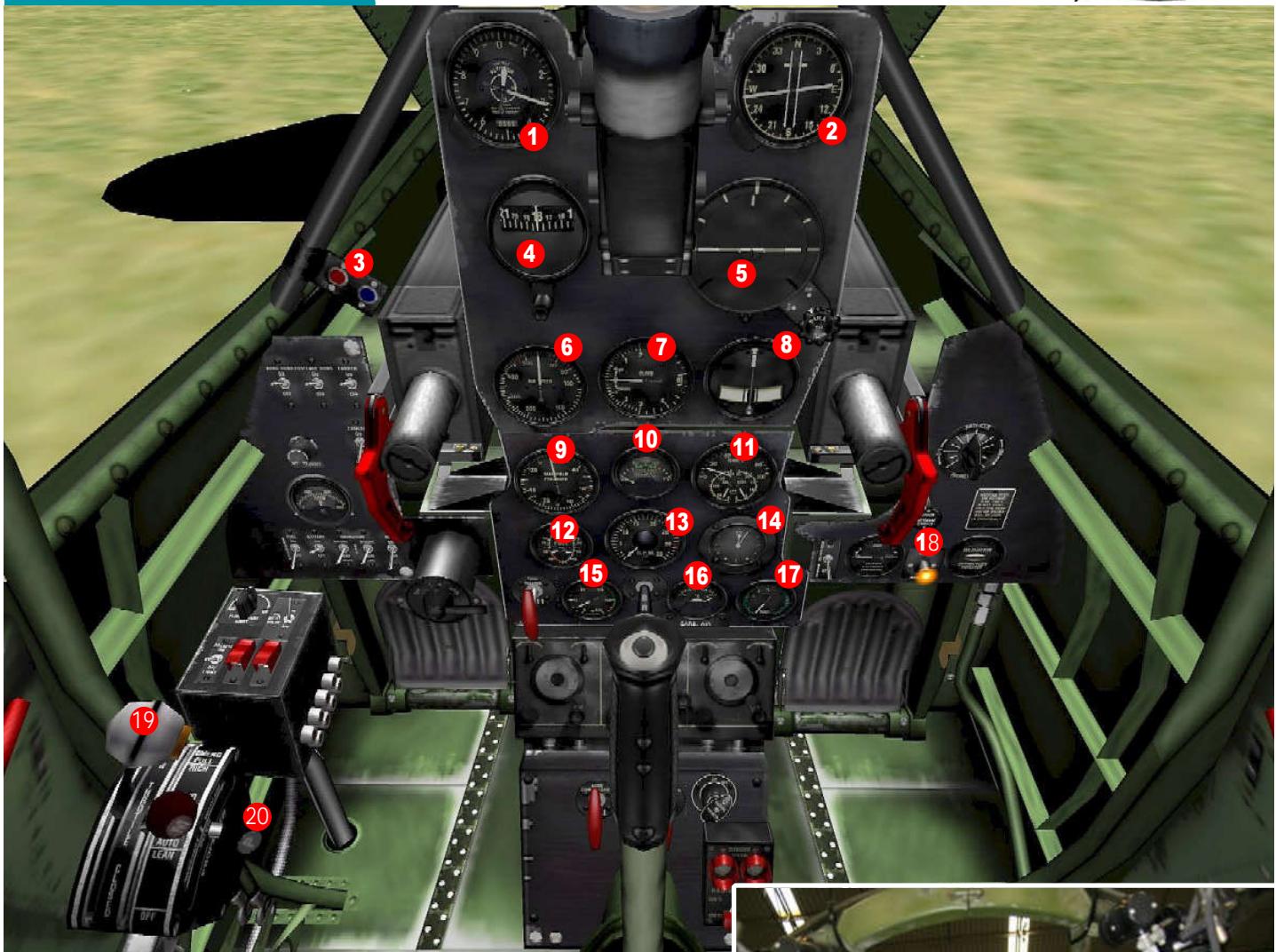
- 1. Clock**
- 2. Remote reading compass**
- 3. Directional gyro**
- 4. Artificial horizon**
- 5. Manifold pressure gage for left & right engine**
- 6. Tachometer for left & right engine**
- 7. Coolant temperature gage for left & right engine**
- 8. Fuel gage (reserve front tank)**
- 9. Altimeter**
- 10. Airspeed indicator**
- 11. Turn and bank indicator**
- 12. Rate-of-climb indicator**
- 13. Left engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 14. Right engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 15. Carburetor air temperature gage for left and right engine**
- 16. Fuel gage (main rear tank)**
- 17. Hydraulic pressure gage**
- 18. Landing gear position indicator: green - down  
no light - in transition  
red - up**
- 19. Left engine ammeter**
- 20. Right engine ammeter**
- 21. Flaps lever**
- 22. Left engine propeller pitch lever**
- 23. Right engine propeller pitch lever**
- 24. Left engine throttle**
- 25. Right engine throttle**
- 26. Elevator trim wheel**
- 27. Landing gear lever**

P-38 ([http://www.flickr.com/photos/jan\\_pics/3412045730/](http://www.flickr.com/photos/jan_pics/3412045730/))



# Bell P-39 Airacobra

D-1 / D-2 / N-1 / Q-1 / Q-10 / P-400



- 1. Altimeter
- 2. Remote reading compass
- 3. Landing gear warning light (throttle <= 30%)
- 4. Directional gyro
- 5. Artificial horizon
- 6. Airspeed indicator
- 7. Rate-of-climb indicator
- 8. Turn and bank indicator
- 9. Manifold pressure gage
- 10. Coolant temperature gage
- 11. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 12. Fuel gage
- 13. Tachometer
- 14. Clock
- 15. Gear box oil pressure gage
- 16. Carburetor air temperature gage
- 17. Suction gage
- 18. Fuel pressure indicator light
- 19. Throttle
- 20. Propeller pitch lever



P-39Q (<http://www.fightfactory.com/airplane-gallery/bell-p-39-airacobra.jpg>)

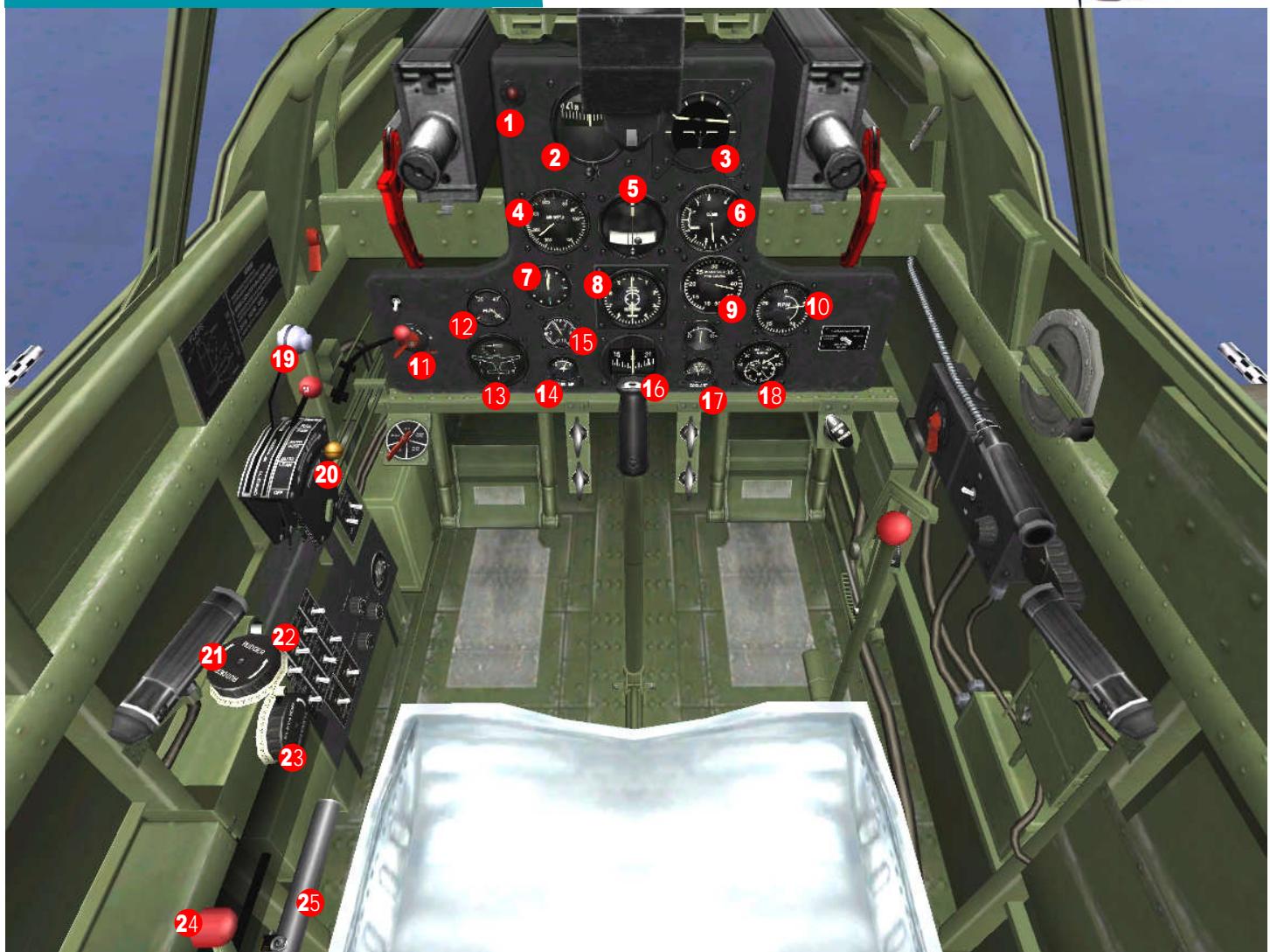


P-39Q (<http://www.fightfactory.com/airplane-gallery/bell-p-39-airacobra.jpg>)



# Curtiss P-40 Hawk / Tomahawk

B/C/Hawk 81A-2/Tomahawk Mk. IIa/Mk. IIb



- 1.** Coolant temperature **warning light**
- 2.** Directional gyro
- 3.** **Artificial horizon**
- 4.** **Airspeed indicator**
- 5.** **Turn and bank indicator**
- 6.** Rate-of-climb indicator
- 7.** **Clock**
- 8.** **Altimeter**
- 9.** **Manifold pressure gage**
- 10.** Tachometer
- 11.** Engine ignition switch
- 12.** Fuel gage
- 13.** Flaps and landing gear position indicator
- 14.** Carburetor air temperature gage
- 15.** Suction gage
- 16.** Magnetic compass
- 17.** Coolant temperature gage
- 18.** Engine gage: **oil temperature** (top)  
**oil pressure** (left)  
**fuel pressure** (right)
- 19.** Throttle
- 20.** Propeller pitch lever
- 21.** Rudder trim wheel
- 22.** Aileron trim electrical switch
- 23.** Elevator trim wheel
- 24.** Flaps lever
- 25.** Landing gear lever



P-40B (<http://lend-lease.airforce.ru/english/index.htm>)



# Curtiss P-40 Warhawk

## E/E Field mod. / M



**1. Low fuel warning light**

**2. Directional gyro**

**3. Artificial horizon**

**4. Coolant temperature warning light**

**5. Landing gear failure warning light**

**6. Turn and bank indicator**

**7. Airspeed indicator**

**8. Altimeter**

**9. Rate-of-climb indicator**

**10. Manifold pressure gage**

**11. Carburetor air temperature gage**

**12. Coolant temperature gage**

**13. Flaps and landing gear position indicator**

**14. Clock**

**15. Tachometer**

**16. Magnetic compass**

**17. Oil pressure gage**

**18. Engine gage: oil temperature (top)**

**oil pressure (left)**

**fuel pressure (right)**

**19. Position lights switch**

**20. Instrument light switch**

**21. Throttle**

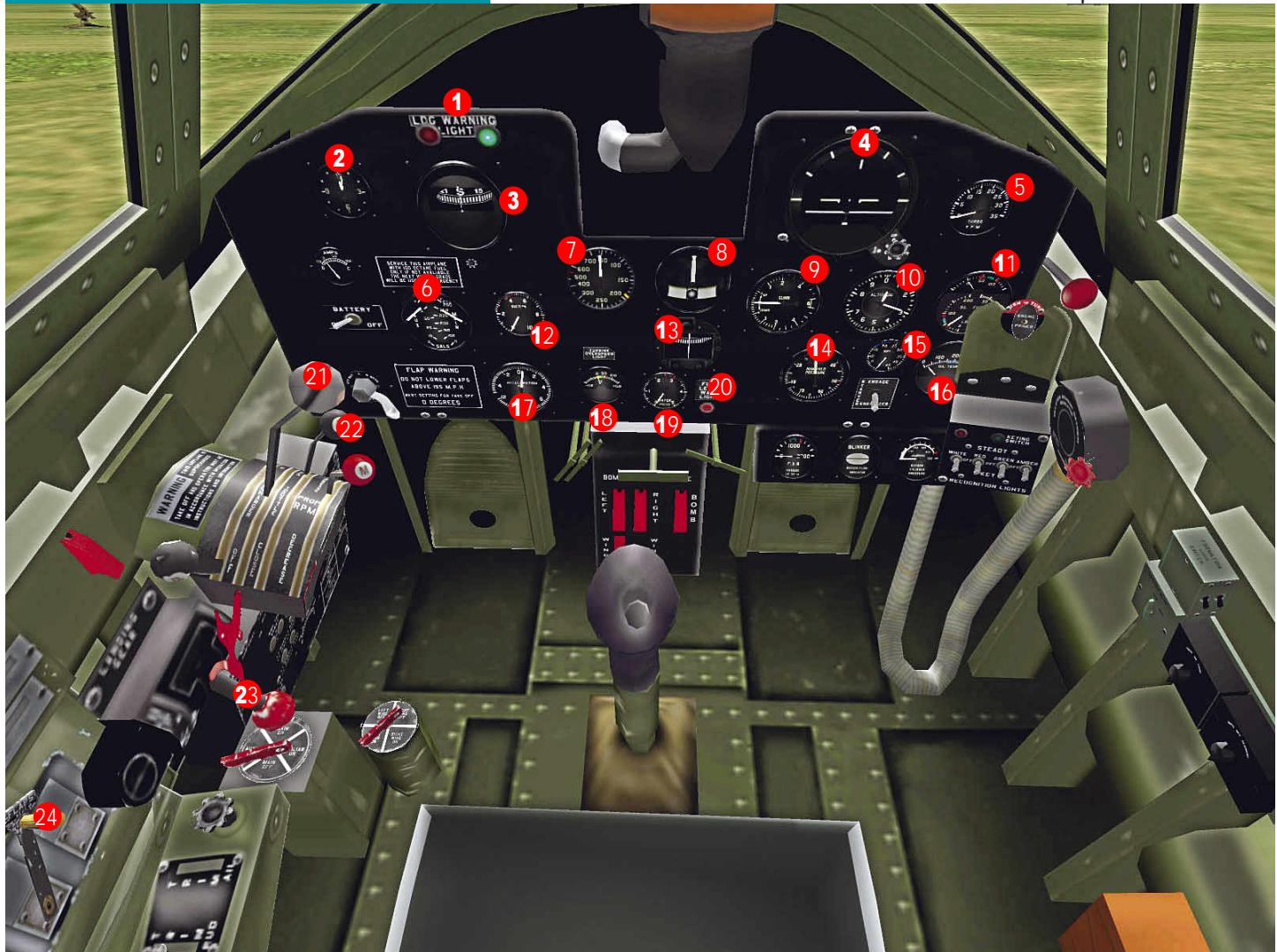
**22. Propeller pitch lever**

P-40E (<http://uscockpits.com/Early%20Fighters/P-40%20Warhawk.JPG>)



P-40 Warhawk (<http://uscockpits.com>)





**1.** Landing gear position indicator: green - down  
no light - in transition  
red - up

**2.** Clock

**3.** Directional gyro

**4.** Artificial horizon

**5.** Turbo-supercharger tachometer

**6.** Fuel gage

**7.** Airspeed indicator

**8.** Turn and bank indicator

**9.** Rate-of-climb indicator

**10.** Altimeter

**11.** Engine gage: oil temperature (top)

oil pressure (left)

fuel pressure (right)

**12.** Suction gage

**13.** Magnetic compass

**14.** Manifold pressure gage

**15.** Engine tachometer

**16.** Cylinder head temperature gage

**17.** Accelerometer

**18.** Carburetor air temperature gage

**19.** Water (ADI) pressure gage

**20.** Low fuel warning light

**21.** Throttle

**22.** Propeller pitch lever

**23.** Landing gear lever

**24.** Flaps lever



P47D (<http://genso.8online.it/cockp.htm>)



# Republic P-47 Thunderbolt

D / D-27



**1.** Landing gear position indicator: green - down  
no light - in transition  
red - up

**2. Clock**

**3. Directional gyro**

**4. Artificial horizon**

**5. Carburetor air temperature gage**

**6. Airspeed indicator**

**7. Altimeter**

**8. Turn and bank indicator**

**9. Rate-of-climb indicator**

**10. Magnetic compass**

**11. Manifold pressure gage**

**12. Engine tachometer**

**13. Engine gage: oil temperature (top)**

**oil pressure (left)**

**fuel pressure (right)**

**14. Turbo-supercharger tachometer**

**15. Accelerometer**

**16. Suction gage**

**17. Water (ADI) pressure gage**

**18. Low fuel warning light**

**19. Fuel gage**

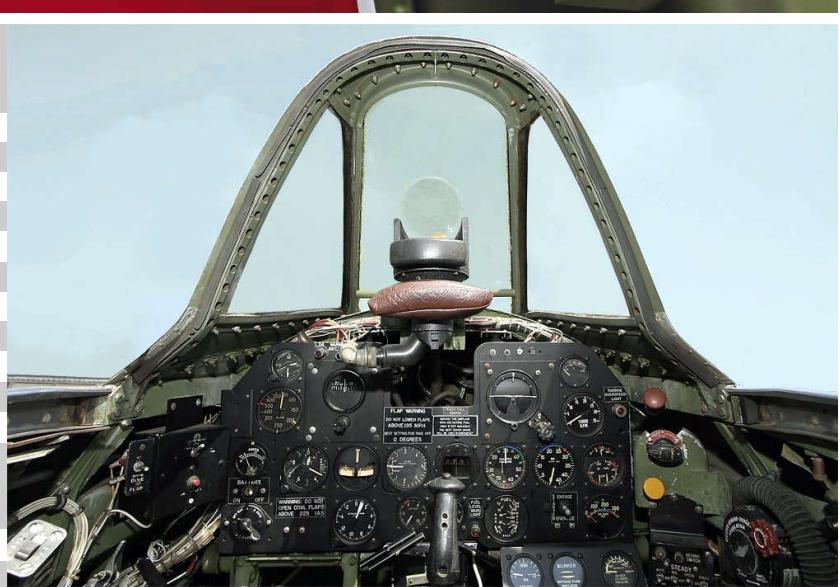
**20. Cylinder head temperature gage**

**21. Propeller pitch lever**

**22. Throttle**

**23. Landing gear lever**

**24. Flaps lever**



P-47D (<http://www.ww2aircraft.net>)



# North American P-51 Mustang

B-NA / C-NT / Mustang Mk. III



**1. Remote reading compass**

**2. Clock**

**3. Suction gage**

**4. Manifold pressure gage**

**5. Altimeter**

**6. Directional gyro**

**7. Artificial horizon**

**8. Tachometer**

**9. Landing gear position indicator:** green - down  
no light - in transition  
red - up

**10. Airspeed indicator**

**11. Turn and bank indicator**

**12. Rate-of-climb indicator**

**13. Coolant temperature gage**

**14. Engine gage: oil temperature (top)**

oil pressure (left)

fuel pressure (right)

**15. Supercharger warning light**

**16. Throttle**

**17. Propeller pitch lever**

**18. Rudder trim wheel**

**19. Aileron trim wheel**

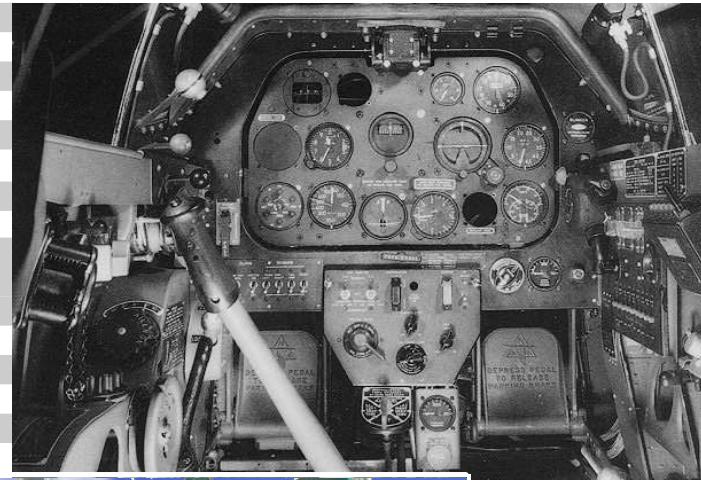
**20. Elevator trim wheel**

**21. Landing gear lever**

**22. Flaps lever**

**23 & 24. Left / Right fuel gage**

(3rd fuel gage at left hand side of headrest)



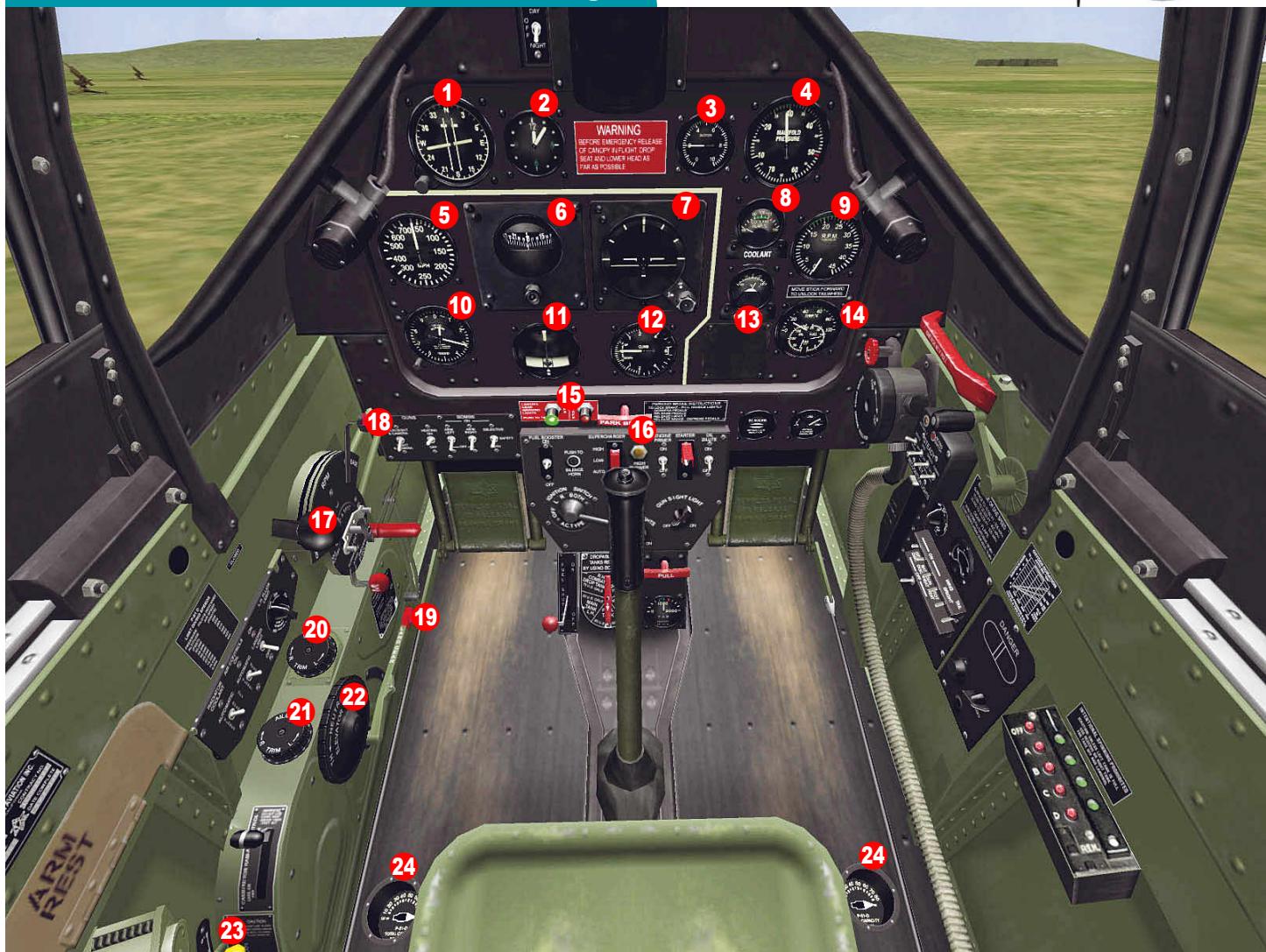
P-51B (<http://uscockpits.com/>)



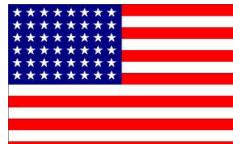
P-51C (<http://www.506thfightergroup.org/p51.asp>)



# North American P-51D-5NT Mustang



1. Remote reading compass
2. Clock
3. Suction gage
4. Manifold pressure gage
5. Airspeed indicator
6. Directional gyro
7. Artificial horizon
8. Coolant temperature gage
9. Tachometer
10. Altimeter
11. Turn and bank indicator
12. Rate-of-climb indicator
13. Carburetor air temperature gage
14. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
15. Landing gear position indicator: green - down  
no light - in transition  
red - up
16. Supercharger warning light
17. Throttle
18. Propeller pitch lever
19. Landing gear lever
20. Rudder trim wheel
21. Aileron trim wheel
22. Elevator trim wheel
23. Flaps lever
24. Fuel gage (3rd fuel gage at left hand side of headrest)



# North American P-51D-20NA Mustang



- 1. K-14 mode selector knob**
- 2. K-14 gunsight wingspan selector**
- 3. Remote reading compass**
- 4. Clock**
- 5. Suction gage**
- 6. Manifold pressure gage**
- 7. Airspeed indicator**
- 8. Directional gyro**
- 9. Artificial horizon**
- 10. Coolant temperature gage**
- 11. Tachometer**
- 12. Altimeter**
- 13. Turn and bank indicator**
- 14. Rate-of-climb indicator**
- 15. Carburetor air temperature gage**
- 16. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 17. Landing gear position indicator: green - down  
no light - in transition  
red - up**
- 18. Supercharger warning light**
- 19. Throttle**
- 20. Propeller pitch lever**
- 21. Rudder trim wheel**
- 22. Aileron trim wheel**
- 23. Elevator trim wheel**
- 24. Landing gear lever**
- 25. Flaps lever**
- 26. Fuel gage (3rd fuel gage at left hand side of headrest)**

P-51D-20NA (<http://untoldvalor.blogspot.com/2007/08/wwii-aircraft-view-from-cockpit.html>)



# Bell P-63C-5 Kingcobra



**1. Altimeter**

**2. Bank indicator**

**3. Remote reading compass**

**4. Directional gyro**

**5. Artificial horizon**

**6. Suction gage**

**7. Landing gear position indicator:** green - down  
no light - in transition  
red - up

**8. Landing gear switch**

**9. Airspeed indicator**

**10. Rate-of-climb indicator**

**11. Turn and bank indicator**

**12. Carburetor air temperature gage**

**13. Manifold pressure gage**

**14. Tachometer**

**15. Engine gage:** oil temperature (top)  
oil pressure (left)  
fuel pressure (right)

**16. Starter switch**

**17. Oil system pressure gage**

**18. Fuel gage**

**19. Clock**

**20. Gear box oil pressure gage**

**21. Coolant temperature gage**

**22. Position lights switches**

**23. Landing light switch**

**24. Cockpit light switch**

**25. Engine ignition switch**

**26. Propeller pitch lever**

**27. Throttle**

P-63 ([http://www.adventure.de/rend2002/ren02\\_p63cockpit.jpg](http://www.adventure.de/rend2002/ren02_p63cockpit.jpg))



# Douglas SBD Dauntless

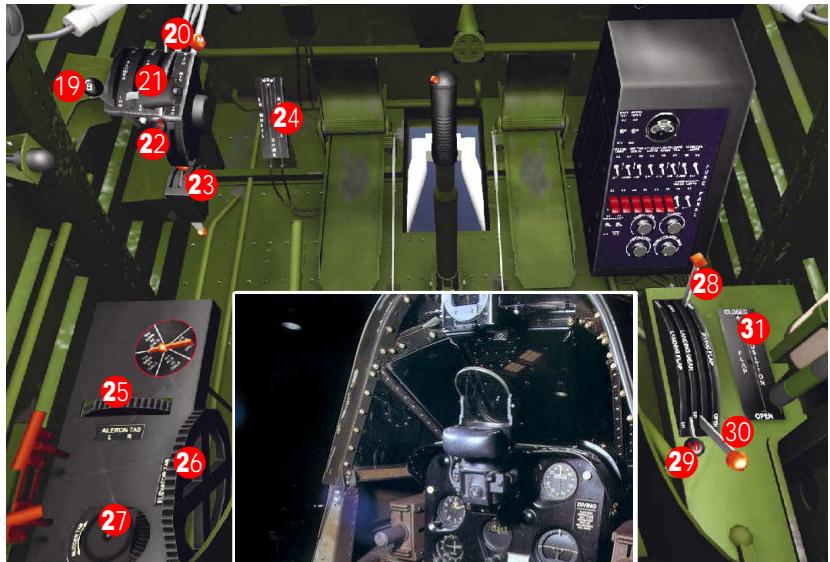
(-3 / -5)



- 1. Magnetic compass**
- 2. Tachometer**
- 3. Manifold pressure gage**
- 4. Altimeter**
- 5. Directional gyro**
- 6. Artificial horizon**
- 7. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**

- 8. Airspeed indicator**
- 9. Turn and bank indicator**
- 10. Rate-of-climb indicator**
- 11. Engine ignition switch**
- 12. Radiator lever**
- 13. Clock**
- 14. Cylinder head temperature gage**
- 15. Suction gage**
- 16. Oil temperaure gage**
- 17. Fuel gage**
- 18. Engine starter**
- 19. Supercharger lever: rear position - stage 1  
front position - stage 2**

- 20. Mixture lever**
- 21. Throttle**
- 22. Propeller pitch lever**
- 23. Bomb release lever**
- 24. Landing gear position indicator**
- 25. Aileron trim wheel**
- 26. Elevator trim wheel**
- 27. Rudder trim wheel**
- 28. Diving flaps lever**
- 29. Flaps lever**
- 30. Landing gear lever**
- 31. Flaps position indicator**



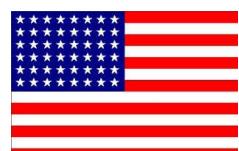
SBD-5 (<http://www.wwiivehicles.com/usa/default.asp>)

SBD-3 (<http://uscockpits.com>)

# Lockheed YP-80 Shooting Star



- 1. K-14 gunsight wingspan selector**
- 2. Landing gear position indicator: green - down  
no light - transition  
red - up**
- 3. Airspeed indicator**
- 4. Directional gyro**
- 5. Artificial horizon**
- 6. Tachometer**
- 7. Altimeter**
- 8. Turn and bank indicator**
- 9. Rate-of-climb indicator**
- 10. Remote reading compass**
- 11. Burner ring fuel pressure gage**
- 12. Tailpipe temperature gage**
- 13. Emergency fuel pump indicator lights (total fuel < 50 %)**
- 14. Elevator trim neutral indicator light**
- 15. Clock**
- 16. Fuselage (main) tank fuel gage**
- 17. Fuselage tank low fuel warning light (total fuel reserve ± 20 %)**
- 18. Engine fire warning light**
- 19. Rear bearing temperature gage**
- 20. Engine oil pressure gage**
- 21. Accelerometer**
- 22. Instrument pressure gage**
- 23. Throttle**
- 24. Engine shut-off lever**
- 25. Landing gear lever**



# UNION OF SOVIET SOCIALIST REPUBLICS



# Bereznyak-Isayev BI-1



**1. Airspeed indicator**

**2. Ammeter**

**3. Altimeter**

**4. Turn and bank indicator**

**5. Oil & air pressure gage**

**6. Engine Status 1**

**7. Engine Status 2**

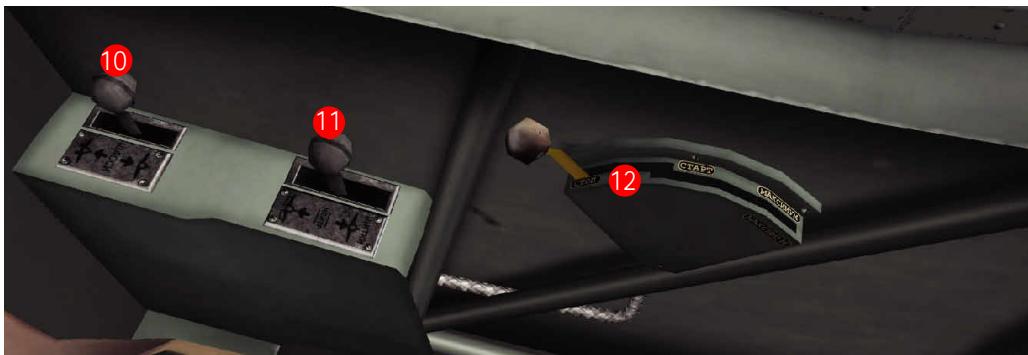
**8. Landing gear position indicator: green - down  
no light - transition  
red - up**

**9. Fuel gage**

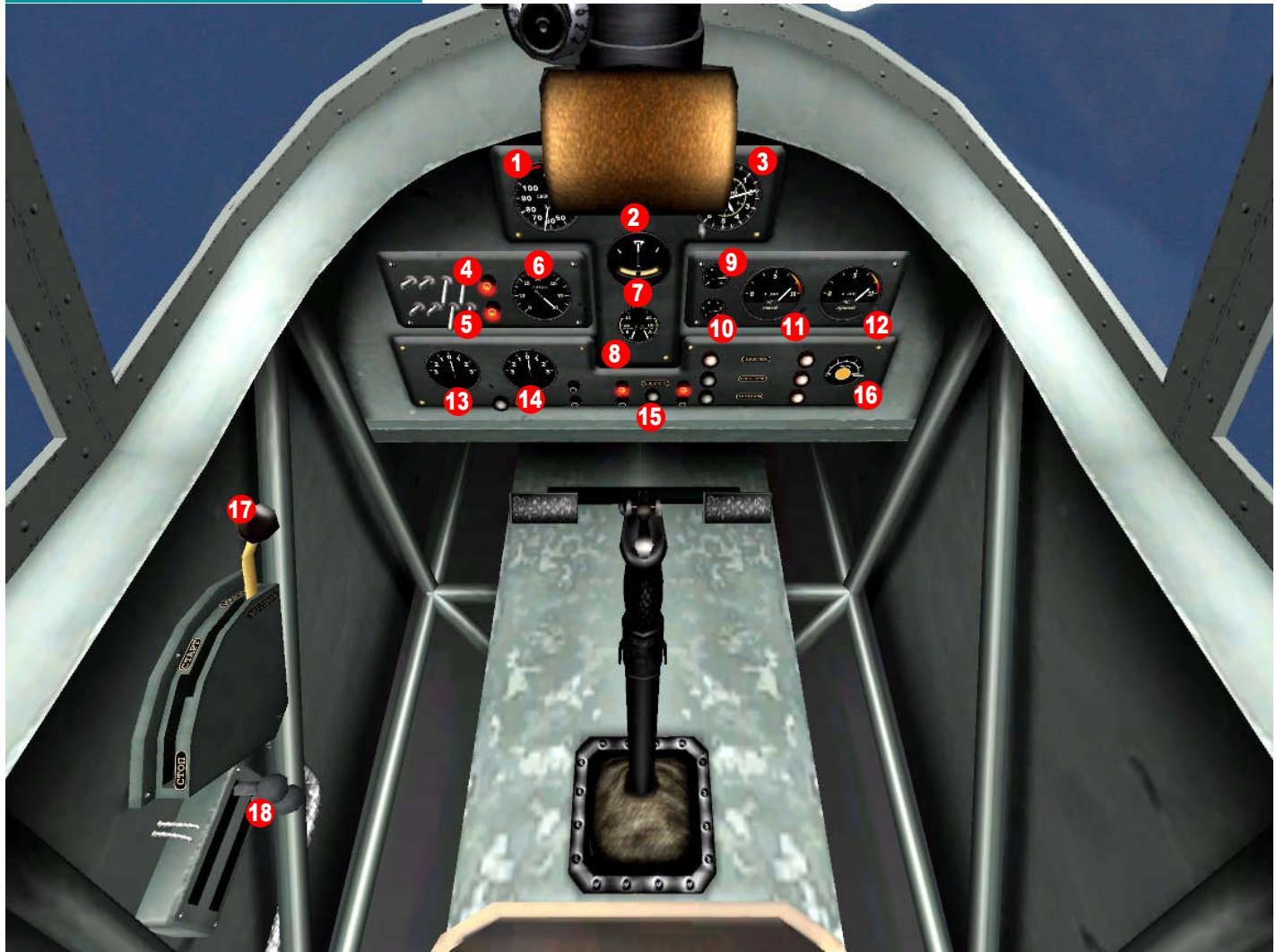
**10. Landing gear lever**

**11. Flaps lever**

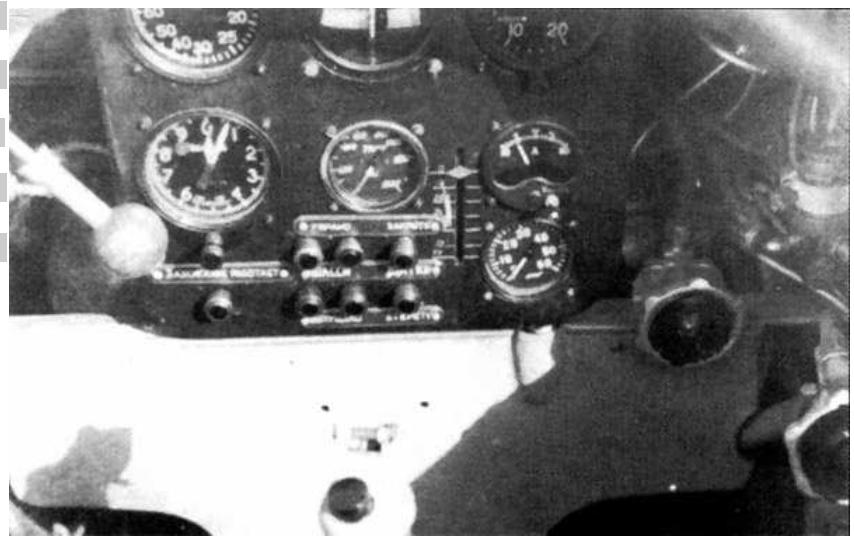
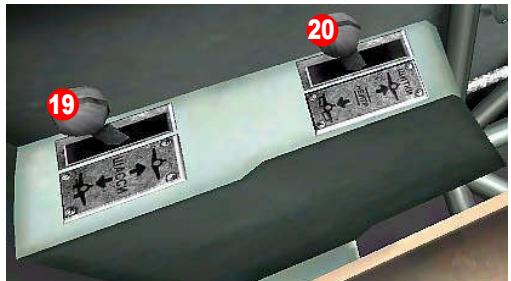
**12. Throttle**



# Bereznyak-Isayev BI-6



- 1. Airspeed indicator
- 2. Ammeter
- 3. Altimeter**
- 4. Engine-on light (left wingtip rocket)
- 5. Engine-on light (right wingtip rocket)
- 6. Fuel gage (wingtip rockets)
- 7. Turn and bank indicator**
- 8. Oil & air pressure gage**
- 9. Fuel pressure gage (left wingtip rocket)
- 10. Fuel pressure gage (right wingtip rocket)
- 11. Exhaust temperature gage (left wingtip rocket)
- 12. Exhaust temperature gage (right wingtip rocket)
- 13. Engine Status 1
- 14. Engine Status 2
- 15. Landing gear position indicator
- 16. Fuel gage**
- 17. Throttle
- 18. Wingtip rockets throttle
- 19. Landing gear lever
- 20. Flaps lever



BI-6 (<http://www.airwar.ru/aww2.html>)



# Ilyushin IL-2 Sturmovik

1st / 2nd / 3rd series / field mod



- 1. Landing gear position indicator: up - gear down  
down - gear up
- 2. Airspeed indicator
- 3. Magnetic compass
- 4. Variometer
- 5. Clock
- 6. Manifold pressure gage
- 7. Altimeter
- 8. Turn and bank indicator
- 9. Artificial horizon
- 10. Landing gear position indicator: green - down  
no light - transition  
red - up
- 11. Coolant temperature gage
- 12. Tachometer
- 13. Engine oil-in temperature gage
- 14. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 15. Fuel gage
- 16. Throttle
- 17. Flaps lever
- 18. Landing gear lever
- 19. Brake lever



# Ilyushin IL-2 Sturmovik

M first-later series / Type 3 / Type 3M / I / T



**1.** Landing gear position indicator: up - gear down  
down - gear up

**2.** Airspeed indicator

**3.** Magnetic compass

**4.** Variometer

**5.** Clock

**6.** Manifold pressure gage

**7.** Altimeter

**8.** Turn and bank indicator

**9.** Artificial horizon

**10.** Landing gear position indicator: green - down  
no light - transition  
red - up

**11.** Coolant temperature gage

**12.** Tachometer

**13.** Engine oil-in temperature gage

**14.** Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)

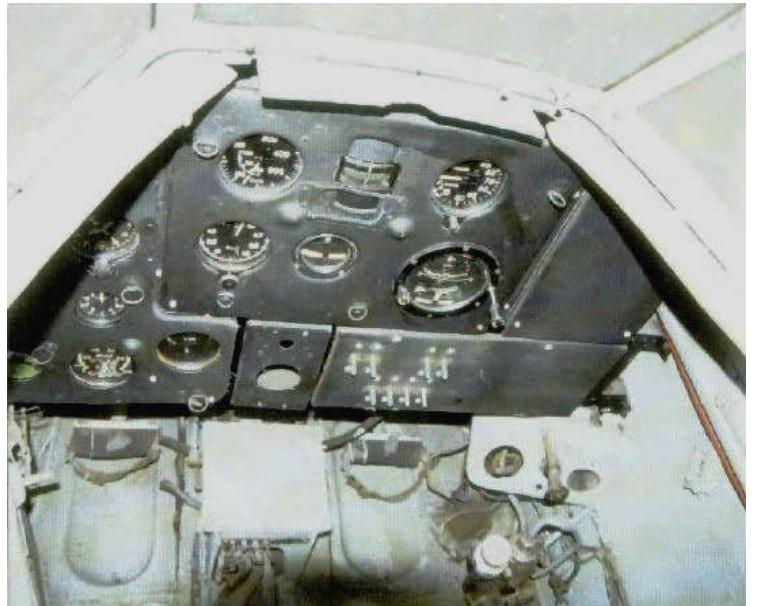
**15.** Fuel gage

**16.** Throttle

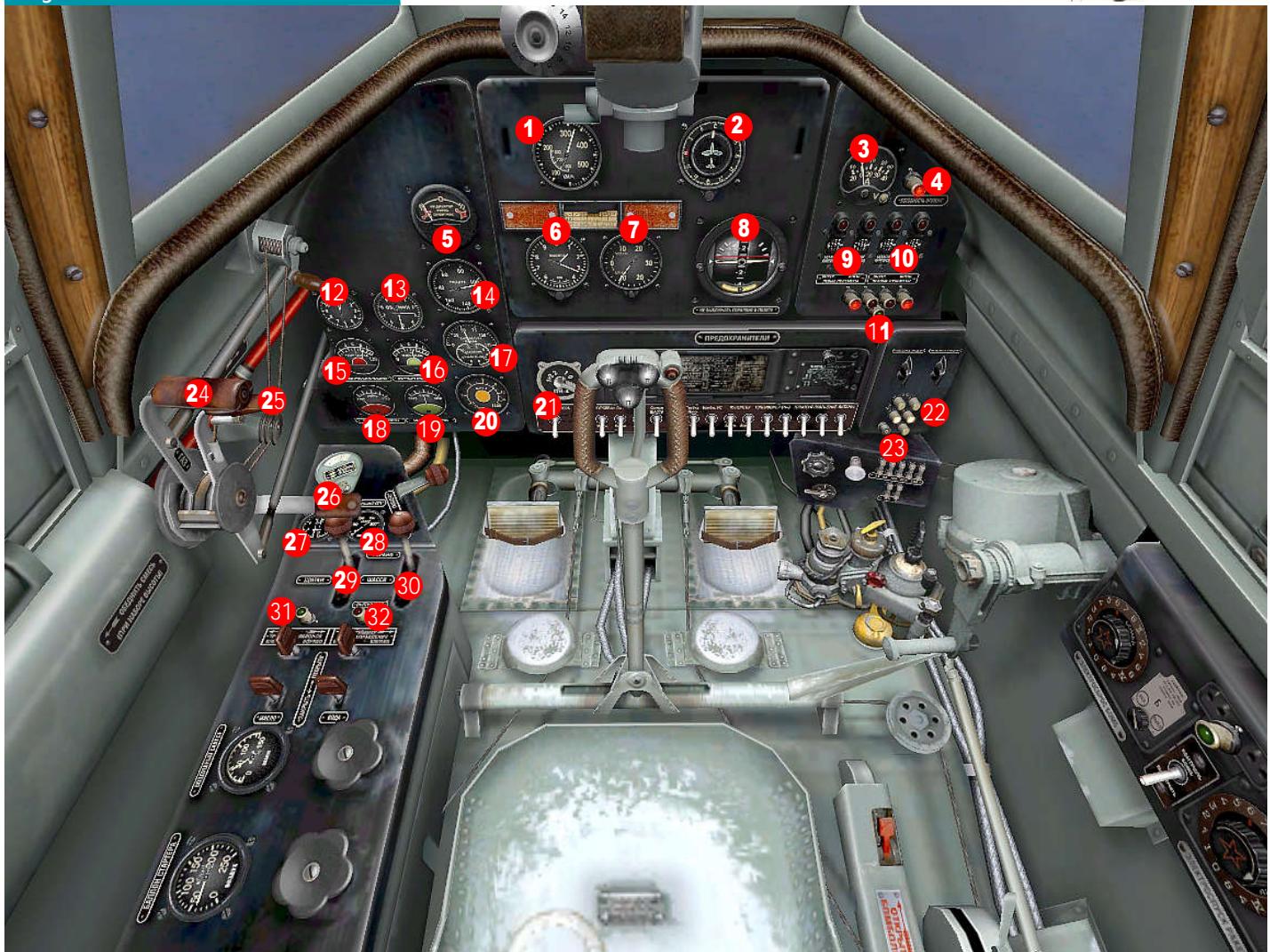
**17.** Flaps lever

**18.** Landing gear lever

**19.** Brake lever



# Ilyushin IL-10 Beast



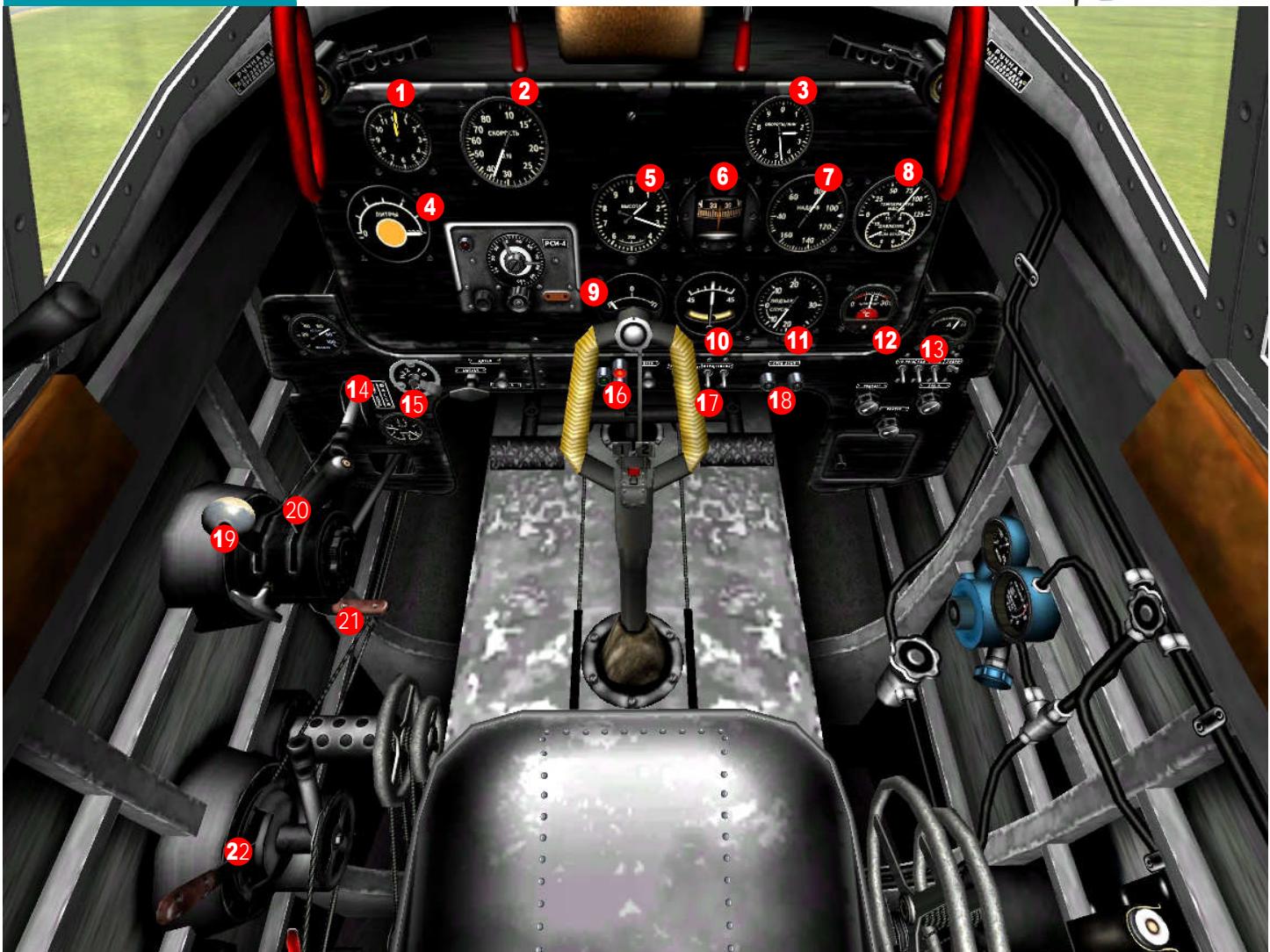
1. Airspeed indicator
2. Magnetic compass
3. Ammeter
4. Guns charged indicator light
5. Pilot's Direction Indicator
6. Altimeter
7. Variometer
8. Artificial horizon / turn and bank indicator
9. Left MG & cannon ammunition counters & warning lights
10. Right MG & cannon ammunition counters & warning lights
11. Landing gear position indicator
12. Clock
13. Tachometer
14. Manifold pressure gage
15. Engine oil-in temperature gage
16. Coolant temperature gage
17. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
18. Oil radiator position indicator
19. Water radiator position indicator
20. Fuel gage
21. Engine ignition switch
22. External ordnance status: upper lights - belly bombs  
(switched on - no bomb) lower lights - wing bombs
23. Bomb bay opening door warning light
24. Throttle
25. Mixture lever
26. Propeller pitch lever
27. Brake pressure gage
28. Compressed air pressure gage
29. Flaps lever
30. Landing gear lever
31. Flaps full open indicator light
32. Landing gear lever down indicator light



IL-10 ([http://www.il10.cz/index\\_ENG.htm](http://www.il10.cz/index_ENG.htm))



# Lavochkin La-5



1. Clock

2. Airspeed indicator

3. Tachometer

4. Fuel gage

5. Altimeter

6. Magnetic compass

7. Manifold pressure gage

8. Engine gage: oil **temperature** (top)

oil **pressure** (left)

fuel **pressure** (right)

9. Pilot's Direction Indicator

10. Turn and bank indicator

11. Variometer

12. Cylinder head **temperature gage**

13. Position lights switch

14. Landing gear lever

15. Engine ignition switch

16. Landing gear **position indicator**: green - down  
no light - in transition  
red - up

17. Landing light switch

18. External ordnance status lights

19. Mixture lever: rear position - leaner mixture  
front position - richer mixture

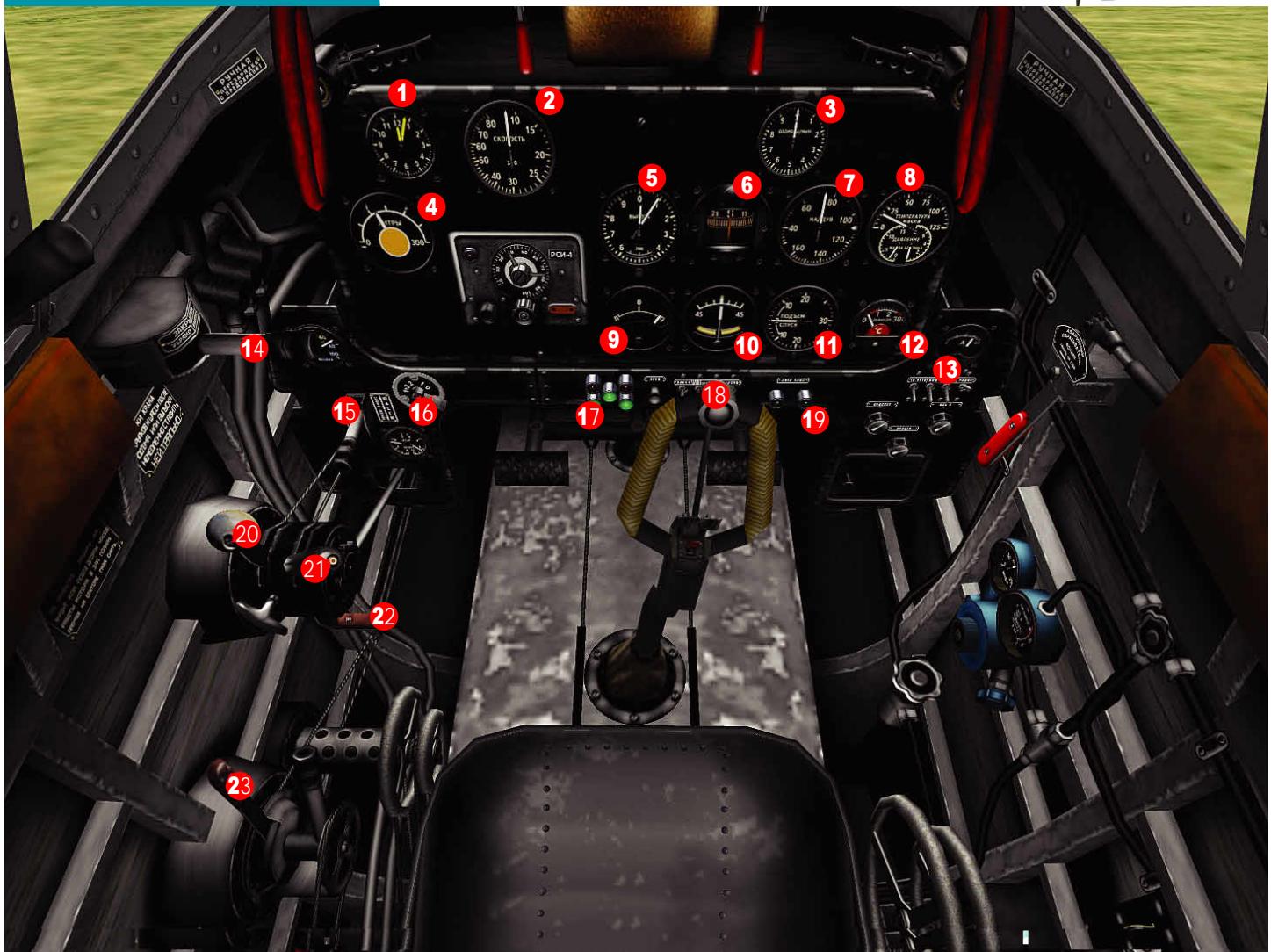
20. Throttle

21. Propeller pitch lever

22. Supercharger lever: rear position - stage 1  
front position - stage 2



# Lavochkin La-5F / FN



**1. Clock**

**2. Airspeed indicator**

**3. Tachometer**

**4. Fuel gage**

**5. Altimeter**

**6. Magnetic compass**

**7. Manifold pressure gage**

**8. Engine gage: oil temperature (top)**

**oil pressure (left)**

**fuel pressure (right)**

**9. Pilot's Direction Indicator**

**10. Turn and bank indicator**

**11. Variometer**

**12. Cylinder head temperature gage**

**13. Position lights switch**

**14. Flaps lever**

**15. Landing gear lever**

**16. Engine ignition switch**

**17. Landing gear position indicator: green - down  
no light - in transition  
red - up**

**18. Landing light switch**

**19. External ordnance status lights**

**20. Mixture lever: rear position - leaner mixture  
front position - richer mixture**

**21. Throttle**

**22. Propeller pitch lever**

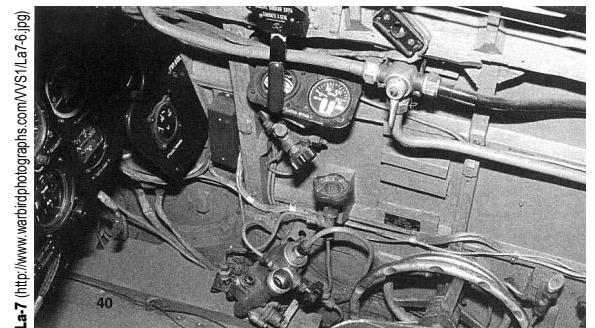
**23. Supercharger lever: rear position - stage 1  
front position - stage 2**



# Lavochkin La-7

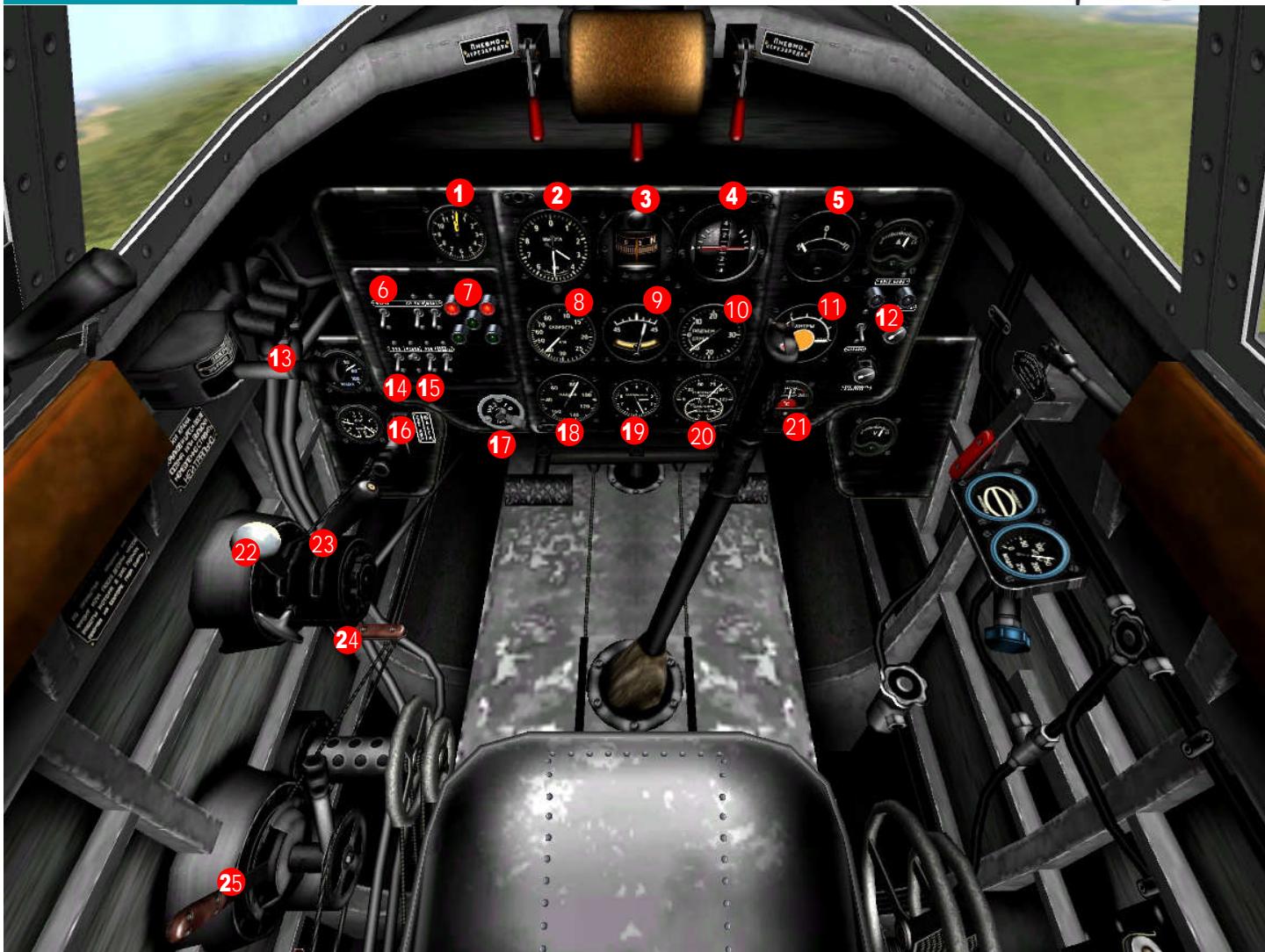


- 1. Clock**
- 2. Altimeter**
- 3. Magnetic compass**
- 4. Pilot's Direction Indicator**
- 5. Landing light switch**
- 6. Landing gear position indicator: green - down  
red - up**
- 7. Airspeed indicator**
- 8. Turn and bank indicator**
- 9. Variometer**
- 10. Fuel gage**
- 11. External ordnance status lights**
- 12. Flaps lever**
- 13. Instrument light switch**
- 14. Position lights switch**
- 15. Landing gear lever**
- 16. Engine ignition switch**
- 17. Manifold pressure gage**
- 18. Tachometer**
- 19. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 20. Cylinder head temperature gage**
- 21. Mixture lever: rear position - leaner mixture  
front position - richer mixture**
- 22. Throttle**
- 23. Propeller pitch lever**
- 24. Supercharger lever: rear position - stage 1  
front position - stage 2**



40





1. Clock

2. Altimeter

3. Magnetic compass

4. Artificial horizon

5. Pilot's Direction Indicator

6. Landing light switch

7. Landing gear **position indicator**: green - down  
red - up

8. Airspeed indicator

9. Turn and bank indicator

10. Variometer

11. Fuel gage

12. External ordnance status lights

13. Flaps lever

14. Instrument light switch

15. Position lights switch

16. Landing gear lever

17. Engine ignition switch

18. Manifold pressure gage

19. Tachometer

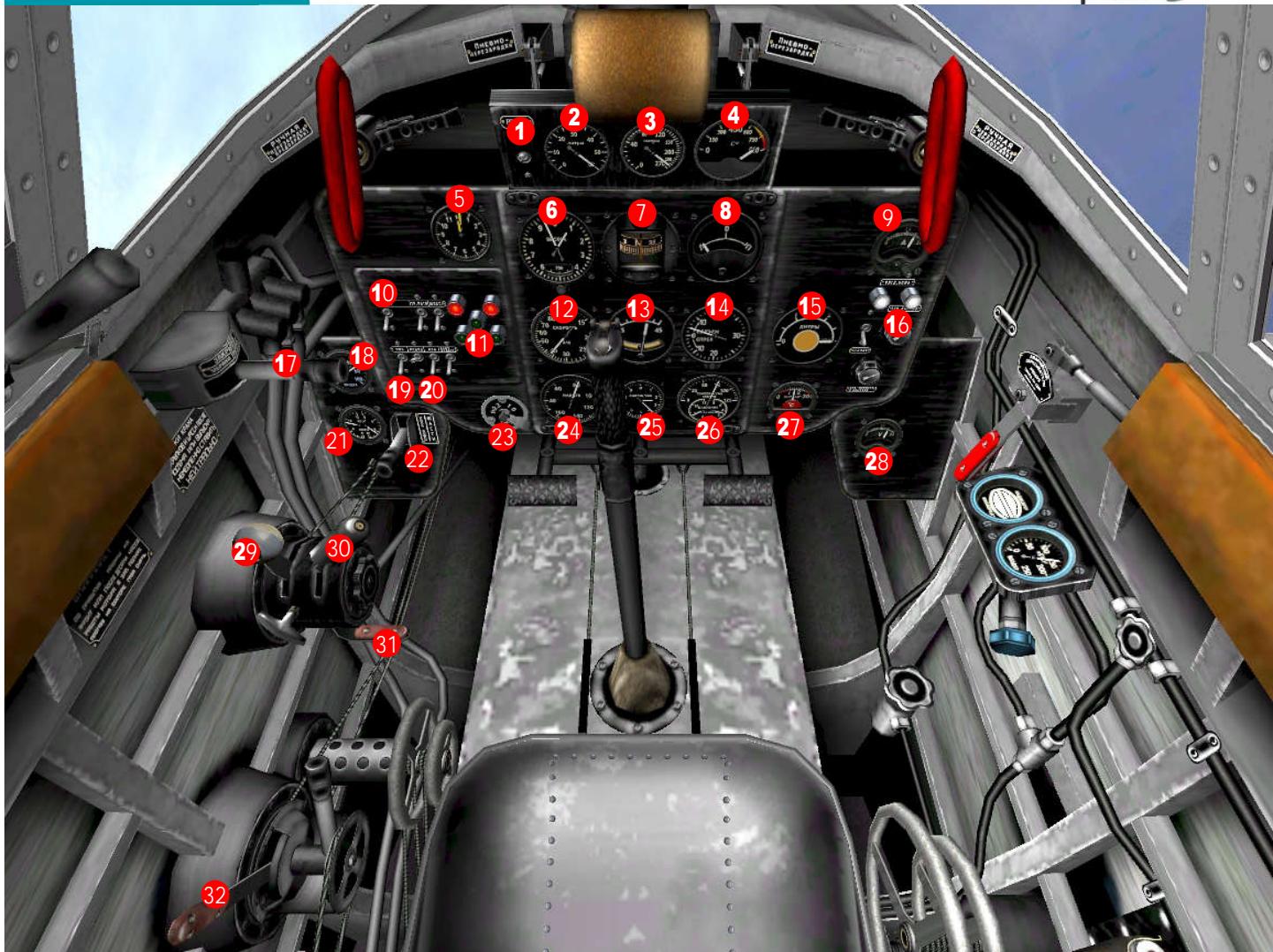
20. Engine gage: oil **temperature** (top)oil **pressure** (left)fuel **pressure** (right)21. Cylinder head **temperature gage**22. Mixture lever: **rear position** - leaner mixture  
**front position** - richer mixture

23. Throttle

24. Propeller pitch lever

25. Supercharger lever: **rear position** - stage 1  
**front position** - stage 2

# Lavochkin La-7R



1. Rocket engine switch
2. Rocket engine fuel gage
3. Rocket engine fuel gage
4. Rocket engine exhaust temperature gage
5. Clock
6. Altimeter
7. Magnetic compass
8. Pilot's Direction Indicator
9. Ammeter
10. Landing light switch
11. Landing gear position indicator: green - down  
red - up
12. Airspeed indicator
13. Turn and bank indicator
14. Variometer
15. Fuel gage
16. External ordnance status light
17. Flaps lever
18. Compressed air pressure gage
19. Instrument light switch
20. Position lights switch
21. Brake pressure gage
22. Landing gear lever
23. Engine ignition switch
24. Manifold pressure gage
25. Tachometer
26. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
27. Cylinder head temperature gage
28. Voltmeter
29. Mixture lever
30. Throttle
31. Propeller pitch lever
32. Supercharger lever: rear position - stage 1  
front position - stage 2



**1. Clock**

2. Low fuel warning light

**3. Altimeter****4. Magnetic compass****5. Manifold pressure gage**6. Engine gage: oil **temperature** (top)oil **pressure** (left)fuel **pressure** (right)7. Oil **temperature warning light** (cold & overheating)**8. Airspeed indicator****9. Turn and bank indicator****10. Variometer**

11. Pilot's Direction Indicator

12. Engine oil-in **temperature gage****13. Tachometer****14. Fuel gage**15. Landing gear **position indicator**: green - down

no light - transition

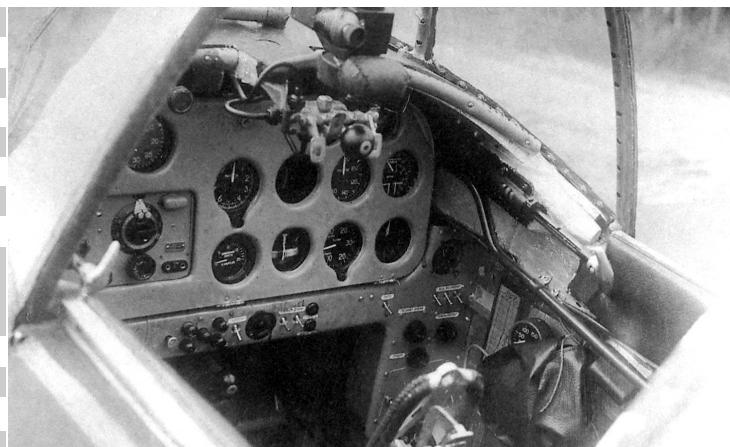
red - up

**16. Throttle****17. Propeller pitch** lever

18. Compressed air pressure gage

19. Brake pressure gage



**1. Clock****2. Airspeed indicator****3. Low fuel warning light****4. Tachometer****5. Fuel gage****6. Altimeter****7. Magnetic compass****8. Manifold pressure gage****9. Engine gage: oil temperature (top)****oil pressure (left)****fuel pressure (right)****10. Pilot's Direction Indicator****11. Turn and bank indicator****12. Oil temperature warning light (cold & overheating)****13. Variometer****14. Engine oil-in temperature gage****15. Landing gear position indicator:** green - down  
no light - transition  
red - up**16. Throttle****17. Propeller pitch lever****18. Compressed air pressure gage****19. Brake pressure gage**LaGG-3 (<http://www.warbirdphotographs.com/WSP/LAGG3-14.jpg>)

# Lavochkin/Gorbunov/Gudkov LaGG-3RD



- 1. Clock
- 2. Airspeed indicator
- 3. Low fuel warning light
- 4. Fuel injection pressure gage
- 5. Oil pressure gage
- 6. Fuel gage
- 7. Altimeter
- 8. Magnetic compass
- 9. Exhaust gas pressure gage
- 10. Tachometer
- 11. Voltmeter
- 12. Pilot's Direction Indicator
- 13. Turn and bank indicator
- 14. Engine shutdown warning light
- 15. Variometer
- 16. Exhaust temperature gage
- 17. Ammeter
- 18. Internal system indicator
- 19. Landing gear position indicator: green - down  
no light - transition  
red - up
- 20. Throttle
- 21. Compressed air pressure gage
- 22. Brake pressure gage

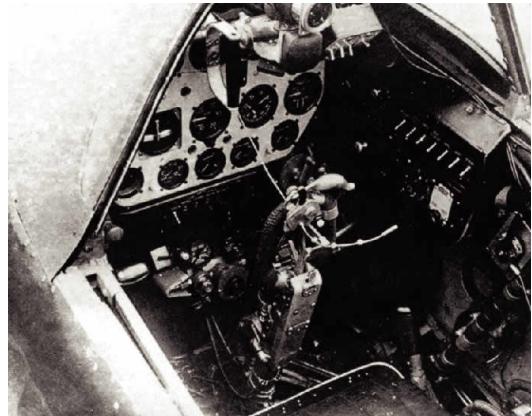




- 1. Altimeter
- 2. Magnetic compass
- 3. Manifold pressure gage
- 4. Fuel gage
- 5. Low fuel warning light
- 6. Airspeed indicator
- 7. Turn and bank indicator
- 8. Variometer
- 9. Tachometer
- 10. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 11. Clock
- 12. Compressed air pressure gage
- 13. Brake pressure gage
- 14. Coolant temperature gage
- 15. Engine oil-in temperature gage
- 16. Landing gear lever
- 17. Landing gear position indicator: red - down  
no light - transition  
green - up
- 18. Gear break lever
- 19. Propeller pitch lever
- 20. Throttle
- 21. Flaps position indicator



**MiG 3** (<http://mig3.sovietwarplanes.com/mig3cockpit.html>)



**MiG 3** (<http://mig3.sovietwarplanes.com/mig3yurt/rusavia3.htm>)



# Mikoyan-Gurevich MiG-9 F2 (I-300) / FS



- 1. Airspeed indicator
- 2. Artificial horizon / turn and bank indicator
- 3. Clock
- 4. Landing gear lever
- 5. Variometer
- 6. Left engine tachometer
- 7. Right engine tachometer
- 8. Altimeter
- 9. Compass
- 10. Pilot's Direction Indicator
- 11. Left engine exhaust pressure gage
- 12. Left engine oil pressure gage
- 13. Right engine oil pressure gage
- 14. Right engine exhaust pressure gage
- 15. Oxygen quantity gage
- 16. Landing gear position indicator
- 17. Fuel gage (tank 1)
- 18. Left engine exhaust gas temperature gage
- 19. Right engine exhaust gas temperature gage
- 20. Fuel gage (tank 2)
- 21. Elevator trim lever
- 22. Compressed air pressure gage
- 23. Left engine fuel pressure gage
- 24. Right engine fuel pressure gage
- 25. Left engine throttle
- 26. Right engine throttle
- 27. Brake pressure gage
- 28. Flaps lever
- 29. Hydraulic pressure gage
- 30. Ammeter

MiG 9 (<http://scalemodels.ru/modules.php?name=photoview&id=270.html>)



Photo by Andrey Zinchuk (An-Z) (c) 2007



# Mikoyan-Gurevich MiG-13 / I-250



- 1. Altimeter
- 2. Magnetic compass
- 3. Clock
- 4. Ammeter
- 5. Voltmeter
- 6. Low fuel warning light
- 7. Engine oil-in temperature gage
- 8. Coolant temperature gage
- 9. Engine ignition switch
- 10. Airspeed indicator
- 11. Artificial horizon / turn and bank indicator
- 12. Variometer
- 13. Fuel gage
- 14. Motorjet engine exhaust temperature gage
- 15. Motorjet engine pressurization gage
- 16. Landing gear lever & position indicator: green - down  
no light - transition  
red - up
- 17. Motorjet engine exhaust pressure gage
- 18. Motorjet engine fuel pressure gage
- 19. Manifold pressure gage
- 20. Tachometer
- 21. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 22. Throttle
- 23. Flaps lever
- 24. Propeller pitch lever
- 25. Mixture lever
- 26. Motorjet engine throttle
- 27. Motorjet engine ignition lever
- 28. Elevator trim wheel
- 29. Rudder trim wheel



# Petlyakov Pe-2 Series 1



- 1. Pilot's Direction Indicator
- 2. Flaps full open indicator light
- 3. Flaps position indicator
- 4. Airspeed indicator
- 5. Magnetic compass
- 6. Artificial horizon
- 7. Elevator trim neutral indicator light
- 8. Elevator trim switch
- 9. Variometer
- 10. Turn and bank indicator
- 11. Altimeter
- 12. Landing gear position indicator
- 13. Aileron trim switch with neutral indicator light
- 14. Rudder trim switch with neutral indicator light
- 15. Left engine throttle
- 16. Right engine throttle
- 17. Dive brakes switch
- 18. Flaps switch
- 19. Engines ignition switches
- 20. Left engine mixture lever
- 21. Right engine mixture lever
- 22. Left engine supercharger lever
- 23. Right engine supercharger lever
- 24. Left side propeller pitch wheel
- 25. Right side propeller pitch wheel
- 26. Gear brakes lever
- 27. Positive G-Load warning indicator light (+3 G)
- 28. Negative G-Load warning indicator light (-1 G)
- 29. Fuel gage
- 30. Left engine manifold pressure gage
- 31. Right engine manifold pressure gage
- 32. Left engine tachometer
- 33. Right engine tachometer
- 34. Fuel tank nitrogen pressure gage
- 35. Left engine fuel pressure gage
- 36. Right engine fuel pressure gage
- 37. Left engine oil pressure gage
- 38. Right engine oil pressure gage
- 39. Left engine oil temperature gage
- 40. Right engine oil temperature gage
- 41. Left engine coolant temperature gage
- 42. Right engine coolant temperature gage
- 43. Airspeed indicator
- 44. Altimeter
- 45. Free air temperature gage
- 46. Compressed air pressure gage
- 47. Repeater compass
- 48. Hydraulic pressure gage
- 49. Landing gear lever
- 50. Left engine radiator switch
- 51. Right engine radiator switch
- 52. External weapons indicator lights (on rear part)



# Petlyakov Pe-2 Series 84



1. Pilot's Direction Indicator  
2. Flaps full open indicator light

3. Flaps position indicator  
4. Airspeed indicator

5. Magnetic compass  
6. Artificial horizon

7. Elevator trim neutral indicator light  
8. Elevator trim switch

9. Variometer

10. Turn and bank indicator

11. Altimeter

12. Landing gear position indicator

13. Aileron trim switch with neutral indicator light  
14. Rudder trim switch with neutral indicator light

15. Left engine throttle  
16. Right engine throttle

17. Dive brakes switch

18. Flaps switch

19. Engines ignition switches

20. Left engine mixture lever

21. Right engine mixture lever

22. Left engine supercharger lever

23. Right engine supercharger lever

24. Left side propeller pitch wheel

25. Right side propeller pitch wheel

26. Gear brakes lever

27. Positive G-Load warning indicator light (+3 G)

28. Negative G-Load warning indicator light (-1 G)

29. Fuel gage

30. Free air temperature gage

31. Left engine manifold pressure gage

32. Right engine manifold pressure gage

33. Left engine tachometer

34. Right engine tachometer

35. Fuel tank nitrogen pressure gage

36. Left engine fuel pressure gage

37. Right engine fuel pressure gage

38. Left engine oil pressure gage

39. Right engine oil pressure gage

40. Airspeed indicator

41. Left engine oil temperature gage

42. Right engine oil temperature gage

43. Altimeter

44. Left engine coolant temperature gage

45. Right engine coolant temperature gage

46. Compressed air pressure gage

47. Left engine radiator switch

48. Right engine radiator switch

49. Repeater compass

50. Hydraulic pressure gage

51. Landing gear lever

52. External weapons indicator lights (on rear part)



# Petlyakov Pe-2 Series 110



1. Pilot's Direction Indicator  
 2. Flaps full open indicator light  
 3. Flaps position indicator  
 4. Airspeed indicator  
 5. Magnetic compass  
 6. Artificial horizon  
 7. Elevator trim neutral indicator light  
 8. Elevator trim switch  
 9. Variometer  
 10. Turn and bank indicator  
 11. Altimeter  
 12. Landing gear position indicator  
 13. Aileron trim switch with neutral indicator light  
 14. Rudder trim switch with neutral indicator light  
 15. Left engine throttle  
 16. Right engine throttle  
 17. Dive brakes switch  
 18. Flaps switch  
 19. Engines ignition switches  
 20. Left engine mixture lever  
 21. Right engine mixture lever  
 22. Left engine supercharger lever  
 23. Right engine supercharger lever  
 24. Left side propeller pitch wheel  
 25. Right side propeller pitch wheel  
 26. Gear brakes lever  
 27. Positive G-Load warning indicator light (+3 G)  
 28. Negative G-Load warning indicator light (-1 G)  
 29. Fuel gage  
 30. Free air temperature gage  
 31. Left engine manifold pressure gage  
 32. Right engine manifold pressure gage  
 33. Left engine tachometer  
 34. Right engine tachometer  
 35. Fuel tank nitrogen pressure gage  
 36. Left engine fuel pressure gage  
 37. Right engine fuel pressure gage  
 38. Left engine oil pressure gage  
 39. Right engine oil pressure gage  
 40. Airspeed indicator  
 41. Left engine oil temperature gage  
 42. Right engine oil temperature gage  
 43. Altimeter  
 44. Left engine coolant temperature gage  
 45. Right engine coolant temperature gage  
 46. Compressed air pressure gage  
 47. Repeater compass  
 48. Left engine radiator switch  
 49. Right engine radiator switch  
 50. Hydraulic pressure gage  
 51. Landing gear lever  
 52. External weapons indicator lights (on rear part)



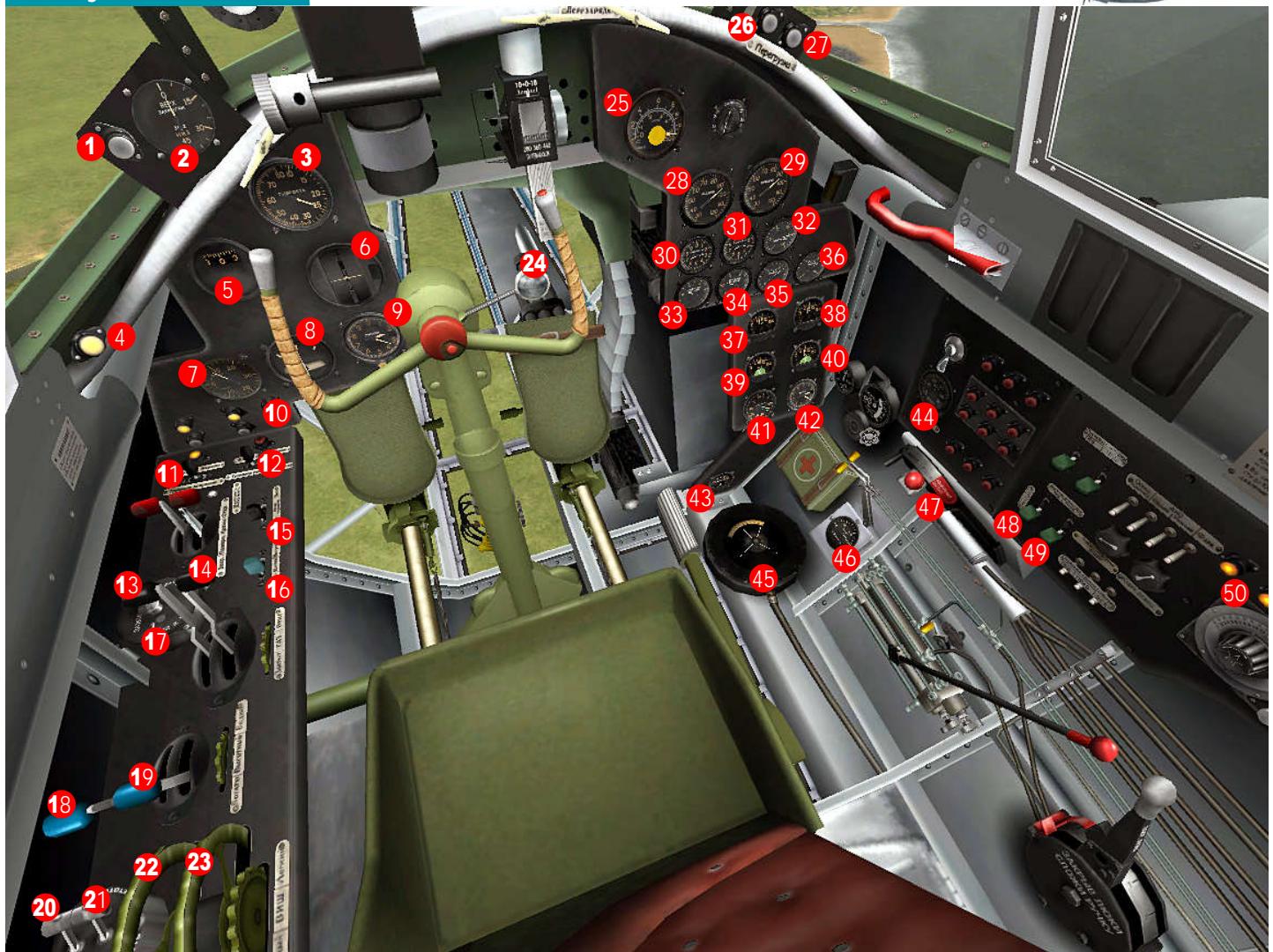
# Petlyakov Pe-2 Series 359



- |  |  |
|--|--|
| 1. Pilot's Direction Indicator                       | 35. Fuel tank nitrogen pressure gage                 |
| 2. Flaps full open indicator light                   | 36. Left engine fuel pressure gage                   |
| 3. Flaps position indicator                          | 37. Right engine fuel pressure gage                  |
| 4. Airspeed indicator                                | 38. Left engine oil pressure gage                    |
| 5. Magnetic compass                                  | 39. Right engine oil pressure gage                   |
| 6. Artificial horizon                                | 40. Airspeed indicator                               |
| 7. Elevator trim neutral indicator light             | 41. Left engine oil temperature gage                 |
| 8. Elevator trim switch                              | 42. Right engine oil temperature gage                |
| 9. Variometer  | 43. Altimeter  |
| 10. Turn and bank indicator                          | 44. Left engine coolant temperature gage             |
| 11. Altimeter  | 45. Right engine coolant temperature gage            |
| 12. Landing gear position indicator                  | 46. Compressed air pressure gage                     |
| 13. Aileron trim switch with neutral indicator light | 47. Repeater compass                                 |
| 14. Rudder trim switch with neutral indicator light  | 48. Left engine radiator switch                      |
| 15. Left engine throttle                             | 49. Right engine radiator switch                     |
| 16. Right engine throttle                            | 50. Hydraulic pressure gage                          |
| 17. Dive brakes switch                               | 51. Landing gear lever                               |
| 18. Flaps switch                                     | 52. External weapons indicator lights (on rear part) |
| 19. Engines ignition switches                        |  |
| 20. Left engine mixture lever                        |  |
| 21. Right engine mixture lever                       |  |
| 22. Left engine supercharger lever                   |  |
| 23. Right engine supercharger lever                  |  |
| 24. Left side propeller pitch wheel                  |  |
| 25. Right side propeller pitch wheel                 |  |
| 26. Gear brakes lever                                |  |
| 27. Positive G-Load warning indicator light (+3 G)   |  |
| 28. Negative G-Load warning indicator light (-1 G)   |  |
| 29. Fuel gage  |  |
| 30. Free air temperature gage                        |  |
| 31. Left engine manifold pressure gage               |  |
| 32. Right engine manifold pressure gage              |  |
| 33. Left engine tachometer                           |  |
| 34. Right engine tachometer                          |  |



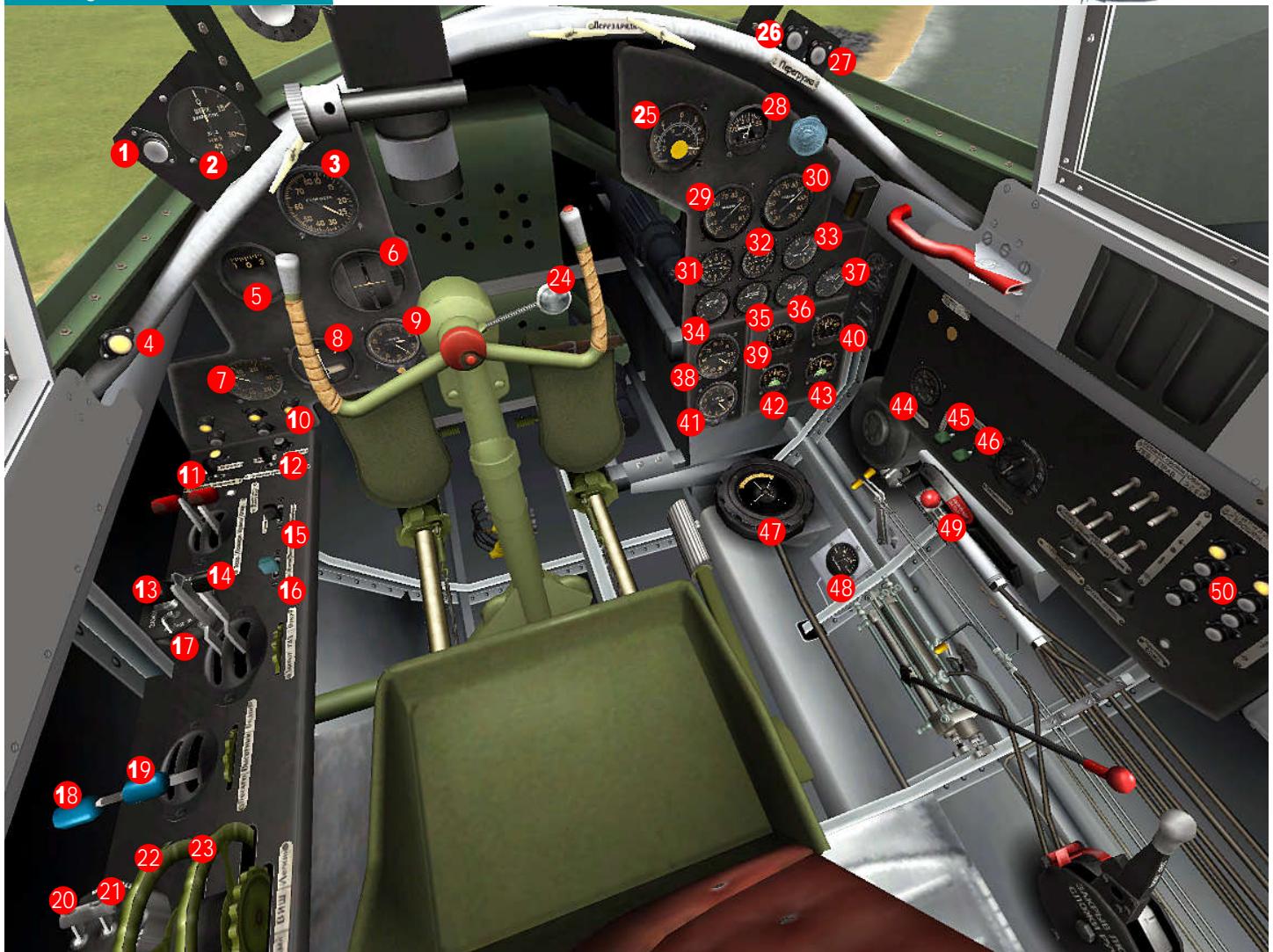
# Petlyakov Pe-3



- 1. Flaps full open indicator light
- 2. Flaps position indicator
- 3. Airspeed indicator
- 4. Elevator trim neutral indicator light
- 5. Magnetic compass
- 6. Artificial horizon
- 7. Variometer
- 8. Turn and bank indicator
- 9. Altimeter
- 10. Landing gear position indicator
- 11. Aileron trim switch with neutral indicator light
- 12. Rudder trim switch with neutral indicator light
- 13. Left engine throttle
- 14. Right engine throttle
- 15. Elevator trim switch
- 16. Flaps switch
- 17. Engines ignition switches
- 18. Left engine mixture lever
- 19. Right engine mixture lever
- 20. Left engine supercharger lever
- 21. Right engine supercharger lever
- 22. Left side propeller pitch wheel
- 23. Right side propeller pitch wheel
- 24. Gear brakes lever
- 25. Fuel gage
- 26. Positive G-Load warning indicator light (+3 G)
- 27. Negative G-Load warning indicator light (-1 G)
- 28. Left engine manifold pressure gage
- 29. Right engine manifold pressure gage
- 30. Left engine tachometer
- 31. Right engine tachometer
- 32. Fuel tank nitrogen pressure gage
- 33. Left engine fuel pressure gage
- 34. Right engine fuel pressure gage
- 35. Left engine oil pressure gage
- 36. Right engine oil pressure gage
- 37. Left engine oil temperature gage
- 38. Right engine oil temperature gage
- 39. Left engine coolant temperature gage
- 40. Right engine coolant temperature gage
- 41. Airspeed indicator
- 42. Altimeter
- 43. Free air temperature gage
- 44. Compressed air pressure gage
- 45. Repeater compass
- 46. Hydraulic pressure gage
- 47. Landing gear lever
- 48. Left engine radiator switch
- 49. Right engine radiator switch
- 50. External weapons indicator lights



# Petlyakov Pe-3bis



- |  |   |
|--|---|
| 1. Flaps full open indicator light                   | 35. Right engine fuel pressure gage       |
| 2. Flaps position indicator                          | 36. Left engine oil pressure gage         |
| 3. Airspeed indicator                                | 37. Right engine oil pressure gage        |
| 4. Elevator trim neutral indicator light             | 38. Airspeed indicator                    |
| 5. Magnetic compass                                  | 39. Left engine oil temperature gage      |
| 6. Artificial horizon                                | 40. Right engine oil temperature gage     |
| 7. Variometer  | 41. Altimeter                             |
| 8. Turn and bank indicator                           | 42. Left engine coolant temperature gage  |
| 9. Altimeter   | 43. Right engine coolant temperature gage |
| 10. Landing gear position indicator                  | 44. Compressed air pressure gage          |
| 11. Aileron trim switch with neutral indicator light | 45. Left engine radiator switch           |
| 12. Rudder trim switch with neutral indicator light  | 46. Right engine radiator switch          |
| 13. Left engine throttle                             | 47. Repeater compass                      |
| 14. Right engine throttle                            | 48. Hydraulic pressure gage               |
| 15. Elevator trim switch                             | 49. Landing gear lever                    |
| 16. Flaps switch                                     | 50. External weapons indicator lights     |
| 17. Engines ignition switches                        |   |
| 18. Left engine mixture lever                        |   |
| 19. Right engine mixture lever                       |   |
| 20. Left engine supercharger lever                   |   |
| 21. Right engine supercharger lever                  |   |
| 22. Left side propeller pitch wheel                  |   |
| 23. Right side propeller pitch wheel                 |   |
| 24. Gear brakes lever                                |   |
| 25. Fuel gage  |   |
| 26. Positive G-Load warning indicator light (+3 G)   |   |
| 27. Negative G-Load warning indicator light (-1 G)   |   |
| 28. Free air temperature gage                        |   |
| 29. Left engine manifold pressure gage               |   |
| 30. Right engine manifold pressure gage              |   |
| 31. Left engine tachometer                           |   |
| 32. Right engine tachometer                          |   |
| 33. Fuel tank nitrogen pressure gage                 |   |
| 34. Left engine fuel pressure gage                   |   |





- 1. Airspeed indicator
- 2. Magnetic compass
- 3. Tachometer
- 4. Altimeter
- 5. Turn and bank indicator
- 6. Variometer
- 7. Engine ignition switch
- 8. Engine gage: oil **temperature** (top)  
oil **pressure** (left)  
fuel **pressure** (right)

- 9. Clock
- 10. Cylinder head temperature gage
- 11. Manifold pressure gage
- 12. Supercharger lever: rear position - stage 1  
front position - stage 2
- 13. Mixture lever: rear position - leaner mixture  
front position - richer mixture
- 14. Throttle
- 15. Propeller pitch knob



I-153 (<http://www.ww2aircraft.net/>)



# Polikarpov I-16 «Ishak»

Type 5 / Type 6



**1. Magnetic compass**

**2. Tachometer**

**3. Airspeed indicator**

**4. Altimeter**

**5. Compressed air pressure gage**

**6. Oil pressure gage**

**7. Manifold pressure gage**

**8. Turn and bank indicator**

**9. Variometer**

**10. Cylinder head temperature gage**

**11. Engine oil-in temperature gage**

**12. Engine oil-out temperature gage**

**13. Fuel gage**

**14. Throttle**

**15. Landing gear handle (not active with skis)**



I-16 early (<http://pic.ipicture.ru/uploads/090216/Ev90DZW8TA.jpg>)



I-16 T10 (<http://www.ww2aircraft.net>)





**1.** Landing gear position indicator: green - down  
no light - transition  
red - up

**2.** Magnetic compass

**3.** Tachometer

**4.** Airspeed indicator

**5.** Altimeter

**6.** Compressed air pressure gage

**7.** Oil pressure gage

**8.** Manifold pressure gage

**9.** Turn and bank indicator

**10.** Variometer

**11.** Cylinder head temperature gage

**12.** Engine oil-in temperature gage

**13.** Engine oil-out temperature gage

**14.** Fuel gage

**15.** Throttle

**16.** Propeller pitch lever

**17.** Landing gear handle



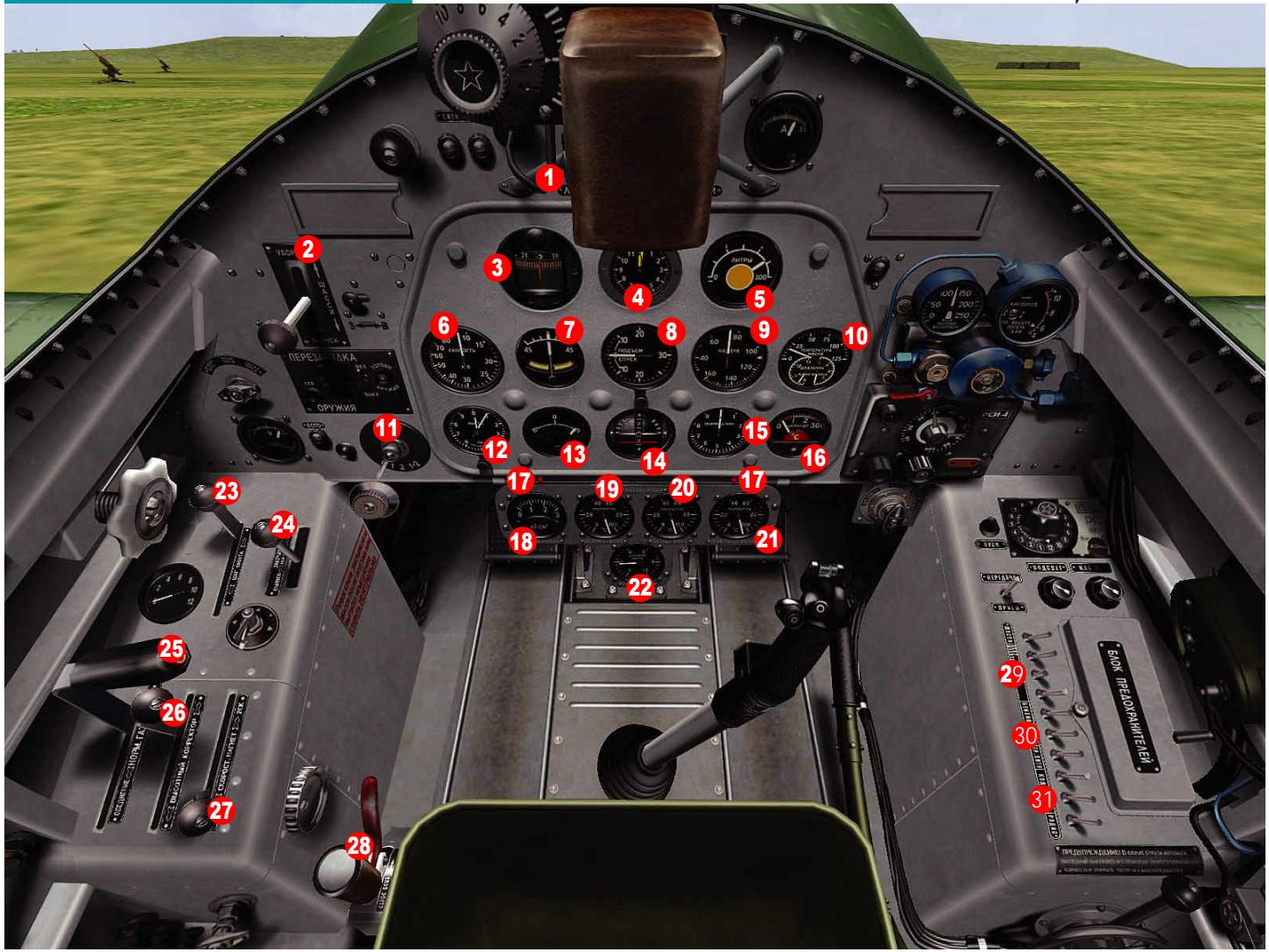
I-16 T24 (<http://www.nzfpm.co.nz/article.asp?id=i16#>)



I-16 T18 (<http://www.historicflight.cz>)



# Polikarpov I-185 M-71



- 1. Landing gear **position indicator**: green - down  
(behind gunsight)  
red- up
- 2. Landing gear **lever**
- 3. **Magnetic compass**
- 4. **Clock**
- 5. **Fuel gage**
- 6. **Airspeed indicator**
- 7. **Turn and bank indicator**
- 8. **Variometer**
- 9. **Manifold pressure gage**
- 10. Engine gage: oil temperature (top)  
**oil pressure** (left)  
**fuel pressure** (right)
- 11. **Engine ignition switch**
- 12. **Altimeter**
- 13. Pilot's Direction Indicator
- 14. **Artificial horizon**
- 15. **Tachometer**
- 16. Cylinder head **temperature** gage
- 17. Landing gear **position indicator**
- 18. **Carburetor pressure** gage
- 19. **Oil temperature** gage (exiting front engine block)
- 20. **Oil temperature** gage (exiting rear engine block)
- 21. **Oil temperature** gage (entering engine)
- 22. **Oil pressure** gage
- 23. **Propeller pitch lever**
- 24. **Flaps lever**
- 25. **Throttle**
- 26. **Mixture lever**
- 27. **Supercharger lever**
- 28. **Bomb release lever** (no bomb available)
- 29. **Landing light switch**
- 30. Instrument light switch
- 31. Position lights switch



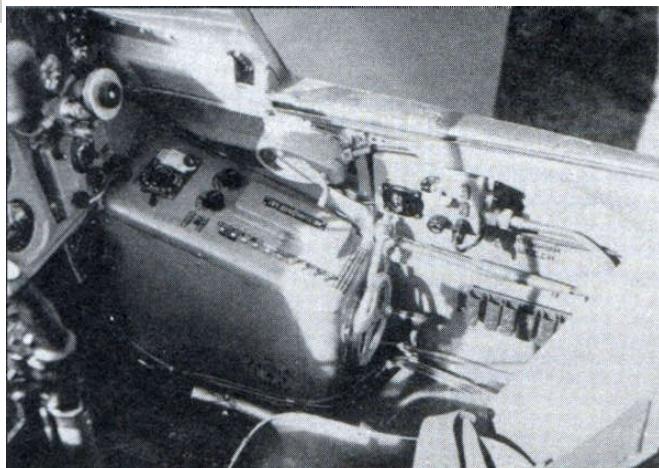
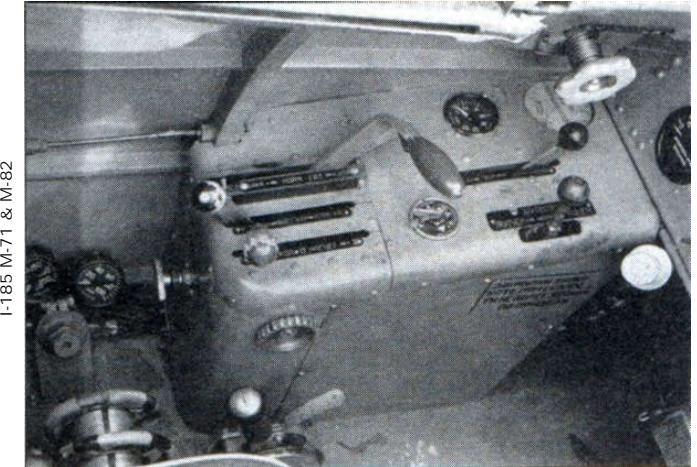
I-185 (<http://www.airwar.ru/aww2.htm>)



# Polikarpov I-185 M-82



1. Bombs status lights
2. Landing gear **position indicator**: green - down  
red - up
3. Landing gear **lever**
4. **Magnetic compass**
5. **Clock**
6. **Fuel gage**
7. **Airspeed indicator**
8. **Turn and bank indicator**
9. **Variometer**
10. **Manifold pressure gage**
11. **Oil temperature gage**
12. **Engine** ignition switch
13. **Altimeter**
14. Pilot's Direction Indicator
15. **Artificial horizon**
16. **Tachometer**
17. Cylinder head **temperature gage**
18. **Carburetor pressure gage**
19. **Oil pressure gage**
20. Landing gear **position indicator**
21. **Propeller pitch lever**
22. **Flaps lever**
23. **Throttle**
24. **Mixture lever**
25. **Supercharger lever**
26. **Bomb release lever**
27. **Landing light switch**
28. **Instrument light switch**
29. **Position lights switch**





**1. Pilot's Direction Indicator**

**2. Artificial horizon**

**3. Airspeed indicator**

**4. Turn and bank indicator**

**5. Variometer**

**6. Altimeter**

**7. Clock**

**8. Magnetic compass**

**9. Engine 1 (left side outboard) tachometer**

**10. Engine 2 (left side inboard) tachometer**

**11. Engine 3 (right side inboard) tachometer**

**12. Engine 4 (right side outboard) tachometer**

**13. Co-pilot artificial horizon**

**14. Co-pilot repeater compass**

**15. Co-pilot altimeter**

**16. Co-pilot turn and bank indicator**

**17. Co-pilot airspeed indicator**

**18. Co-pilot magnetic compass**

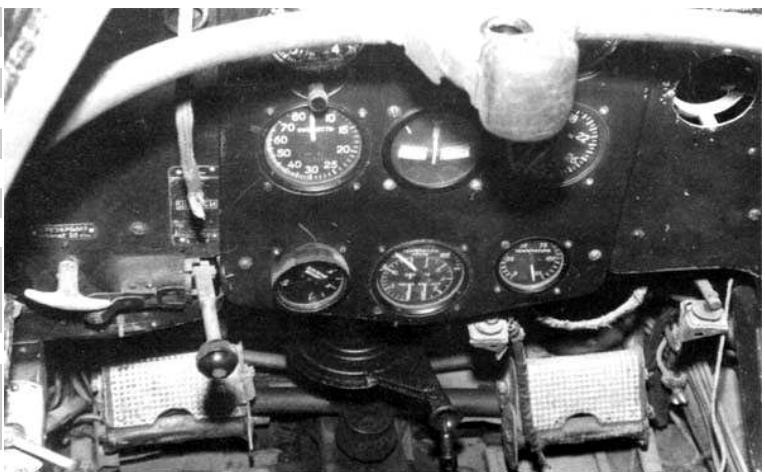
**19. Throttle levers for all 4 engines**



# Yakovlev Yak-1 / B



- 1. Altimeter**
- 2. Magnetic compass**
- 3. Manifold pressure gage**
- 4. Airspeed indicator**
- 5. Turn and bank indicator**
- 6. Tachometer**
- 7. Landing gear lever**
- 8. Clock**
- 9. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)**
- 10. Coolant temperature gage**
- 11. Landing gear position indicator: green - down  
no light - transition  
red - up**
- 12. Propeller pitch lever**
- 13. Supercharger lever: rear position - stage 1  
front position - stage 2**
- 14. Throttle**
- 15. Flaps lever**



Yak-1 (<http://www.airwar.ru/aww2.html>)





- 1. Altimeter**
- 2. Magnetic compass**
- 3. Clock**
- 4. Fuel gage**
- 5. Low fuel warning light**
- 6. Airspeed indicator**
- 7. Turn and bank indicator**
- 8. Variometer**
- 9. Landing gear position indicator:** green - down  
no light - transition  
red - up
- 10. Landing gear lever**
- 11. Manifold pressure gage**
- 12. Tachometer**
- 13. Engine gage:** oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 14. Electric generator warning light**
- 15. Propeller pitch lever**
- 16. Supercharger lever:** rear position - stage 1  
front position - stage 2
- 17. Throttle**
- 18. Flaps lever**



# Yakovlev Yak-3R



- 1. Altimeter
- 2. Magnetic compass
- 3. Clock
- 4. Fuel gage
- 5. Low fuel warning light
- 6. Airspeed indicator
- 7. Turn and bank indicator
- 8. Variometer
- 9. Landing gear position indicator: green - down  
no light - transition  
red - up
- 10.** Landing gear lever
- 11.** Manifold pressure gage
- 12.** Tachometer
- 13.** Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
- 14.** Electric generator warning light
- 15.** Rocket engine switch
- 16.** Rocket engine fuel gage
- 17.** Rocket engine fuel gage
- 18.** Rocket engine exhaust temperature gage
- 19.** Propeller pitch lever
- 20.** Throttle
- 21.** Supercharger lever: rear position - stage 1  
front position - stage 2
- 22.** Flaps lever





1. Altimeter

2. Magnetic compass

3. Manifold pressure gage

4. Airspeed indicator

5. Turn and bank indicator

6. Tachometer

7. Landing gear lever

8. Clock

9. Engine gage: oil temperature (top)

oil pressure (left)

fuel pressure (right)

10. Coolant temperature gage

11. Landing gear position indicator: green - down  
no light - transition  
red - up

12. Propeller pitch lever

13. Supercharger lever: rear position - stage 1  
front position - stage 2

14. Throttle

15. Flaps lever



# Yakovlev Yak-9



**1. Altimeter**

**2. Magnetic compass**

**3. Clock**

**4. Coolant temperature gage**

**5. Airspeed indicator**

**6. Turn and bank indicator**

**7. Variometer**

**8. Low fuel warning light**

**9. Electric generator warning light**

**10. Landing gear lever**

**11. Manifold pressure gage**

**12. Tachometer**

**13. Engine gage: oil temperature (top)**

**oil pressure (left)**

**fuel pressure (right)**

**14. Propeller pitch lever**

**15. Throttle**

**16. Supercharger lever: rear position - stage 1  
front position - stage 2**

**17. Flaps lever**



Yak-9 (<http://walkarounds.airforce.ru/avia/rus/yak/yak-9/index.htm>)





1. Altimeter

2. Magnetic compass

3. Clock

4. Coolant temperature gage

5. Airspeed indicator

6. Turn and bank indicator

7. Variometer

8. Pilot's Direction Indicator

9. Low fuel warning light

10. Electric generator warning light

11. Landing gear lever

12. Manifold pressure gage

13. Tachometer

14. Engine gage: oil temperature (top)

oil pressure (left)

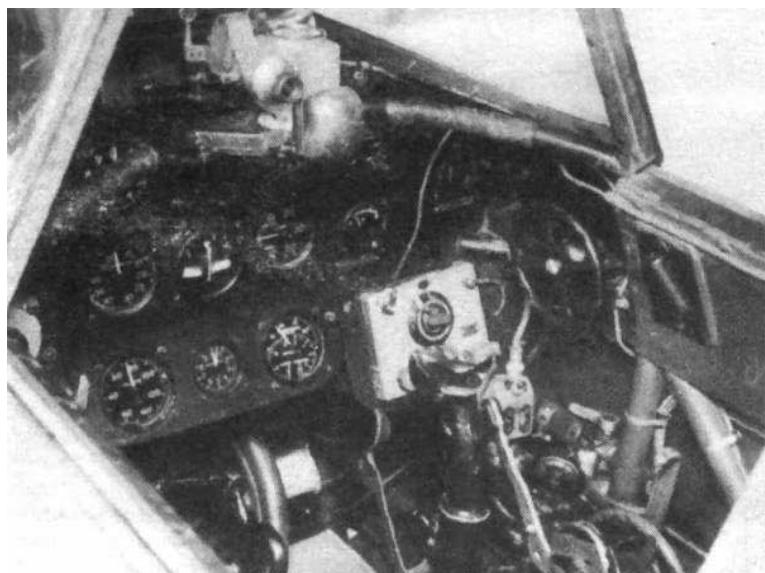
fuel pressure (right)

15. Propeller pitch lever

16. Throttle

17. Supercharger lever: rear position - stage 1  
front position - stage 2

18. Flaps lever



# Yakovlev Yak-9

K / M / T



**1. Altimeter**

**2. Magnetic compass**

**3. Clock**

4. Coolant temperature gage

**5. Airspeed indicator**

**6. Turn and bank indicator**

**7. Variometer**

8. Low fuel warning light

**9. Electric generator warning light**

10. Landing gear lever

**11. Manifold pressure gage**

**12. Tachometer**

13. Engine gage: oil **temperature** (top)

oil **pressure** (left)

fuel **pressure** (right)

**14. Propeller pitch lever**

**15. Throttle**

**16. Supercharger lever:** rear position - stage 1  
front position - stage 2

**17. Flaps lever**



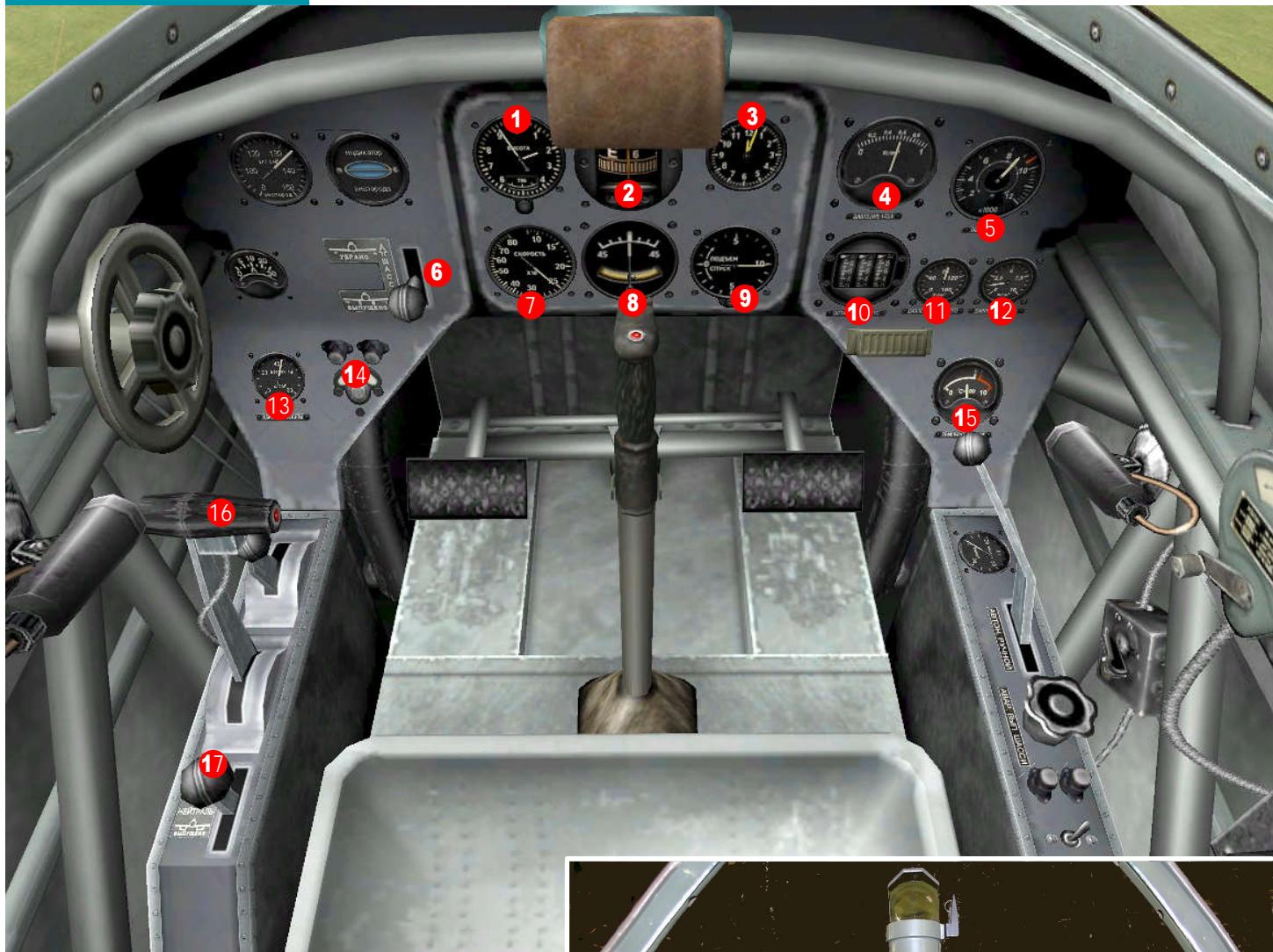
# Yakovlev Yak-9U / UT



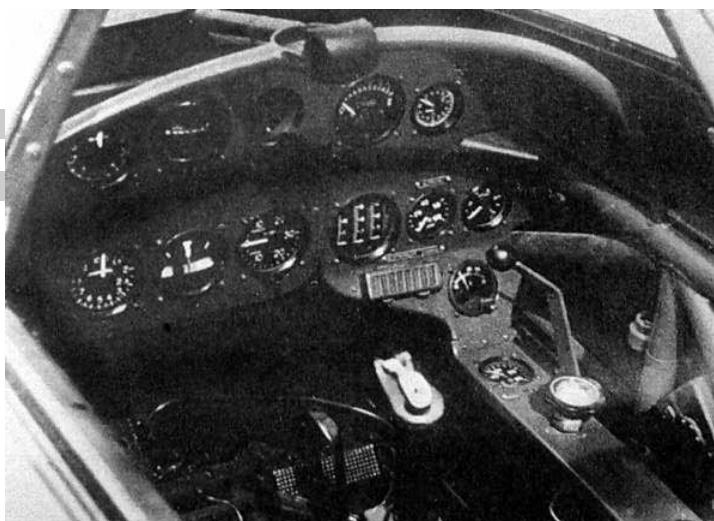
1. Altimeter
2. Magnetic compass
3. Clock
4. Fuel gage
5. Low fuel warning light
6. Airspeed indicator
7. Turn and bank indicator
8. Variometer
9. Landing gear position indicator: green - down  
no light - transition  
red - up
10. Landing gear lever
11. Manifold pressure gage
12. Tachometer
13. Engine gage: oil temperature (top)  
oil pressure (left)  
fuel pressure (right)
14. Electric generator warning light
15. Propeller pitch lever
16. Throttle
17. Supercharger lever: rear position - stage 1  
front position - stage 2
18. Flaps lever



# Yakovlev Yak-15



- 1.** Altimeter
- 2.** Magnetic compass
- 3.** Clock
- 4.** Exhaust gas pressure gage
- 5.** Tachometer
- 6.** Landing gear lever
- 7.** Airspeed indicator
- 8.** Turn and bank indicator
- 9.** Variometer
- 10.** Fuel gage
- 11.** Fuel injection pressure gage
- 12.** Oil pressure gage
- 13.** Compressed air pressure gage
- 14.** Landing gear position indicator:  
green - down  
no light - transition  
red - up
- 15.** Exhaust temperature gage
- 16.** Throttle
- 17.** Flaps lever



Yak-15 (<http://www.airwar.ru/aww2.html>)



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