

Douglas A4 Skyhawk panel

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Introduction

This panel has been made for the nice freeware and payware Skyhawk. It is based on pictures of a french A4-N taken at Nimes-Garons airport. My thanks go to Yannick who flies the plane and took all the cockpit pictures I needed, and to Arne Bartels who taught me how to make the specific gauges for this plane and some others.

General

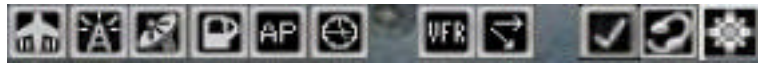
This is a 2D panel with different view possibilities, IFR, VFR or landing. All the gauges have been made according pictures of the original gauges, except the HUD and the GPS. Hereafter is a view of the main IFR panel loaded with the plane.



As this panel uses many subpanels, to avoid loading problem, please load a default FS plane first then change to the Skyhawk.

You can notice that the panel has no HSI, but a GPS, like on the original plane and a special ADI also graduated in heading degrees. An HSI is available by clicking on the SimIcon representing a VOR. The HSI will replace the GPS. This will be explained further on.

To access to the subpanels, never use SHIFT + NUM, but always click on the SimIcons located in the center of the panel which are represented hereafter to display/hide a subpanel.



They are three groups of SimIcons, from left to right : the subpanels SimIcons, the main views SimIcons and the standard FS interface SimIcons.

1 - Subpanels SimIcons

- The first one opens the left bank where the throttle lever is located ;
- The second one opens the right bank where the radios are located ;
- The third one opens an enlarged GPS ;
- The fourth one opens the fuel subpanel ;
- The fifth one opens the autopilot subpanel ;
- The sixth one (representing a VOR indicator) opens the HSI subpanel which will hide the GPS on the main IFR and VFR panels.

2 - Main views SimIcons

The two center SimIcons correspond to the views accessible from the displayed main view.

- The SimIcon with the text IFR opens the IFR panel view, with little exterior view ;
- The SimIcon with the text VFR opens the VFR panel view, with good exterior view but less instruments;
- The SimIcon with the two arrows, one horizontal and one downwards opens the Landing panel view, with maximum exterior view and few instruments;

3 - Standard FS interface SimIcons

These three SimIcons don't need to be explained as they are standard in FS.

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Main panels

As explained formerly, they are three main panels, the IFR one loaded by default, the VFR and the Landing panels accessible by clicking on the corresponding SimIcons.

1 – The IFR panel

The main IFR panel shows all navigation and engine instruments. When clicking on the corresponding SimIcon, an HSI and an OMI replace the GPS, as represented hereafter.



2 – The VFR panel

The main IFR panel shows less instruments, but has more external view, as well as a HUD to replace the missing instruments.



If you click on the barometric list it will be enlarged. Clicking on the open In HG/Mb list will close it.

984	29,35	1014	29,94
995	29,38	1015	29,97
996	29,41	1016	30,00
997	29,44	1017	30,03
998	29,47	1018	30,06
999	29,50	1019	30,09
1000	29,53	1020	30,12
1001	29,56	1021	30,15
1002	29,59	1022	30,18
1003	29,62	1023	30,21
1004	29,65	1024	30,24
1005	29,68	1025	30,27
1006	29,71	1026	30,30
1007	29,74	1027	30,33
1008	29,77	1028	30,36
1009	29,80	1029	30,39
1010	29,83	1030	30,42
1011	29,85	1031	30,45
1012	29,88	1032	30,47
1013	29,91	1033	30,50

1 – The Landing panel

The main Landing panel shows no instruments, except the HUD and the angle of attack indicator.



Hereafter are represented these two instruments which help you landing either on an airport or an aircraft carrier.



The HUD is the excellent gauge made by William Lipscomb (lips_hud.zip on www.flightsim.com). It is always shown on both VFR and Landing panels, and not on the IFR (no sufficient space for it).

Left bank

The left bank subpanel is open by clicking on the throttle SimIcon. It looks like the following picture.



On the top part are located the gear, flaps and trims indicators as well as the flaps and gear levers.

Underneath are located the spoilers arming switch (usable for landing automatic deployment), the speed brakes and trims levers as well as the throttle lever. At the bottom you will find the autopilot.

You can close the left bank panel by clicking on its close SimIcon on its top left corner

Right bank

The right bank subpanel is open by clicking on the radios SimIcon. It looks like the following picture.



On the top you will find the lights and pitot heating switches as well as the outside air temperature indicator. Underneath are located the radios, with, from top to bottom :

- the COM1 radio and the Transponder
- the NAV1 and NAV2 radios
- the ADF radio

All radios have only one frequency, no standby frequency.

You can close the right bank panel by clicking on its close SimIcon on its top left corner

GPS panel

The GPS panel is open by clicking on the GPS SimIcon. It looks like the following picture.



You can close the GPS panel by clicking on its SimIcon, or on the top left corner of the GPS, on the GARMIN name.

RMI

The RMI located at the bottom left of the main IFR panel has two needles, a single and a double. Two switches left from the RMI are used to switch between VOR1 and ADF for the single needle, and between VOR2 and ADF for the double needle. Don't forget that RMI only shows VOR direction, but not LOC direction.



Fuel subpanel

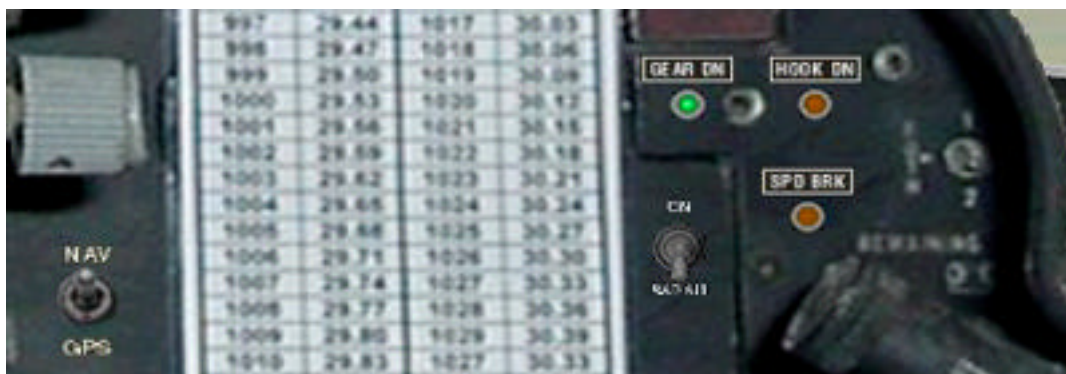
The fuel subpanel is accessible only from the main IFR panel by clicking on the fuel SimIcon. It looks like the right side of the following picture, the left side showing the main IFR panel with no fuel subpanel open.



You can close it by clicking on its SimIcon, or on the close SimIcon at the top right corner of the fuel subpanel.

You can notice that on this subpanel are completely visible the fuel gauge (yellow frame) and the fuel switch letting you choose the remaining fuel quantity either of internal tanks or external tanks. By default internal tanks are selected.

Switches and warning lights



On the top right part of the main panels are located the NAV/GPS switch and the radio altimeter main switch, as well as some warning lights I have added for convenience : the gear down light (green), the arrestor hook down light (amber) and the speed brake deployed light (amber).

The radio altimeter located at the bottom right center of the main IFR panel needs to be switched on to function.

Autopilot and flight director

The Skyhawk has a very simple autopilot. You can access to it on the left bank subpanel, just underneath the throttle levers, or more directly by clicking on the AP SimIcon. In that case here is the picture how it looks like.



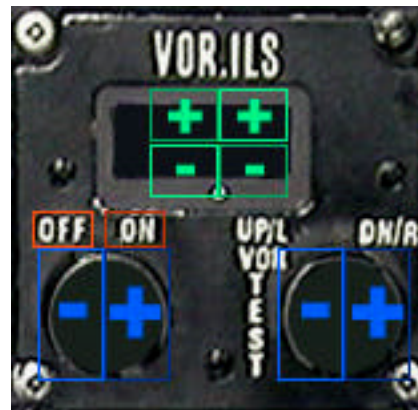
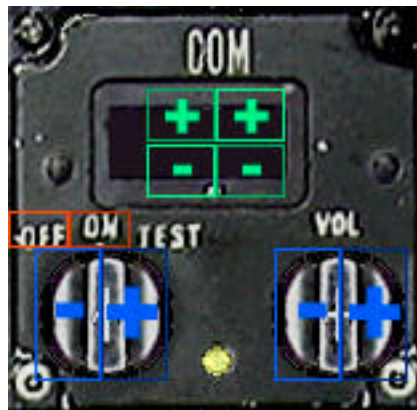
The Flight Director switch is located on the right of the autopilot. The available functions switches are at the bottom of the autopilot frame, from left to tight : the yaw damper switch, the heading hold switch, the VOR/LOC radial interception and course following and the altitude hold switch. The autopilot mainswitch is on the right side of the bottom part of the gauge.



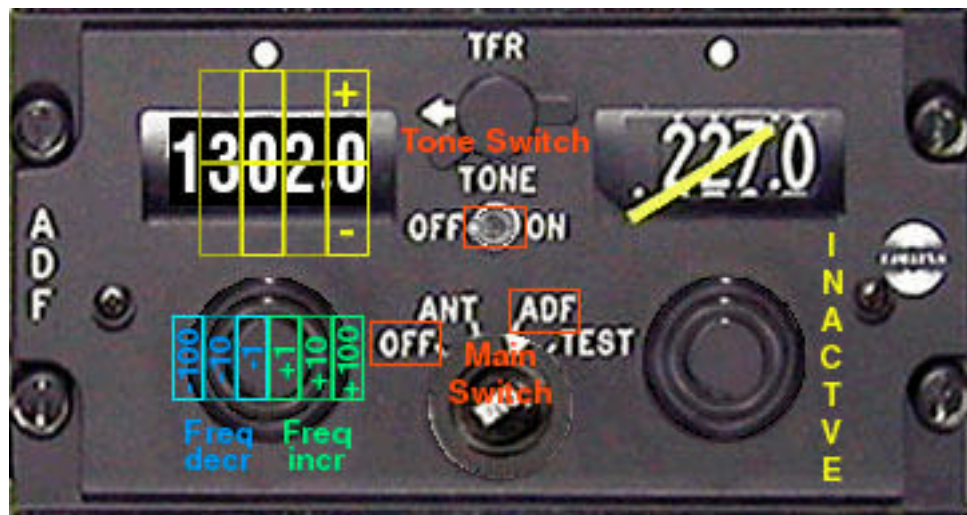
The heading and course selection buttonss are in the center of the autopilot. Left clicking increases/decreases the value by 1 degree, right clicking by 10 degrees.

Radios

The following pictures show you the radios hot spots.



You switch On/Off the COM and NAV radios by clicking on the ON or OFF red areas. You set the frequencies by clicking on the minus areas to decrease, and plus areas to increase the corresponding values, either on the buttons or on the digits themselves. The left areas or button correspond to the whole frequency, the right to the fractionnal .



On the ADF, the red areas also correspond to the switches. On/Off functions are performed by clicking on ADF and OFF respectively. The ADF station ident is switched on/off by clicking in the center of the tone switch.

The frequencies are set by clicking on the green or blue areas on the button for units, ten, and hundred digits, but an easier way is to use the yellow areas located on the digits themselves

NOTA : Don't forget that the frequency can only be set when the radio is ON. Otherwise the clicking zones are inoperant.

Other instruments

All other instruments and gauges have a help installed telling you their function.