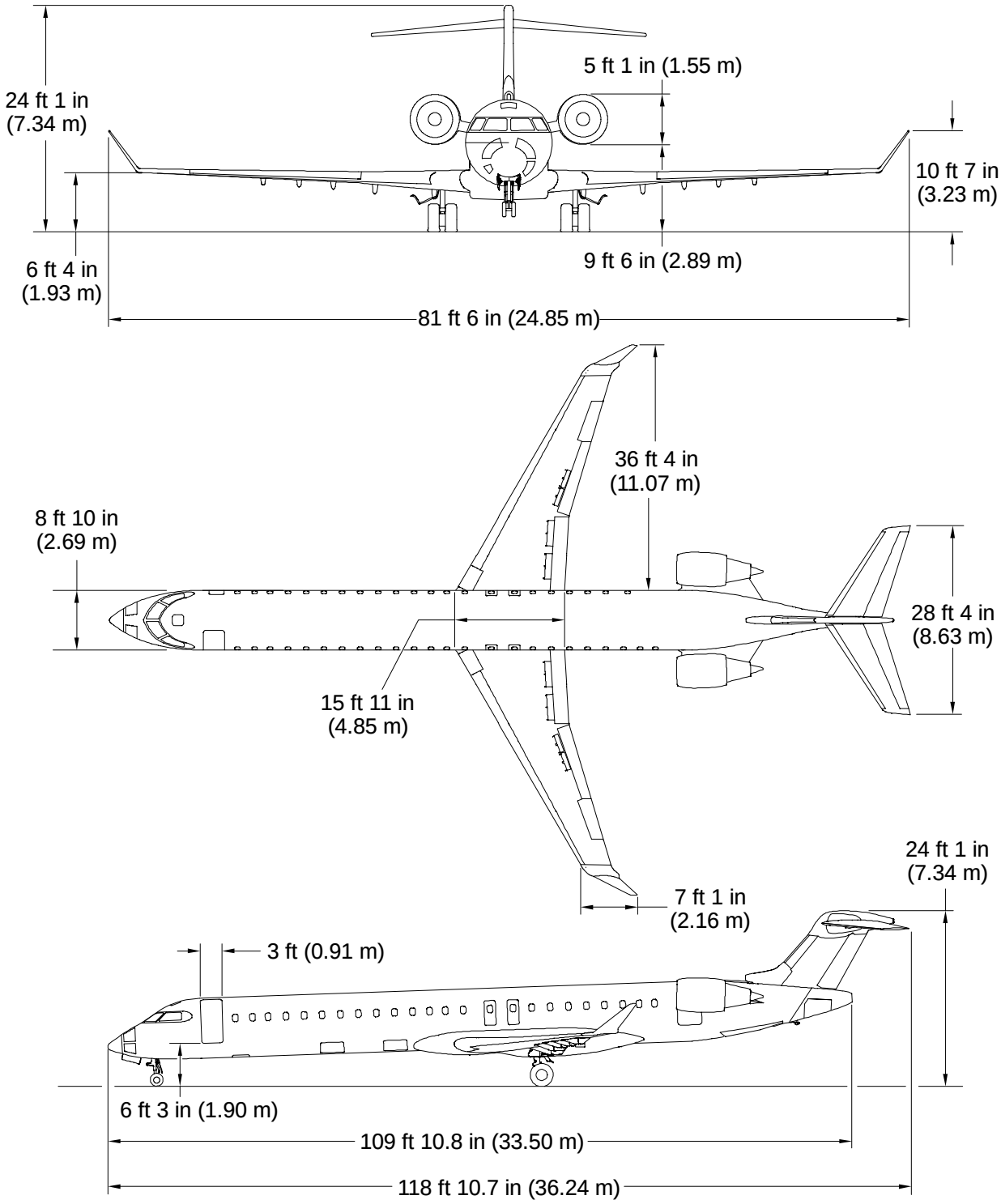
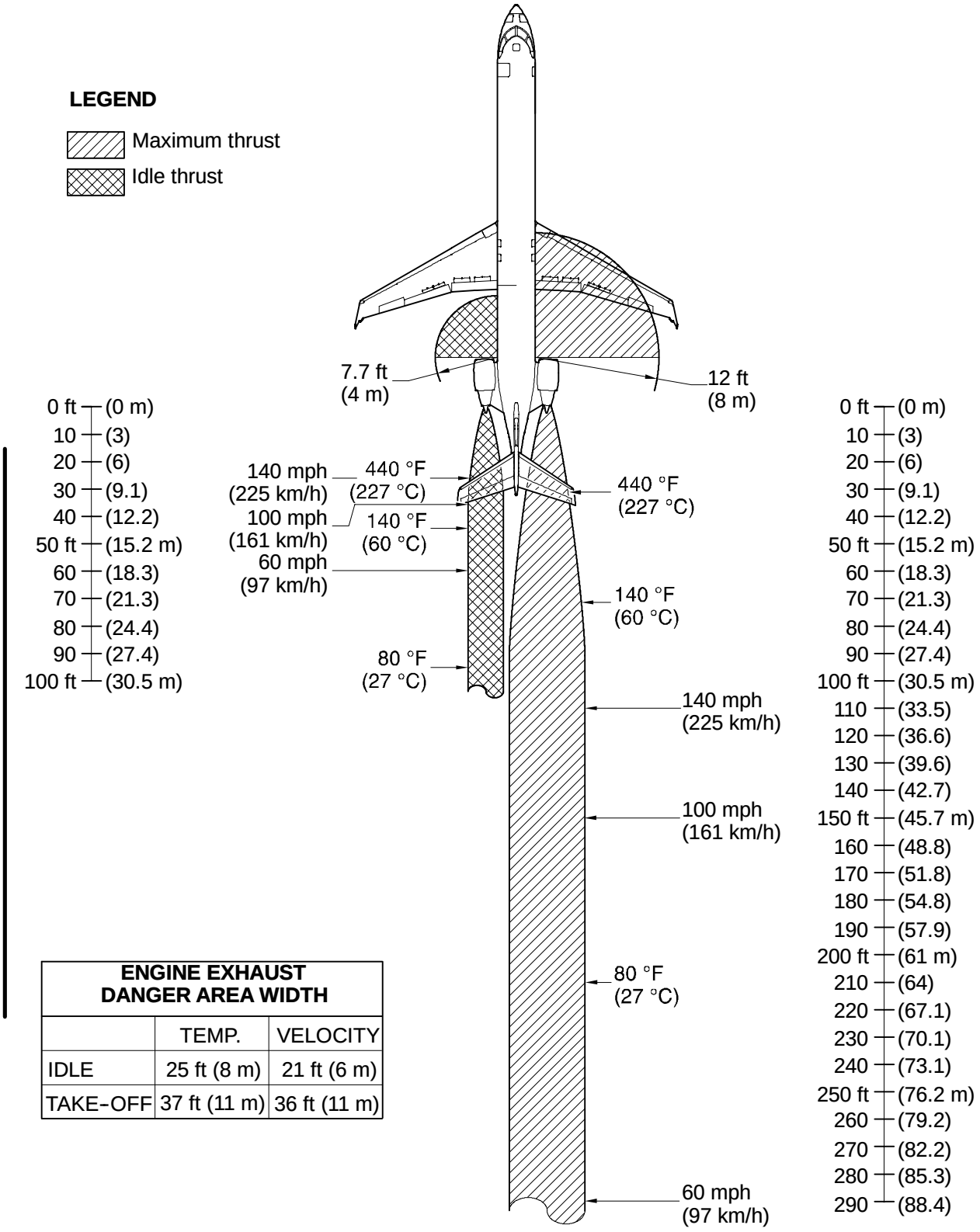
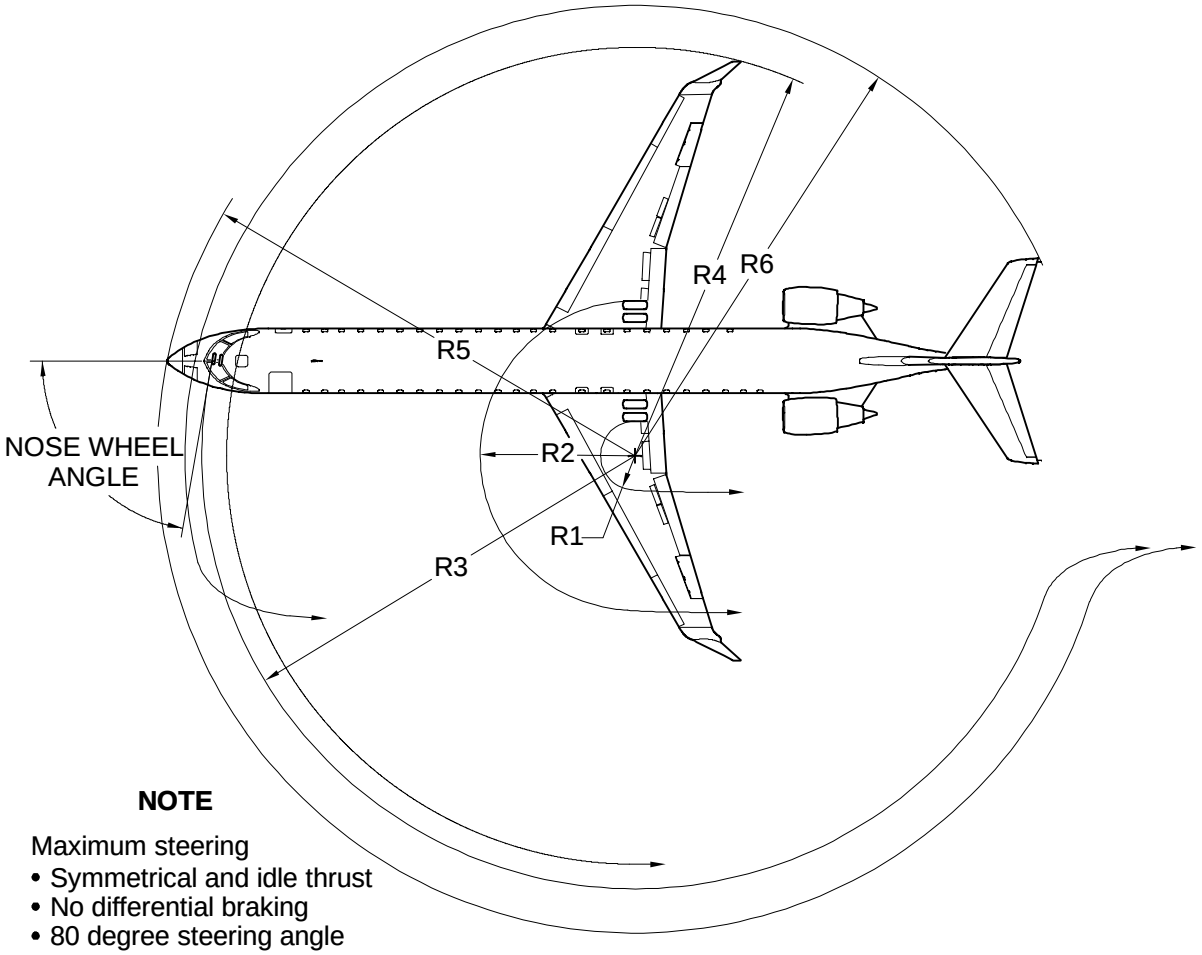



External Aircraft Dimensions <2224>
Figure 01–20–1




| ENGINE EXHAUST DANGER AREA WIDTH | | |
|---|---|---|
| | TEMP. | VELOCITY |
| IDLE | 25 ft (8 m) | 21 ft (6 m) |
| TAKE-OFF | 37 ft (11 m) | 36 ft (11 m) |

Engine Hazard Areas <2224>
Figure 01–20–2

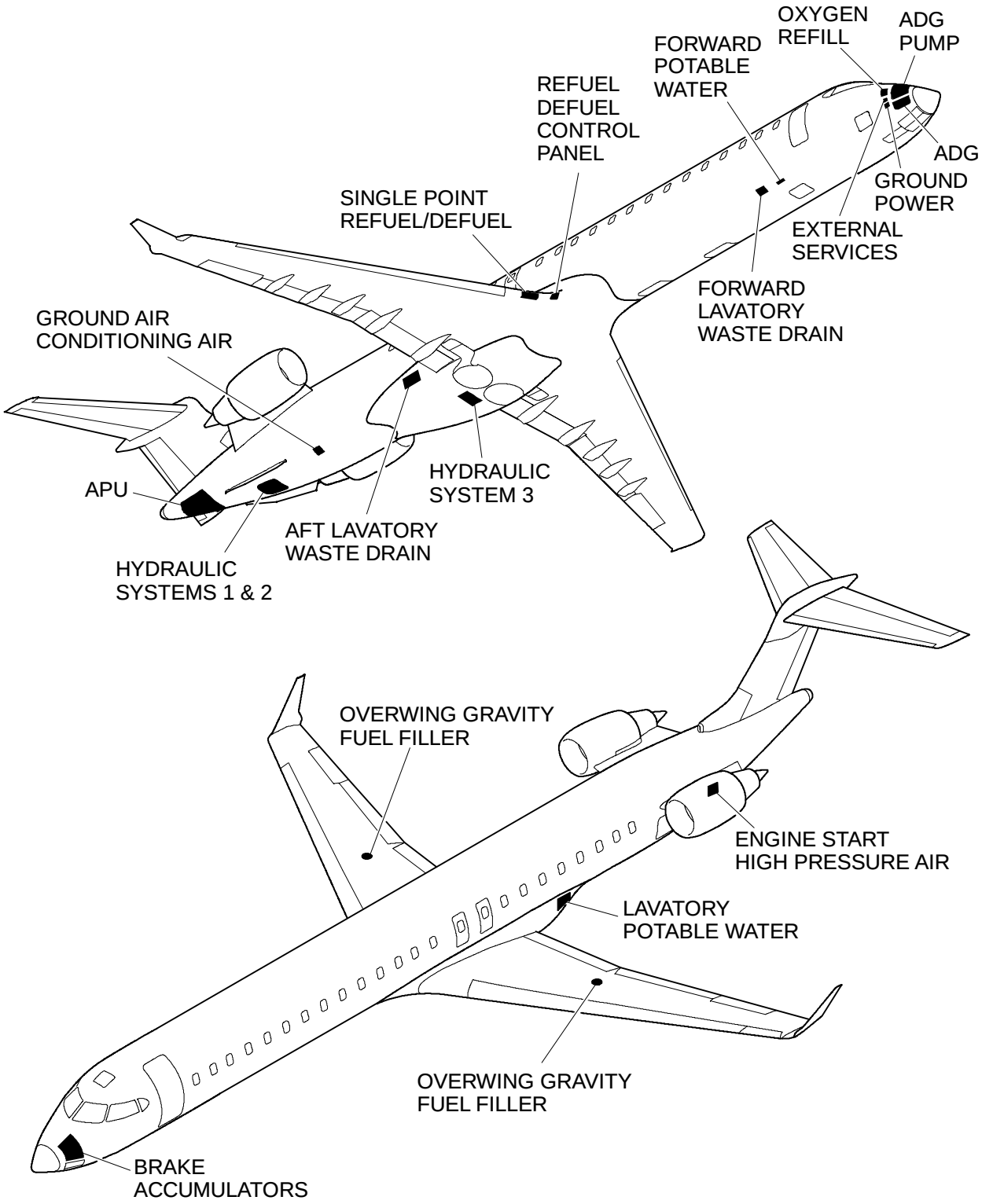



**NOTE**

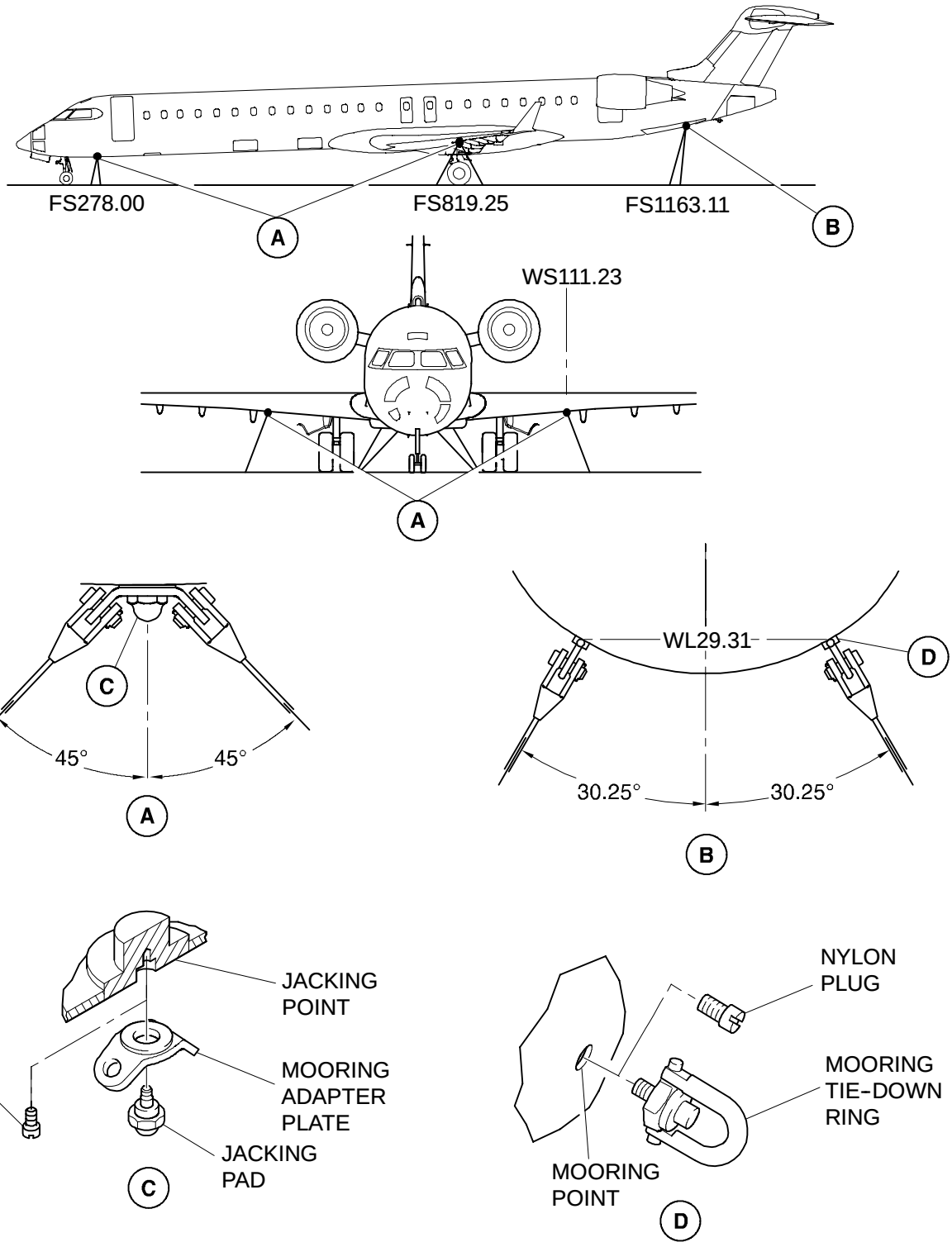
Maximum steering
- Symmetrical and idle thrust
- No differential braking
- 80 degree steering angle
- Slip of 3 degrees
- Dry runway
- Slow continuous turn
- Maximum airplane weight
- Aft center of gravity

| TURNING RADII FOR VARIOUS NOSE WHEEL ANGLES | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANGLE | R1 | | R2 | | R3 | | R4 | | R5 | | R6 | |
| | ft | m | ft | m | ft | m | ft | m | ft | m | ft | m |
| 20° | 147.13 | 44.85 | 163.55 | 49.85 | 166.24 | 50.67 | 197.18 | 60.10 | 167.93 | 51.19 | 177.70 | 54.16 |
| 30° | 89.70 | 27.34 | 106.10 | 32.34 | 114.01 | 34.75 | 139.76 | 42.59 | 116.85 | 35.62 | 124.41 | 37.92 |
| 40° | 59.11 | 18.02 | 75.53 | 23.02 | 88.91 | 27.10 | 109.30 | 33.31 | 92.75 | 28.27 | 97.98 | 29.86 |
| 50° | 39.15 | 11.93 | 55.57 | 16.94 | 74.77 | 22.79 | 89.49 | 27.27 | 79.45 | 24.22 | 82.29 | 25.08 |
| 60° | 24.32 | 7.41 | 40.74 | 12.42 | 66.27 | 20.20 | 74.85 | 22.81 | 71.61 | 21.83 | 72.02 | 21.95 |
| 70° | 12.24 | 3.73 | 28.65 | 8.73 | 61.17 | 18.64 | 63.00 | 19.20 | 66.99 | 20.42 | 64.96 | 19.80 |
| 80° | 4.69 | 1.43 | 21.10 | 6.43 | 59.05 | 18.00 | 54.84 | 16.71 | 65.08 | 19.84 | 61.35 | 18.70 |

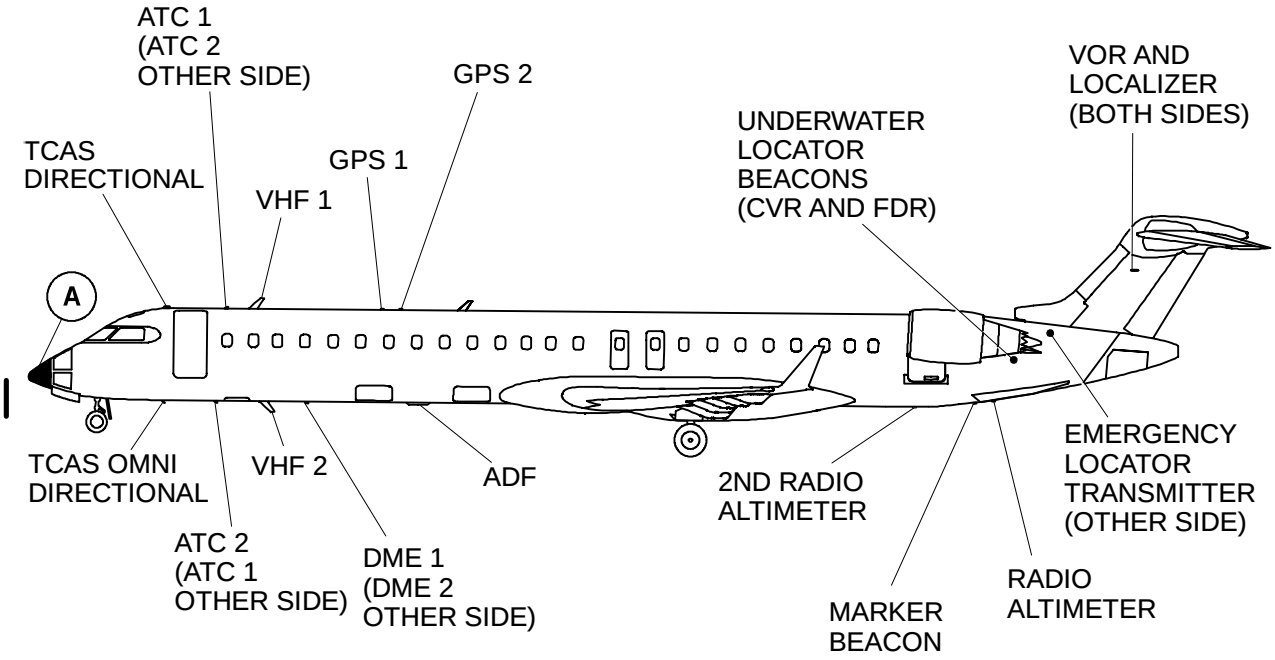
Taxiing and Turning Radii
Figure 01–20–3

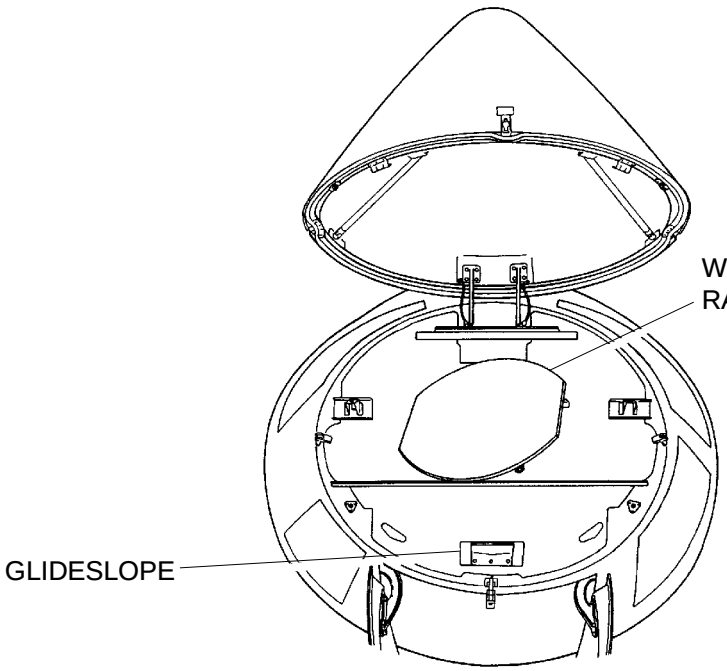



Airplane Service Points <2224>
Figure 01–20–4



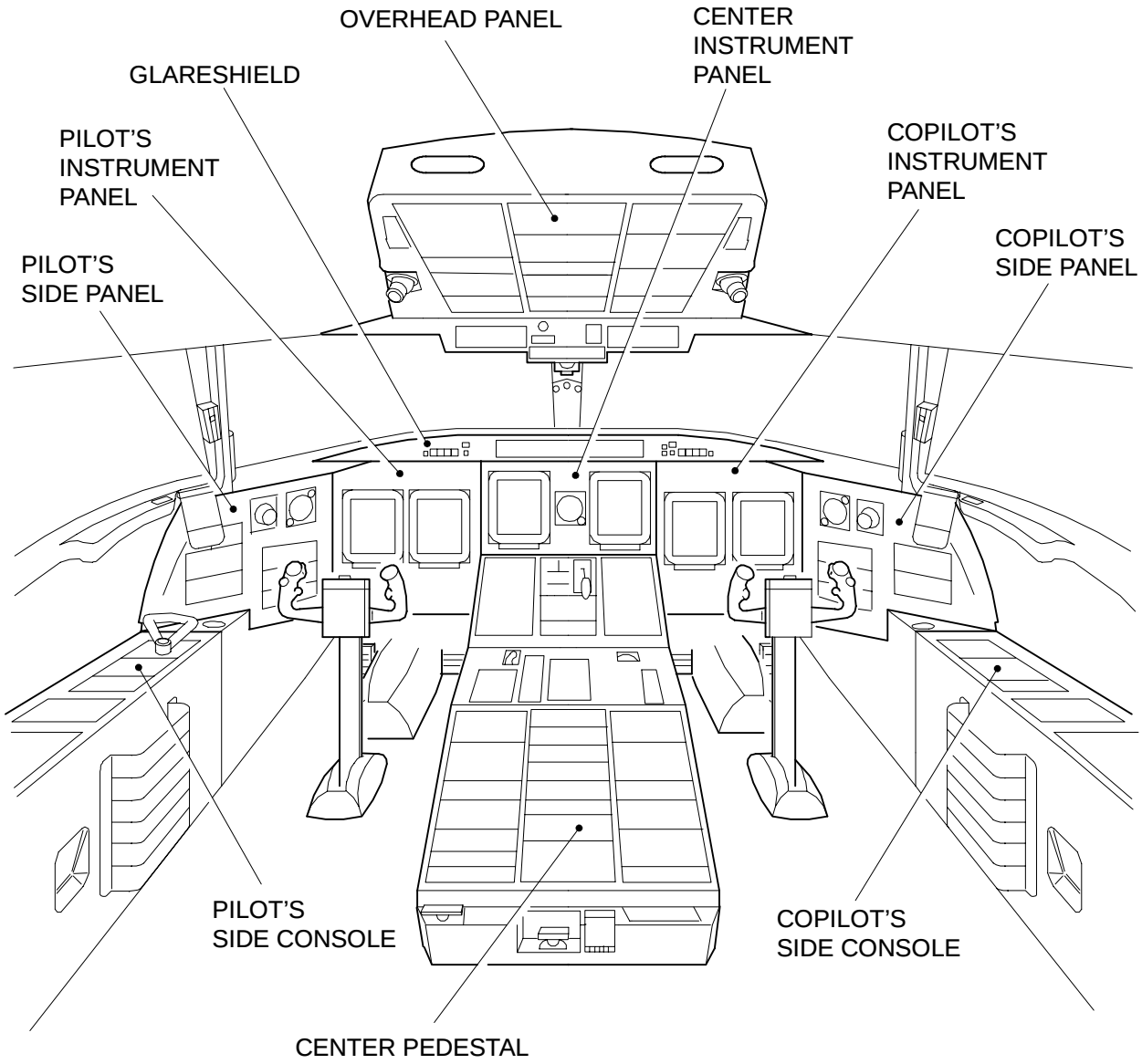

Airplane Mooring Points
Figure 01–20–5



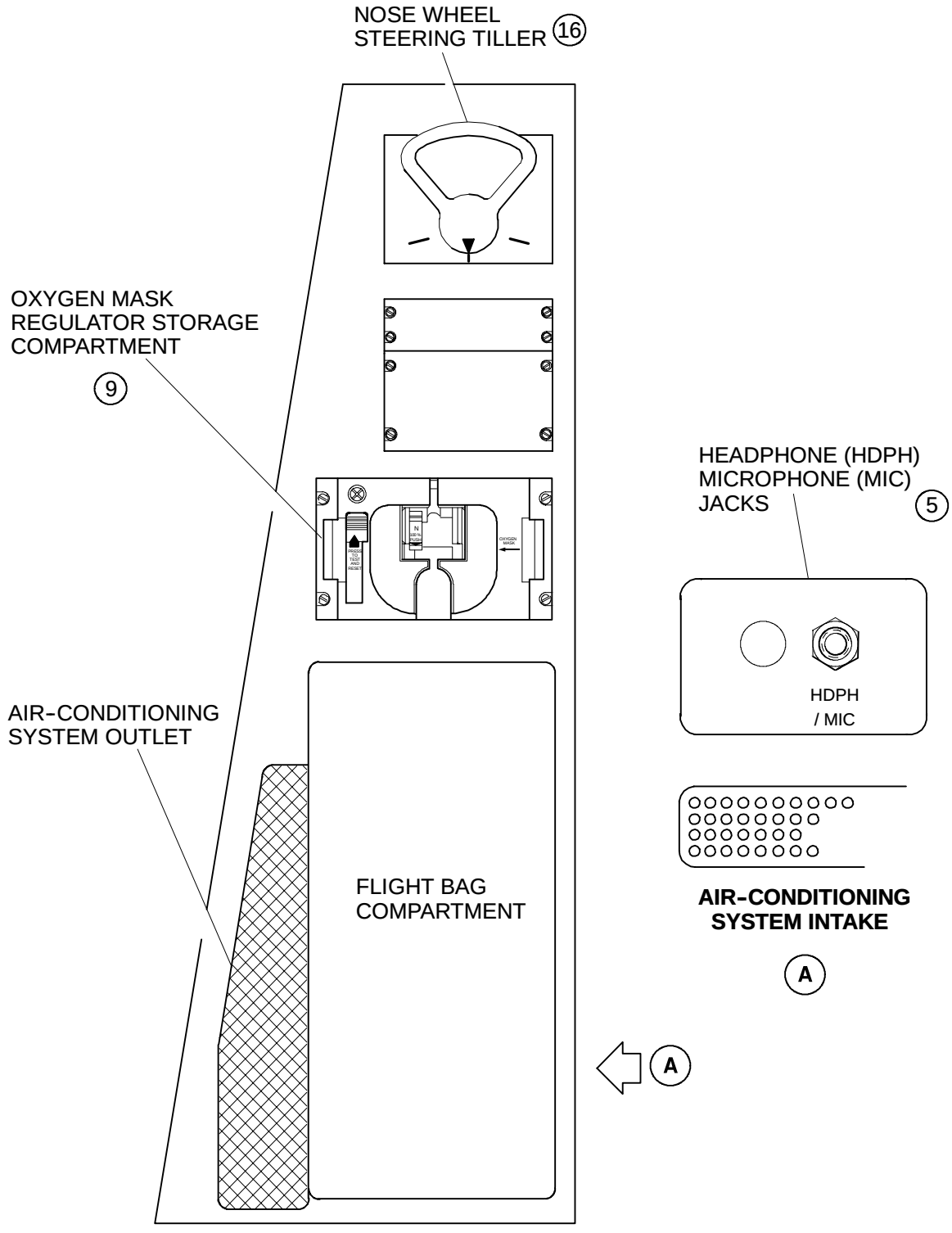




**NOTE**
Radar hazard area is 2 ft (0.6 m) from antenna with radome closed.

Airplane Antenna Locations <1045, 1027,1212>
Figure 01–20–6

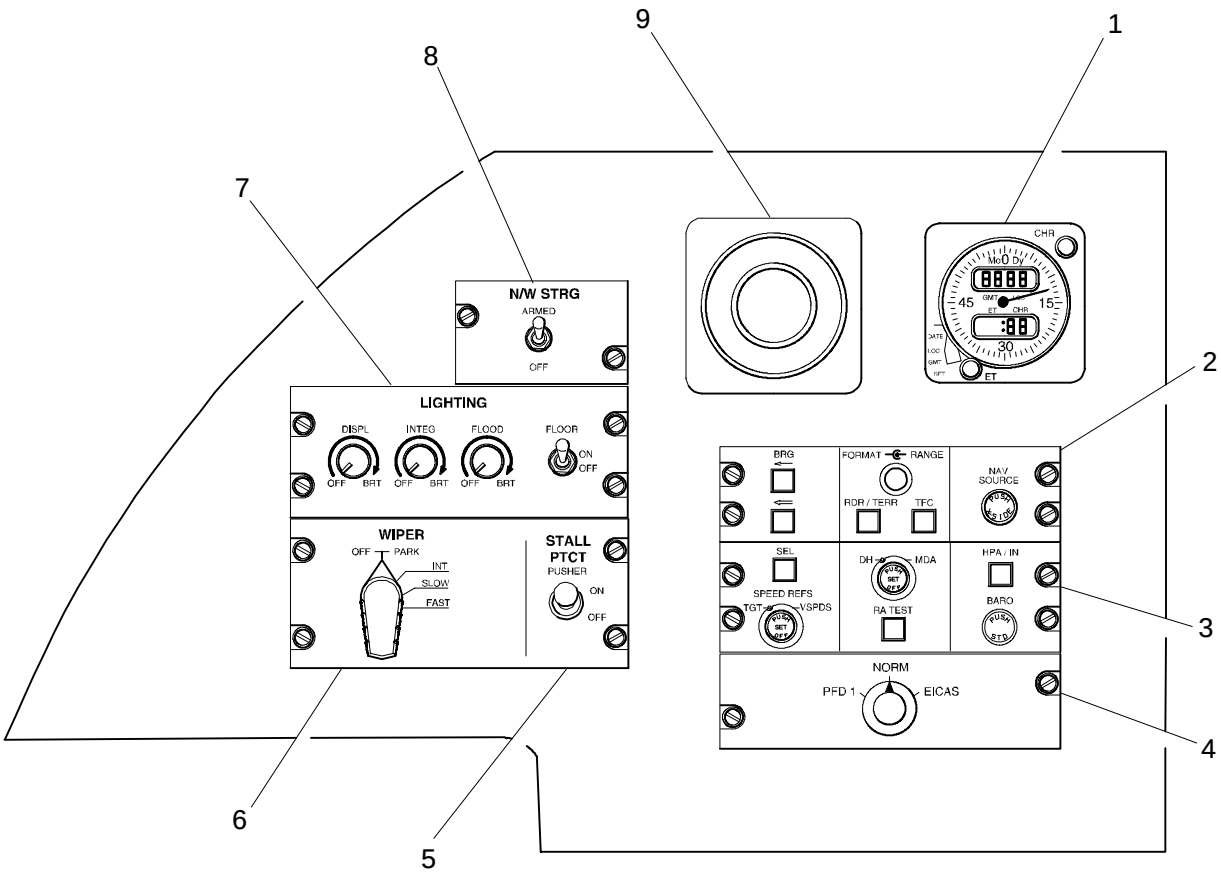



Flight Compartment Panel Layout
Figure 01–30–1




◯ Indicates Chapter in which information on item may be found.

Pilot's Side Console <1205>
Figure 01–30–2

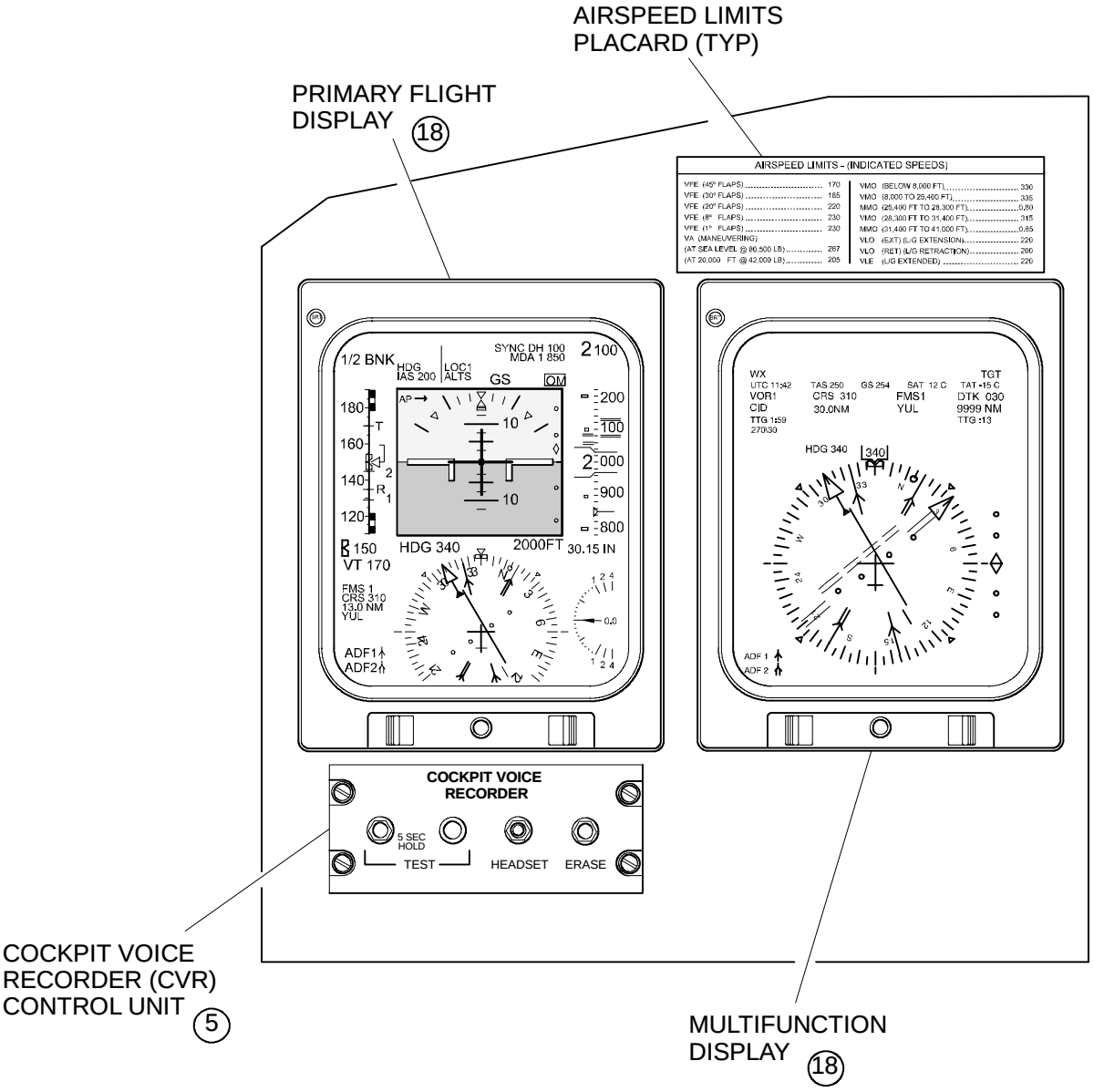



**LEGEND**

1. Clock. (12)
2. Display control panel. (12) (18)
3. Air data reference panel. (12) (18)
4. Display reversionary panel. (2)
5. Stall protection panel. (11)
6. Windshield wiper control panel. (15)
7. Lighting panel. (17)
8. Nose wheel steering subpanel. (16)
9. Air conditioning system gasper. (8)

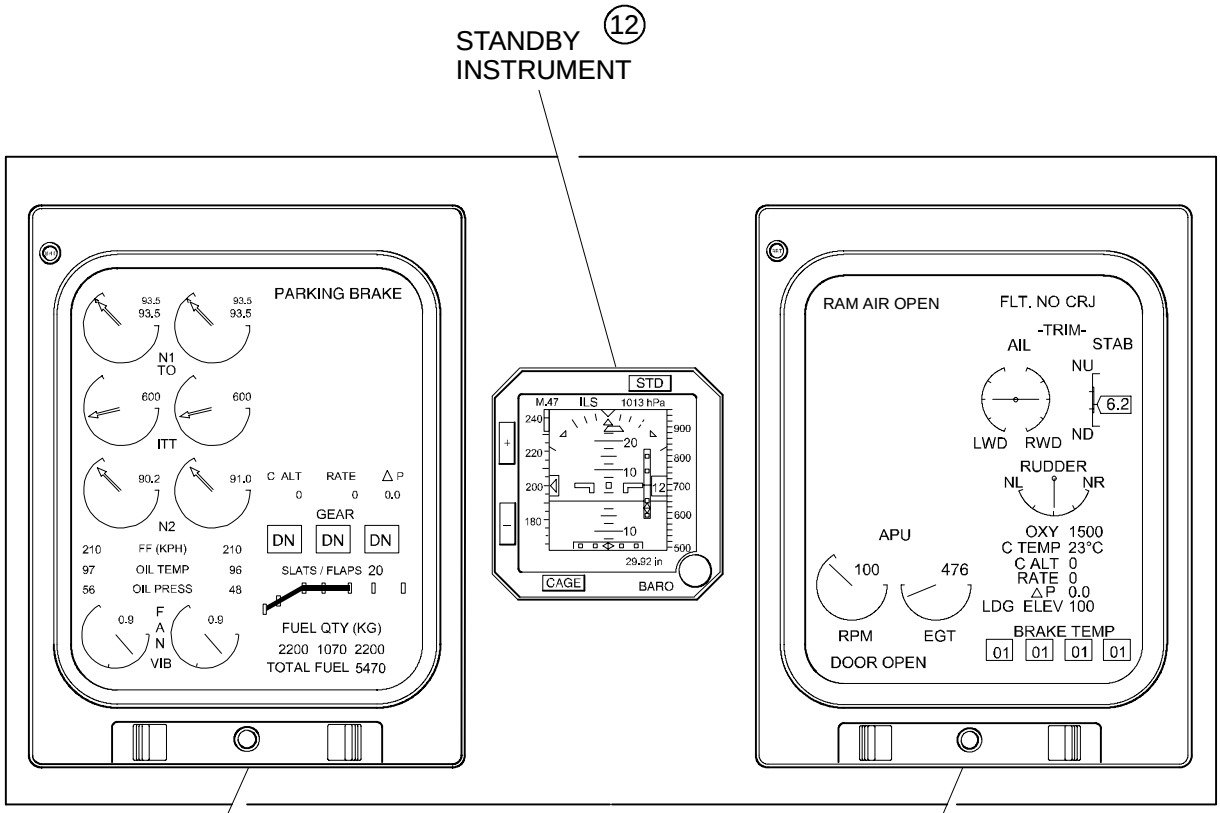
(○) Indicates Chapter in which information on item may be found.

Pilot's Side Panel <2040>
Figure 01-30-3




○ Indicates chapter in which information on item may be found.

Pilot's Instrument Panel <1015, 2217>
Figure 01–30–4

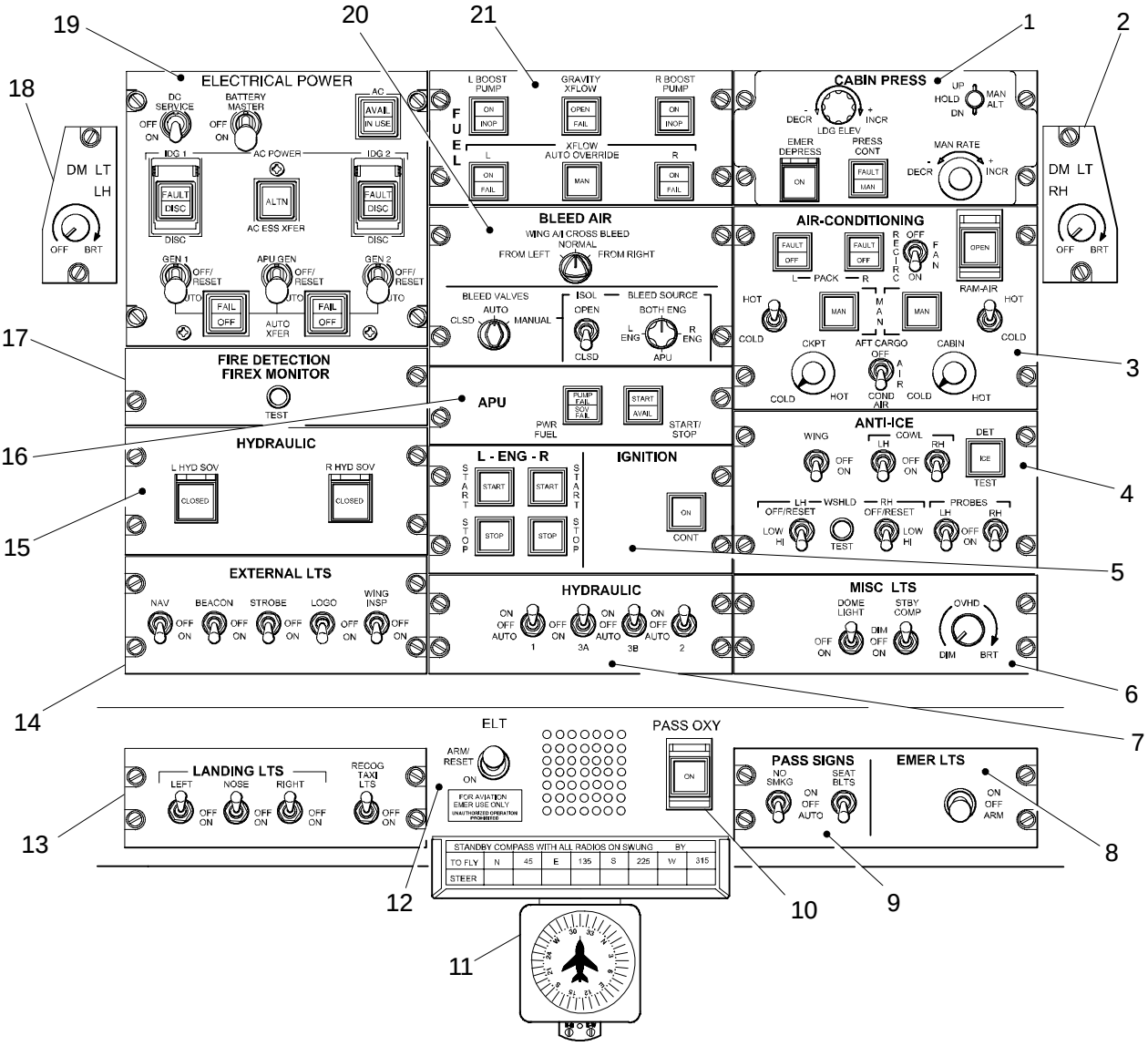



ENGINE INDICATION AND CREW ALERTING SYSTEM (EICAS) PRIMARY DISPLAY (2)

EICAS SECONDARY DISPLAY (2)

◯ Indicates Chapter in which information on item may be found.

Centre Instrument Panel <1001>
Figure 01–30–5

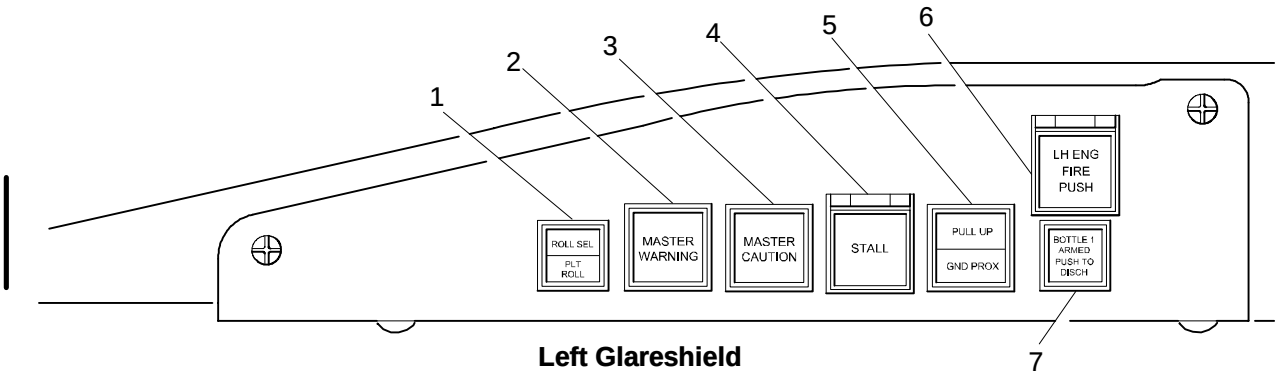



**LEGEND**

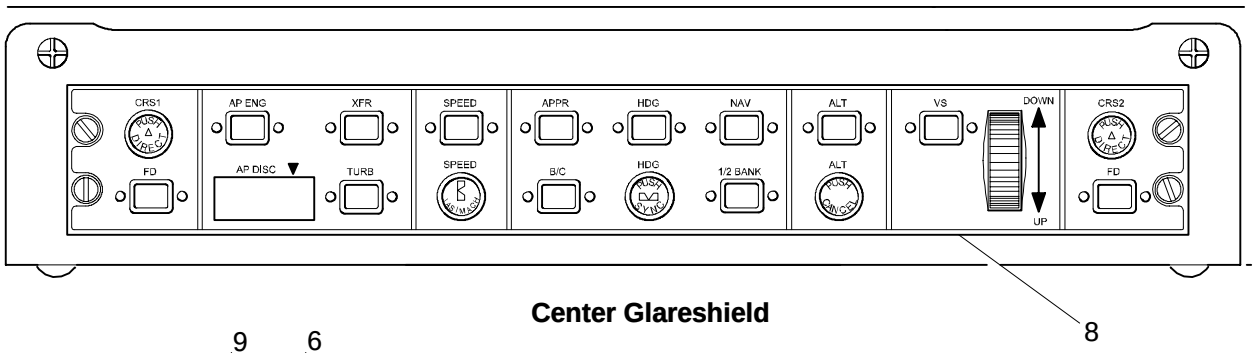
1. Cabin pressurization panel. (8)
2. Copilot's dome light control. (17)
3. Air-conditioning panel. (8)
4. Anti-ice panel. (15)
5. Engine / ignition panel. (20)
6. Miscellaneous lights panel. (17)
7. Hydraulic pump panel. (14)
8. Emergency lights panel. (17)
9. Passenger signs panel. (1)
10. Passenger oxygen control. (9)
11. Standby compass. (12)
12. Emergency locator transmitter control. (9)
13. Landing lights panel. (17)
14. External lights panel. (17)
15. Hydraulic shutoff panel. (14)
16. APU panel. (4)
17. Fire detection / FIREX monitor panel. (10)
18. Pilot's dome light control. (17)
19. Electrical panel. (7)
20. Bleed air panel. (19)
21. Fuel panel. (13)

◯ Indicates Chapter in which information on item may be found.

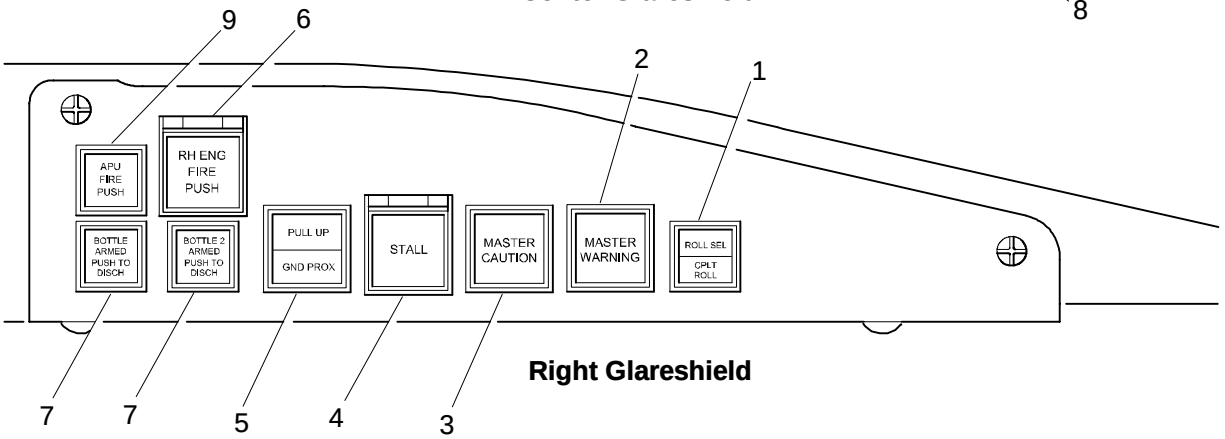
Overhead Panel <1020><1201>
Figure 01-30-6




**Left Glareshield**




**Center Glareshield**



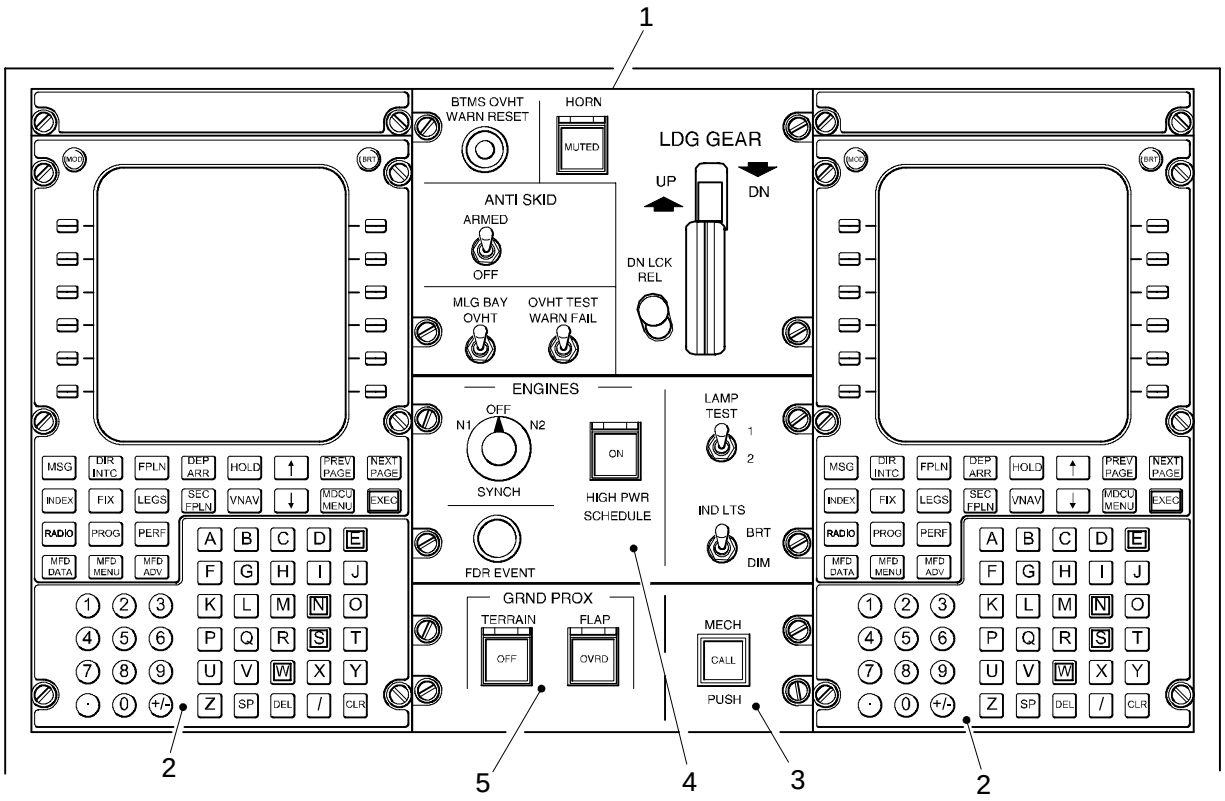

**Right Glareshield**

**LEGEND**

1. Roll select. (11)
2. Master warning. (2)
3. Master caution. (2)
4. Stall warning. (11)
5. GPWS and glideslope warning. (18)
6. Engine fire warning. (10)
7. Firex bottle discharge. (10)
8. Flight control panel. (3)
9. APU fire warning. (10)

◯ Indicates chapter in which information on item may be found.

Glareshield <2040>
Figure 01-30-7

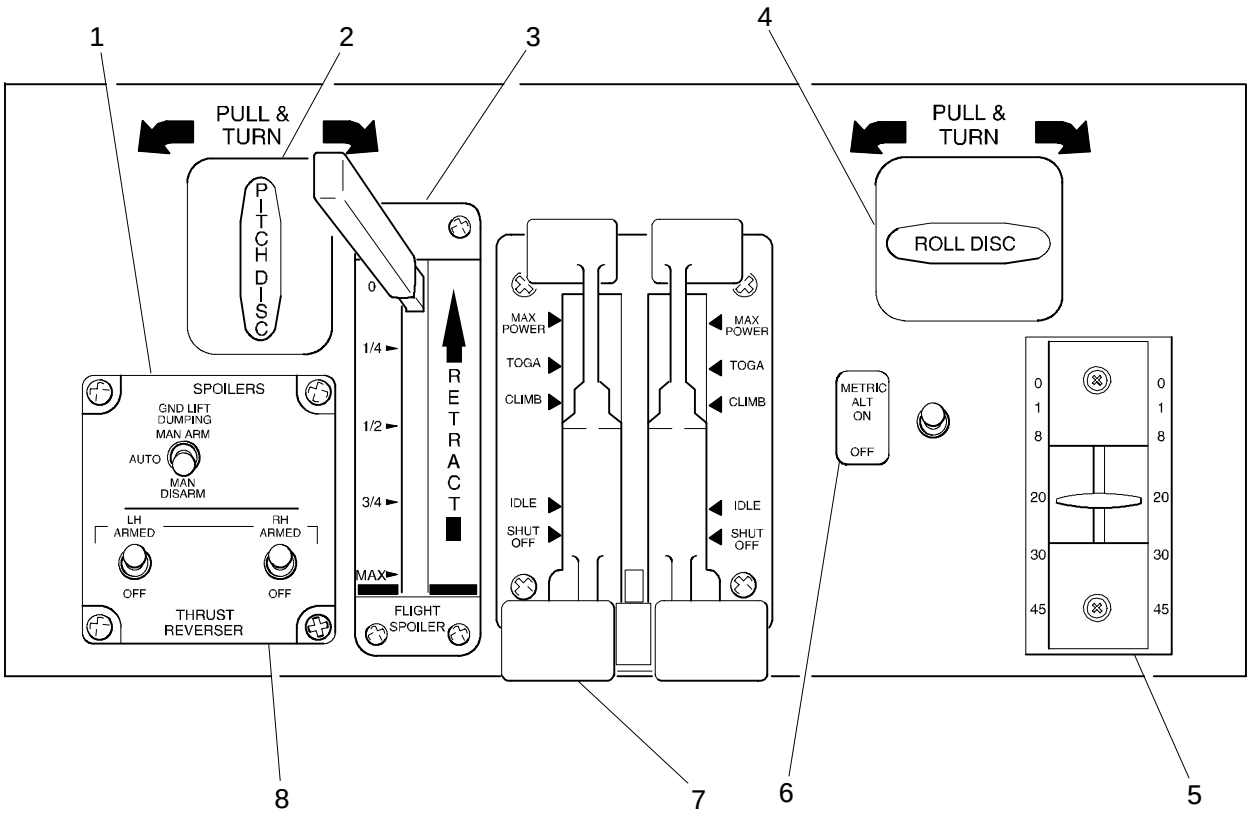



**LEGEND**

1. Landing gear control panel. (16)
2. Flight management system control display unit. (18)
3. Interphone panel. (5)
4. Engine / miscellaneous test panel. (20) (2) (17)
5. Ground proximity warning panel. (18)

◯ Indicates Chapter in which information on item may be found.

Centre Pedestal (Upper) <2040, 1214>
Figure 01–30–8

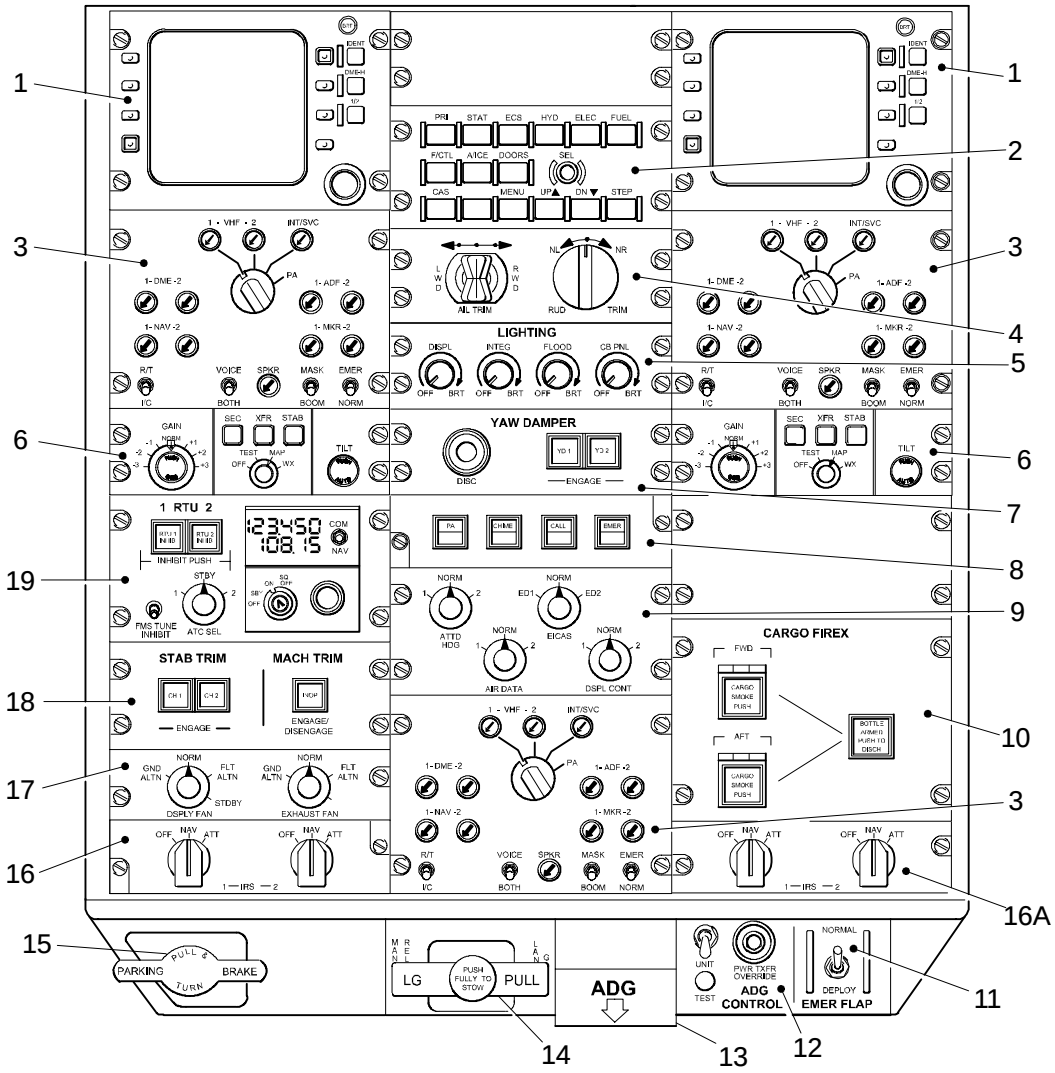



**LEGEND**

1. Spoilers system control subpanel. (11)
2. Pitch disconnect control. (11)
3. Flight spoiler lever. (11)
4. Roll disconnect control. (11)
5. Slat/ flap lever (11)
6. Metric altimeter subpanel. (12)
7. Thrust lever quadrant. (20)
8. Thrust reverser subpanel. (20)

◯ Indicates Chapter in which information on item may be found.

Center Pedestal – Thrust Lever and Flight Controls <1029, 2040>
Figure 01–30–9

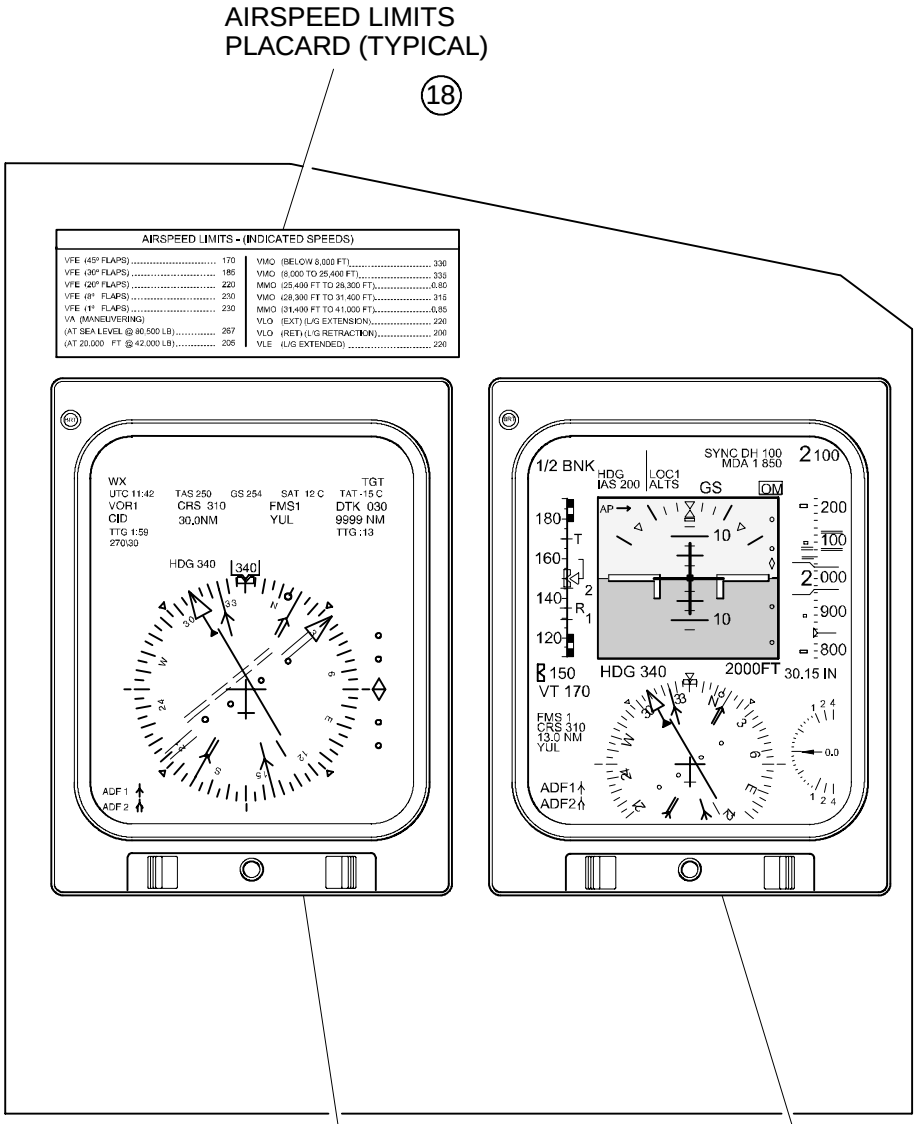



**LEGEND**

1. Radio tuning unit. (5) (18)
2. EICAS control panel. (2)
3. Audio control panel. (5) (18)
4. Aileron/rudder trim panel. (11)
5. Lighting panel. (17)
6. Weather radar control panel. (18)
7. Yaw damper panel. (11)
8. Interphone control panel. (5)
9. Source selector panel. (2) (12)
10. Cargo firex panel. (10)
11. Emergency flap deploy control. (11)
12. Air driven generator – auto-deploy panel. (7)
13. Air driven generator – manual deploy handle. (7)
14. Landing gear – manual release handle (16)
15. Parking brake handle. (16)
16. Compass control panel (on both sides). (12)
16A. <1025> IRS mode select unit. (12)
17. Avionics cooling control panel. (8)
18. Stabilizer/Mach trim panel. (11)
19. Backup tuning unit. (5)

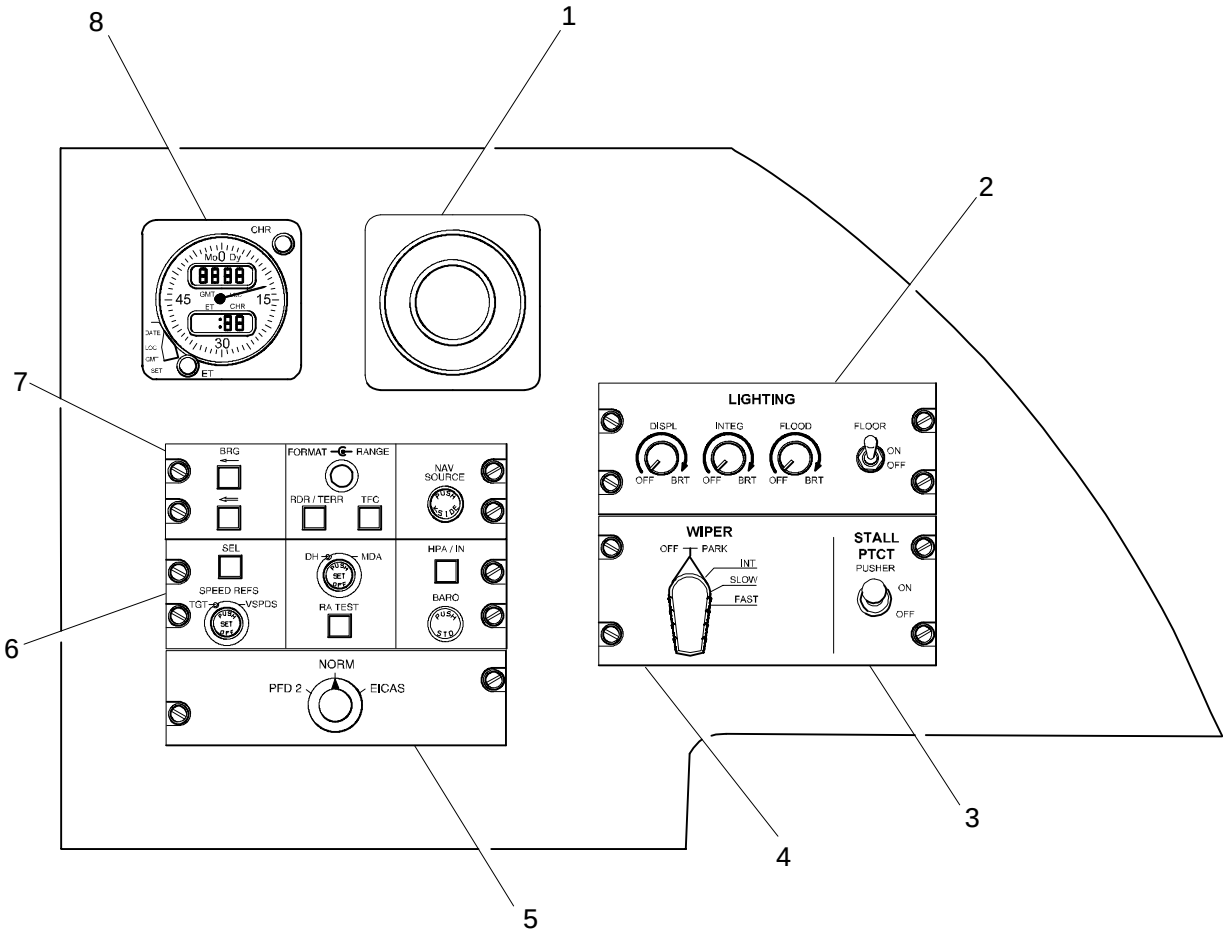
◯ Indicates Chapter in which information on item may be found.

Centre Pedestal (Lower) <1012, 1025,>
Figure 01–30–10




◯ Indicates Chapter in which information on item may be found.

Copilot's Instrument Panel <1015, 2217>
Figure 01–30–11

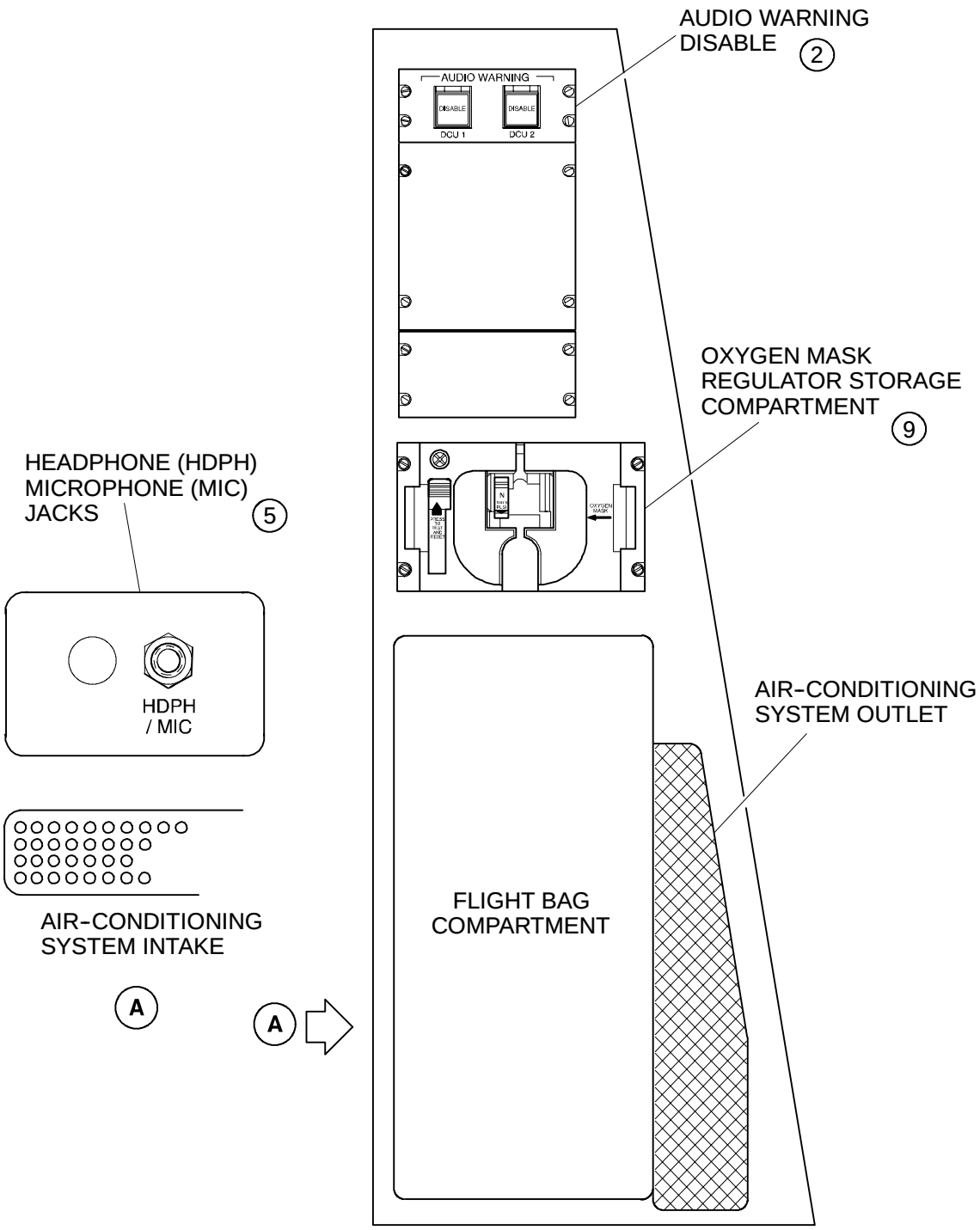



**LEGEND**

1. Air conditioning system gasper. (8)
2. Lighting panel. (17)
3. Stall protection panel. (11)
4. Windshield wiper control panel. (15)
5. Display reversionary panel. (2)
6. Air data reference panel. (12) (18)
7. Display control panel. (12) (18)
8. Clock. (12)

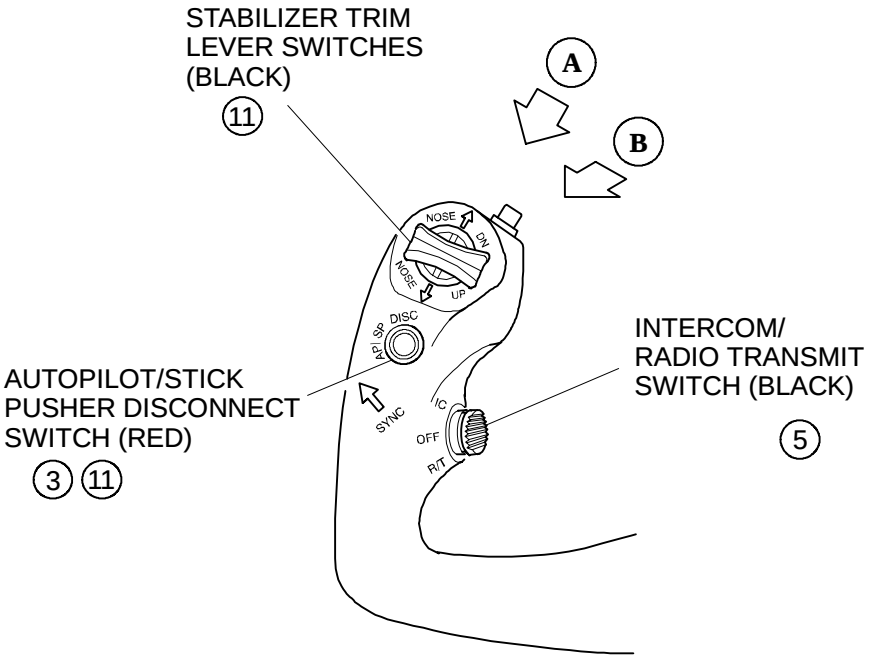
◯ Indicates Chapter in which information on item may be found.

Copilot's Side Panel <2040>
Figure 01–30–12

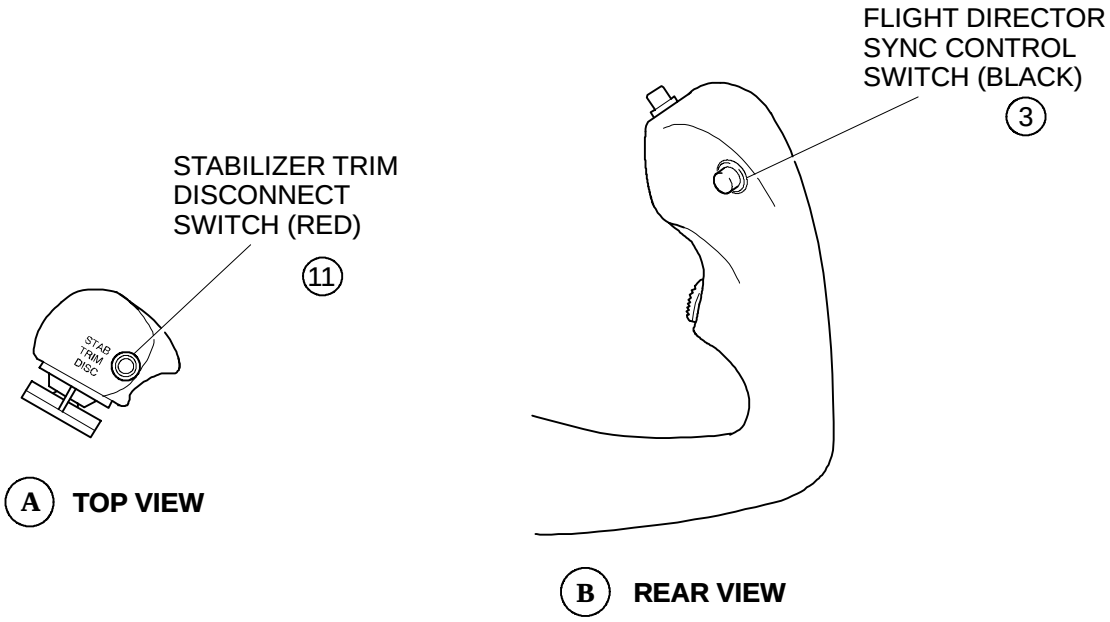



◯ Indicates Chapter in which information on item may be found.

Copilot's Side Console <1205>
Figure 01–30–13




**Pilot's Control Wheel**
**(Copilot's Opposite)**




A **TOP VIEW**

B **REAR VIEW**

◯ Indicates Chapter in which information on item may be found.

Control Wheels
Figure 01–30–14

## 1. REINFORCED FLIGHT COMPARTMENT DOOR <1226>

### A. General

The reinforced flight compartment door is installed to enhance aircraft security. The door is used to protect the flight crew from ballistic threat and to prevent unauthorized access to the flight compartment. The door is made from Nomex core panels sandwiched in the middle with a bullet proof insert.

The door consists of:

(1) Slide latch

(2) Deadbolt assembly with key lock

(3) Two quick-release hinge pins

(4) Two decompression panels release latches

(5) Cabin viewer

(6) Strap handles

### B. Operation

The slide latch is used to latch and unlatch the door

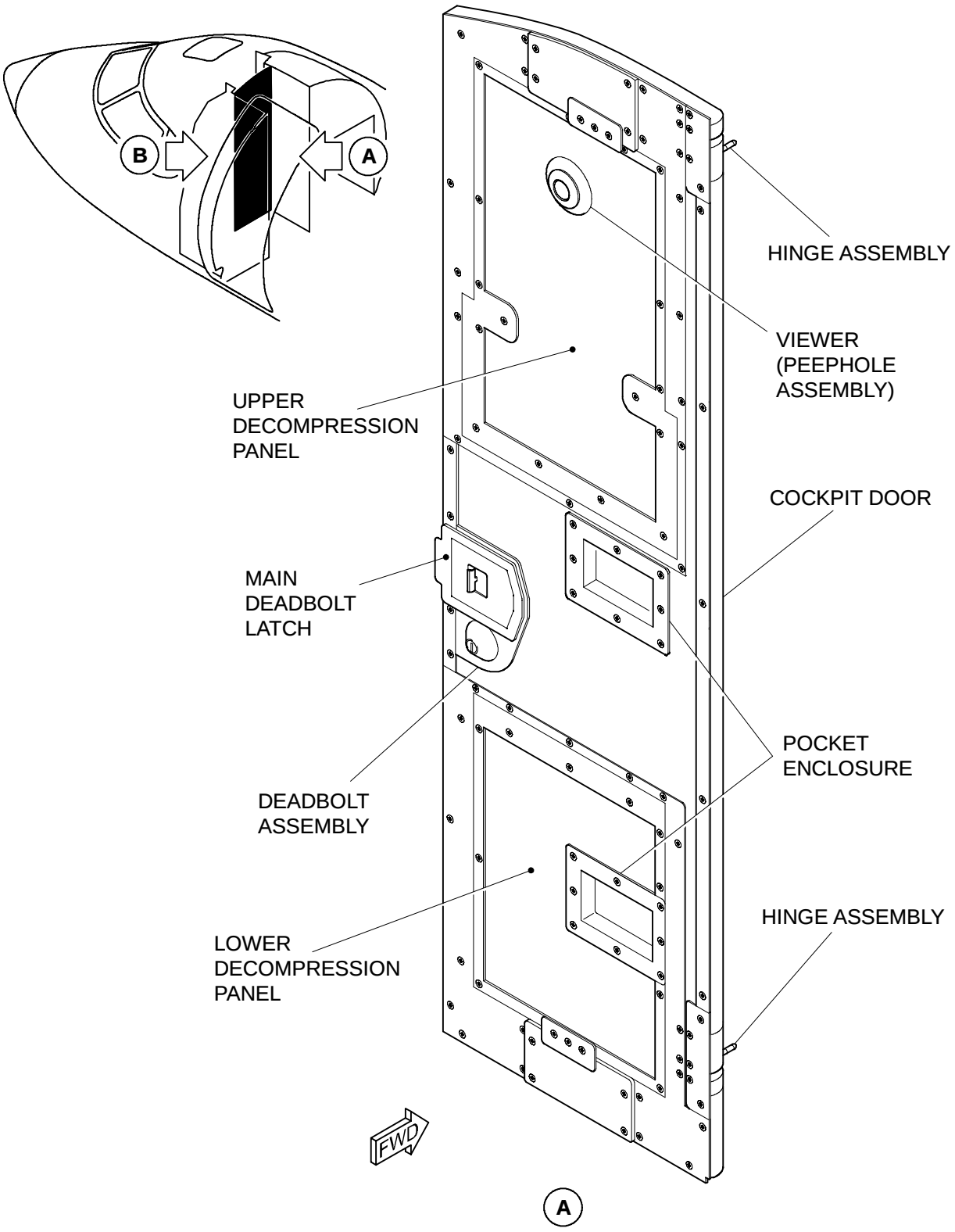
The deadbolt assembly is used securely lock the door. To lock or unlock the door from inside the flight compartment, the deadbolt knob is manually rotated to engage the deadbolt pin into the flight compartment bulkhead. A key is required to lock or unlock the door from the passenger compartment.

The door is hinged to the galley bulkhead. The door opens towards the passenger compartment and can be held open with a door retainer on the galley wall. The two quick-release pins are used to remove the door from inside the flight compartment and the strap handles are used to lift the door out of the way.

The bullet proof viewer has two lenses to increase the magnification for field of view.

The decompression panels are hinged on the door and held closed by the pressure release latches. When the pressure differential between the passenger compartment and the flight compartment exceeds a preset limit, the latches release to allow both panels to open. This is done to equalize the pressure between the two compartment.

At any time during the flight, if one of the required flight crew leaves the flight compartment, another crew member must replace him/her in the flight compartment to ensure that the required crew member is not locked out of the flight compartment.




Reinforced Flight Compartment Door
Figure 01–30–15

### C. Evacuation

If the latch has failed or if the door has jammed, the following steps are used to remove the door in an emergency

**WARNING**

The lower door hinge pin must be released before the upper hinge pin. Failure to do so could result in the door suddenly coming disengaged from the hinges causing injury to persons.

From inside the flight compartment:

(1) Unlock and lift lower hinge pin.

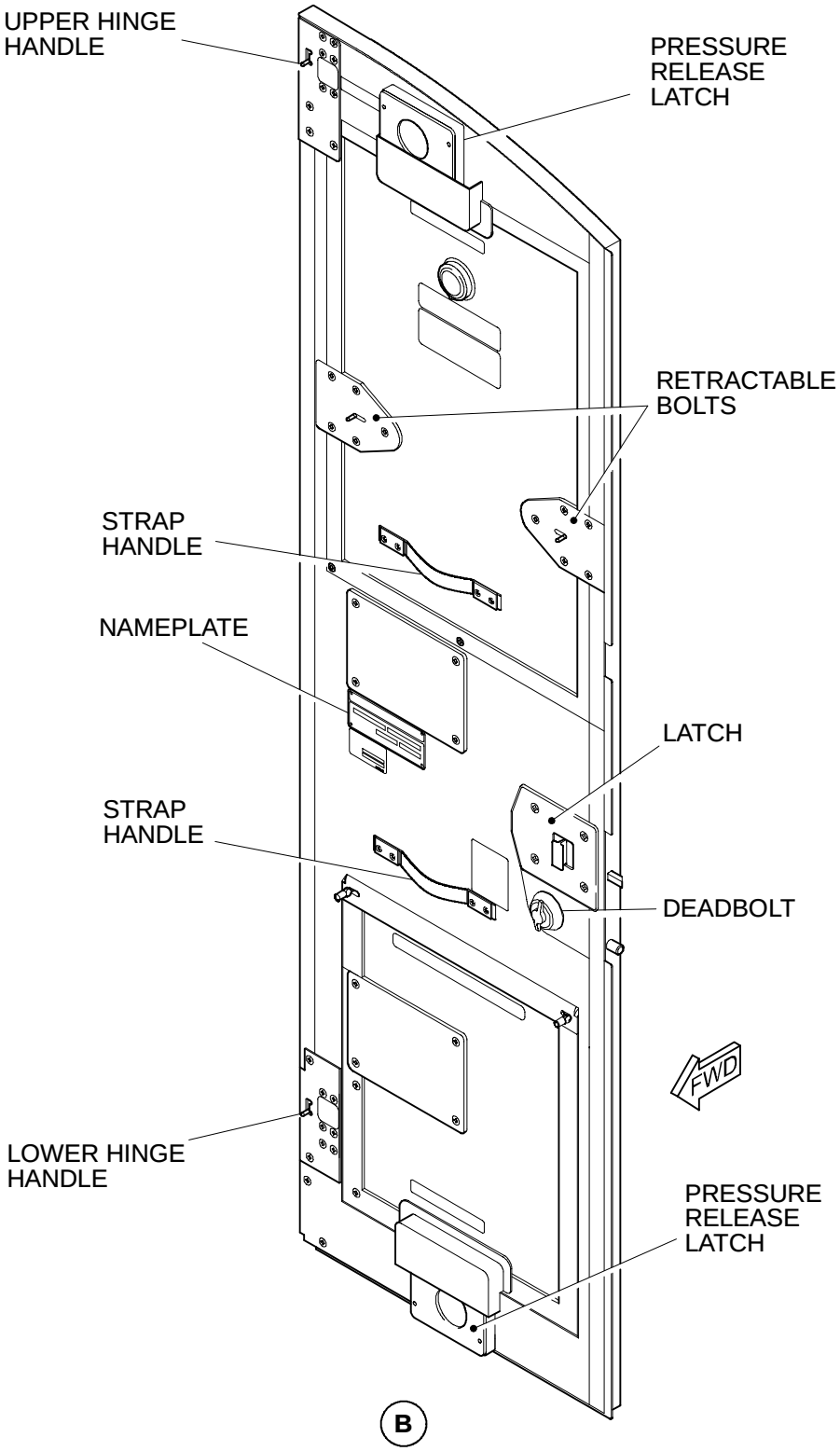
(2) Unlock and pull down upper hinge pin.

(3) Remove the door by forcibly pushing it out at the hinge side.

(4) Rotate door clockwise and stow against the galley.

From the passenger compartment:

In the event that the flight crew becomes trapped in the flight compartment or becomes incapacitated, it has been demonstrated that rescue personnel can remove the door using normally available, non-powered, hand carried, rescue tools (e. g. , crowbar, axe, etc.).




Reinforced Flight Compartment Door – Placards
Figure 01–30–16