

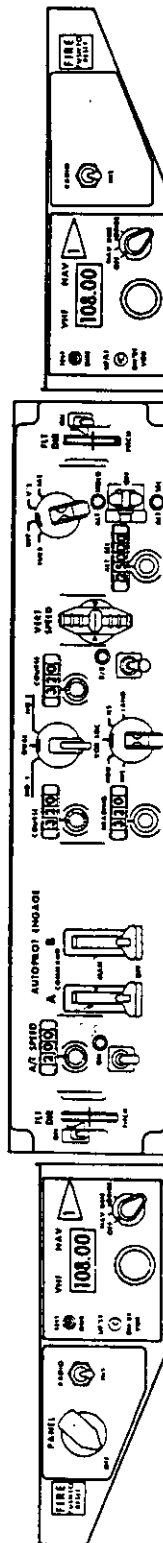
DOCKET NO.: SA-517
EXHIBIT NO. 9C

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

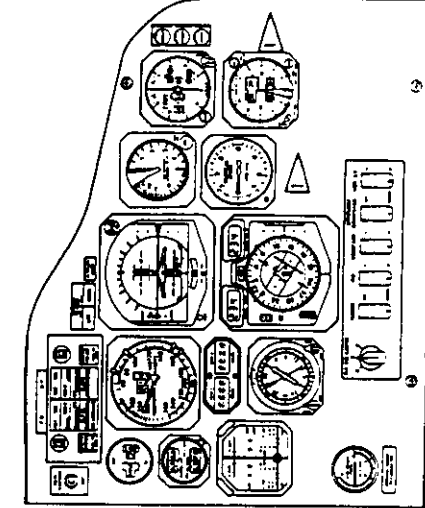
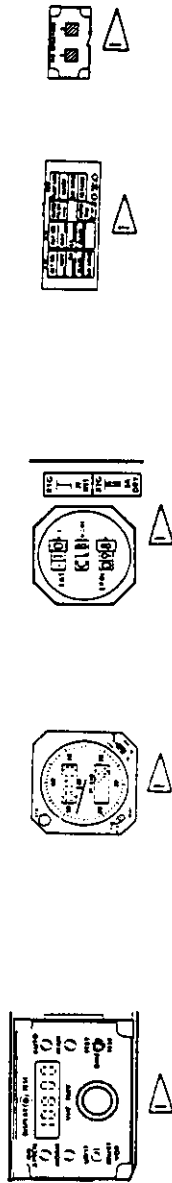
SYSTEMS GROUP CHAIRMAN'S FACTUAL REPORT
ATTACHMENT 2
COCKPIT PANEL LAYOUT DIAGRAMS

By: Gregory Phillips
(21 pages)

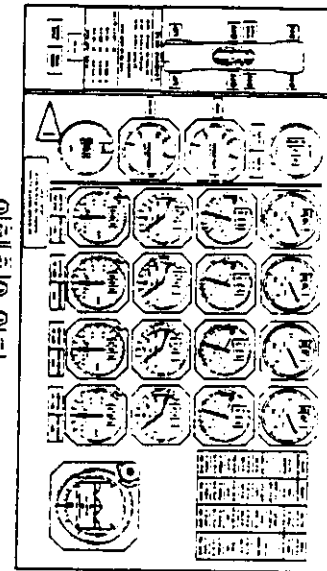
Attachment 2
Cockpit Panel Layout Diagrams



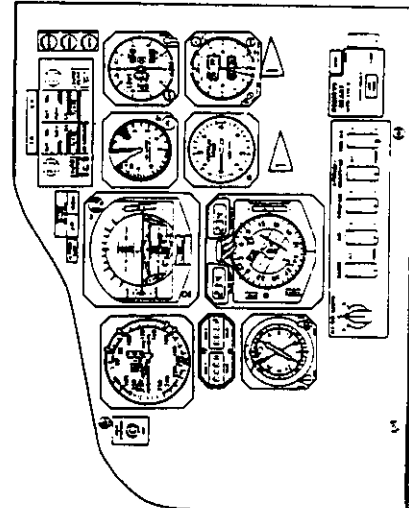
PILOTS' LIGHTSHIELD



FIRST OFFICER'S INSTRUMENT PANELS



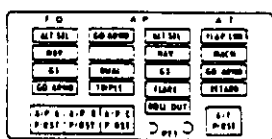
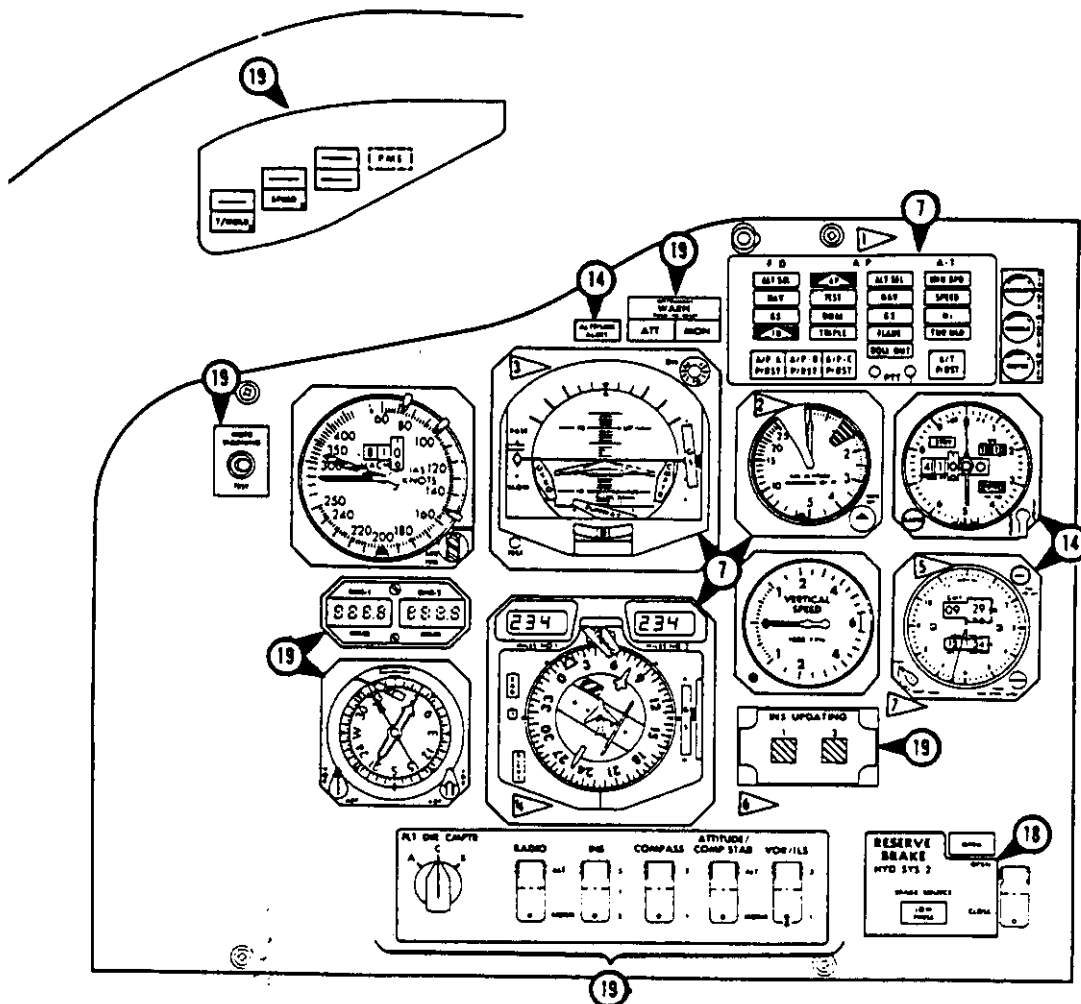
PILOTS' CENTER PANEL



PILOT'S INSTRUMENT PANELS

△ As installed

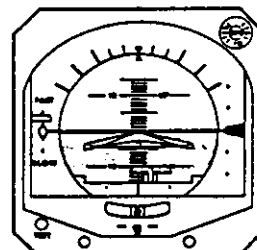
PILOTS' INSTRUMENT PANELS



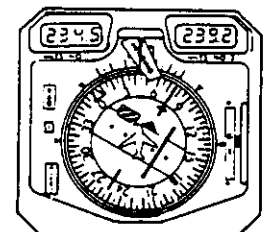
1 ▶ As installed



2 ▶ As installed



3 ▶ As installed



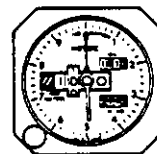
4 ▶ As installed



5 ▶ As installed



6 ▶ As installed

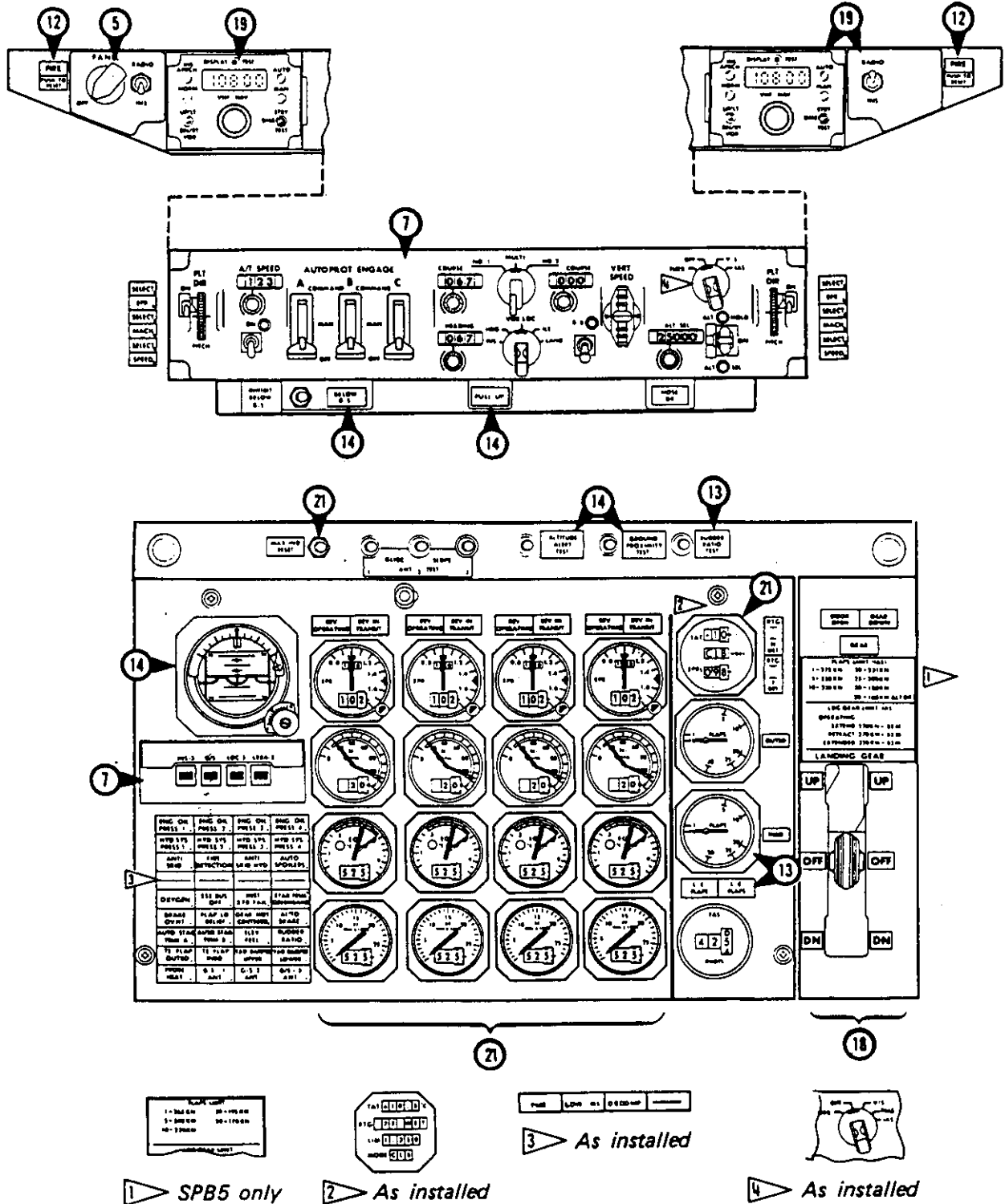


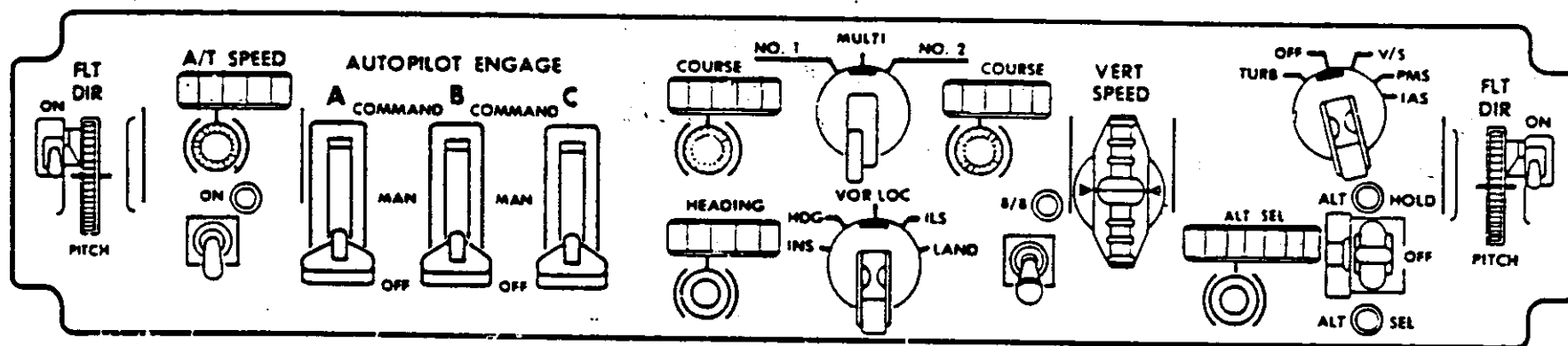
7 ▶ As installed

CAPTAIN'S INSTRUMENT PANEL
2B5F, SPB5, LATER 2B5B, 3B5

BOEING 747 OPERATIONS MANUAL

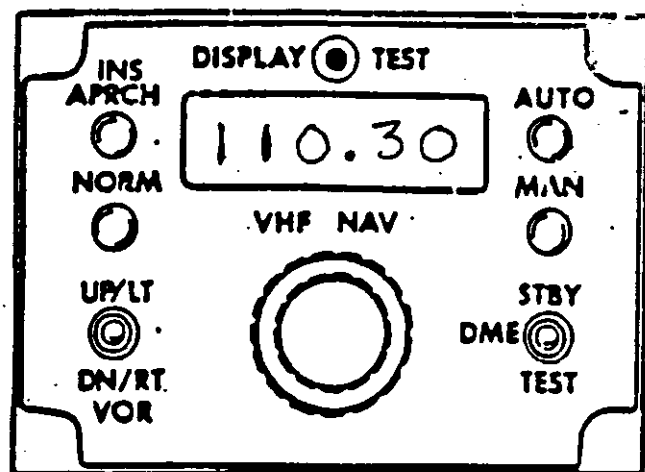
AIRPLANE GENERAL COCKPIT PANELS





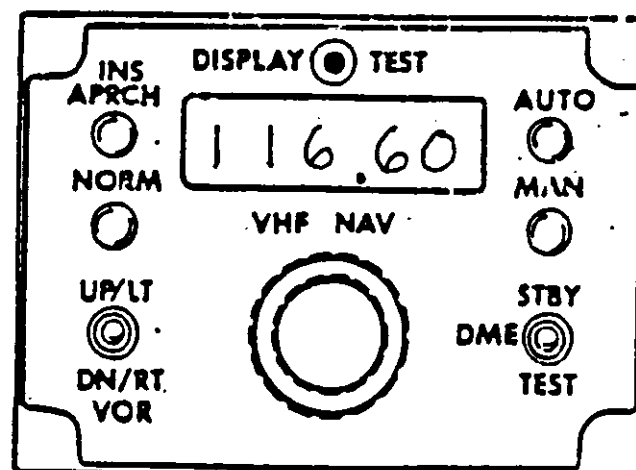
MODE SELECT PANEL

CART SN=17

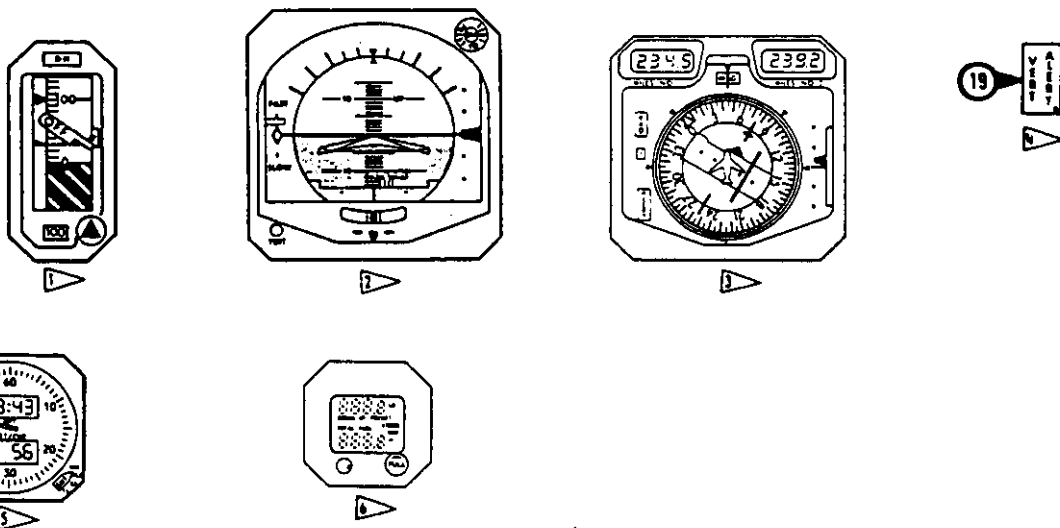
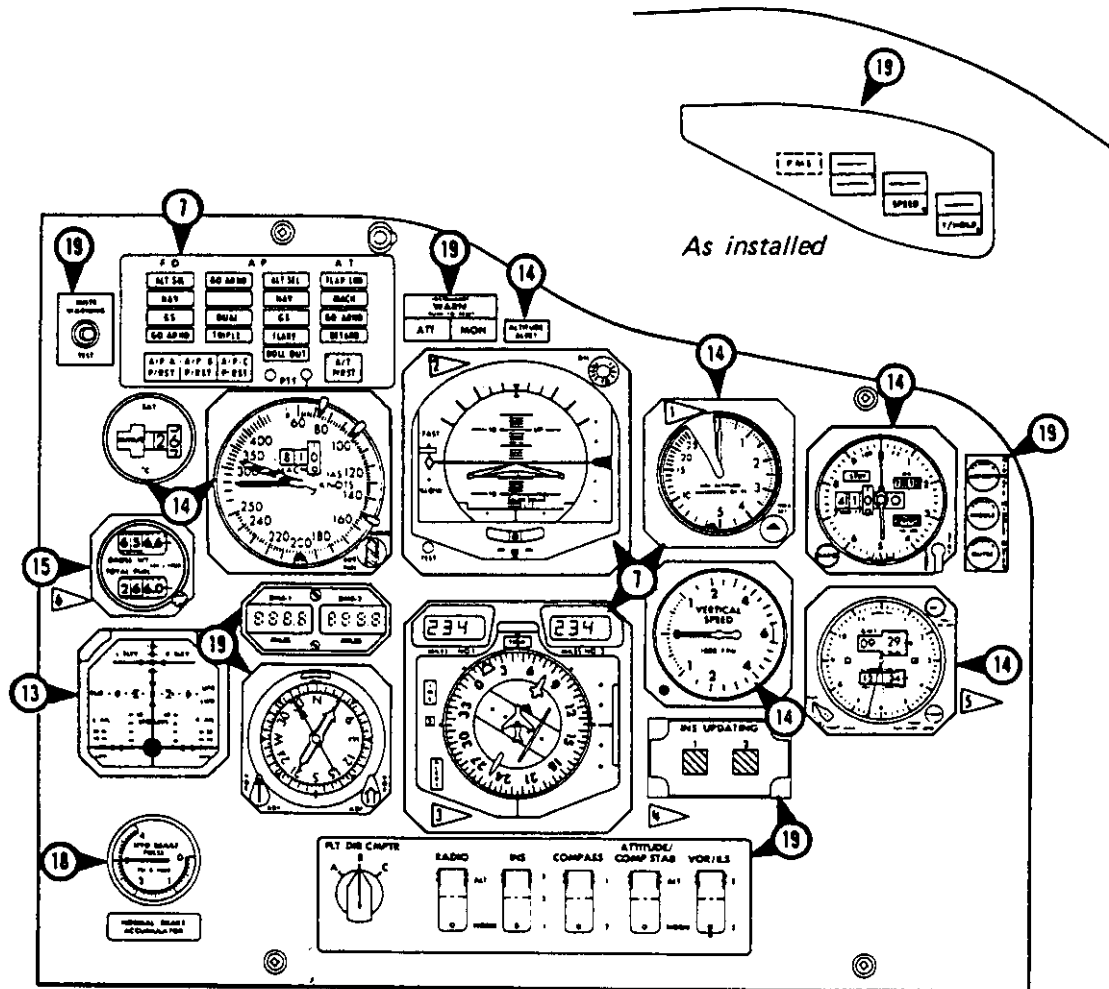


COMPARED:
STOP COLLAR PIN,
SHAFT FLAT,
ROTOR CONTACTS
MHZ & FRACTIONAL
SWITCH SECTIONS

F/O SN=26



SHAFTS WOULD NOT TURN

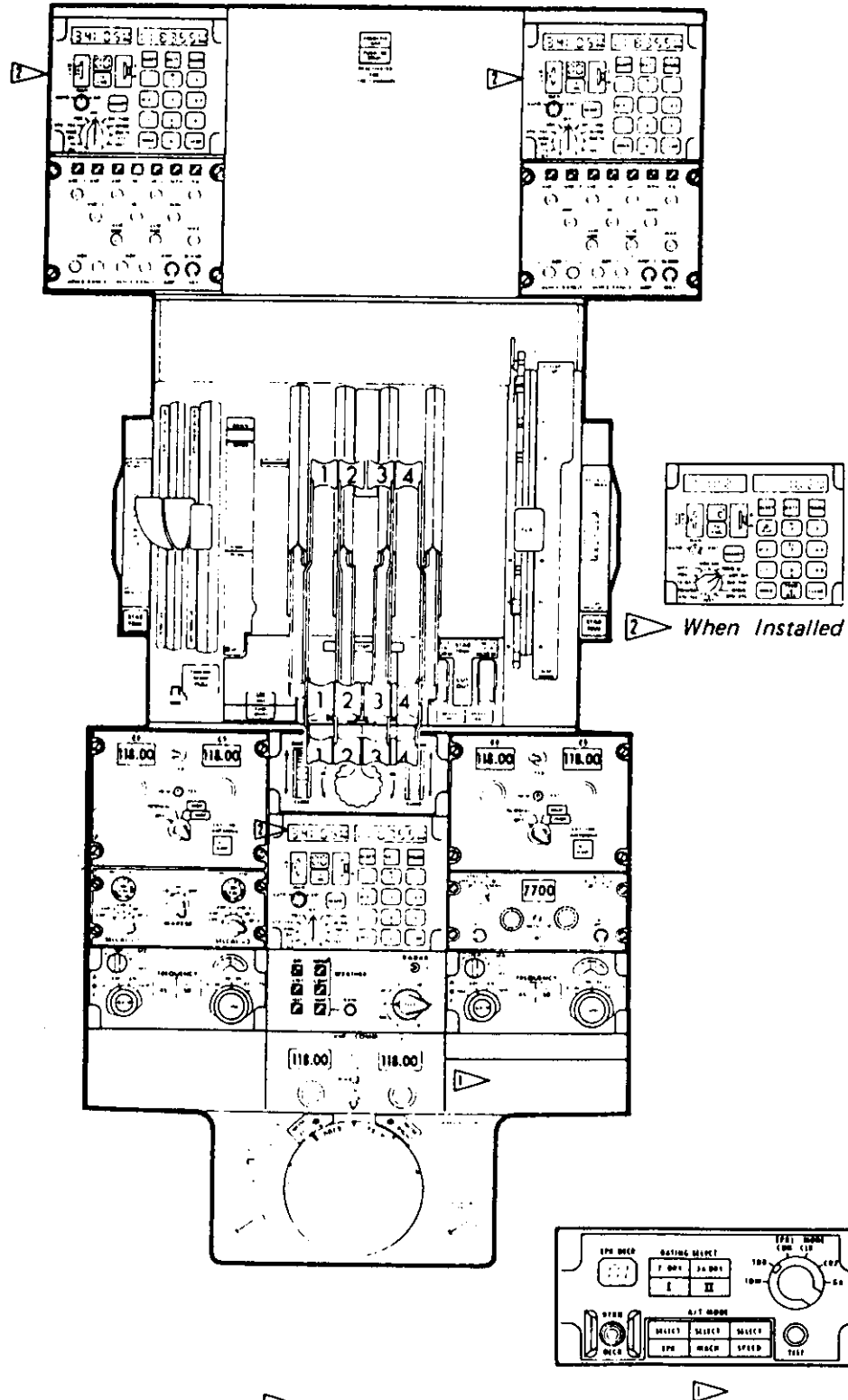


1 thru 6 As installed

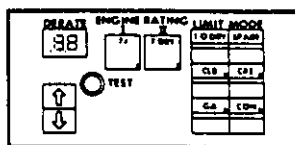
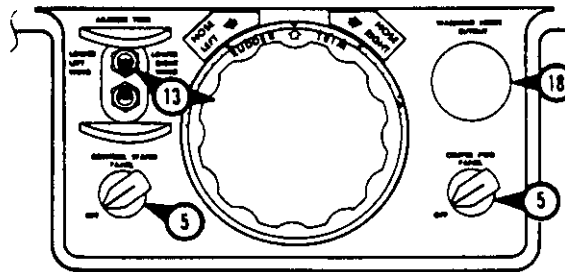
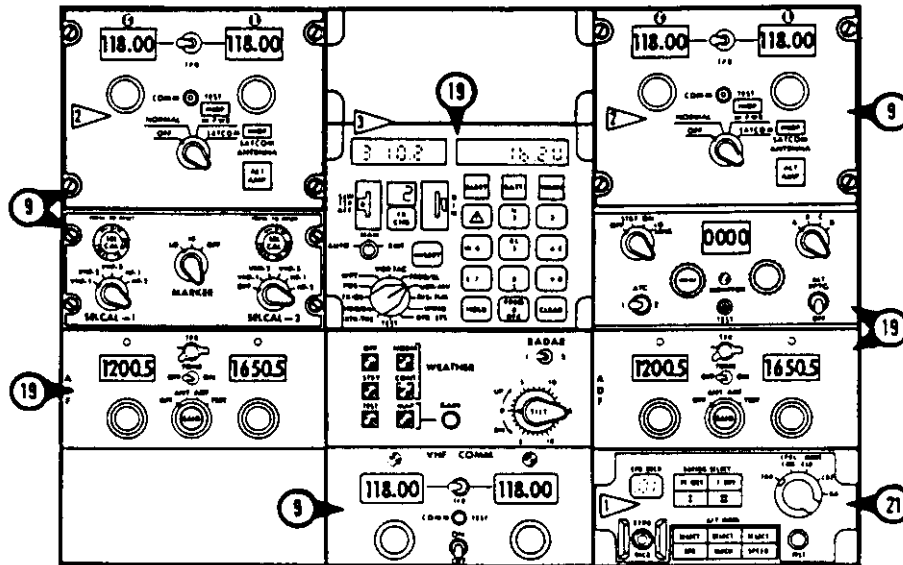
FIRST OFFICER'S INSTRUMENT PANEL
2B5F, SPB5, LATER 2B5B, 3B5

BOEING 747
OPERATIONS MANUAL

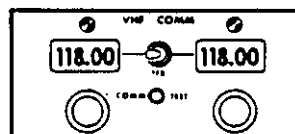
AIRPLANE GENERAL
COCKPIT PANELS



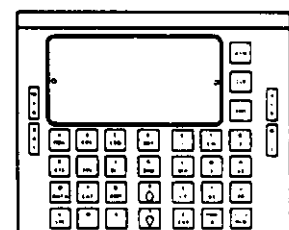
PILOTS' CONTROL STAND



1 ▶ As installed

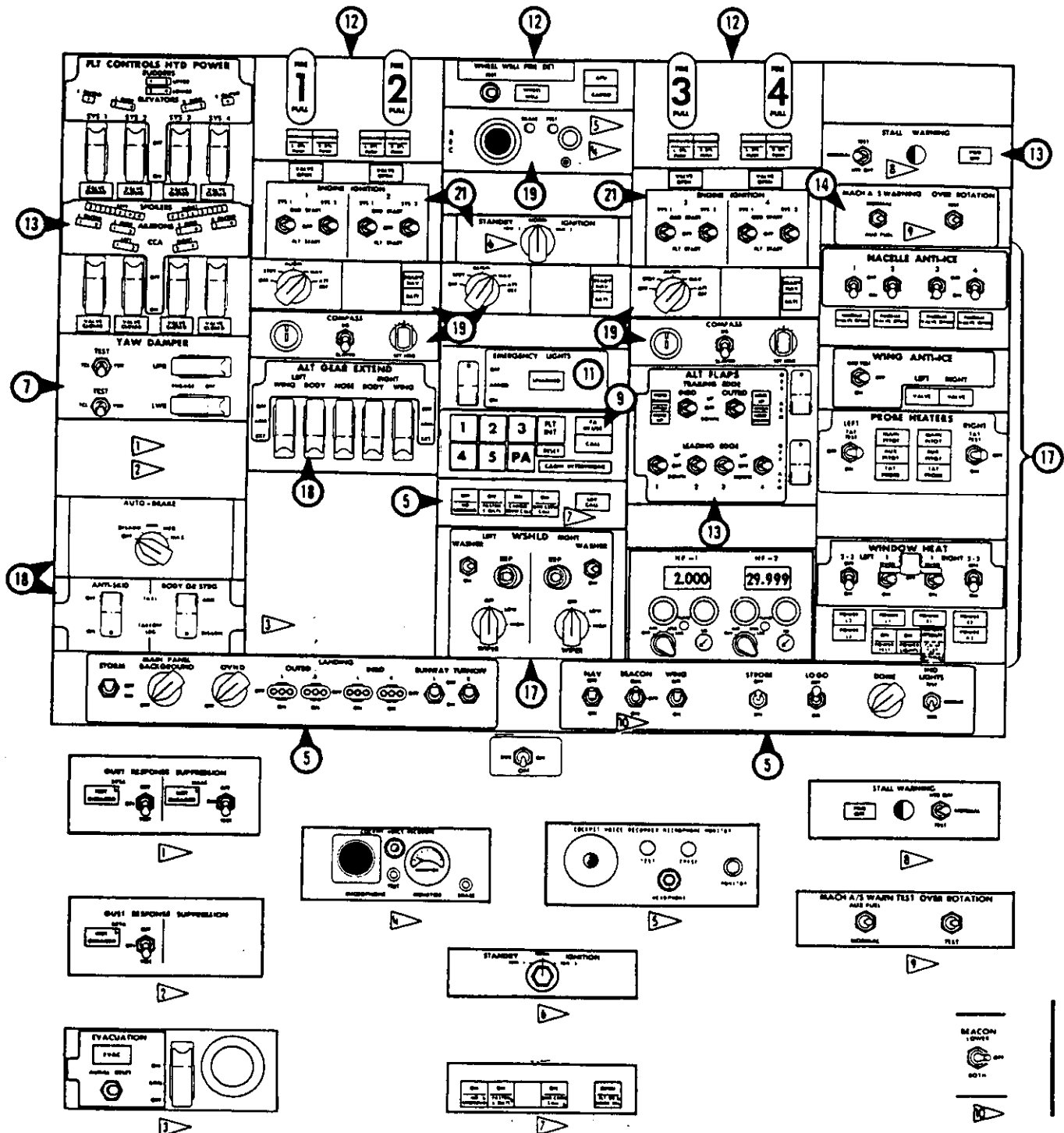


2 ▶ As installed



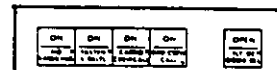
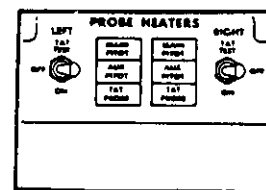
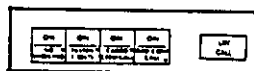
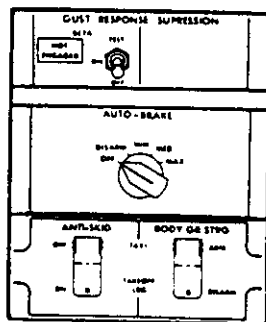
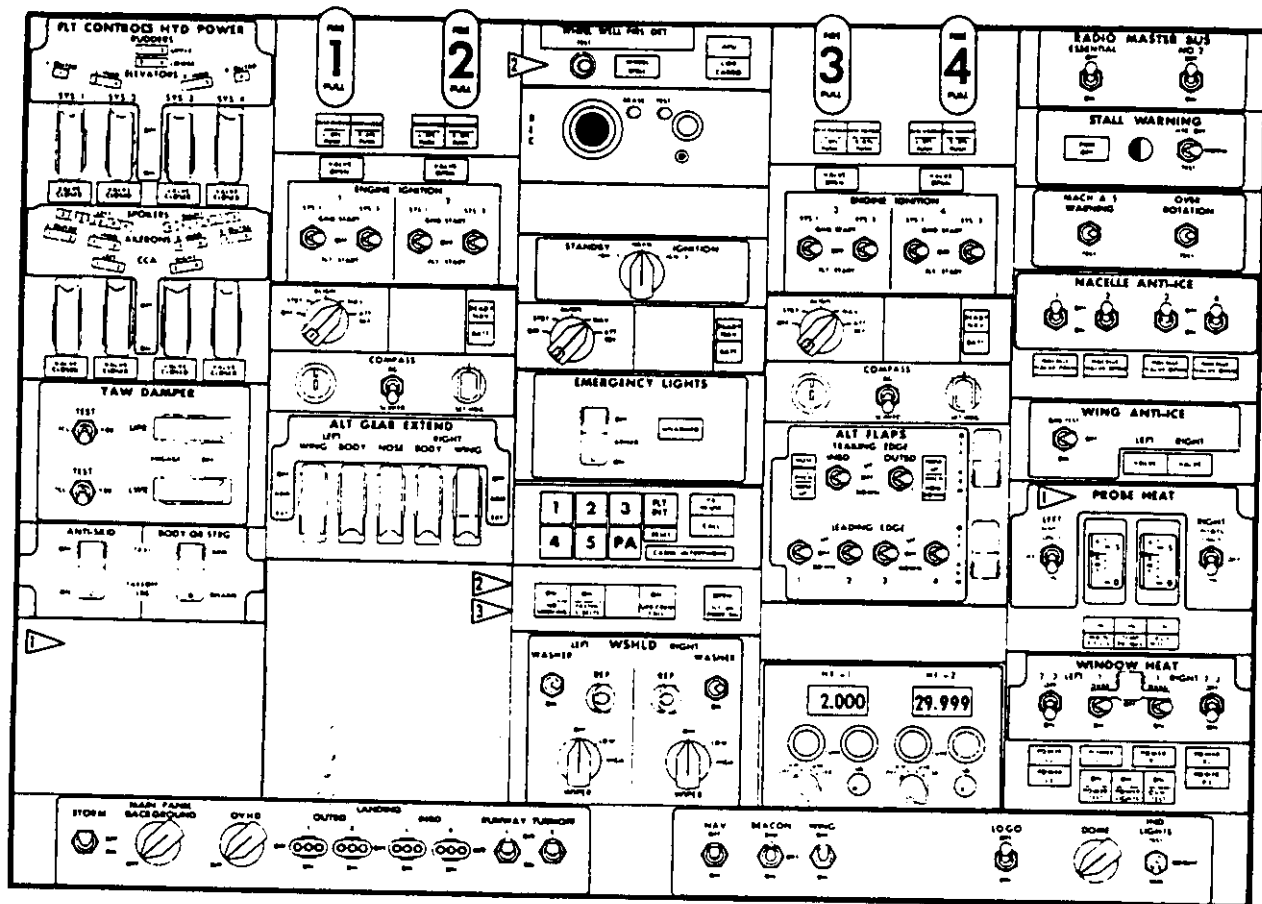
3 ▶ As installed

PILOTS' CONTROL STAND (LOWER HALF)
2B5F, SPB5, LATER 2B5B, 3B5



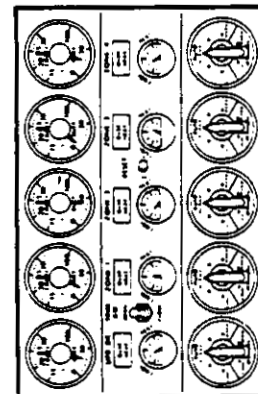
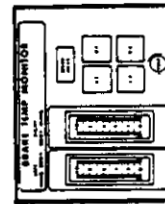
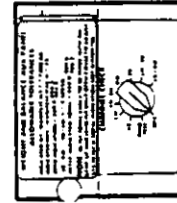
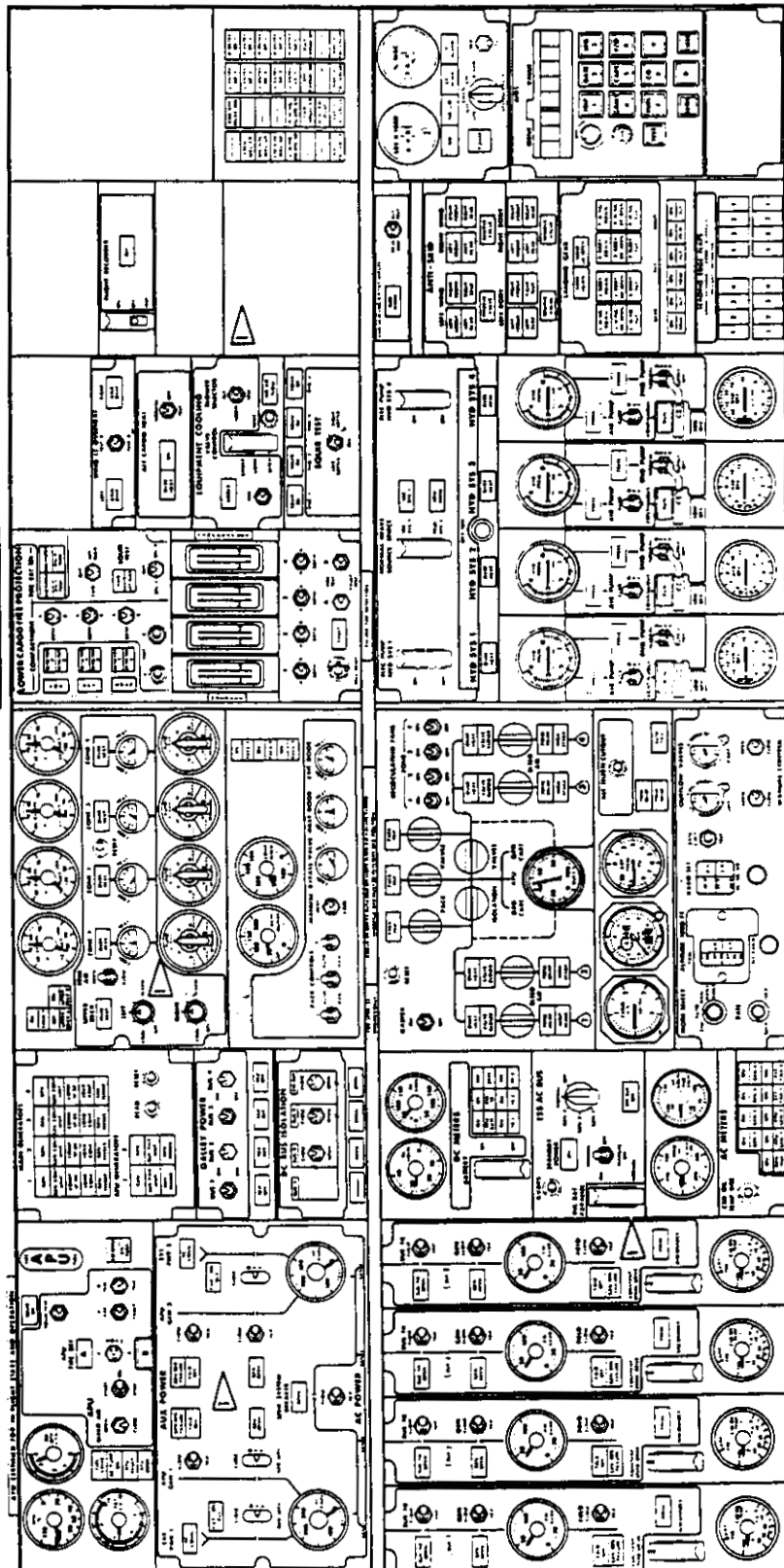
1 Thru 18 As Installed

PILOTS' OVERHEAD PANEL
2B5F, SPB5, LATER 2B5B, 3B5



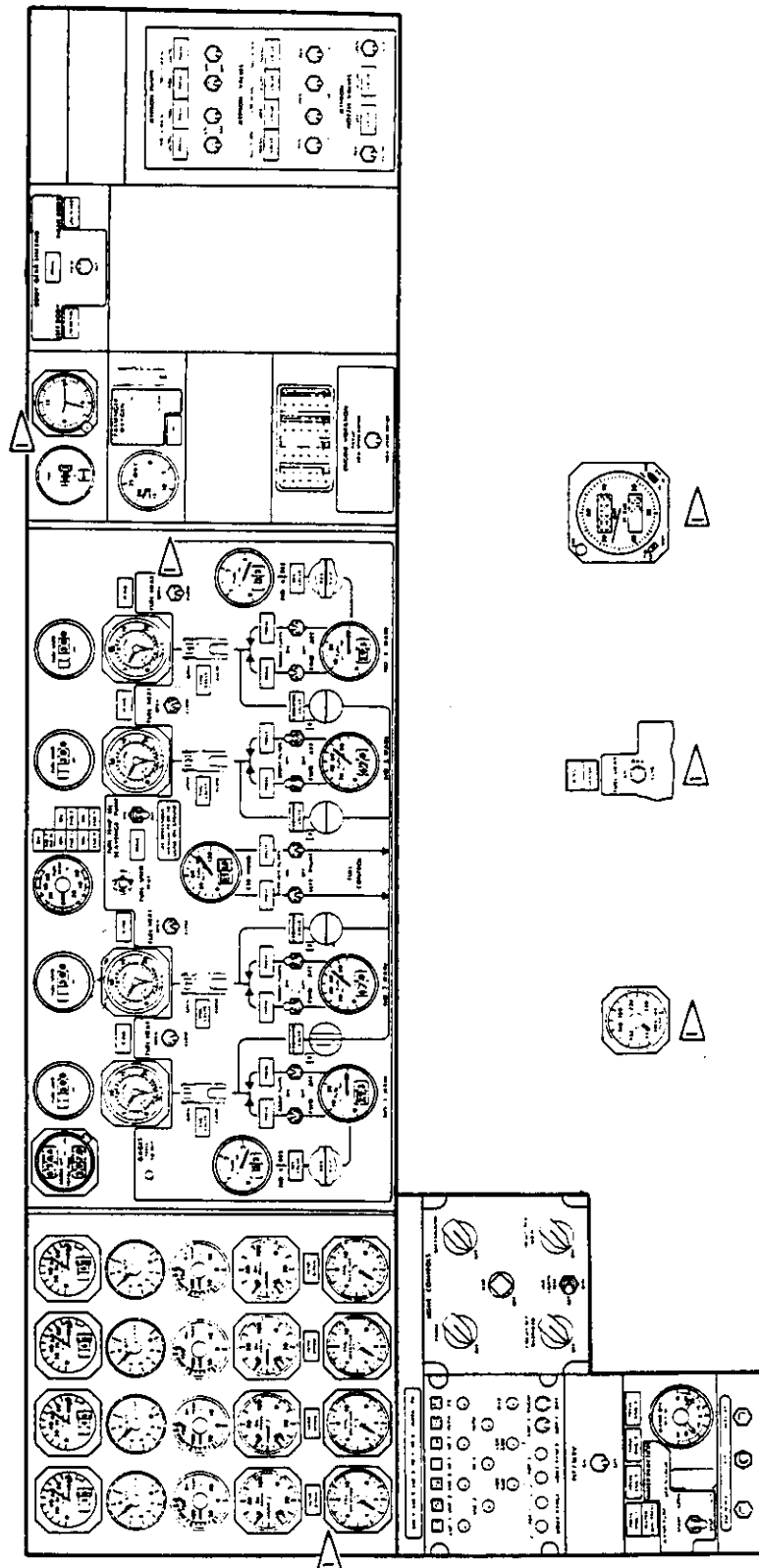
- 1 As installed
- 2 HL7454, HL7458
- 3 3B5 Combi

PILOTS' OVERHEAD PANEL

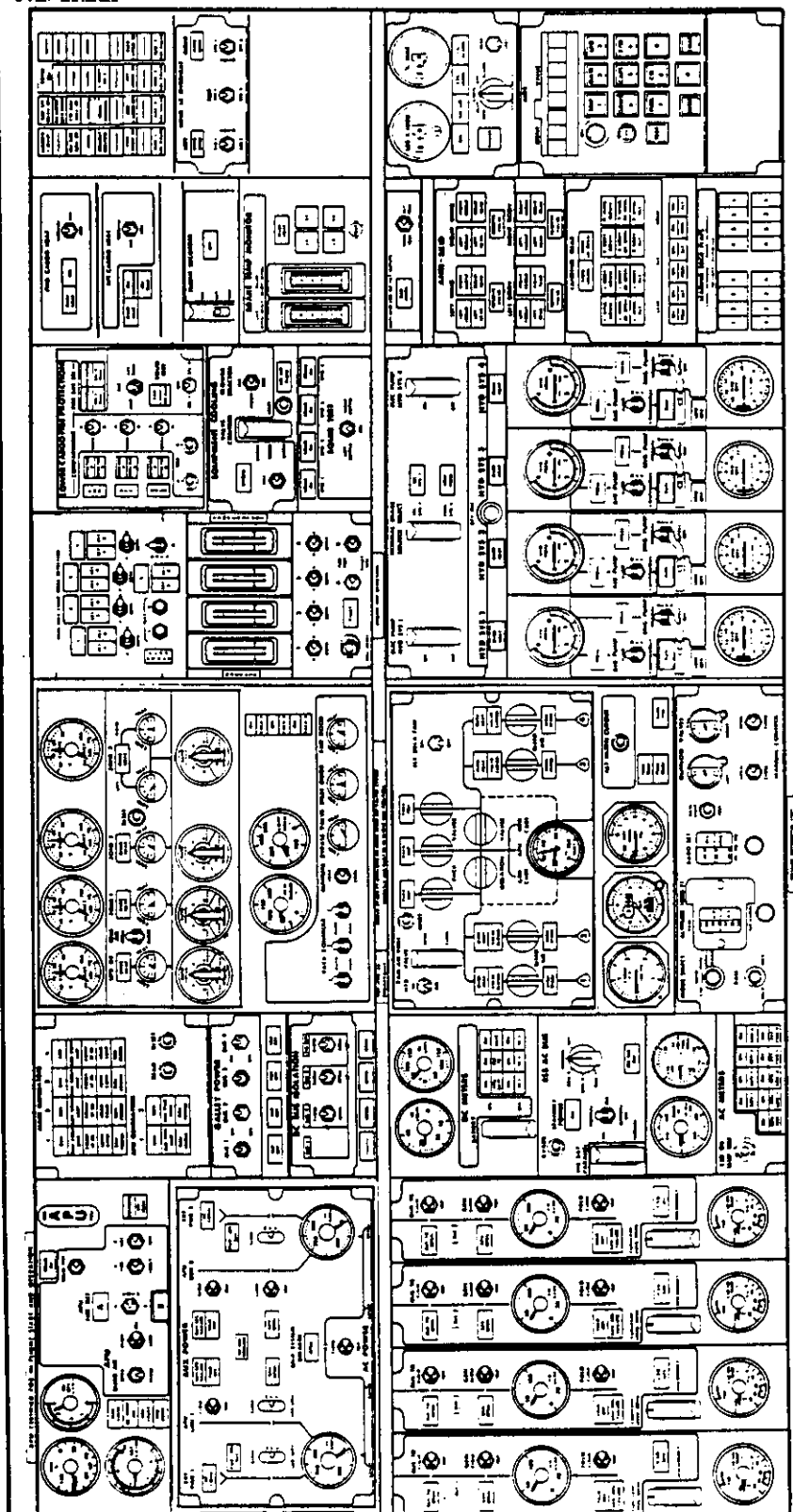


Later Airplanes

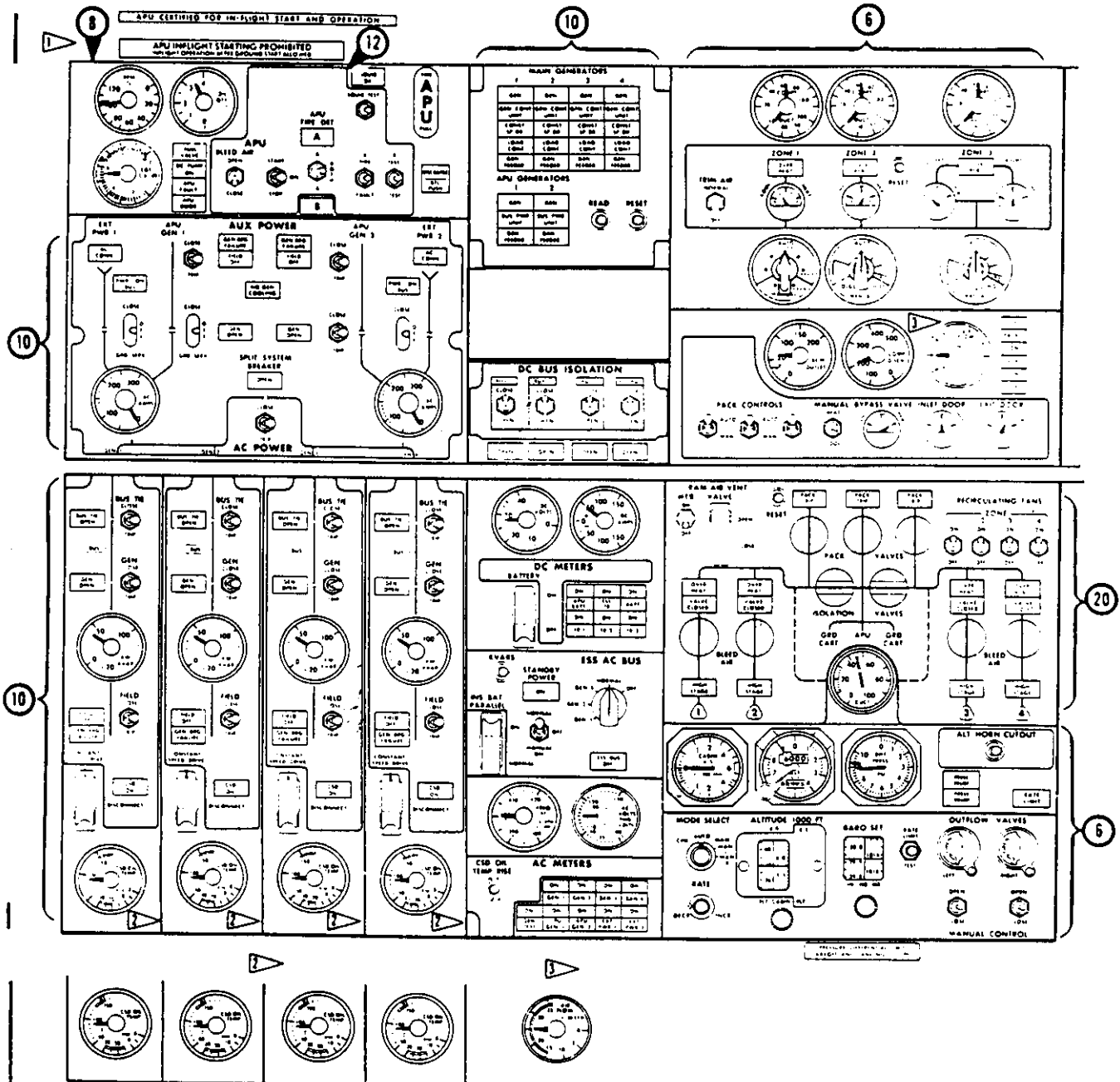
FLIGHT ENGINEER'S INSTRUMENT PANELS - UPPER



FLIGHT ENGINEER'S INSTRUMENT PANELS - LOWER



**FLIGHT ENGINEER'S INSTRUMENT PANELS - UPPER
 (HL7454, HL7458)**



① thru ③ As installed

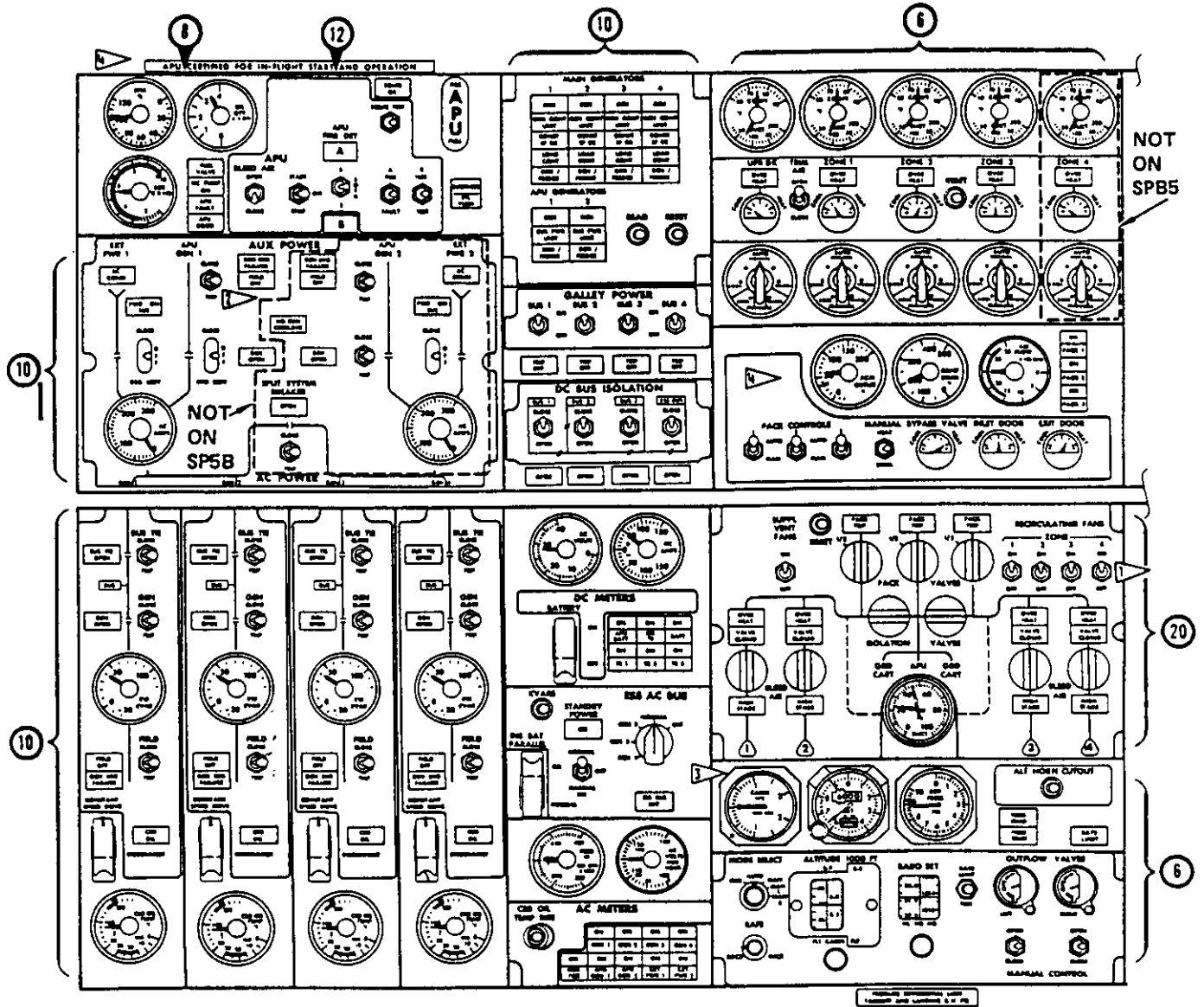
FLIGHT ENGINEER'S INSTRUMENT PANEL - UPPER PANEL-LEFT
2B5F

BOEING 747 OPERATIONS MANUAL

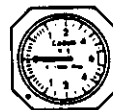
AIRPLANE GENERAL COCKPIT PANELS

APU INFLIGHT STARTING PROHIBITED
INFLIGHT OPERATION AFTER GROUND START ALLOWED

4 As installed



2 SPB5



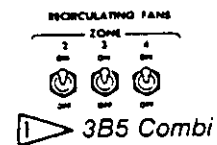
3 As installed



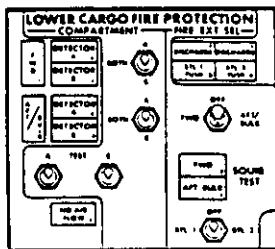
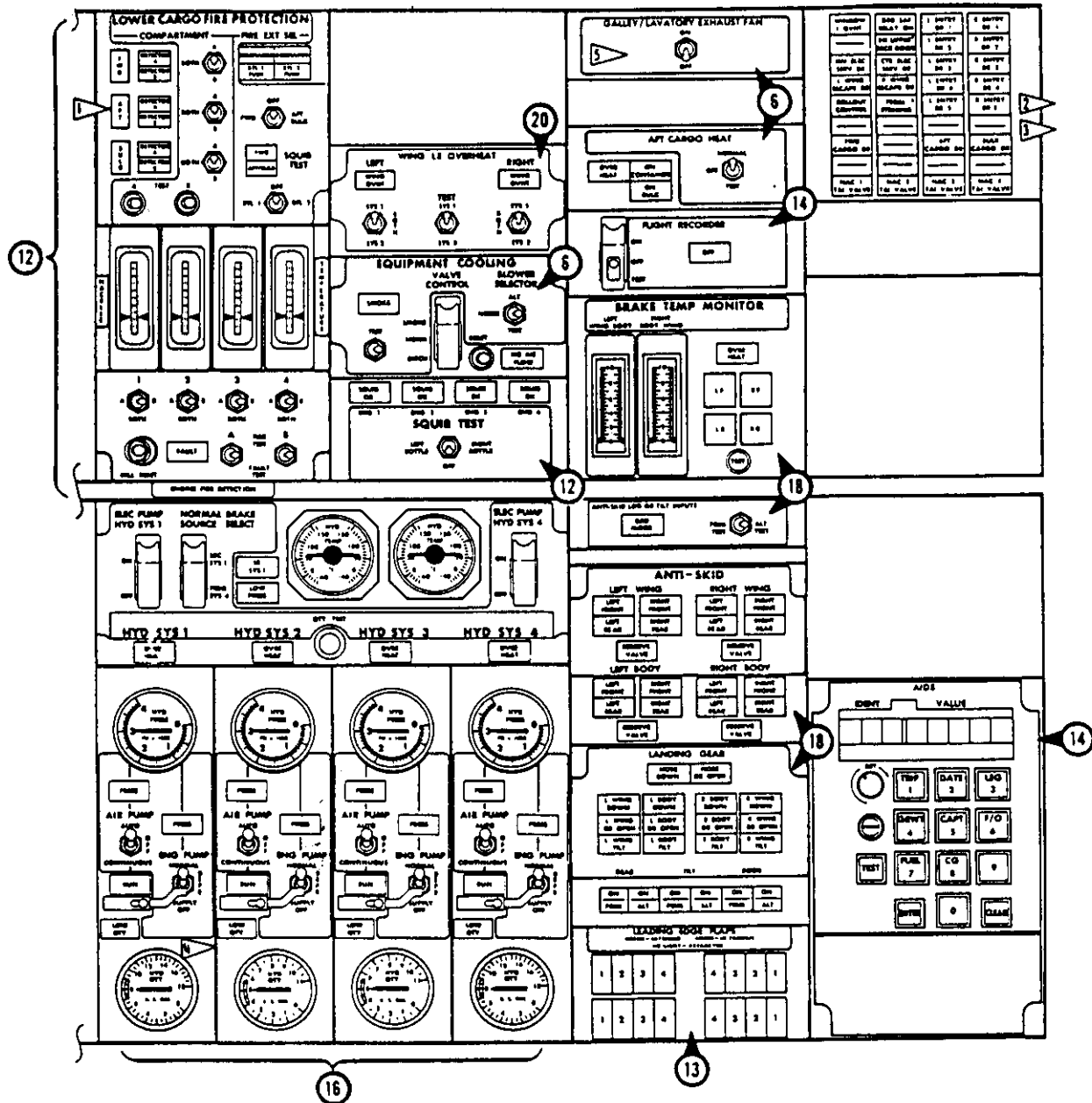
4 3B5 Combi



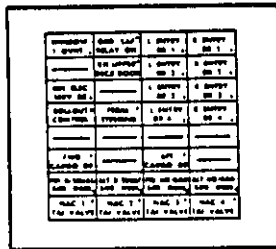
1 SPB5



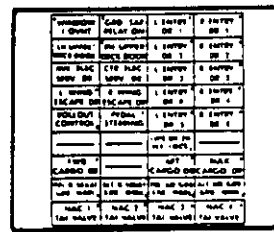
FLIGHT ENGINEER'S INSTRUMENT PANEL - UPPER PANEL-LEFT
(HL7454, HL7458)



1 SPB5



2 SPB5



3 As installed

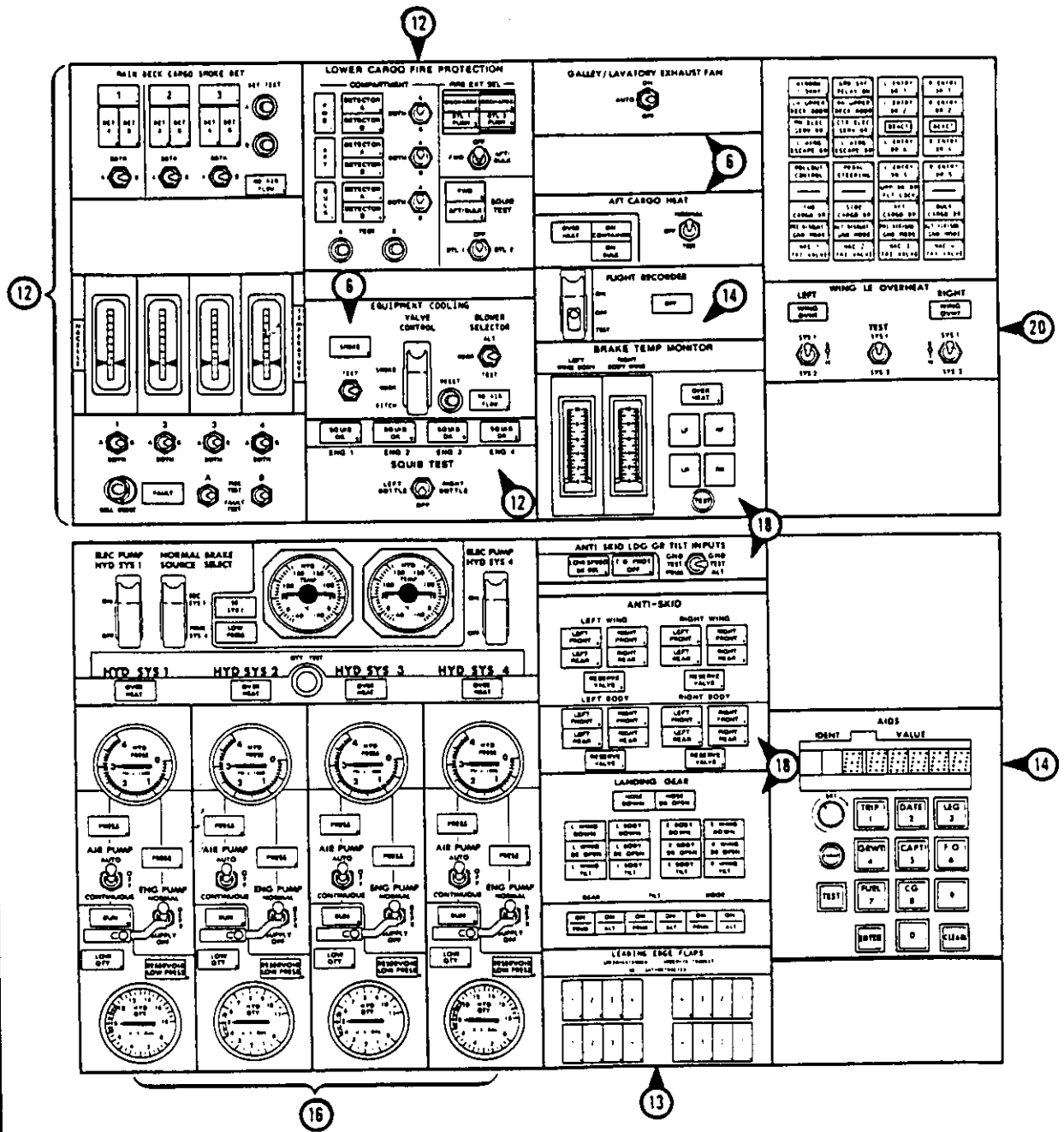
RESERVOIR (4 PLACES)
LOW PRESS

4 As installed



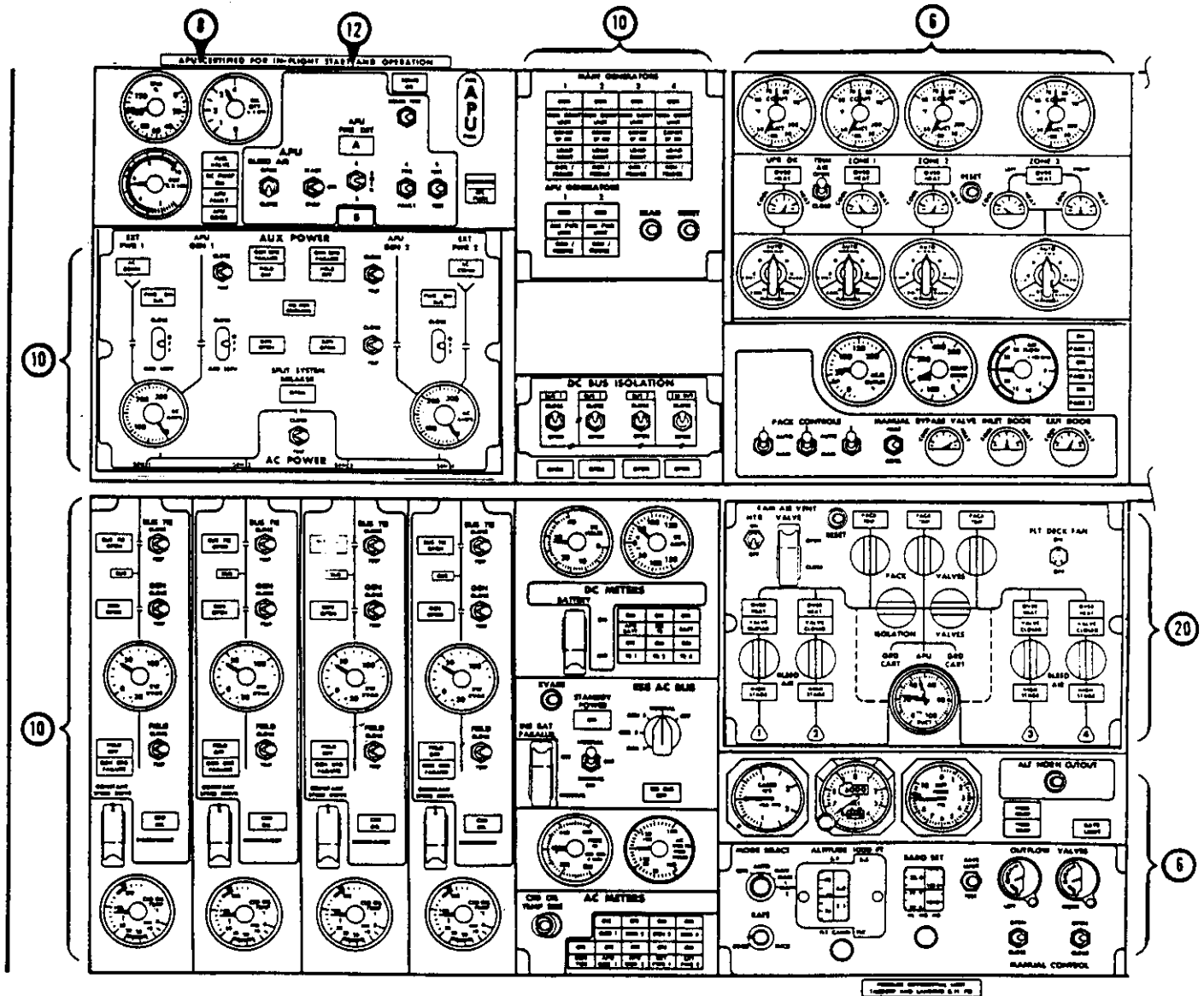
5 As installed

FLIGHT ENGINEER'S INSTRUMENT PANEL - UPPER PANEL - RIGHT
SPB5, LATER 2B5B, 3B5



FLIGHT ENGINEER'S PANEL - UPPER PANEL - RIGHT

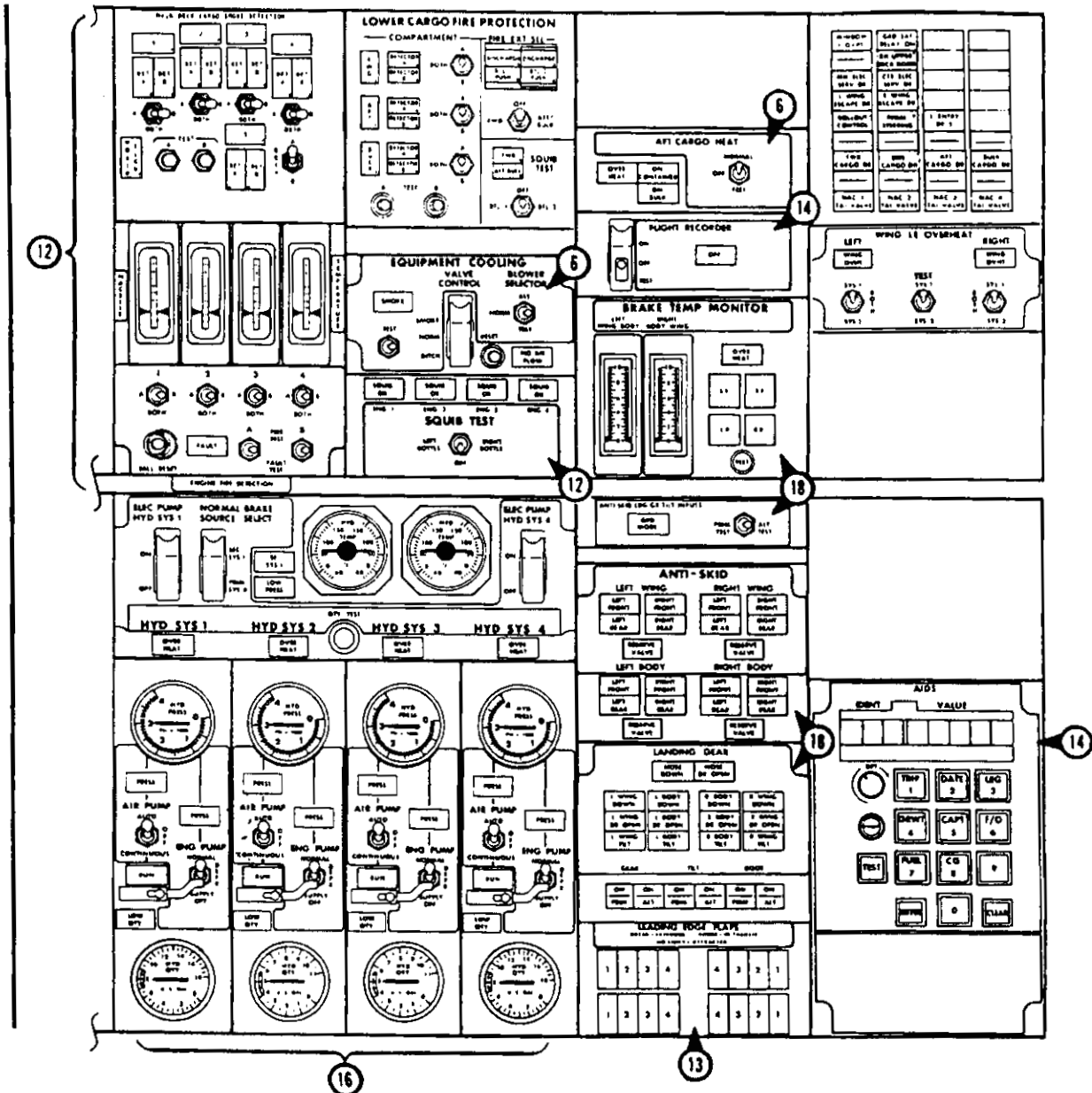
385-COMBI



FLIGHT ENGINEER'S INSTRUMENT PANEL - UPPER PANEL-LEFT
(HL7454, HL7458)

BOEING 747 OPERATIONS MANUAL

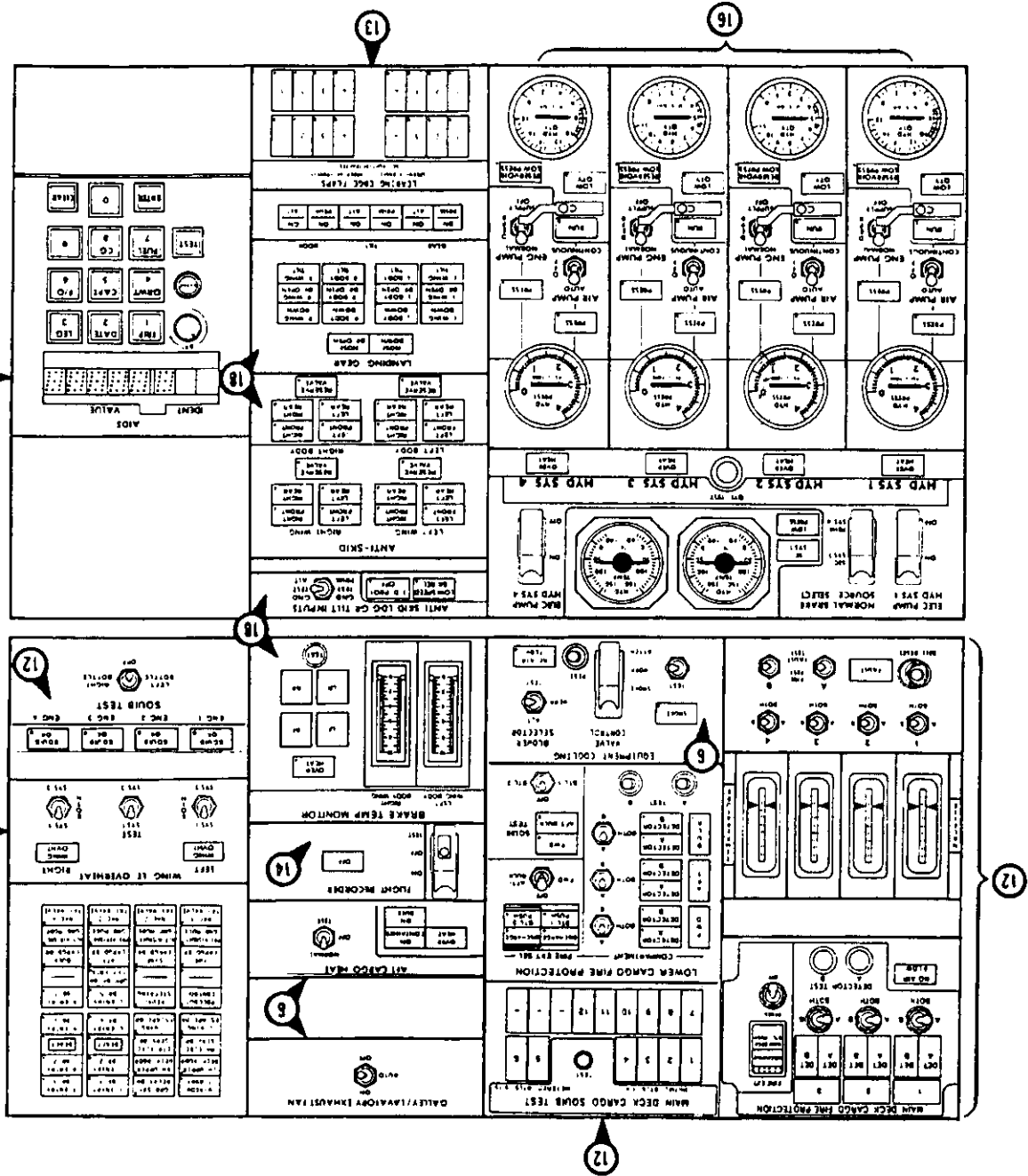
AIRPLANE GENERAL COCKPIT PANELS

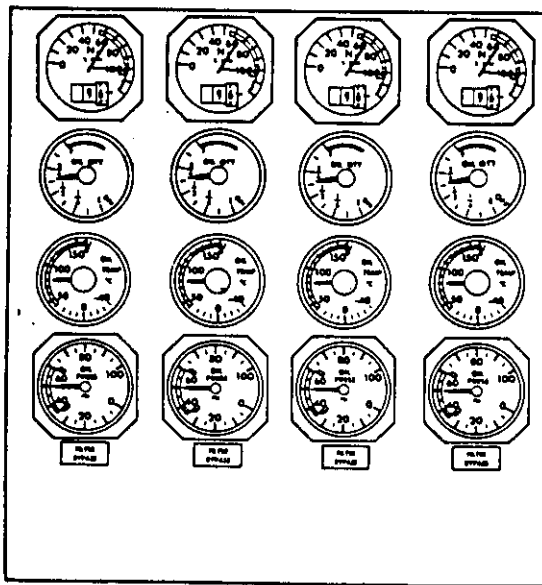


FLIGHT ENGINEER'S INSTRUMENT PANEL - UPPER PANEL - RIGHT
(HL7454, HL7458)

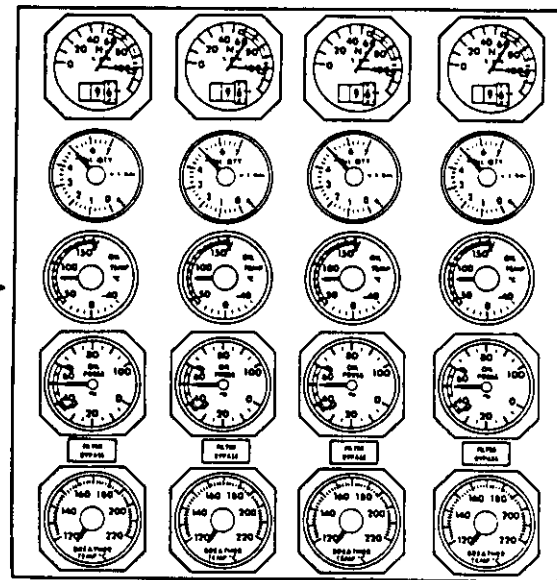
FLIGHT ENGINEER'S PANEL - UPPER PANEL - RIGHT
(HL 7470)

05
Dec 02/96

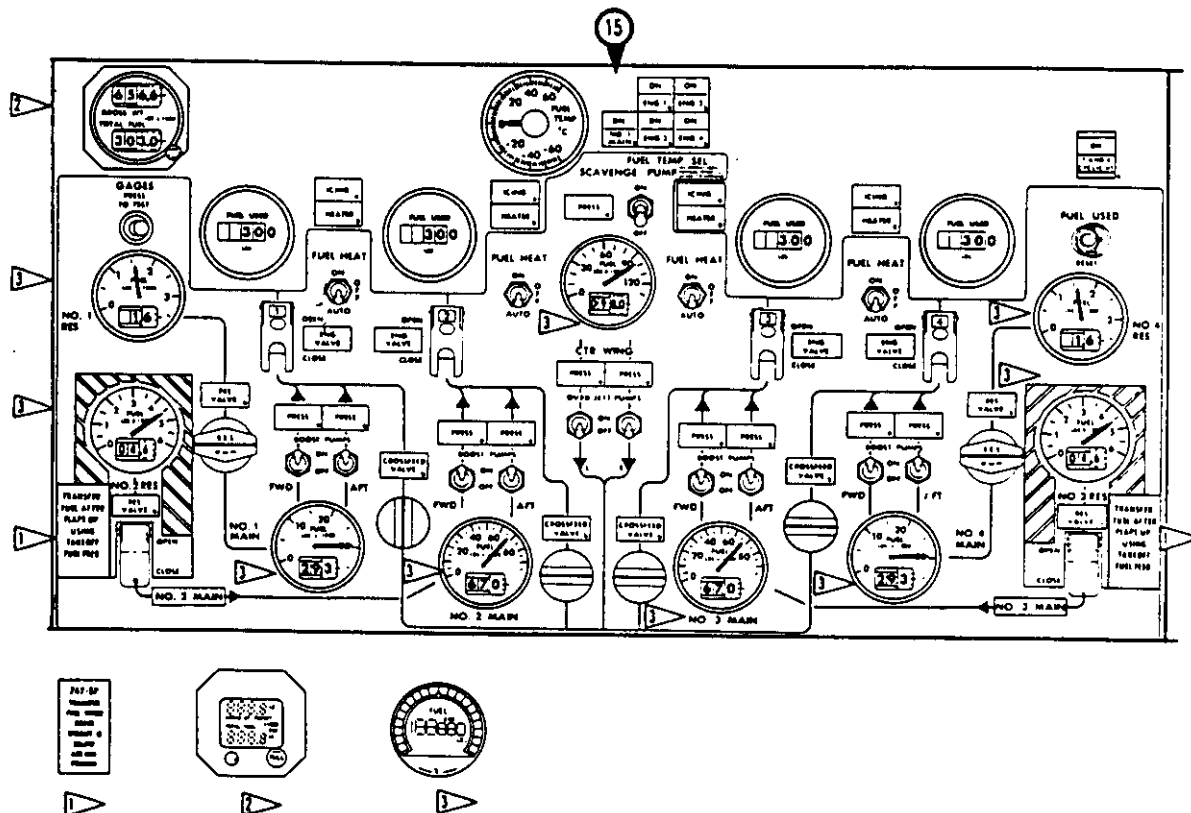




2B5F, later 2B5B, 3B5



SPB5



1 thru 3 As installed

FLIGHT ENGINEER'S LOWER INSTRUMENT PANELS
2B5F, SPB5, LATER 2B5B, 3B5