Legendary 707

Flight and Training Manual

Part I – SYSTEMS MANUAL

FOR FLIGHT SIMULATION USE ONLY

Captain Sim

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PILOTS' MAIN INSTRUMENT PANEL

1. Handle
2. Panel lights
3-6. Landing lights switches
7. Taxi light switch
8. RW turnoff light Left
9. RW turnoff light Right
10. Stand-by Magnetic Compass
11. Altitude alert panel
12-15. Engine fire handles and warning lights (red)
16-19. Bottle discharge switches
20-21. Bottle discharged light
22. Engine fire test switch
23. Pilot's sliding windows handle
24. Autopilot disengaged warning light (red)
25. Autopilot Modes and GPWS lights
26. Flight Director Modes lights
27. MDA light (amber)
28. Pneumatic brake lever
29. Total Air Temperature indicator
30-33. Reverse operating lights (amber)
34. Landing gear doors lights
35. Marker lights
36. Master test and dim switch
37. Airspeed/Mach indicator
38. Attitude Director Indicator (ADI)
39. Altimeter-1
40. Low range radio altimeter
41. Altimeter-2
42-45. Engine Pressure Ratio indicators
46. Landing gear position indicator
47. Gyrosyn compass indicator
48. Horizontal Situation Indicator(HSI)
49. Vertical speed and TCAS indicator
50. DME 1, 2 indicator
51. Clocks
52. Standby artificial horizon
53-56. N_1 tachometers
57. Leading edge flap lights
58-61. Engine Exhaust Gas Temperature indicators (EGT)
62,67. Flap position indicators
63-66. N_2 tachometer
68,73. Low oil pressure and Oil filter lights
69-72. Engine fuel flow indicators

CONTROLS ASSIGNMENTS OTHER THAN DEFAULT

LIGHTS:

Control cabin lights --	**Shift +L**

EXITS:

Pilot's Sliding Windows --	**Shift+E**
Passenger Cabin Door (FWD) --	**Shift+E+2**
Passenger Cabin Door (AFT) --	**Wing Fold ***
Luggage Doors/ Cargo Door --	**Tail Hook** *
Cargo Door (C version only) --	**Tail Hook** *
Refueling Doors (E-3A only) --	**Tail Hook** *

* **should be assigned by YOU.**

GPWS:

Aural warnings On/Off --	**Shift+Q**

I PANEL SELECTION ICONS (Shift+2, 707-320B & 707-320ADV only)

(Shift+1 or Num 8)* Main Panel →

(Num 7) * Forward Left View →

(Num 4) * Left View →

(Num 1)* Rear Left View →

Overhead Panel **(Num 5) *** →

Pedestal Panel **(Shift+8)** →

(Shift+3) Radio Stack Panel →

(Shift+4) Autopilot Panel →

Map View →

Passenger Left View →

Yoke →

GPS MAP 295 Panel **(Shift+7)** →

Kneeboard **(F10)** →

← Forward Right View **(Num 9)***

← Right View **(Num 6)***

← **(Num 2)*** Rear View

← Upper Second Officer Panel

← Lower Second Officer Panel

← Announcements Panel

← Radar **(Shift+9)**

← Air Traffic Control **(`)**

← Passenger Right View

← Fuel Dump Unit View

← Digital Readout (FWD View only)

← Close Icon Panel **(Shift+2 To Open)**

II PANEL SELECTION ICONS (Shift+2, Cargo & E-3A)

(Shift+1 or Num 8)* Main Panel →

(Num 7) * Forward Left View →

(Num 4) * Left View →

(Num 1)* Rear Left View →

Overhead Panel **(Num 5) *** →

Pedestal Panel **(Shift+8)** →

(Shift+3) Radio Stack Panel →

(Shift+4) Autopilot Panel →

Map View →

Yoke →

GPS MAP 295 Panel **(Shift+7)** →

Kneeboard **(F10)** →

← Forward Right View **(Num 9)***

← Right View **(Num 6)***

← **(Num 2)*** Rear View

← Upper Second Officer Panel

← Lower Second Officer Panel

← Announcements Panel

← Radar **(Shift+9)**

← Air Traffic Control **(`)**

← Passenger Right View

← Fuel Dump Unit View

← Digital Readout (FWD View only)

← Close Icon Panel **(Shift+2 To Open)**

***NOTE** - Num Lock must be ON

III PANEL SELECTION ICONS (Shift+2, VC-137C only)

(Shift+1 or Num 8)* Main Panel →

(Num 7) * Forward Left View →

(Num 4) * Left View →

(Num 1)* Rear Left View →

Overhead Panel **(Num 5) *** →

Pedestal Panel **(Shift+8)** →

(Shift+3) Radio Stack Panel →

(Shift+4) Autopilot Panel →

Map View →

Passenger Left View →

Yoke →

GPS MAP 295 Panel **(Shift+7)** →

Kneeboard **(F10)** →

← Forward Right View **(Num 9)***

← Right View **(Num 6)***

← **(Num 2)*** Rear View

← Upper Second Officer Panel

← Lower Second Officer Panel

← Announcements Panel

← Radar **(Shift+9)**

← Air Traffic Control **(`)**

← Passenger Right View

← Auxiliary Power Unit

← Fuel Dump Unit View

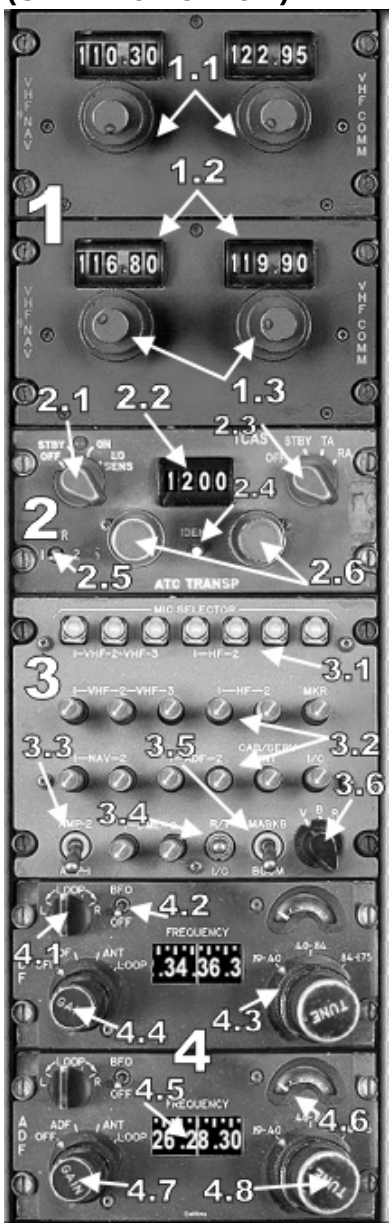
← Digital Readout (FWD View only)

← Close Icon Panel **(Shift+2 To Open)**

***NOTE** - Num Lock must be ON

RADIO PANEL

(SHIFT+3 BUTTON)



1 VHF NAVIGATION AND DME / COMMUNICATION PANELS

1.1 NAV/COMM FREQUENCY SELECTOR
1.2 NAV/COMM FREQUENCY INDICATOR
1.3 NAV/COMM FREQUENCY SELECTOR

LEFT mouse button is used to change WHOLE NUMBERS

RIGHT mouse button is used to change DECIMALS

2 ATC TRANSPONDER

2.1 FUNCTION SELECTOR
2.2 DISPLAY WINDOW
2.3 TCAS MODE SELECTOR
2.4 IDENT PUSHBUTTON
2.5 ALTITUDE SOURCE SELECTOR
2.6 CODE SELECTOR KNOBS

3 AUDIO SELECTOR PANEL

3.1 TRANSMITTER SELECTORS
3.2 COMMUNICATIONS RECEIVE SWITCHES
3.3 AMP(lifier)1/--AMP(lifier)2 SELECTOR
3.4 R/T(radiotelephony)--I/C(intercom) SWITCH (spring-loaded to neutral)
3.5 MASK / BOOM MICROPHONE SWITCH
3.6 FILTER SELECTOR (Voice/Both/Range)

4 ADF. FORWARD OR AFT ELECTRONIC CONTROL PANEL

4.1 LOOP CONTROL
4.2 BEAT FREQUENCY OSCILLATOR (BFO) SWITCH
4.3 TUNING CONTROL
4.4 VOLUME CONTROL
4.5 FREQUENCY INDICATOR
4.6 TUNING METER
4.7 FUNCTION SELECTOR
4.8 FREQUENCY BAND SELECTOR

LEFT mouse button is used to change ONES

RIGHT mouse button is used to change TENS

TCAS (Traffic Collision Avoidance System)

Coupled with the ATC Transponder (2) and is controlled by the TCAS mode selector (2.3) which has FOUR MODES:

1. **OFF**---TCAS is OFF;
2. **STBY---** TCAS is working, but giving NO ADVISORIES(For example: during taxiing into takeoff position or after landing when clear off the runway);
3. **TA**(Traffic Advisory)--- TCAS is working and giving ONLY ADVISORY commands, such as **Traffic!! Traffic!!.** This regime is recommended on final approach phase of flight or just after takeoff.(Depends on company procedures you want to comply with.)

4. **RA**(Resolution Advisory)---TCAS is giving RESOLUTION ADVISORY commands to avoid traffic collision, such as **Climb!! Climb!!** or **Descent!! Descent!!** also giving on the VSI(Vertical Speed Indicator) RED and GREEN bands of the recommended by the TCAS computer Vertical Speeds, that must be kept **ONLY IN GREEN (not in the RED) BAND** TO avoid traffic collision.

AUTOPILOT (AP) AND FLIGHT DIRECTOR (FD) CONTROLS PANEL

(SHIFT+4 BUTTON)

1. AUTOPILOT/FLIGHT DIRECTOR MODE SELECTOR

MAN – Autopilot holds a constant airplane heading and pitch attitude, which can be changed with the turn and pitch controller. The mode selector will spring load from any mode to MAN if the AP/FD is disconnected **(Z-button or as assigned)**.

NAV / LOC – The AP/FD will fly the airplane at the existing heading near the course selected on the captain's(NAV 1 tuned to ILS or VOR frequencies) instruments, or coupled with FSNAV route(VALID ROUTE-SET, HDG SEL (HEADING SELECT) SWITCH (7) – ON, GPS light + NAV/LOC PUSHED) moves the FD and the airplane will then turn to and track the selected course(track). Automatic crosswind compensation is provided. During passage over a VOR station the autopilot hold the existing inbound track.

AUTO G/S - The autopilot glide slope mode is armed and will fly the airplane on the localizer until intercepting the glide slope. The glide slope mode is now engaged and will pitch the airplane down and fly the glide slope, while the autopilot memorizes the rate of descent. After glide slope engaged, the roll and pitch sensitivities are reduced at 1500' on the radio altimeter to compensate for beam convergence. Automatic crosswind compensation is provided. After glide slope engaged, the ALT HOLD mode is ineffective.

MAN G/S – Same as AUTO G/S except the AP/FD immediately pitches and rolls the airplane to capture **both** the localizer and glideslope. Thus airplane will fly the localizer and glideslope by the most direct route. ALT HOLD mode is ineffective.

2. AUTOPILOT TURN AND PITCH CONTROLLER – controls the airplane angle of bank and rate of pitch change when AP is on. When controlling PITCH – switches off the altitude hold switch (5). When controlling ROLL - switches off the HDG SEL (heading select) switch (7).

3-4. AUTOPILOT AILERON AND ELEVATOR CHANNELS MASTER SWITCHES **("Z-BUTTON OR AS ASSIGNED, OR INDIVIDUALLY).**

Engage AUTOPILOT roll and pitch axis. Can be engaged or disengaged together **(Z-button or as assigned)** or separately. When BOTH engaged the airplane PITCH and ROLL are controlled by the autopilot turn and pitch controller (2). After disengagement the autopilot disengaged warning light (red, 24) should be pushed.

5. ALTITUDE HOLD SWITCH

ALT HOLD - Autopilot holds (and FD shows the direction to) constant airplane altitude at which the elevator switch is engaged. Mode is disabled after glideslope capture. Switch trips to OFF when the AP is disconnected (Z-button or as assigned), or when the AUTOPILOT TURN AND PITCH CONTROLLER is used to control PITCH.

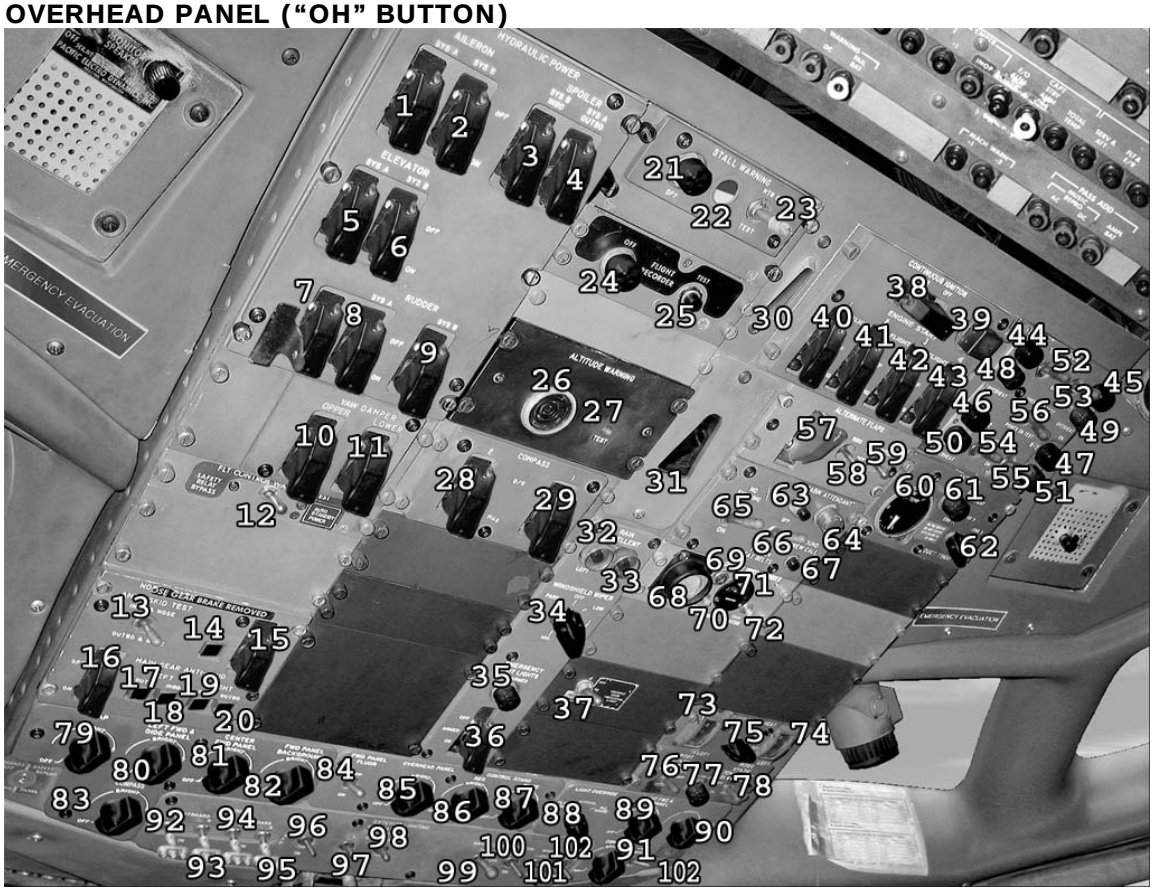
6. PITCH CHANNEL SELECTOR

A – Selects hydraulic system A to power autopilot command signals to the left elevator (right elevator acts as a slave).
B – Selects hydraulic system B to power autopilot command signals to the right elevator (left elevator acts as a slave).

7. HDG SEL(HEADING SELECT) SWITCH

– When engaged the autopilot will turn the aircraft to (the FD shows the way) and hold the heading selected on the captain's present heading selector. Effective in MAN and NAV/LOC mode prior to course capture. Switch trips to OFF when the AP is disconnected (Z-button or as assigned), or when the AUTOPILOT TURN AND PITCH CONTROLLER is used to control ROLL. The sequence HDG SEL SWITCH – ON, GPS light + NAV/LOC - PUSHED moves the FD and the airplane will then turn to and track the selected FSNAV route course (track).

OVERHEAD PANEL ("OH" BUTTON)



1. Aileron switch (system A)
2. Aileron Switch (system B)
3. Spoiler switch (system B)
4. Spoiler switch (system A)
5. Elevator switch (system A)
6. Elevator switch (system B)
7-8. Lower rudder switches (standby and system A)
9. Upper rudder switches (system B)
10-11. Yaw damper switches
12. Flight control warning test switch
13. Anti-skid test switch
15. Nose gear brake and anti-skid switch
16. Main gear and anti-skid switch
14, 17-20. (Nose, OUTBD & INBD LEFT and Right) Brake release indicator
21. Stall warning off light (amber)
22. Test indicator
23. Stall warning switch
24. Flight recorder – off light (Amber)
25. Flight recorder test light
26. Altitude warning system
27. Altitude warning test switch
28. The #2 compass system switch
29. The #1 compass system switch
30-31. The control stand hooded floodlights
32-33. Rain repellent switches (left and right)
34. Windshield wiper switch
35. Emergency exit lights unarmed (armed)
36. Emergency exit lights switch
37. Cockpit door indication light switch
38. The ignition system switch
39. Engine access door light
40-43. Engine start switches
44-47. Window heat power on lights (green)
48-51. Window overheat lights (amber)
52-55. Window heat switches
56. Window heat test switch
57. Alternate flaps master switch
58-59. Alternate flaps switches
60. Anti-ice duct temperature indicator
61. Anti-ice duct overheat light (amber)
62. Anti-ice duct temperature selector
63. Cabin attendant call switch
64. Cabin attendant call light (blue)
65. No smoking switch
66. Fasten seat belts switch
67. Ground crew call switch
68. Microphone
69. Test jack
70. Test switch

71. Monitor
72. Erase switch
73-74. Ammeters
75. Pitot static heat ammeters selector
76. Left pitot static heat switch
77. Heater off light (amber)
78. Right pitot static heat switch
79. Map light
80. Left fwd & side panel lights
81. Centre fwd panel lights
82. Fwd panel background lights
83. Compass light
84. Fwd panel fluor lights
85. Overhead panel lights
86. Control stand red lights
87. Control stands white lights
88. Light override switch
89. Right fwd & side panel lights
90. Map light
91. Dome red
92-95. Landing lights switches
96. Taxi light switch
97-98. Runway turnoff left and right switches
99. Navigation lights switch
100. Rotating beacon (anti-collision) light switch
101. Instrument Panel light switch
102. Strobe Light switch

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APU PANEL (VC-137C, E-3A, Cargo only)

1. APU master switch
ON – Opens the Fuel Shutoff valve and arms the automatic Start circuit.
START – Energizes the starter motor, activates the automatic start circuit.
OFF – Shuts down the APU.
NOTE: Battery switch is ON, APU Fire Switches closed, Remote APU stop switch is in the NORMAL position; APU Fire Warning Test-Reset switch has been reset.

2. Generator breaker light (Amber)
ILLUMINATED – Generator disconnected from synchronous bus.

3. Generator breaker switch
CLOSE – Connects APU generator to airplane synchronous bus. Closing the APU generator switch will automatically trip the airplane generator breakers or external power contactor.
TRIP – disconnects circuit between APU generator and synchronous bus.

4. Fire switch
When pulled, will arm the respective APU bottle discharge switch, trip the APU generator field relay and close the APU fuel shutoff and bleed air valves.

5. Fire warning light (Red)
ILLUMINATED – indicates tire in APU shroud. Fire alarm bell (in cockpit) and intermittent APU fire warning horn (in nose wheel well) also sound. Master Fire Warning Lights also illuminate.

6. Generator field light (Amber)
ILLUMINATED – Generator field relay open, generator field de-energized.

7. Generator field switch
CLOSE – Closes generator field relay and energizes field.
TRIP - De-energizes APU generator field. Automatically trips doe to voltage or differential faults or if APU fire shutdown system is activated. Automatically trips APU generator breaker.

8. Bottle discharge switch
Armed only if APU fire switch pulled.

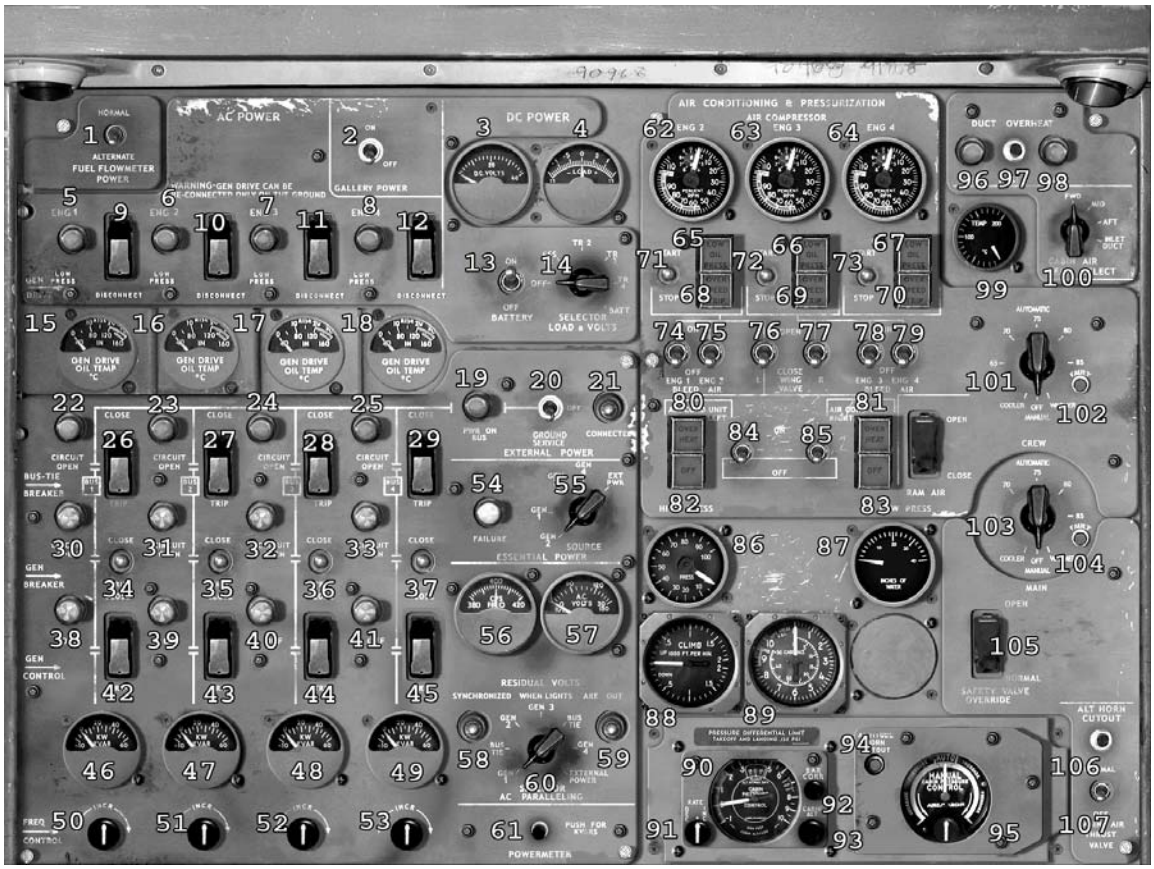
9. Auto fire shutdown arming switch
ARMED – A fire warning or test will automatically shutdown APU.
OFF - Automatic shutdown deactivated.
NOTE: If shutdown is initiated by either fire switch or the automatic fire shutdown relay, the fuel shutoff valve will close immediately accompanied by other normal shutdown actions.

10. Fire warning test-reset switch
TEST – Heats fire detector to trigger fire warning system.
CAUTION: Limit test time to 60 seconds.
RESET – Will silence fire warning bell and horn and extinguish Master Fire Warning Lights. When APU Fire Warning Light is extinguished, resets automatic fire shutdown to allow starting the APU.

11. APU ammeter
Indicates APU or external power current flow.

12. EGT indicator
Green band indicates normal operating range, yellow band indicates caution range. Red line indicates maximum temperature.

SECOND OFFICER (SO) UPPER PANEL



ELECTRICAL POWER PANEL

1. Alternate fuel flowmeter power switch
2. Galley power switch
3. DC power voltmeter
4. DC power loadmeter (ammeter)
5-8. Generator drive low pressure lights
9-12. Generator drive disconnect switches
13. Battery ON/OFF (master switch)
14. DC meters selector
15-18. Generator drive oil temperature indicator
19. Power on BUS light
20. Ground service master switch
21. External power connected light
22-25. Generator bus-tie closed lights
26-29. Generator bus-tie circuit breakers
30-33. Generator circuit open lights
34-37. Generator-circuit breaker switches
38-41. Generator control lights
42-45. Generator control switches
46-49. Generator power meters
50-53. Frequency control knobs
54. Essential power source failure light
55. Essential power selector
56. Frequency indicator
57. AC voltmeter
58-59. Synchronizing lights (clear)
60. AC meters selector
61. KVAR button

AIR CONDITIONING & PRESSURIZATION PANEL

62-64. Turbocompressor N_2 tachometers
65-67. Turbocompressor low oil pressure lights(amber)
68-70. Turbocompressor Overspeed trip lights(amber)
71-73. Turbocompressor start/stop switches
74,75,78,79. Engine bleed air switches
76-77. Wing valve switches
80. Left air-conditioning unit overheat light
81. Right air-conditioning unit overheat light
82. Left air-conditioning unit OFF light
83. Right air-conditioning unit OFF light
84,85. Left & Right air-conditioning unit ON/OFF switches
86. Duct high pressure indicator
87. Duct low pressure indicator
88. Cabin rate of climb indicator
89. Cabin altitude indicator
90. Cabin pressure control indicator
91. Cabin pressure rate of change knob
92. Barometric correction knob
93. Cabin altitude correction knob
94. Altitude horn cutout switch
95. Manual cabin pressure control indicator
96. Crew duct overheat light (amber)
97. Main duct overheat light (amber)
98. Duct overheat reset button
99. Cabin air source temperature indicator
100. Cabin air source temperature selector
101. Crew manifold air temperature selector
102. Crew manifold fault reset button
103. Main manifold air temperature selector
104. Main manifold fault reset button
105. Safety valve override switch
106. Altitude horn cutout button
107. Cabin air thrust valve position switch

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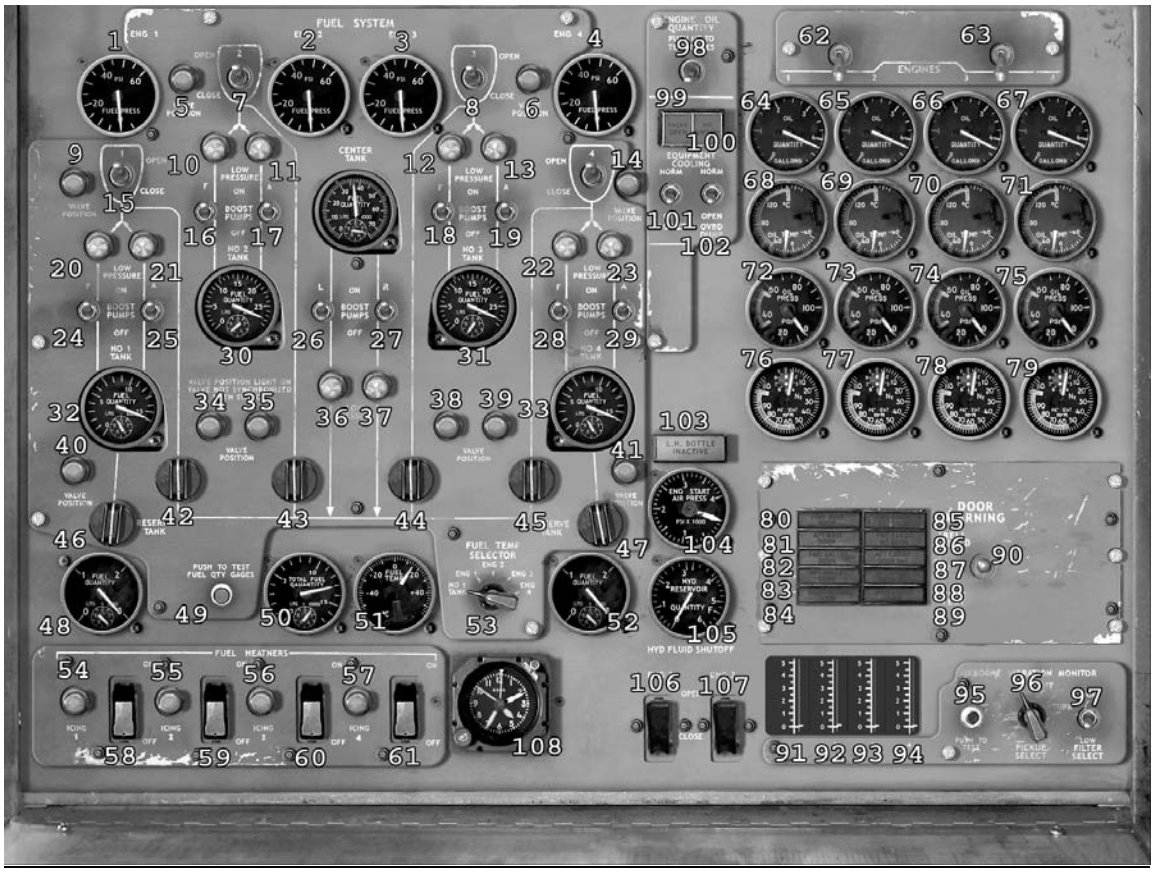
SO LOWER PANEL



FUEL SYSTEM PANEL

1-4. Engine 1,2,3,4 fuel pressure indicators
5, 6, 9. Engine 2, 3, 1, 4 fuel shutoff valve position lights (blue)
7, 8, 14,15. Engine 2, 3, 4, 1fuel shutoff valve switches
10, 12, 20, 22. FWD fuel boost pump low pressure lights of the respective tanks (amber)
11, 13,21,23. AFT fuel boost pump low pressure lights
of the respective tanks (amber)
16, 18, 24, 28. FWD fuel boost pump switches of the respective tanks
17, 19, 25, 29.AFT fuel boost pump switches of the respective tanks
26, 27. Left & Right center wing tank boost pump switches
30. No.2 main tank fuel quantity indicator
31. No.3 main tank fuel quantity indicator
32. No.1 main tank fuel quantity indicator
33. No.4 main tank fuel quantity indicator
34, 35. Fuel shutoff valve in transit lights (blue)
36, 3. Center tank fuel boost pump low pressure lights (amber)
38-41. Fuel shutoff valve in transit lights (blue)
42-47. Fuel cross feed manifold valve switches
48. No.1 reserve tank fuel quantity indicator
49. Fuel quantity indicator test switch
50. Total fuel quantity indicator
51. Fuel temperature indicator in the selected
52. No.4 reserve tank fuel quantity indicator
53. Fuel temperature source selector switch
54-57. Fuel Icing Eng. 1,2,3,4 lights (amber)
58-61. Fuel Heaters Eng. 1,2,3,4 switches
62, 63. Source selector switches
64-67. No.1, 2, 3, 4 Engine oil quantity indicators
68-71. No.1, 2, 3,4 Engine oil temperature indicators
72-75. No.1, 2, 3,4 Engine oil pressure indicators
76-79. No.1, 2, 3, 4 Engine N_2 tachometers
80-89.Door warning annunciation panel
80. FWD main door open light

81. AFT main door open light
82. FWD galley door open light
83. AFT galley door open light
84. Radio access door open light
85. FWD cargo external door open light
86. AFT cargo external door open light
87. AFT cargo door No.1 open light
88. AFT cargo door No.2 open light
89. Main cargo door open light
90. Door warning lights master switch
91-94. No.1, 2, 3, 4 Engine vibration indicators
95. Engine vibration push-to-test switch
96. Engine vibration source selector switch
97. Engine vibration filter selector switch
98. Engine oil quantity push-to-test switch
99. Equipment cooling valve open light (amber)
100. Equipment cooling NO AIRFLOW light (amber)
101. Equipment cooling blower master switch
102. Equipment cooling overboard dump master switch
103. L.H. bottle inactive light (red)
104. Engine start air pressure indicator
105. Hydraulic reservoir quantity indicator
106. Hydraulic fluid shutoff Eng No.2 switch
107. Hydraulic fluid shutoff Eng No.3 switch
108. Clock

WEATHER RADAR

It can be switched on from icons panel (SHIFT+2), Rr button or (Shift+9), or by the ON/OFF switch (1) from the cockpit.

Weather radar scans space ± 60 degrees horizontally and ± 15 degrees vertically.
Radar can be used to identify weather or other traffic

1. WXR **ON / OFF** switch
2. Range selector: you can select range of scanning between 20/50/150 Nm
3. Dimmer knob – controls radar display brightness
4. Erase rate knob – controls the frequency of scanning
5. Marks knob – controls displayed marks residual brightness
6. Weather return mark

GROUND PR0XIMITY WARNING SYSTEM

GENERAL

The ground proximity warning system provides the flight crew with visual and aural warnings of a potentially dangerous flight path relative to the ground. Warnings are given during two flight conditions:

A. Impending terrain impact, or
B. Deviation below the glide slope.

The system monitors five abnormal flight conditions:

Terrain warning –
Mode 1 – Excessive descent rate below 2500 feet AGL.
Mode 2 – Excessive closure rate with rising terrain.
Mode 3 – Descent during the takeoff regime.
Mode 4 – Not in landing configuration below 500 ft. AGL.

Glideslope warning –
Mode 5 – Bellow and excessively below the glide slope.

The system will never warn against:

- Landing short of the runway if the airplane is in landing configuration with a normal rate of descent and non-availability of glide slope.
- A flight profile approaching very steep terrain, such as a sheer cliff.
-
-

GPWS LIGHTS

GPWS PULL UP / Push-To-Test **LIGHT (Red)**
Illuminates flashing to provide visual warning for Mode 1,2,3,4.

Press to test aural and visual warnings. System can be tested on ground only.
GP – glide slope deviation warning light (White)
Illuminates flashing to provide visual warning for Mode 5.

OPERATION

Modes and Warnings
The system automatically and continuously monitors the airplane's flight path with respect to terrain at all radio altitudes between 50 and 2500 feet.
The system provides "soft" and "hard" warnings in some modes. The "hard" warning indicates a more dangerous flight path than the "soft" warning
There are five different flight modes that will give the flight crew a warning.

MODE ONE: EXCESSIVE RATE OF DESCENT WITH RESPECT TO TERRAIN.
The purpose of this mode is to give an alarm if the aircraft develops an excessive rate of descent at low altitude. Beginning at 2500 feet (radio altimeter limit) the sink rate is automatically monitored to detect an abnormally high rate of change.

To prevent nuisance alarm, the system is inhibited below 50 feet radio altitude.

The warning is a red **PULL UP** light and aural "DON'T SINK" (soft warning).

The warning is a red **PULL UP** light and aural "WHOOP - WHOOP - PULL UP" (hard warning).

MODE TWO: EXCESSIVE CLOSURE RATE TO TERRAIN.
There are two configurations in relation to Mode Two:

2A – Not in landing configuration. The system is monitoring the flight path and terrain contour. If the computed flight path predicts terrain contact, the warning is activated. The warning is a red **PULL UP** light and aura "TOO LOW TERRAIN" is activated (soft warning).
The warning is a red **PULL UP** light and aural "DON'T SINK" (soft warning).
The warning is a red **PULL UP** light and aural "WHOOP - WHOOP - PULL UP" (hard warning).
2B - In landing configuration.
The warning is a red **PULL UP** light and aural "DON'T SINK" (soft warning).

The warning is a red **PULL UP** light and aural “WHOOP - WHOOP - PULL UP” (hard warning).

MODE THREE: ACCUMULATED ALTITUDE LOSS BEFORE ACQUIRING 700 FEET.
TERRAINE CLEARANCE AFTER TAKEOFF OR MISSED APPROACH.

This mode is designed to provide warning if the airplane begins to loose altitude after takeoff or missed approach. It becomes operational at 50 feet radio altitude and inhibited after 700 feet.
The warning is a red **PULL UP** light and aural “DON’T SINK” (soft warning).

MODE FOUR: FLIGHT INTO TERRAIN WITH LESS THAN 500 FT.
TERRAINE CLEARANCE AND NOT IN LANDING CONFIGURATION.

The purpose of this mode is to protect against an excessive sink rate during the approach. In addition, it also provides GEAR UP and FLAP UP warning.
The mode becomes operational below 1000 feet. A warning will be used if:

1. The descent rate is excessive. The warning is a red **PULL UP** light and aural “DON’T SINK” (soft warning).
2. The gear is not extended. Aural “LANDING GEAR” sounds.
3. Below 200 feet with the flaps not full down.

The warning is a red **PULL UP** light and aural as follows:

- below 1000 feet AGL at speeds in excess of normal maneuvering speeds: “TOO LOW, TERRAIN”;
- below 500 feet AGL at approach and landing speeds with gear not extended: “TOO LOW,GEAR”;
- below 200 feet AGL at approach and landing speeds with flaps not in landing configuration: “TOO LOW, FLAPS”.

MODE FIVE: GLIDESLOPE DEVIATION ALERTING.

If a valid frequency has been selected, the below glide slope warning is activated (aural ”GLIDESLOPE” and the white “GP g/s” LIGHT comes on) when the aircraft is below 100 feet **and more than one dot deflection** below the glide path. If the deviation below the glideslope increases, the voice repetition rate will increase. (At 300 ft. or less, a significant deviation (2 dots) below the glide slope will cause the audio level to increase.)

SYSTEM TEST

The TEST button on the ground proximity panel verifies the integrity of the system. It is operative on the ground. When pressed, it causes the **GPWS** red light to illuminate. In addition, the audio system is activated, broadcasting the words:

- SINK RATE, SINK RATE;
- WHOOP – WHOOP - PULL UP(3 TIMES);
- TERRAIN, TERRAIN;
- WHOOP - WHOOP - PULL UP(3 TIMES);
- DON’T SINK (4 TIMES);
- TOO LOW TERRAIN (TWICE);
- TOO LOW GEARS (TWICE);
- TOO LOW FLAPS (TWICE).