

THE SU-27 COCKPIT FOR FLIGHTGEAR

By Yanes

A cockpit instruments & lights nomenclature

PIC N°1:



The Autopilot panel

1 : **LAND**: by activating the AP (switch n°9) and pressing this button ,the LAND mode will be engaged .

Correct runway localizer frequency must be already set in NAV1(use radio dialog , press F12 to show the dialog).and checked the beacons indicator lights ON .

You should also be at max 25° deviation from the localizer course at 1820m (6000 ft) of altitude .(keep your speed below 500 km/h).

2:**NAV** : This is for the lateral radio NAV hold (Not Yet Implemented).

3:**NAVIG** : This button make an active AP (switch 9) follow the navigation route , route should be set and ACTIVATED from the route manager dialog .

If no active route found the ACS (AP) will fail and a warning light will be lit (N°4 under the HUD see “pic2”).The AP then should be RESET by pressing button8 from the same panel .

4:**AUTO** : This button make an active AP (switch 9) maintain the current attitude (Roll & Pitch).

5:**RADAR ALT** : Radar altitude hold (Or Terrain follow) NOT Yet Implemented.

6: **VERT**; Vertical Speed hold mode ,NOT Yet Implemented.

7:**ALT-HOLD** : Barometric altitude hold mode ,This button make an active AP (switch 9) maintain the current barometric altitude , no matter what roll commands entered by the pilot .

8:**RESET** : This button reset the AP , thus , disengaging any already active mode and solves the ACS failures due to lost route or localizer .use it generally when you see light N°4 (PIC2).

Cockpit Lights & visual warnings :

PIC N°2:



Cockpit instruments (Yellow) & lights (Red).

INSTRUMENTS :

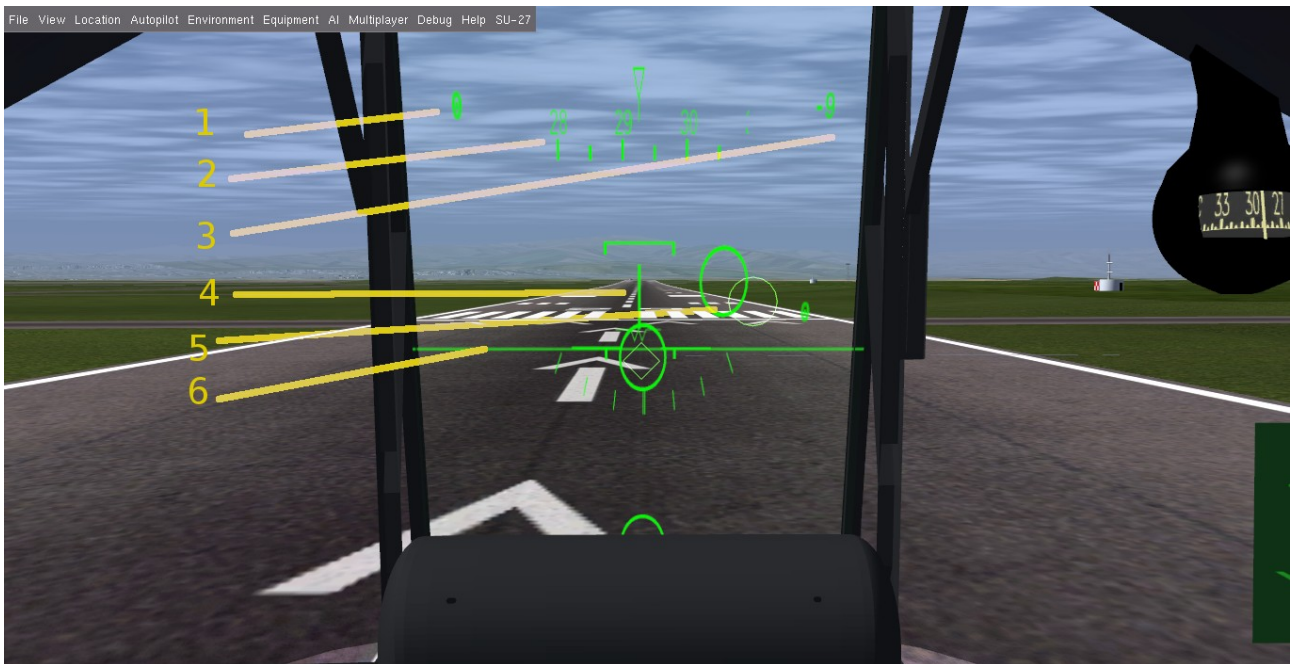
- 1: G-Load & Alpha (AoA) indicator .
- 2: Air Speed Indicator (KM/H).
- 3: Attitude Indicator .
- 4: Vertical Speed Indicator(m/s) .
- 5: Throttle Engine RPM Indicator(%).
- 6: Turbines Temperature Indicator .
- 7: HSI ,Horizontal Situation Indicator .
- 8: Barometric Altimeter (x1000 m).
- 9: Radar Altimeter (m) max 1600m.
- 10 :Flight Controls Indicator (Gears , Flaps , Slats ,AirBrake).

LIGHTS & VISUAL WARNINGS :

- 1: NAV Radio beacons reception : The left one for the VOR,VOR/DME or Localizer , the right for the Glide Slope (GS) beacons signals.
- 2: Canopy : open or Not correctly locked .
- 3: Radar Emission : Radar is emitting waves and detection is On (Toggle by pressing “SHIFT-R”). put the detection ON in the HDD and HUD by switching the lever at the top right of HDD the to “ТАКТ”.
- 4: ACS Failure : Generally due to lost of beacons signal when AP is following it , or by pressing the AP “NAVIG “ button with no route active (The AP then should be RESET by pressing button8 from the same panel).
- 5: High AoA or G -Load .(A voice warning should be heard).
- 6: Engines AfterBurner ON .

HUD SYMBOLOGY :

PIC.3 :



- 1: Air Speed .
- 2: Heading Scale (Currently at 292°).
- 3: Barometric Altitude (Pressure not set).
- 4: Attitude Indicator .
- 5: Target or Route marker .
- 6: Virtual Horizon Line .