

MANUAL BY:

**ENDERSIEGE
MADBOMBER
SUNWOLFNC**

LAST UPDATE: 2-2-24



DCS C-130 HERCULES MOD BY: ANUBIS

DISCLAIMER

This document has been created for recreational purposes only. Do not use for training or real life flying.

The authors of this document have never had access to restricted or classified documentation on the C-130 Hercules. The authors have never had access to OEM (Original Equipment Manufacturer) data related To the C-130 Hercules, its armament systems nor its defensive systems. All the information within this Document is taken from public documentation (i.e. C-130 Hercules) and non-official tutorials (player-made videos on Youtube).

The procedures listed in this document are deliberately simplified for game play purposes due to the limitations of the DCS World simulation environment and the limitations of the DCS C-130 Hercules module By Anubis.

This document is merely a free, personal project that is used for entertainment. This document is not meant nor designed to teach someone to fly a real C-130 Hercules.



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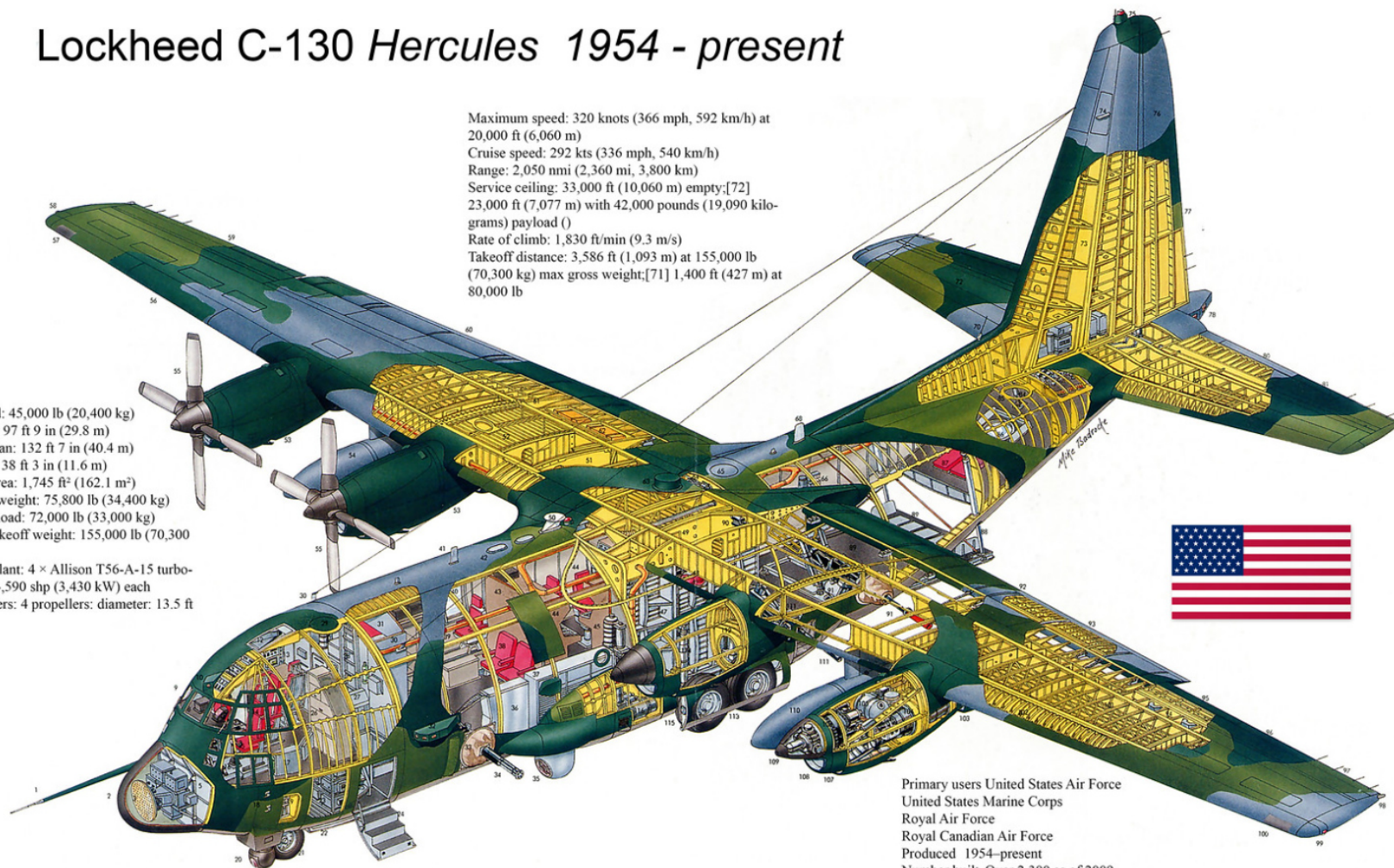
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Lockheed C-130 Hercules 1954 - present

Maximum speed: 320 knots (366 mph, 592 km/h) at 20,000 ft (6,060 m)
 Cruise speed: 292 kts (336 mph, 540 km/h)
 Range: 2,050 nmi (2,360 mi, 3,800 km)
 Service ceiling: 33,000 ft (10,060 m) empty; [72] 23,000 ft (7,077 m) with 42,000 pounds (19,090 kilograms) payload ()
 Rate of climb: 1,830 ft/min (9.3 m/s)
 Takeoff distance: 3,586 ft (1,093 m) at 155,000 lb (70,300 kg) max gross weight; [71] 1,400 ft (427 m) at 80,000 lb

Payload: 45,000 lb (20,400 kg)
 Length: 97 ft 9 in (29.8 m)
 Wingspan: 132 ft 7 in (40.4 m)
 Height: 38 ft 3 in (11.6 m)
 Wing area: 1,745 ft² (162.1 m²)
 Empty weight: 75,800 lb (34,400 kg)
 Useful load: 72,000 lb (33,000 kg)
 Max. takeoff weight: 155,000 lb (70,300 kg)
 Powerplant: 4 × Allison T56-A-15 turbo-props, 4,590 shp (3,430 kW) each
 Propellers: 4 propellers: diameter: 13.5 ft



Primary users United States Air Force
 United States Marine Corps
 Royal Air Force
 Royal Canadian Air Force
 Produced 1954–present
 Number built Over 2,300 as of 2009
 Unit cost
 C-130H \$30.1 million[1]



Key Bindings Needed

Axis Commands

- Rudder
- Roll
- Pitch
- Throttle (Both or Left & Right)
- Brakes (Left & Right)

- Trim Hat - NOSE DOWN
- Trim Hat - NOSE UP
- Trim Hat - ROLL LEFT
- Trim Hat - ROLL RIGHT
- Countermeasures Chaff Dispense
- Countermeasures Flares Dispense
- Paratroop Air Deflector Extend/Retract/Toggle (You can use it as Air Brakes)
- Throttles Beta Mode
- Throttles Flight to Beta Full Reverse

- Throttles Take-off power Toggle On/OFF
- Rearming and Refueling Window
- Cargo Door/Ramp Close
- Cargo Door/Ramp Open
- Crew Entrance Door Open/Close
- Paratroop Doors Open/Close
- Flight deck Windows Toggle Open/Close
- AP Engage (not realistic)
- AP: 1st press - disengage (...)
- Flaps Increment Down
- Flaps Increment up

OPTIONAL

- (Optional) Flaps 0%/50%/100%/Increment
- (Optional) Flashlight

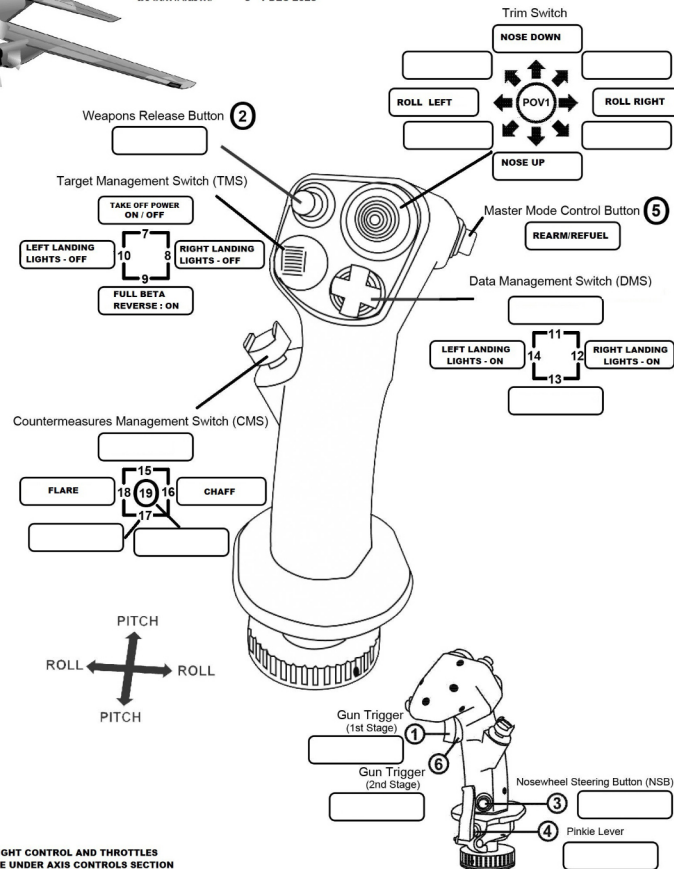
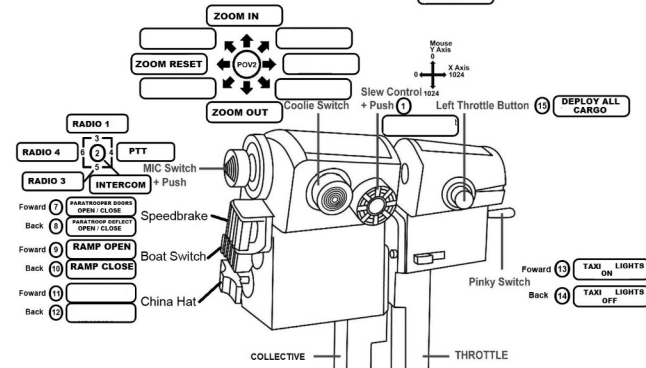
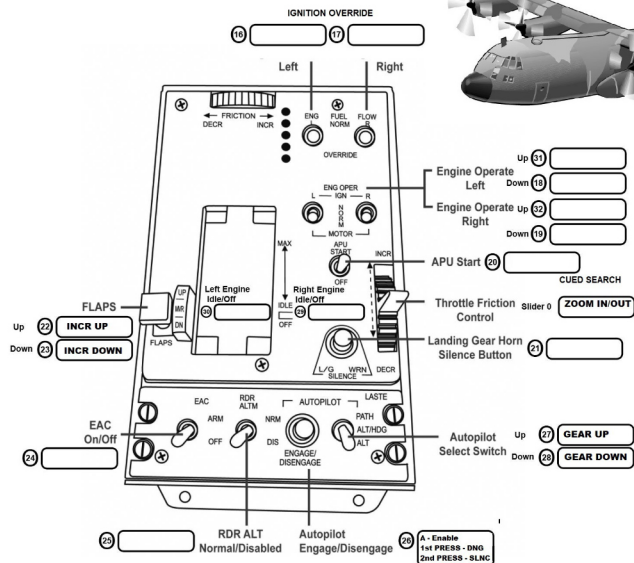
If you intend to make Air Drops:

- Cargo Deploy ALL (Jettison Lock Release)
- Cargo Deploy FWD (Jettison Lock Release)
- Cargo Deploy MID (Jettison Lock Release)
- Cargo Deploy AFT (Jettison Lock Release)



C-130 BY ANUBIS

VERSION 6.8.2 31 JUL 2021
 MAPPING CHART GEN X - 9-FEB-2020
 BY SUNWOLFNC 3 1 DEC 2023



FLIGHT CONTROL AND THROTTLES
 ARE UNDER AXIS CONTROLS SECTION

Instruments

HUD



1. HUD Up/Down
2. HUD Dark Mode & Contrast



1. Autopilot Desired Heading (Set with Bug)
2. Current Heading
3. Course Set Below the Flight Computer
4. Compass Rose
5. +5 Degree Angle Marker
6. Refusal Marker
7. Rotate Speed Marker
8. Air Speed
9. Current G Force
10. Ground Speed
11. Altitude
12. Vertical Speed
13. Radar Altimeter
14. Barometric Pressure
15. Horizon Line
16. Acceleration Cue
17. Vertical Speed
18. Waterline Symbol
19. Velocity Vector
20. -5 Degree Angle Marker
21. Turn Indicator
22. Bank Angle Line
23. Bank Angle
24. Bank Angle Reference Line (0 deg)



A detailed view of a ship's bridge control room. The room features a large panoramic window at the front, showing a harbor scene with a bridge and mountains in the distance. Below the window is a complex dashboard with multiple displays and control panels. The displays include radar screens, electronic display units (EDUs) showing various data, and a central console with numerous buttons and switches. The controls are labeled with yellow numbers from 1 to 30, indicating specific components of the bridge equipment. The overall environment is dimly lit, with the primary light source being the displays and the natural light from the window.

1. HUD
2. Reference Select Switch (RSS)
3. Auto Pilot Speed Set
4. Auto Pilot Altitude Set
5. Master Warning / Caution Lights
6. Auto Pilot Panel
7. Avionics Management Unit - Pilot
8. Avionics Management Unit - Pilot
9. Avionics Management Unit – (CNBP)
10. Keypad for CNBP
11. Avionics Management Unit - Copilot
12. Avionics Management Unit - Copilot
13. Stopwatch
14. Caution Panel
15. Heading Bug Mod

16. Air Diverter
17. HDD (Readout)
18. Artificial Horizon Standby (not working)
19. Clock
20. Aircraft Messages
21. Parking Brakes
22. HDD (Readout)
23. Flap and Trim Panel
24. HDD (Readout)
25. Landing Gear and Status
26. Landing/Taxi Lights Panel
27. Brakes Panel
28. Hydraulic Panel
29. Copilot Tacview Attach Lever
30. HDD (Readout)

[illegible][illegible]

The image shows the cockpit of a Cessna 441 Conquest II. The primary flight display (PFD) is centered, showing a green horizon line, altitude (15000), and speed (150). The Autopilot Control Panel is highlighted with a yellow box, showing various buttons and a digital display. The instrument panel includes a central PFD, a Multi-Function Display (MFD) on the left, and a System Status Display on the right. The MFD shows a map and various flight parameters. The System Status Display shows engine, electrical, and fuel system status. The cockpit is equipped with dual engine engines, a four-blade propeller, and a retractable landing gear.



The image shows the cockpit of a Cessna 441 Conquest II. The primary flight display (PFD) is centered, showing a green horizon line, altitude (15000), and speed (150). The Autopilot Control Panel is highlighted with a yellow box, showing various buttons and a digital display. The instrument panel includes a central PFD, a Multi-Function Display (MFD) on the left, and a System Status Display on the right. The MFD shows a map and various flight parameters. The System Status Display shows engine, electrical, and fuel system status. The cockpit is equipped with dual engine engines, a four-blade propeller, and a retractable landing gear.



1. Mode Selector

Move switch to IAS

*HP: Horse Power Setting bug for the engine HDD (Heads Down Display)

*RAD ALT: Radio Altimeter Alert

IAS: Indicated (Airplane) Air Speed (for autopilot)

*FPA: Flight Path Angle to be displayed on HUD

*MINS: Minimums Altitude Sound Alert

* **NOT SIMULATED IN MOD**

NOTE: These panels will not work and light up until at least 1 engine is spinning.

2. Current AP Heading
3. Knob to set AP Heading
4. Knob to set Altitude. Ref 2 below.
5. Knob to set Barometric Altitude. Ref 3 below.
6. Master Warning Light
7. Master Caution Light
8. Various Autopilot Modes



To use the Autopilot, you must first **ENGAGE** the Autopilot.

This switch is in the center console.



1. Indicated Airspeed (IAS) is set to 154
2. The Reference Mode for Altitude is set to 2400
3. The Reference Mode for Barometric Altitude is set to 2480
4. Heading Bug Mode has been dialed to 048
5. Altitude Hold is ON
6. Heading Hold is ON
7. Auto Throttle is ON

Autopilot Components

Auto-Throttle



Engage the Auto-throttle on the autopilot panel and then set your desired airspeed using the knob to the left. In the HUD you can see your desired airspeed vs your current airspeed. When the line on the scale matches with the arrow, you are at desired airspeed.

- If you move your throttle too much, auto-throttle will disengage.
- If an engine shuts down, auto-throttle will disengage.
- You can manually disengage Auto-throttle by:
 - Left Alt+T
 - Right click the A/T button

Heading Hold



Engage the Heading Autopilot and set your desired heading using the heading bug mod below the autopilot alarms.

Altitude Hold



Maintains level flight at the designated altitude

Note:

- Altitude Hold AND Vertical Speed Hold CANNOT be engaged at the same time.
- Either one or the other can be enabled at any one time
- If Altitude Hold is engaged and Vertical Speed Hold is engaged
- Altitude Hold will turn off
- If Vertical Speed Hold is engaged and Altitude Hold is engaged
- Vertical Speed Hold will turn off

Vertical Speed Hold



Maintains the climb/descent rate designated. Aircraft will then maintain that rate as long as the engines can keep up. You CAN stall the aircraft if designated ascent rate outpaces airspeed.

Average stall speed for the C130 mod is ~125kts

Note:

- Altitude Hold AND Vertical Speed Hold CANNOT be engaged at the same time.
- Either one or the other can be enabled at any one time
- If Altitude Hold is engaged and Vertical Speed Hold is engaged, Altitude Hold will turn off
- If Vertical Speed Hold is engaged and Altitude Hold is engaged, Vertical Speed Hold will turn off



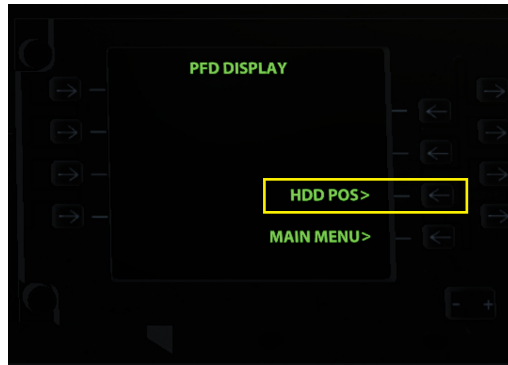
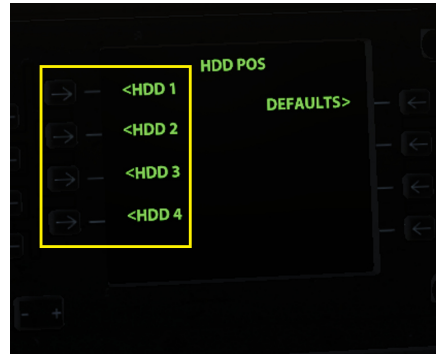
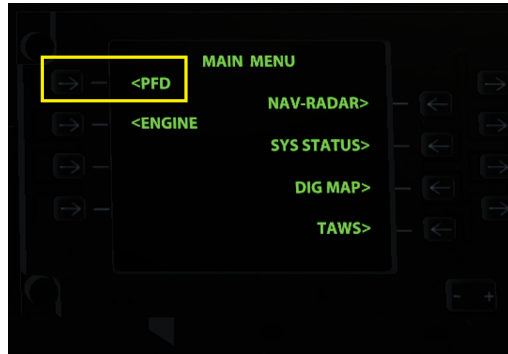
CAPS does not appear to be modeled



APPR does not appear to be modeled

More Autopilot stuff coming!

HDDs 7 & 8, 11 & 12 PFD Menu



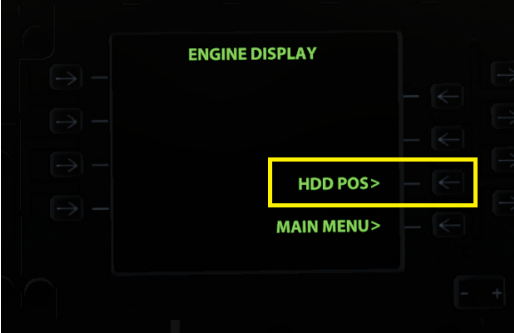
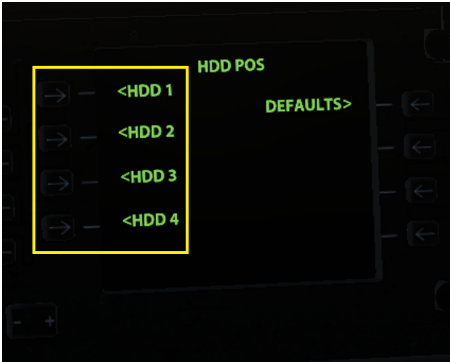
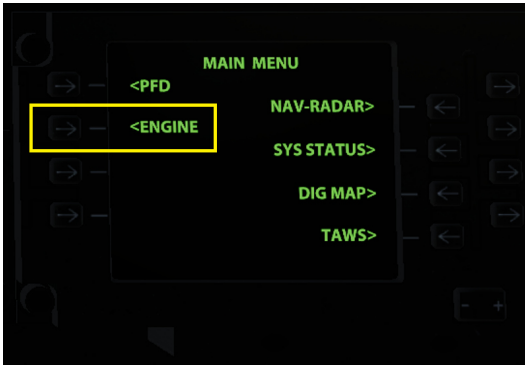
The PFD Menu

Sets what HDD it will display on.



Displays this screen.

7 & 8, 11 & 12 ENGINE Menu

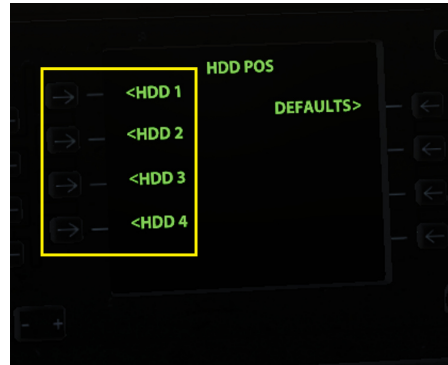
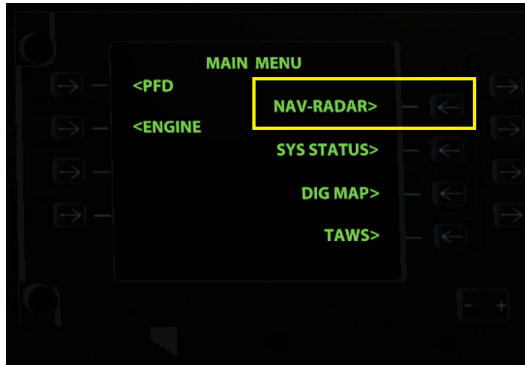


The Engine Menu
Sets what HDD it
will display on.



Displays this screen.

7 & 8, 11 & 12 Nav-Radar Menu



The HDD POS Menu

Sets what HDD it will display on.

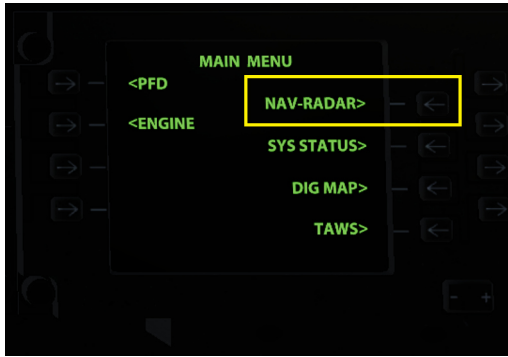


Displays this screen.

Nav-Radar Screen

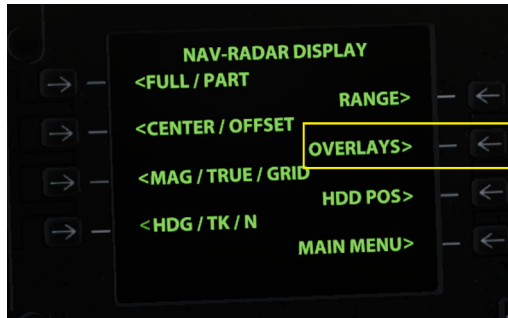
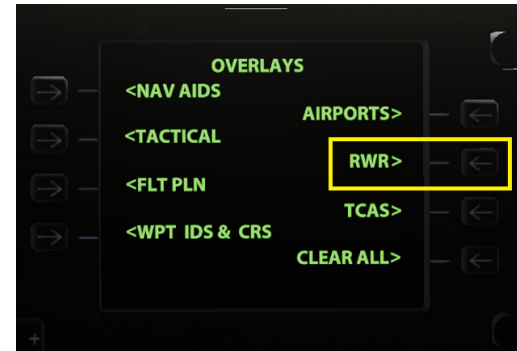


1. Slip Indicator *	10. Heading Bug	19. Unknown
2. Waypoint # Heading / Distance	11. 360° Compass	20. Radar Range
3. ETA Mission Local Time (8)	12. Range Marker	21. Longitude / Latitude
4. Time To Go to Current Waypoint	13. RWR Info	22. Unknown
5. True Ground Speed	14. KC-130 Aircraft	23. Unknown
6. Current Ground Speed (KTS)	15. Unknown	24. AGL in Feet
7. Unknown	16. C-130 Location	25. Unknown
8. Current Mission Local Time (GMT)	17. E2 Hawkeye Aircraft	26. Unknown
9. Current Heading	18. Brightness Knob	*=Nonfunctional



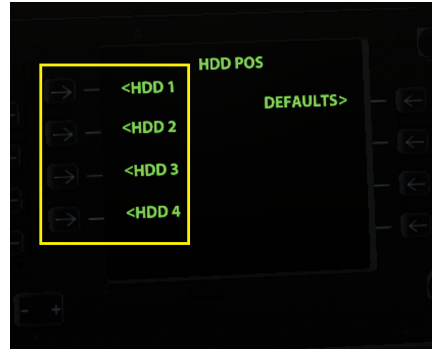
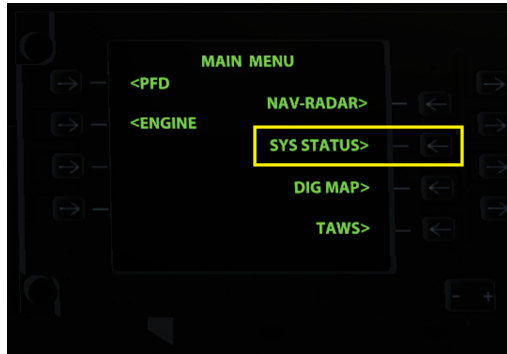
You can set various ranges too.

This range is displayed at #20 on the previous page.



The ONLY Nav Overlay that works is the RWR.

Shown on page 26.



The HDD POS Menu

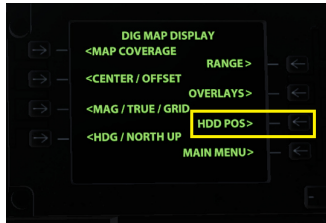
Sets what HDD it will display on.

SYSTEM STATUS					
ELECTRICAL					
GENERATOR	1	2	3	4	APU
VOLTS A	115	115	115	115	off
B	115	115	115	115	
C	115	115	115	115	
% LOAD	3.9	3.9	3.9	3.9	
TR % LOAD	1-ESS-3	1.8	1.8	1.8	
DC BUS VOLTS	28	28	28	28	
HYD PRESSURE					
UTILITY	3000	3000	3000	3000	AUX
RUDDER BOOST	3000	3000	3000	3000	2914
NORM	3000	3000	3000	3000	EMERG
BRAKES	3000	3000	3000	3000	2914
OIL CPF %					
1	2	3	4		
80	80	80	80		
FUEL QUANTITY					
1	2	3	4	TOTAL	
4743	4743	4743	4743	25822	
L-EXT	L - AUX - R	R-EXT	TOTAL %		
0	3454	3454	0	59	
LOX % 90 L					

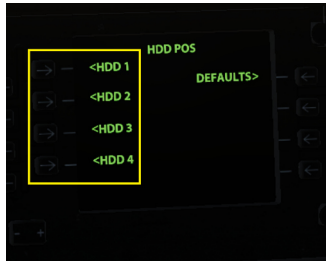
Displays this screen.



Only the HDD POS is functional.



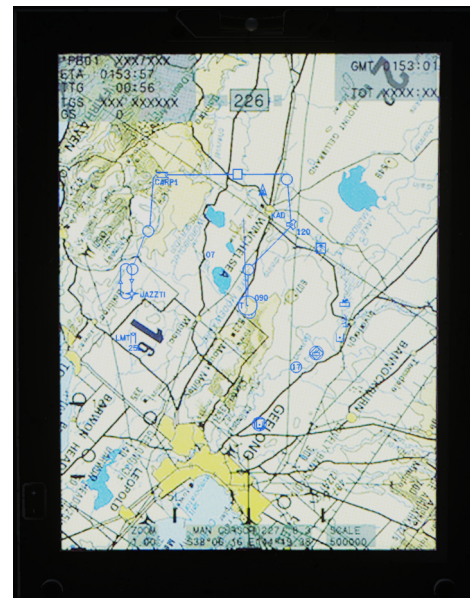
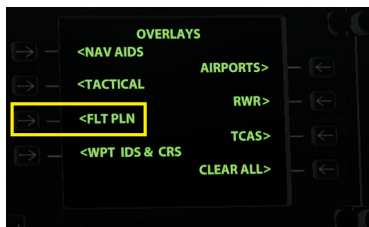
Sets what HDD it will display on. Sets what HDD it will display on.



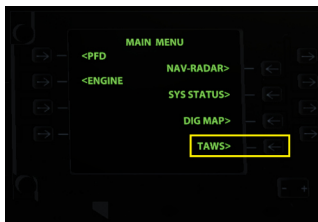
Displays this screen.



The FLT PLN overlays
a NONFUNCTIONAL
Flight plan.



Displays this screen.



Only the HDD POS is functional.

Sets what HDD it will display on.



See page 26 for explanation, but without the RVR.



HDD 3



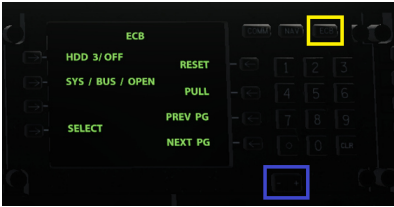
Nonfunctional

Blue is Contrast



Nonfunctional

Blue is Contrast



Nonfunctional

Blue is Contrast

Prop Feather

To Feather a prop, the engine must be off, then switch to NORMAL (Up).

NORMAL: Feathers the Prop (Up)

UNFEATHER: Acts like a Neutral if Feathered or Unfeathered (Center)

1, 2, 3, 4: Right Click and HOLD will UNFEATHER the Prop (Down)



Low Speed Ground Idle



Highlighted engine is in LSGI, you can see the props spinning slower.



To engage Low Speed Ground Idle, hold brakes, engage BETA, then press which engine button you want in LSGI, then touch the throttles forward to disengage BETA (reverse).

Start Up Procedure

1. Turn on Battery
2. EXT PWR: Set to APU
3. APU: Right Click, then hold till green light comes on, then release. Wait for it to build up to 100%

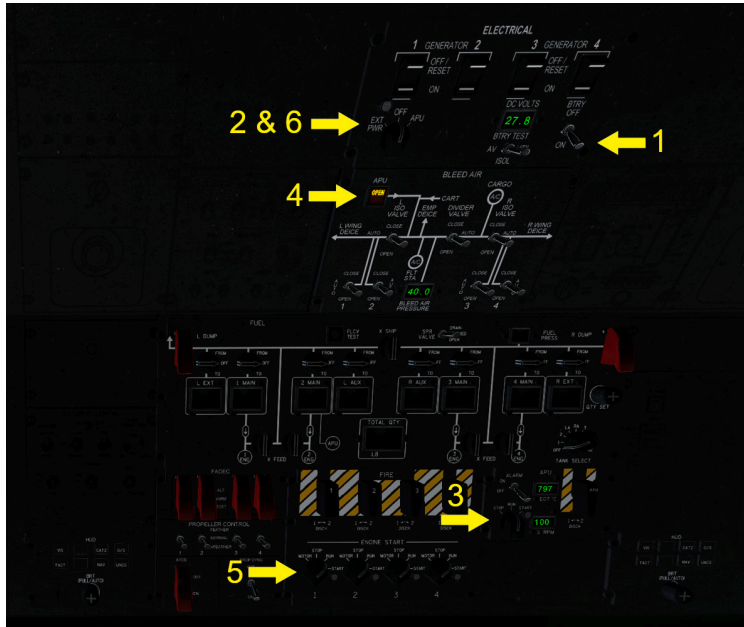
4. Turn on APU power, wait for it to build up to 40

5. Start engines 1 at a time in this order:
1, 4, 2, then finally 3

6. EXT PWR: Set to OFF

7. Turn on the Hydraulic Pump, it will build up to 3001 PSI. You can now Raise / Lower the rear ramp

8. Close both Pilot and Copilot windows



Special Thanks

Special thanks to Anubis for making this wonderful and free DCS Mod.