Chapter 2

CONTROLS AND EQUIPMENT AT CREW STATIONS

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Introduction

1. This chapter provides information regarding the disposition, function and operation of the controls and equipment at the crew stations.

Entrance to stations

2. Entry to the stations is through the door in the underside of the aircraft nose section, as described in Chapter 1 of this section.

CREW STATIONS

General

3. Accommodation is provided for three crew members in the rearward-facing bucket-type seats in the aft end of the pressurised cabin. The positions are occupied, port to starboard, by the A.E.O., navigator/radar operator and navigator/air bomber respectively. Below the cabin is a curved blister which accommodates the air bomber lying in the prone position.

KEY TO FIG.1
MISCELLANEOUS CONTROLS AND EQUIPMENT AT CREW STATIONS
(BLUE STEEL ROLE)

1. A.V.S. MANUAL TEMPERATURE CONTROL
2. DIMMER SWITCH - PANEL PILLAR LIGHTS
3. BOMB FIRING SWITCH
4. SWITCH - LIGHT AT AIR BOMBER'S PRONE POSITION
5. BOMB RELEASE SWITCH
6. BOMB DOORS SWITCH
7. MOUNTING PANEL FOR E.Q. CONTROL UNIT
8. PRESS TO TEST INDICATOR - OVERRIDE BREAK UP
9. PRESS TO TEST INDICATOR - COMMAND BREAK UP
10. PRESS TO TEST INDICATOR - SHUTTERED DETONATOR
11. DIMMER SWITCH - E.Q. PANEL LIGHT
12. D.C. SUPPLIES SWITCH - SINGLE POLE, GUARDED
13. RELEASE PRESSURE INDICATOR - ILLUMINATES AMBER - PRESS TO TEST
14. STORE GONE INDICATOR - ILLUMINATES AMBER
15. E.Q. POWER SUPPLIES EMERGENCY OVERRIDE - DOUBLE POLE SWITCH, GUARDED
16. ON/OFF SINGLE POLE SWITCH - RELEASE UNIT HEATER
17. BOMB SELECTOR SWITCH, BALLISTIC - POWER - DOUBLE POLE-GUARDED
18. FUSE BLOCK
19. DIMMER SWITCH AND LAMP
20. STORE HEATING CONTROL
21. ANTI-FLASH SCREEN
22. WARNING INDICATOR - LOSS OF CABIN PRESSURE
23. OXYGEN PRESSURE INDICATOR
24. STORE EXCHANGER OUTLET TEMPERATURE SELECTOR
25. STORE BAY TEMPERATURE SELECTOR
26. STORE ENGINE TEMPERATURE GAUGE
27. DIMMER SWITCH - CHARTBOARD LIGHTS
28. STORE BAY TEMPERATURE GAUGE
29. DIMMER SWITCH - PANEL LIGHTS
30. STORE-EXCHANGER OUTLET TEMPERATURE SELECTOR
31. BOMB BAY TEMPERATURE INDICATOR
32. BOMB BAY HEATING CONTROL SWITCH
33. BOMB BAY HEATING MANUAL CONTROL SWITCH
34. BOMB BAY TEMPERATURE SELECTOR
35. N.B.S. AIR SUPPLY PRESSURE INDICATOR
36. N.B.S. AIR SUPPLY ON/OFF SWITCH
37. OXYGEN REGULATORS
38. ACCESS DOOR - STORE RELEASE HANDLE
39. ACCESS DOOR - SAFETY LOCK REMOVAL HANDLE
40. H.2.S. PRESSURISATION ON/OFF SWITCH
41. H.2.S. PRESSURE GAUGE
42. AIR NAUTICAL MILES COUNTER
43. OXYGEN ON INDICATOR
44. COMPASS DEVIATION CARD HOLDER
45. AIR SPEED INDICATOR
46. ALTIMETER
47. CABIN DECOMPRESSION HANDLE
48. OXYGEN PRESSURE GAUGES
49. FUEL CONTENTS GAUGES - NO.1, 2, 3 & 4 ENGINE
50. FORWARD THROW INDICATOR
51. OUTSIDE AIR TEMPERATURE INDICATOR
52. FIN GAP DOORS SWITCH - NORMAL
53. FIN GAP DOORS - MAGNETIC INDICATOR
54. REFRIGERATION HEATER ON/OFF SWITCH
55. E.P.C.U. START PUSH SWITCH & PRESS TO TEST INDICATOR
56. START/STOP PUSH SWITCH - A/C HYDRAULIC UNIT
57. START/STOP PUSH SWITCHES - A/C REFRIGERATION
58. FIN GAP DOORS EMERGENCY SWITCH-GUARDED
59. SIGNAL PISTOL
60. E.C.M. COOLANT TEMPERATURE INDICATOR
61. CABIN LIGHT SWITCH
62. BELOW TABLE LIGHT SWITCH
63. PERISCOPE HEATER SWITCH
64. PORT ROOF LIGHT SWITCH
65. C.S.D.U. OIL TEMPERATURE GAUGES WITH DIMMER SWITCH AND LAMPS
66. A.A.P.P. CONTROL PANEL - 70P (SECTION 6, CHAP.5)
67. ALTERNATOR CONTROL PANEL - 10P (SECTION 6, CHAP.2)
68. SECONDARY SUPPLIES PANEL - 50P (SECTION 6, CHAP.4)
69. TIME DELAY EMERGENCY JETTISON PANEL
70. PERISCOPE CONTROL HANDLE
71. A.V.S. FLOW CONTROL
72. WINDOW LAUNCH AND/OR TELEMETERING CONTROL PANEL
73. STORE CONTROL PANEL - OPERATING & MONITORING
74. SANITARY CONTAINERS
75. RATION HEATERS
76. STARBOARD ROOF LIGHT SWITCH
77. DIMMER SWITCH - STORE PANEL LIGHT
78. DIMMER SWITCH - INSTRUMENT PANEL LIGHT
79. ABANDON AIRCRAFT SIGN
80. EMERGENCY DOOR OPENING SWITCHES (2 OFF)
81. ANTI-DAZZLE LIGHTS SWITCH
82. WIND INDICATOR UNIT
83. COVER FOR STORE CONTROL SWITCHES

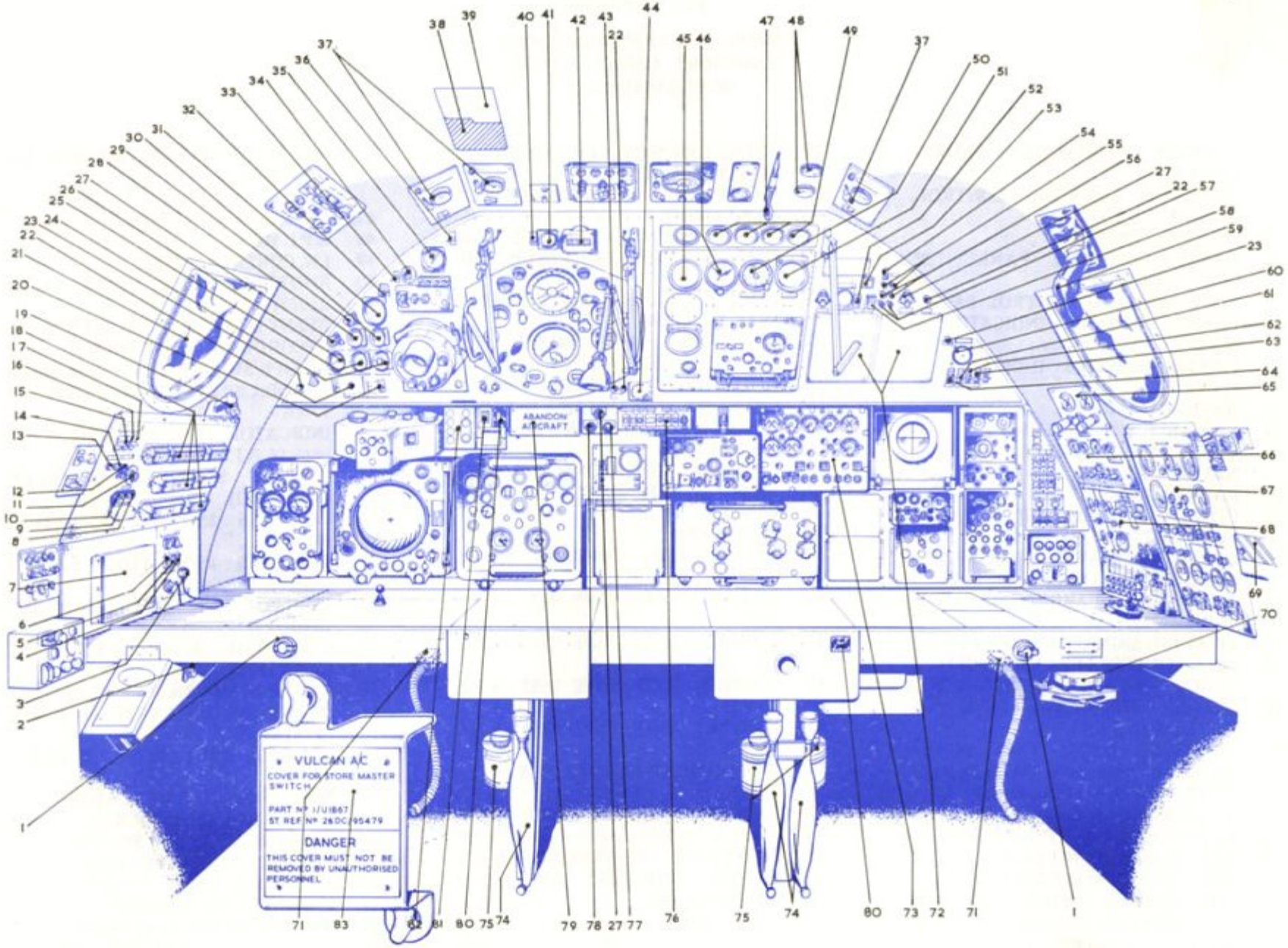

Fig. 1 Miscellaneous controls and equipment - crew stations (Blue Steel role)
(Mod. 2256 and 2300)

KEY TO FIGURE 2

RADAR, RADIO AND ASSOCIATED EQUIPMENT - CREW STATIONS (BLUE STEEL ROLE)

1. SCANNER STABILISATION SWITCH (A.R.I.5928)
2. SCANNER ROTATION CONTROL SWITCH (A.R.I.5928)
3. PULSE ALTIMETER
4. RADIO CONTROL PANEL 12P (SECT.6, CHAP.7)
5. TRUE AIRSPEED CONTROL PANEL
6. POWER SUPPLIES INDICATOR - N.B.C.
7. POWER SUPPLIES INDICATOR - H.2.S.
8. NAVIGATION PANEL
9. VARIABLE AIRSPEED UNIT
10. INTERCOMM. CONTROL PANEL - NAV./RADAR OP.
11. RADIO ALTIMETER
12. CONTROL UNIT, TYPE 1274 (A.R.I.23023)
13. COMPASS REPEATER - TRUE TRACK MAGNETIC HEADING
14. A.D.F. - D.F. BEARING INDICATOR (A.R.I.23023)
15. STEERING SIGNAL TEST SOCKET
16. LOOP CONTROLLER (A.R.I.23023)
17. TRACK CONTROLLER UNIT - M.F.S.
18. DIMMER SWITCH - AUTO LAND AND T.C.U. LIGHTS
19. ◀ CONTROL UNIT, TYPE 160501 (Inoperative when Mod.2263 embodied)
20. TEST METER (Inoperative when Mod.2263 embodied) ▶
21. I.F.F. CONTROL UNIT (A.R.I.5848)
22. S.I.F. CONTROL UNIT (A.R.I.5848)
23. PRESS-TO-TRANSMIT SWITCH
24. H.F. SUPPLIES SWITCH (A.R.I.5874)
25. I.F.F. SUPPLIES SWITCH (A.R.I.5848)
26. H.F. OUTPUT SWITCH (A.R.I.5874)
27. A.D.F. SUPPLY SWITCH (A.R.I.23023)
28. CONFERENCE INTERCOMM. MASTER SWITCH
29. MONITOR - ALARM SWITCH (A.R.I.18105)
30. DIMMER SWITCH - CONTROL UNIT DIAL LIGHTING (A.R.I.18105 AND 18076)
31. DIMMER SWITCH - CONTROL UNIT DIAL LIGHTING
32. I.L.S. SUPPLY ON/OFF SWITCH
33. CONTROL UNIT TYPE 705
34. AUTO-THROTTLE ON/OFF SWITCH (Inoperative when Mod.2263 embodied)
35. INTERCOMM. MASTER CONTROL SWITCH
36. EXTERNAL INTERCOMM. SWITCHES
37. E.C.M. POWER SUPPLY CONTROL PANEL
38. MORSE KEY
39. INTERCOMM. CONTROL PANEL A.E.O.
40. CONTROL UNIT, TYPE 9422 (A.R.I. 18076)
41. CONTROL UNIT, TYPE 7812 (A.R.I. 18074)
42. CONTROL UNIT, TYPE 9562 (A.R.I. 18105)
43. CONTROL UNIT, TYPE 9456 (A.R.I. 18075)
44. INDICATOR UNIT, TYPE 6935 (A.R.I. 5919)
45. ◀ CONTROL UNIT, TYPE 7216 (A.R.I.5874) (Pre-Mod.2300) CONTROL TRANSMITTER/RECEIVER, TYPE M53 (A.R.I.23090) (Post Mod.2300)
46. CONTROL UNIT, TYPE 4189 (A.R.I.5874) (Pre-Mod.2300) ANTENNA CONTROL UNIT, Ref.10L 951 4615 (A.R.I.23090) (Post Mod.2300) ▶
47. I.N. MONITORING UNIT
48. G.P.I. MK.6
49. I.N. CONTROL PANEL
50. SHORTING PLUG PLATE (A.R.I. 23023)
51. EVENT MARKER - PUSH SWITCH
52. RECORDER - ON/OFF SWITCH
53. ON/OFF SWITCH - GEE or (subsequent to MOD.1291) CONTROL UNIT, TYPE 7780)
54. ◀ INDICATOR CONTROL UNIT, TYPE 9869 (A.R.I.5972)
55. ON/OFF SWITCH - DOPPLER (A.R.I.5972) ▶
56. COMPASS ISOLATION SWITCH (STBD.)
57. COMPASS ISOLATION SWITCH (PORT)
58. CONTROL UNIT TYPE 7750 (A.R.I. 18107/13)
59. CONTROL UNIT TYPE 585 (A.R.I.5928)
60. CAMERA TYPE RX.88 (A.R.I.5928)
61. INDICATING UNIT TYPE 301 (A.R.I. 5928)
62. CONTROL UNIT TYPE 595 (A.R.I. 5928)
63. N.B.C. ISOLATION INDICATORS
64. N.B.C. SIMULATOR SOCKET
65. BOMBING SELECTOR SWITCH
66. CONTROL UNIT TYPE 12580
67. INTERCOMM. CONTROL UNIT-NAV./AIR BOMBER
68. SIMULATED BOMBING PANEL
69. T.F.R. FAILURE WARNING LIGHT

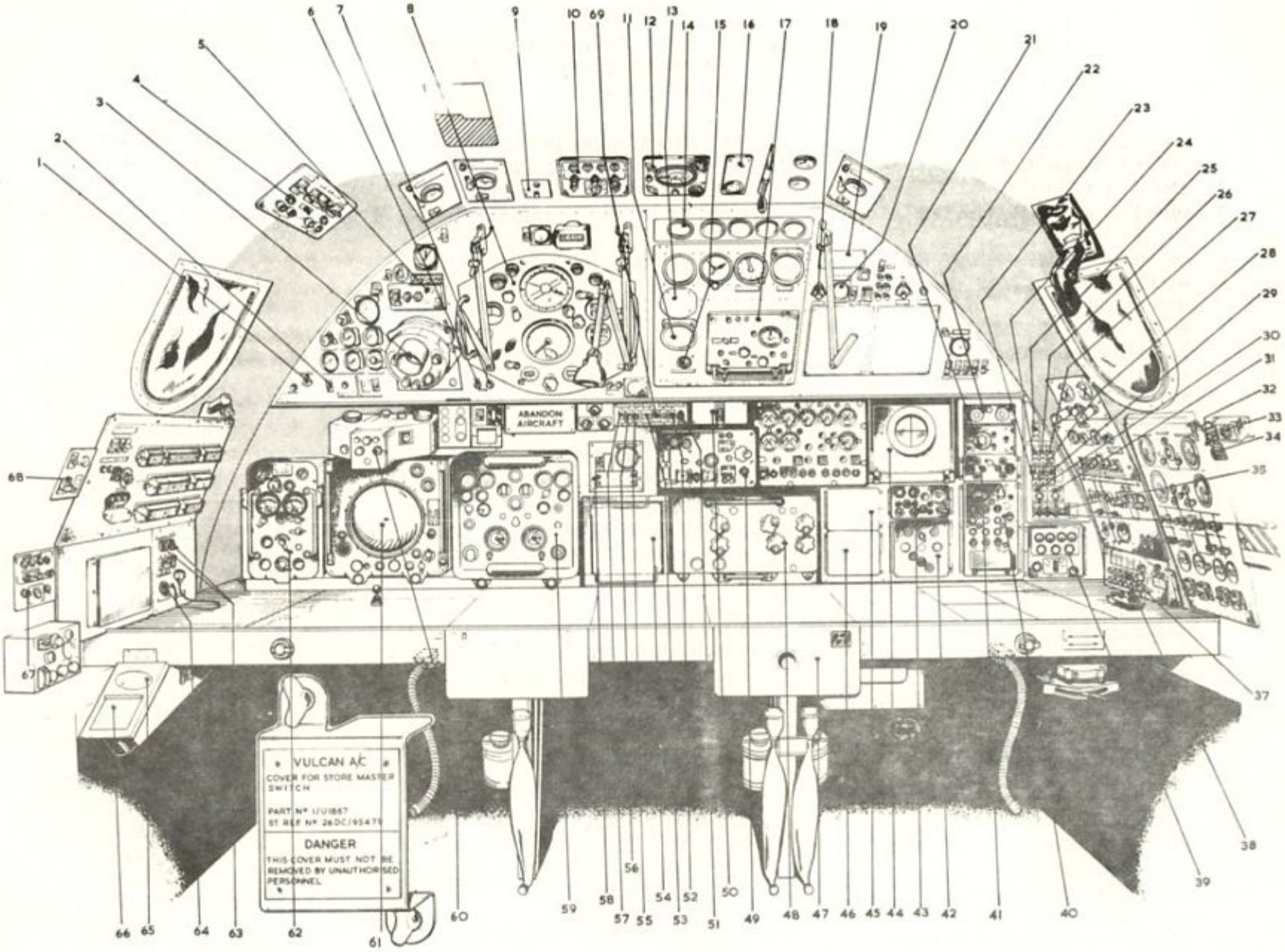

Fig.2. Radar, radio and associated equipment – crew stations (Blue Steel role)
(Mod. 2256 and 2300)

KEY TO FIGURE 3

MISCELLANEOUS CONTROLS AND EQUIPMENT - CREW STATIONS (FREE FALL ROLE)

1. OXYGEN PRESSURE INDICATOR
2. LOSS OF PRESSURE WARNING LAMP
3. ANTI FLASH SCREEN
4. DIMMER SWITCHES CHARTBOARD LIGHTS
5. DIMMER SWITCH PANEL LIGHTS
6. BOMB BAY TEMPERATURE INDICATOR
7. BOMB BAY HEATING SWITCH - AUTO-OFF-MANUAL
8. MANUAL HEATING CONTROL SWITCH, INC, -OFF, -DEC.
9. BOMB BAY TEMPERATURE SELECTOR
10. N.B.C. AIR SUPPLY - DIFFERENTIAL PRESSURE GAUGE
11. N.B.C. PRESSURISATION CONTROL - ON/OFF SWITCH
12. OXYGEN REGULATOR - NAV/BOMBER
13. OXYGEN REGULATOR - NAV/RADAR OP.
14. N.B.C./H.2.S. SUPPLIES - BLACK WHITE DOLLS EYES
15. H.2.S. PRESSURISATION CONTROL SWITCH
16. H.2.S. PRESSURE GAUGE
17. AIR NAUT. MILES COUNTER
18. COMPASS DEVIATION CARD HOLDER
19. AIR SPEED INDICATOR
20. ALTIMETER MK.19F
21. FUEL CONTENTS GAUGE No.1, 2, 3 and 4 ENGINE
22. CABIN DECOMPRESSION HANDLE
23. OXYGEN PRESSURE INDICATORS
24. OXYGEN REGULATOR A.E.O.
25. FORWARD THROW INDICATOR
26. OUTSIDE AIR TEMPERATURE INDICATOR
27. DIMMER SWITCH – AUTO LAND INSTRUMENT LIGHTS
28. E.C.M. COOLANT TEMPERATURE GAUGE
29. PUNKAH LOUVRE
30. DIMMER SWITCH, INSTRUMENT PANEL
31. SIGNAL PISTOL
32. ELECTRO MAGNETIC COUNTER WINDOW INSTALLATION
33. WINDOW INSTALLATION SWITCH
34. SWITCH FATIGUE METER
35. R.B.W. CONTROL PANEL, LIGHTS – DIMMER SWITCH
36. STBD. ROOF LIGHT SWITCH
37. PORT ROOF LIGHT SWITCH
38. CABIN LIGHT SWITCH
39. UNDER TABLE LIGHT SWITCH
40. PERISCOPE HEATER SWITCH
41. OIL TEMPERATURE GAUGES C.S.D. UNITS
42. DIMMER SWITCH AND LIGHTS
43. A.A.P.P. CONTROL PANEL 70P (SECT.6)
44. SECONDARY SUPPLIES PANEL 50P (SECT.6)
45. BOMB TIME DELAY EMERGENCY JETTISON PANEL
46. ALTERNATOR CONTROL PANEL 10P (SECT.6)
47. EXPLOSION PROTECTION RESET BUTTON (MOD.1744)
48. AUXILIARY A.V.S. SWITCHES
49. EXPLOSION PROTECTION INDICATOR LAMPS PORT AND STBD. (MOD.1744)
50. E.C.M. POWER SUPPLY PANEL
51. PERISCOPE CONTROL HANDLE
52. A.V.S. TEMPERATURE CONTROL
53. A.V.S. FLOW RATE CONTROL
54. AUXILIARY A.V.S. QUICK-RELEASE CONNECTOR
55. RATION HEATERS
56. SANITARY CONTAINERS
57. A.S.I. CORRECTION CARD HOLDER
58. CONTROL SWITCH (A.R.I.5972)
59. ABANDON AIRCRAFT SIGN
60. EMERGENCY DOOR OPENING SWITCHES (2 OFF)
61. ANTI-DAZZLE SWITCH
62. WIND INDICATOR UNIT
63. BOMB DOOR SWITCH
64. DIMMER SWITCH PANEL PILLAR LIGHTS
65. LIGHT SWITCH – AIR BOMBER'S PRONE POSITION
66. BOMB RELEASE SWITCH
67. CAMERA CONTROL UNIT TYPE 551
68. BOMB DOOR CONTROL SWITCH
69. BOMB SPACING UNIT PANEL
70. LIVE JETTISON SWITCH
71. V.T. FUZING SWITCH
72. DIMMER SWITCH AND PANEL LIGHT
73. REMOTE FATIGUE INDICATOR, TYPE M2372

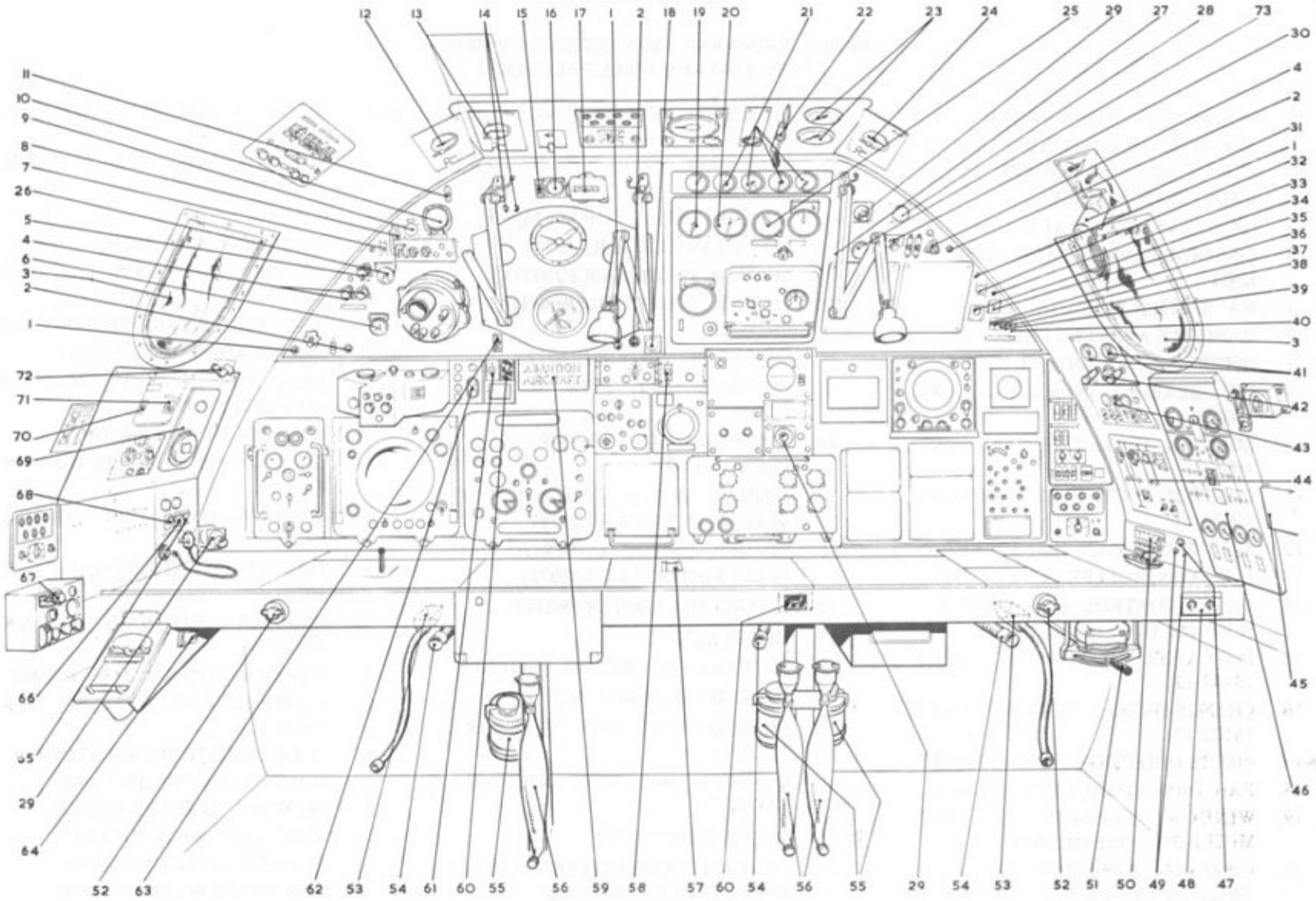

Fig. 3 Miscellaneous controls and equipment-crew stations (Free fall role)

► Mod 2388, 2439 and 2473 ◄

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KEY TO FIGURE 4

RADAR, RADIO AND ASSOCIATED EQUIPMENT – CREW STATIONS (FREE FALL ROLE)

1. SCANNER ROTATION SWITCH
2. SCANNER STABILISATION SWITCH (A.R.I.5928) (OFF-EMER-STBY-ON)
3. RADIO SWITCH PANEL
4. HIGH LEVEL RADIO ALTIMETER
5. CONTROL PANEL – TRUE AIR SPEED UNIT
6. NAVIGATION PANEL MK.1A
7. VARIABLE AIRSPEED UNIT
8. INTERCOMM. – CONTROL UNIT
9. D.F. BEARING INDICATOR (A.R.I. 23023)
10. CONTROL UNIT, TYPE 7681 (A.R.I. 23023)
11. CONTROL UNIT, TYPE 1274 (A.R.I. 23023)
12. STEERING SYSTEM TEST SOCKET
13. LOOP CONTROLLER (A.R.I.23023)
14. TRACK CONTROL UNIT, TYPE C – M.F.S. MK.1B
15. INDICATOR, TYPE 9547 (A.R.I. 18107/13)
16. CHANGE-OVER SWITCH (A.R.I. 18107/13)
17. ▶ PILOTS DIRECTION INDICATOR ◀
18. FAIL INDICATOR (A.R.I.23134/5/4)
19. WINDOW LAUNCH OR TELE-METERING CONTROL PANEL
20. COMPASS REPEATER SELECTOR SWITCH, PORT & STBD.
21. INDICATOR UNIT, TYPE 6935 (A.R.I. 5919)
22. INDICATOR, TYPE 17171 (A.R.I. 18228/1)
23. SUPPLIES SWITCH (A.R.I.5874)
24. OUTPUT SWITCH (A.R.I.5874)
25. SUPPLIES SWITCH (A.R.I.23023)
26. CONFERENCE INTERCOMM. MASTER SWITCH
27. ON/OFF SWITCH (A.R.I.18011)
28. CONTROL UNIT, TYPE 705 (A.R.I. 18011)
29. AUTO-THROTTLE ON-OFF SWITCH (Inoperative) ▶ ◀
30. DIMMER SWITCH CONTROL UNIT DIAL LIGHTING (A.R.I.5919)
31. DIMMER SWITCH CONTROL UNIT DIAL LIGHTING (A.R.I.18076)
32. INTERCOMM. MASTER SWITCH
33. MORSE KEY
34. EXTERNAL INTERCOMM. SWITCHES
35. PRESS-TO-TRANSMIT SWITCH
36. CONTROL UNIT, TYPE 17172 (A.R.I. 18228/1)
37. CONTROL UNIT, TYPE 9422 (A.R.I. 18076)
38. ▶ DELETED (Mod.2501)
39. CONTROL TRANSMITTER/RECEIVER TYPE M53 (A.R.I.23090) ◀
40. ▶ ANTENNA CONTROL UNIT, (A.R.I. 23090) ◀
41. CONTROL UNIT, TYPE 16929 (A.R.I. 23134/5/4)
42. G.P.I. MK.6
43. TEST POINT (G.P.I. MK.6)
44. CONTROL UNIT, TYPE 7750 (A.R.I. 18107/13)
45. H.R.U. POWER FAILURE INDICATOR
46. NAV. HEADING UNIT (H.R.S.)
47. INDICATOR CONTROL UNIT, TYPE 9869 (A.R.I.5972)
48. CONTROL UNIT (H.R.S. UNIT)
49. GROUND SPEED SELECTOR UNIT (N.B.C.)
50. CONTROL UNIT, TYPE 585 (A.R.I. 5928)
51. INDICATING UNIT, TYPE 301 (A.R.I. 5928)
52. CONTROL UNIT, TYPE 626 (A.R.I. 5928)
53. CAMERA, TYPE RX.88 (A.R.I.5928)
54. CONTROL UNIT, TYPE 595 (A.R.I. 5928)
55. N.B.C. ISOLATION INDICATORS
56. CONTROL UNIT, TYPE 12580
57. BOMBING SELECTOR SWITCH
58. N.B.C. SIMULATOR SOCKET
59. BOMBING SELECTOR PANEL
60. SIMULATED BOMBING PANEL

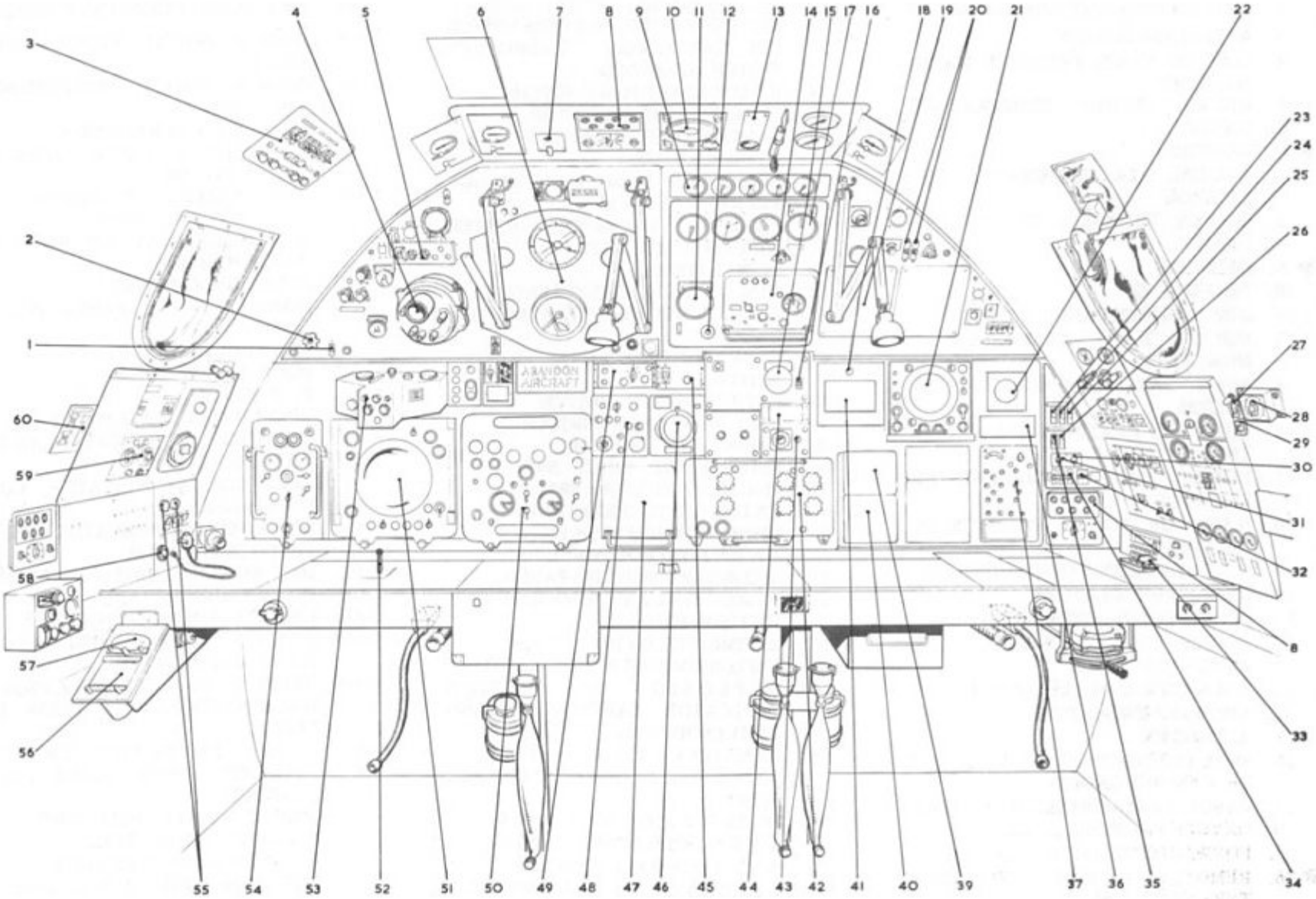

Fig 4 Radar, radio and associated equipment-crew stations (Free fall role)

► Mod. 2439, 2473 and 2501 ◄

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KEY TO FIGURE 5

MISCELLANEOUS CONTROLS AND EQUIPMENT - CREW STATIONS (MOD.2112)

1. STORE HEATING CONTROL
2. OXYGEN PRESSURE INDICATOR
3. ANTI-FLASH SCREEN
4. LOSS OF CABIN PRESSURE WARNING LAMP
5. STORE ENGINE TEMPERATURE GAUGE
6. ▶ DELETED
7. OUTSIDE AIR TEMPERATURE INDICATOR ◀
8. DIMMER SWITCH – CHARTBOARD LIGHTS
9. ▶ DELETED
10. DELETED ◀
11. DIMER SWITCH PANEL LIGHTS
12. BOMB BAY TEMPERATURE INDICATOR
13. BOMB BAY HEATING CONTROL SWITCH
14. BOMB BAY HEATING MANUAL CONTROL SWITCH
15. BOMB BAY TEMPERATURE SELECTOR
16. N.B.C. AIR SUPPLY PRESSURE INDICATOR
17. N.B.C. AIR SUPPLY ON/OFF SWITCH
18. OXYGEN REGULATORS
19. ACCESS DOOR – STORE RELEASE
20. ACCESS DOOR SAFETY LOCK REMOVAL HANDLE
21. AIR NAUTICAL MILES COUNTER
22. AIR SPEED INDICATOR
23. ALTIMETER
24. FUEL CONTENTS GAUGES No.1, 2, 3 and 4 ENGINE GROUPS
25. CABIN DECOMPRESSION HANDLE
26. OXYGEN PRESSURE GAUGES
27. FORWARD THROW INDICATOR
28. ▶ REMOTE FATIGUE INDICATOR TYPE M2372 ◀
29. PUNKAH LOUVRE
30. FIN GAP DOORS - MAGNETIC IND.
31. FIN GAP DOORS - SWITCH - NORMAL
32. REFRIGERATION HEATERS SWITCH
33. FIN GAP DOORS - EMERGENCY SWITCH - GUARDED
34. E.P.U.C. START PUSH SWITCH
35. PRESS TO TEST INDICATOR
36. START/STOP PUSH SWITCHES - A/C HYDRAULIC UNIT
37. START/STOP PUSH SWITCHES - A/C REFRIGERATION
38. ELECTRO MAGNETIC COUNTER WINDOW INSTALLATION
39. SIGNAL PISTOL
40. WINDOW INSTALLATION SWITCH
41. E.C.M. COOLANT TEMPERATURE GAUGE
42. R.B.W. CONTROL PANEL LIGHTS - SWITCH
43. FATIGUE METER - SWITCH
44. PORT ROOF LIGHT - SWITCH
45. CABIN LIGHT - SWITCH
46. BELOW TABLE - LIGHT SWITCH
47. PERISCOPE HEATER - SWITCH
48. C.S.D.U. OIL TEMPERATURE
49. DIMMER SWITCH WITH LIGHTS
50. A.A.P.P. CONTROL PANEL 70P
51. SECONDARY SUPPLIES PANEL
52. TIME DELAY EMERGENCY JETTISON PANEL
53. ALTIMETER CONTROL PANEL
54. EXPLOSION PROTECTION RESET
55. EXPLOSION PROTECTION INDICATOR LAMPS PORT AND STBD. (MOD.1744)
56. AUXILIARY A.V.S. SWITCHES
57. E.C.M. POWER SUPPLY CONTROL PANEL
58. PERISCOPE CONTROL HANDLE
59. A.V.S. TEMPERATURE CONTROL
60. A.V.S. FLOW RATE CONTROL
61. AUXILIARY A.V.S. QUICK-RELEASE CONNECTOR
62. RATION HEATERS
63. SANITARY CONTAINERS
64. A.S.I. CORRECTION CARD HOLDER
65. DIMMER SWITCH - STORE - PANEL LIGHT
66. DIMMER SWITCH - INSTRUMENT - PANEL LIGHT
67. ABANDON AIRCRAFT SIGN
68. EMERGENCY DOOR OPENING SWITCHES (2 OFF)
69. ANTI-DAZZLE LIGHT SWITCH
70. WIND INDICATOR UNIT
71. SWITCH-LIGHT AT AIR BOMBER'S PRONE POSITION
72. BOMB FIRING SWITCH
73. DIMMER SWITCH - PANEL PILLAR LIGHTS
74. BOMB RELEASE - SWITCH
75. BOMB DOORS - SWITCH
76. FUSE BLOCKS
77. DIMMER SWITCH E.Q. PANEL
78. PRESS TO TEST INDICATOR - OVERRIDE BREAK UP
79. PRESS TO TEST INDICATOR - COMMAND BREAK UP
80. PRESS TO TEST INDICATOR - SHUTTERED DETONATOR
81. D.C. SUPPLIES SWITCH - SINGLE POLE GUARDED
82. CAMERA CONTROL UNIT TYPE 551
83. STORE GONE INDICATOR ILLUMINATES AMBER
84. RELEASE PRESSURE INDICATOR - ILLUMINATES AMBER PRESS TO TEST
85. BOMB SELECTOR SWITCH BALLISTIC - POWER - DOUBLE POLE GUARDED
86. ON/OFF SINGLE POLE SWITCH - RELEASE UNIT HEATER
87. E.Q. POWER SUPPLIES EMERGENCY OVERRIDE - DOUBLE POLE SWITCH GUARDED
88. DIMMER SWITCH AND LAMP

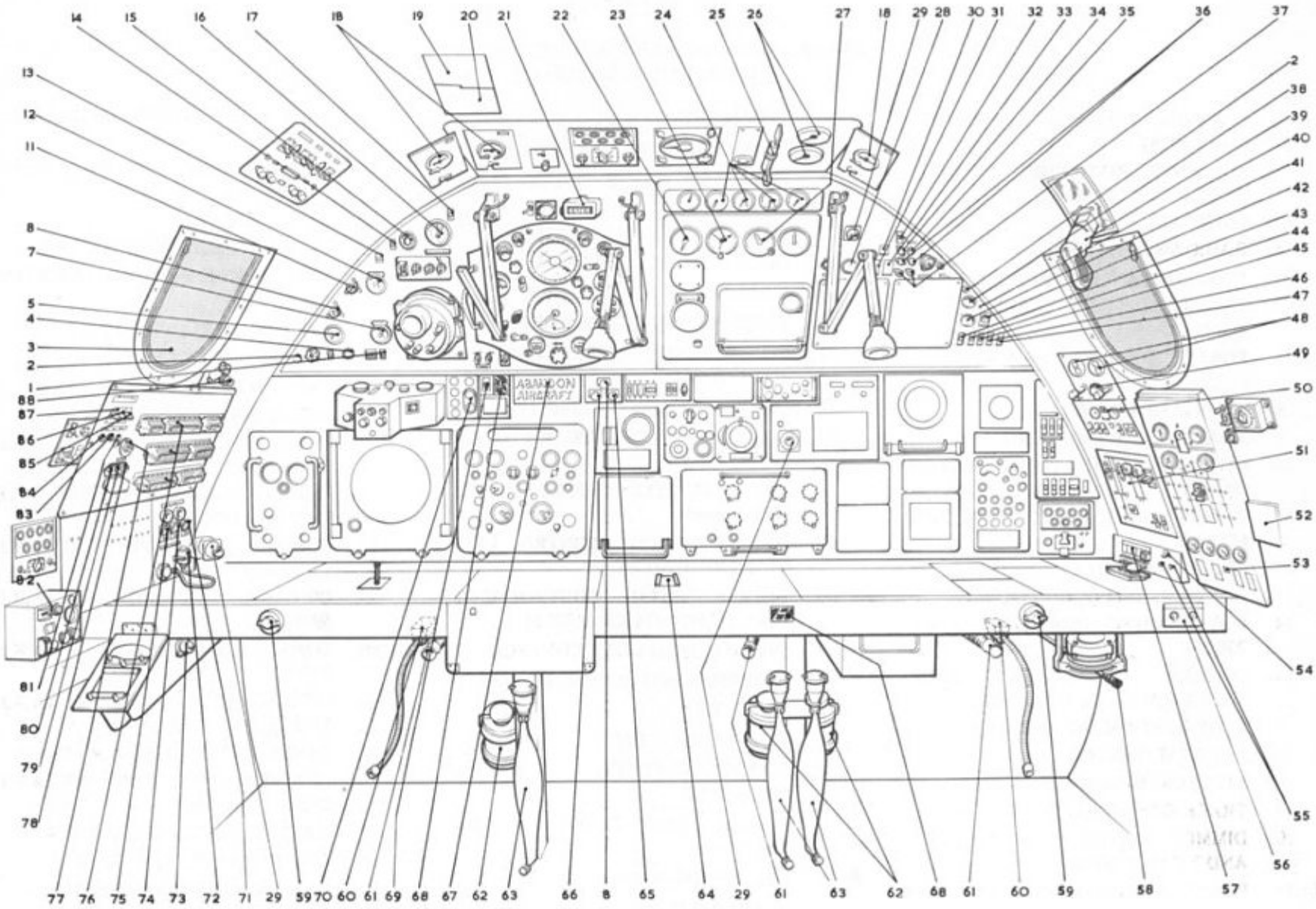

Fig. 5 Miscellaneous controls and equipment-crew stations (Mod. 2112)

► Mod. 2388, 2439 and 2473 ◄

KEY TO FIGURE 6

RADAR, RADIO AND ASSOCIATED EQUIPMENT – CREW STATIONS (MOD.2112)

1. SCANNER STABILISATION SWITCH (A.R.I.5928)
2. SCANNER ROTATION CONTROL SWITCH (A.R.I.5928)
3. PULSE ALTIMETER
4. RADIO SWITCH PANEL
5. CONTROL PANEL – TRUE AIR SPEED
6. POWER SUPPLIES INDICATOR – N.B.C.
7. POWER SUPPLIES INDICATOR – H.2.S.
8. NAVIGATION PANEL
9. VARIABLE AIRSPEED UNIT
10. COMPASS ISOLATION SWITCH (PORT)
11. COMPASS ISOLATION SWITCH (STBD.)
12. ON/OFF SWITCH (A.R.I.5972)
13. CONTROL UNIT (A.R.I.23023)
14. D.F. BEARING INDICATOR (A.R.I. 23023)
15. COMPASS – REPEATER – TRUE TRACK MAGNETIC HEADING
16. LOOP CONTROLLER (A.R.I.23023)
17. RADIO ALTIMETER
18. STEERING SIGNAL TEST SOCKET
19. TRACK CONTROLLER UNIT – M.F.S.
20. DIMMER SWITCH – AUTO LAND AND T.C.U. LIGHTS
21. ▶ PILOTS DIRECTION INDICATOR ◀
22. WINDOW LAUNCH OR TELE-METERING CONTROL PANEL
23. FAIL INDICATOR (A.R.I.23134/5/4)
24. TEST POINT (G.P.I. Mk.6)
25. INDICATOR, TYPE 6935 (A.R.I.5919)
26. INDICATOR, TYPE 17171 (A.R.I. 18228/1)
27. SUPPLIES SWITCH (A.R.I.5874)
28. OUTPUT SWITCH (A.R.I.5874)
29. SUPPLY SWITCH (A.R.I.23023)
30. PRESS-TO-TRANSMIT SWITCH
31. CONFERENCE INTERCOMM. – MASTER SWITCH
32. ON/OFF SWITCH (A.R.I.18011)
33. CONTROL UNIT, TYPE 705 (A.R.I. 18011)
34. AUTO-THROTTLE ON/OFF SWITCH (Inoperative)
35. DIMMER SWITCH – CONTROL UNIT DIAL LIGHTING
36. DIMMER SWITCH – CONTROL UNIT DIAL LIGHTING (A.R.I.18076)
37. INTERCOMM. MASTER CONTROL
38. EXTERNAL INTERCOMM. SWITCHES
39. MORSE KEY
40. INTERCOMM. CONTROL UNIT (A.E.O.)
41. CONTROL UNIT, TYPE 17172 (A.R.I. 18228/1)
42. CONTROL UNIT, TYPE 9422 (A.R.I. 18076)
43. ▶ DELETED (Mod.2501) ◀
44. BLANKING PLATE
45. ▶ CONTROL TRANSMITTER/RECEIVER TYPE M53 (A.R.I.23090) ◀
46. ▶ ANTENNA CONTROL UNIT, (A.R.I. 23090) ◀
47. CONTROL UNIT, TYPE 16929 (A.R.I. 23134/5/4)
48. NOT ALLOCATED
49. GROUND SPEED SELECTOR UNIT
50. H.R.U. POWER FAILURE INDICATOR
51. G.P.I. MK.6
52. NAV. HEADING UNIT (H.R.S.)
53. H.R.S. CONTROL UNIT
54. EVENT MARKER PUSH SWITCH
55. RECORDER – ON/OFF SWITCH
56. FAILURE WARNING LIGHT (A.R.I. 5959)
57. INDICATOR CONTROL UNIT, TYPE 9869 (A.R.I.5972)
58. CONTROL UNIT, TYPE 7750 (A.R.I. 18107/13)
59. CONTROL UNIT, TYPE 585 (A.R.I. 5928)
60. CONTROL UNIT, TYPE 626 (A.R.I. 5928)
61. INDICATING UNIT, TYPE 301 (A.R.I. 5928)
62. CAMERA, TYPE RX.88 (A.R.I.5928)
63. CONTROL UNIT, TYPE 595 (A.R.I. 5928)
64. N.B.C. ISOLATION INDICATORS
65. CONTROL UNIT, TYPE 12580
66. BOMBING SELECTOR SWITCH
67. N.B.C. SIMULATOR SOCKET
68. BOMBING SELECTOR PANEL
69. SIMULATED BOMBING PANEL

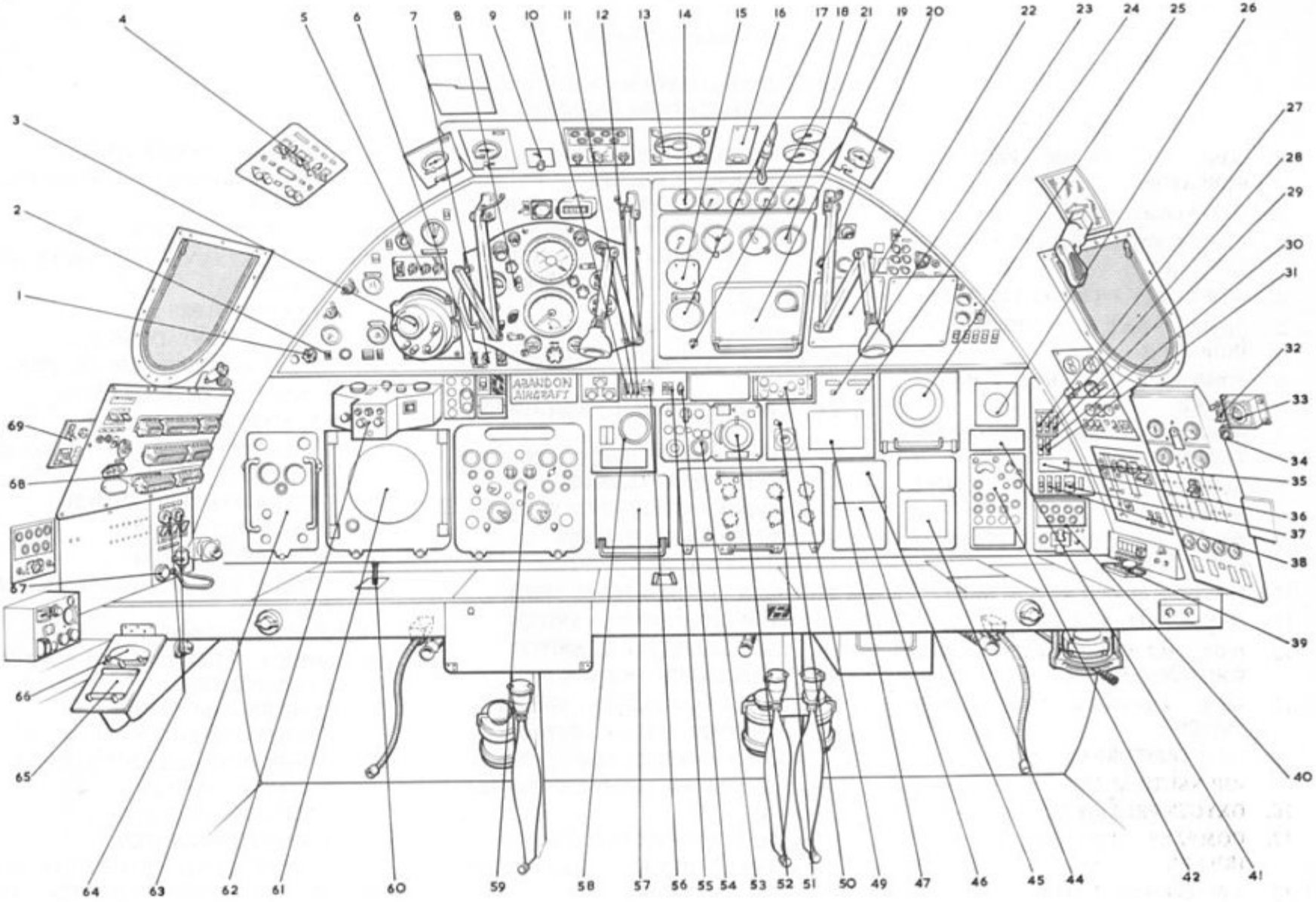

Fig. 6 Radar, radio and associated equipment – crew stations (Mod 2112)

► Mod. 2263, 2439, 2473 and 2501 ◄

KEY TO FIGURE 7

MISCELLANEOUS CONTROLS AND EQUIPMENT – CREW STATIONS (MOD.2024)

1. LOSS OF CABIN PRESSURE INDICATOR
2. ANTI-FLASH SCREEN
3. DIMMER SWITCHES – CHARTBOARD LIGHTS
4. DIMMER SWITCH PANEL LIGHTS
5. BOMB BAY TEMPERATURE INDICATOR
6. BOMB BAY HEATING CONTROL SWITCH
7. BOMB BAY HEATING MANUAL CONTROL SWITCH
8. BOMB BAY TEMPERATURE SELECTOR
9. N.B.C. AIR SUPPLY PRESSURE INDICATOR
10. N.B.C. AIR SUPPLY ON/OFF SWITCH
11. OXYGEN REGULATORS
12. N.B.C. H.2.S. SUPPLIES – BLACK/WHITE DOLLS EYES
13. H.2.S. PRESSURIZATION ON/OFF SWITCH
14. H.2.S. PRESSURE GAUGE
15. AIR NAUTICAL MILES INDICATOR
16. OXYGEN PRESSURE INDICATOR
17. COMPASS DEVIATION CARD HOLDER
18. AIR SPEED INDICATOR
19. ALTIMETER
20. FUEL CONTENTS GAUGES No.1, 2, 3 and 4 ENGINE GROUPS
21. CABIN DECOMPRESSION HANDLE
22. OXYGEN PRESSURE GAUGES
23. FORWARD THROW INDICATOR
24. OUTSIDE AIR TEMPERATURE INDICATOR
25. PUNKAH LOUVRE
26. E.C.M. COOLANT TEMPERATURE GAUGE
27. DIMMER SWITCH INSTRUMENTS PANEL
28. ELECTRO MAGENTIC COUNTER WINDOW INSTALLATION
29. WINDOW INSTALLATION SWITCH
30. SWITCH, FATIGUE METER
31. SIGNAL PISTOL
32. R.B.W. CONTROL-PANEL LIGHT
33. ROOF LIGHTS STBD. – SWITCH
34. ROOF LIGHTS PORT – SWITCH
35. CABIN LIGHTS – SWITCH
36. UNDER TABLE LIGHT – SWITCH
37. PERISCOPE HEATER – SWITCH
38. A.A.P.P. CONTROL PANEL – 70P
39. ALTERNATOR CONTROL PANEL – 10P
40. SECONDARY SUPPLIES PANEL
41. TIME DELAY EMERGENCY JETTISON PANEL
42. AUXILIARY A.V.S. SWITCHES
43. PERISCOPE CONTROL HANDLE
44. A.V.S. MANUAL TEMPERATURE CONTROL
45. A.V.S. FLOW CONTROL
46. AUXILIARY A.V.S. QUICK-RELEASE CONNECTOR
47. RATION HEATERS
48. SANITARY CONTAINERS
49. A.S.I. CORRECTION CARD HOLDER
50. CONTROL SWITCH (A.R.I.5972)
51. ABANDON AIRCRAFT SIGN
52. EMERGENCY DOOR OPENING SWITCHES (2 OFF)
53. ANTI-DAZZLE LIGHT SWITCH
54. WIND INDICATOR UNIT
55. BOMB DOORS SWITCH
56. DIMMER SWITCH – PANEL PILLAR LIGHTS
57. BOMB FIRING SWITCH
58. SWITCH – LIGHT AT AIR BOMBER PRONE POSITION
59. BOMB RELEASE SWITCH
60. BOMB DOORS SWITCH
61. CAMERA CONTROL UNIT TYPE 551
62. BOMB SPACING UNIT
63. V.T. FUZING SWITCH
64. LIVE JETTISON SWITCH
65. DIMMER SWITCH AND PANEL LIGHT
66. ▶ REMOTE FATIGUE INDICATOR TYPE M2372 ◀

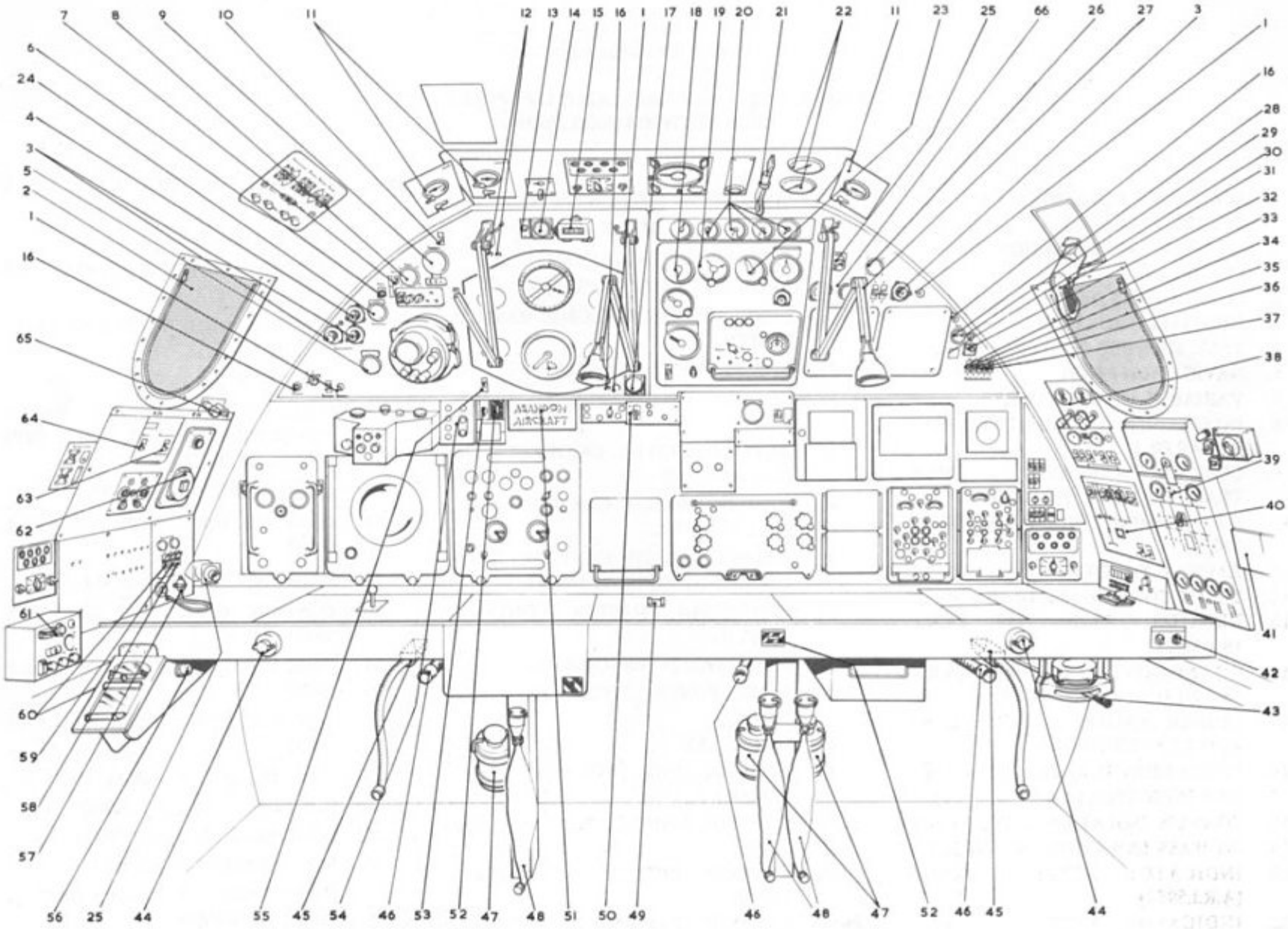

Fig. 7 Miscellaneous controls and equipment - crew stations (Mod. 2024)

► Mod. 2388, 2439 and 2473 ◄

A1329

KEY TO FIGURE 8

RADAR, RADIO AND ASSOCIATED EQUIPMENT – CREW STATIONS (MOD.2024)

1. SCANNER ROTATION CONTROL SWITCH (A.R.I.5928)
2. SCANNER STABILISATION SWITCH (A.R.I.5928)
3. PULSE ALTIMETER
4. RADIO CONTROL PANEL
5. TRUE AIRSPEED CONTROL PANEL
6. NAVIGATION PANEL
7. VARIABLE AIRSPEED UNIT
8. INTERCOMM. CONTROL UNIT (NAV/RADAR OP.)
9. COMPASS REPEATER – TRUE TRACK MAGNETIC HEADING
10. D.F. BEARING INDICATOR (A.R.I. 23023)
11. RADIO ALTIMETER
12. TRACK CONTROLLER UNIT – M.F.S.
13. INICATOR, TYPE 9547 (A.R.I. 18107/13)
14. CHANGE-OVER SWITCH (A.R.I. 18107/13)
15. DIMMER SWITCH – AUTO LAND AND T.C.U. LIGHTS
16. ▶ PILOTS DIRECTION INDICATOR ◀
17. FAIL INDICATOR (A.R.I.23134/5/4)
18. COMPASS ISOLATION SWITCH PORT
19. COMPASS ISOLATION SWITCH STBD.
20. INDICATOR, AZIMUTH RANGE (A.R.I.5952)
21. INDICATOR, TYPE 17171 (A.R.I. 18228/1)
22. SUPPLIES SWITCH (A.R.I.5874)
23. OUTPUT SWITCH (A.R.I.5874)
24. SUPPLY SWITCH (A.R.I.23023)
25. PRESS-TO-TRANSMIT SWITCH
26. CONFERENCE INTERCOMM. MASTER SWITCH
27. ON/OFF SWITCH (A.R.I.18011)
28. CONTROL UNIT, TYPE 705 (A.R.I. 18011)
29. AUTO THROTTLE – ON/OFF SWITCH (Inoperative) ▶ ◀
30. DIMMER SWITCH CONTROL UNIT DIAL LIGHTING
31. DIMMER SWITCH CONTROL UNIT DIAL LIGHTING (A.R.I.18076)
32. INTERCOMM. MASTER CONTROL SWITCH
33. EXTERNAL INTERCOMM. SWITCHES
34. E.C.M. POWER SUPPLY CONTROL PANEL
35. MORSE KEY
36. CONTROL UNIT, TYPE 17172 (A.R.I. 18228/1)
37. CONTROL UNIT, TYPE 9422 (A.R.I. 18076)
38. CONTROL UNIT, TYPE 13044 (A.R.I. 18146)
39. ▶ CONTROL TRANSMITTER/RECEIVER TYPE M53 (A.R.I.23090) ◀
40. ▶ ANTENNA CONTROL UNIT, (A.R.I. 23090)
41. DELETED (MOD.2501) ◀
42. CONTROL UNIT, TYPE 16929 (A.R.I. 23134/5/4)
43. CONTROL UNIT, TYPE 7750 (A.R.I. 18107/13)
44. G.P.I. MK.6
45. H.R.U. POWER FAILURE INDICATOR
46. INDICATOR CONTROL UNIT, TYPE 9869 (A.R.I.5972)
47. GROUND SPEED SELECTOR UNIT
48. CONTROL UNIT, TYPE 585 (A.R.I. 5928)
49. CAMERA, TYPE RX.88 (A.R.I.5928)
50. CONTROL UNIT, TYPE 626 (A.R.I. 5928)
51. INDICATING UNIT, TYPE 301 (A.R.I. 5928)
52. CONTROL UNIT, TYPE 595 (A.R.I. 5928)
53. N.B.C. ISOLATION INDICATORS
54. CONTROL UNIT, TYPE 12580
55. BOMBING SELECTOR SWITCH
56. N.B.C. SIMULATOR SOCKET
57. INTERCOMM. CONTROL UNIT – NAV/AIR BOMBER
58. SIMULATED BOMBING PANEL

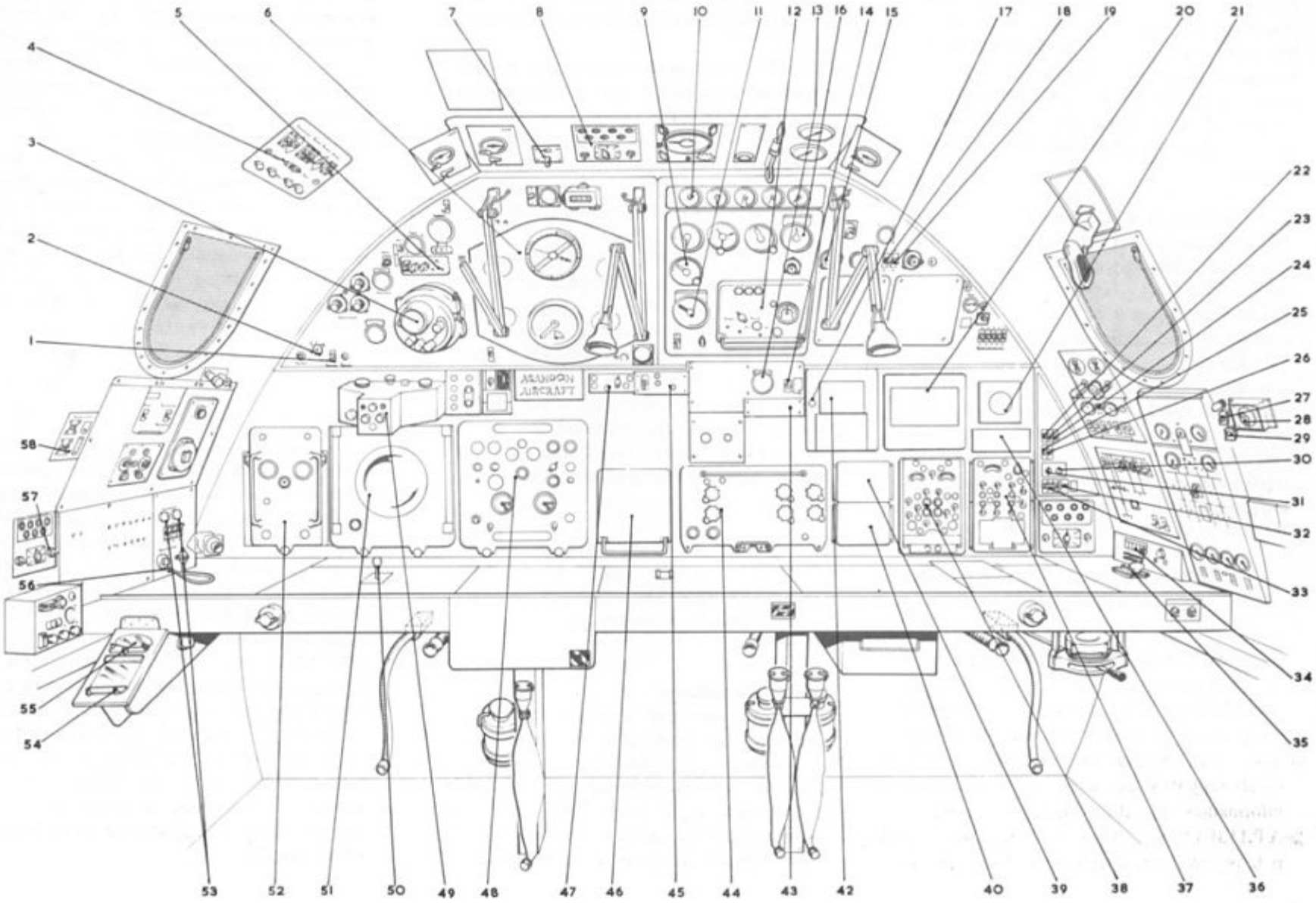

Fig. 8 Radar, radio and associated equipment - crew stations (Mod. 2024)

► Mod. 2388, 2439, 2473 and 2501 ◄

A1330

4. Prior to the introduction of Mod.1696 four static lines are fitted on the back of the rear crew centre seat for use with the Mk.20 back-type parachute. Subsequently to the modification, the Mk.40 back-type parachute is used and as the static line is included in the pack assembly the seat back stowage is not required.

5. Provision is made for fitting an extra crew member's seat above the starboard sextant step. The seat, fitted by 'Special Order Only' (Mod.504), consists of a cushion, attached to the step with 'DOT' fasteners and a backrest secured outboard of the cushion with four Pip-pins. Another backrest, also secured with four Pip-pins and located forward of the cushion is fitted with a safety harness and provides a crash station for the extra crew member. His oxygen supply is from the regulator at the air bomber's prone position, an oxygen indicator (dolls eye) being mounted on the aft member of the pilots' floor structure.

6. Facing the crew's seats is a single table extending the full width of the compartment. The table top has hinged sections to provide access to stowages for charts and other items of equipment. A Type F (subsequent to Mod.961 at Type 51) morse key is mounted on the port side of the table. Three ration heaters, ▶Type 1WT/20835 are mounted below the table◀ on its support struts; servicing and descriptive information for these heaters is given in ▶A.P.113F-0826-1. When using the heater, it◀ is imperative that a hole be made in each tin before it is placed in the heater. No tin must be continously heated for more than 2 hours.

7. The crew's instrument panel, housing mainly radar equipment, is mounted above the table. The upper half is inclined and consists of two panels which are hinged to provide access to radar and radio equipment during ground servicing. Normally the hinged panels are retained in position with Dzus fasteners.

8. On the port side of the cabin, adjacent to the A.E.O.'s station, is a circular window which is provided with an anti-flash blind. Below the window are control panels for the A.A.P.P. and the secondary electrical supplies. Forward of these panels is the alternator control panel. A circular window and blind are also provided in the starboard side of the compartment at the navigator/air bomber's station, below this being mounted the bombing panels.

9. In each side of the canopy coaming is a sextant mounting. Above the navigator/plotters seat is a black-and-yellow striped handle for cabin decompression.

Periscope installation

10. An upper and lower rearward-viewing periscope is provided at the rear crew position. A control handle at the port forward edge of the crew's table is connected by a cable, which is enclosed in a conduit, to the pivot mechanism of the upper and lower periscope heads. Upward movement of the handle selects the view from the upper periscope and downward movement that of the lower periscope. Movement of the handle from left to right causes rotation of the selected periscope head, giving a range of movement through 90 deg. in azimuth. The telescopic eye-piece of the instrument is stowed in a recess in the crew's table at the A.E.O.'s station and is covered by a hinged panel. When in use the eye-piece is raised from its recess and locked in position by a spring catch, when it can be fully extended and focused by the operator. De-misting of the instrument is controlled by a toggle switch mounted on the A.E.O.'s panel. Further details of the installation are given in Sect.7, Chap.4 of this publication.

Seats

11. Prior to Mod.1696, the rearward facing seats are bolted to the crews' floor and also form the crash stations in emergency, being sufficiently strong to withstand deceleration loads of up to 25G. Each seat is equipped with a padded headrest and a Type CZ safety ▶harness the latter consisting of lap straps,◀ secured to the sides of the seat and shoulder straps attached to a shackle at the top of the seat. A lever attached to the lower port side of the seat controls the shackle release mechanism which, when in the locked position, prevents movement of the shackle and ensures that the crew member is held firmly to the seat. Moving the lever to the 'release' position allows the occupant 10 in. of movement away from the seat against the spring loading of the shackle.

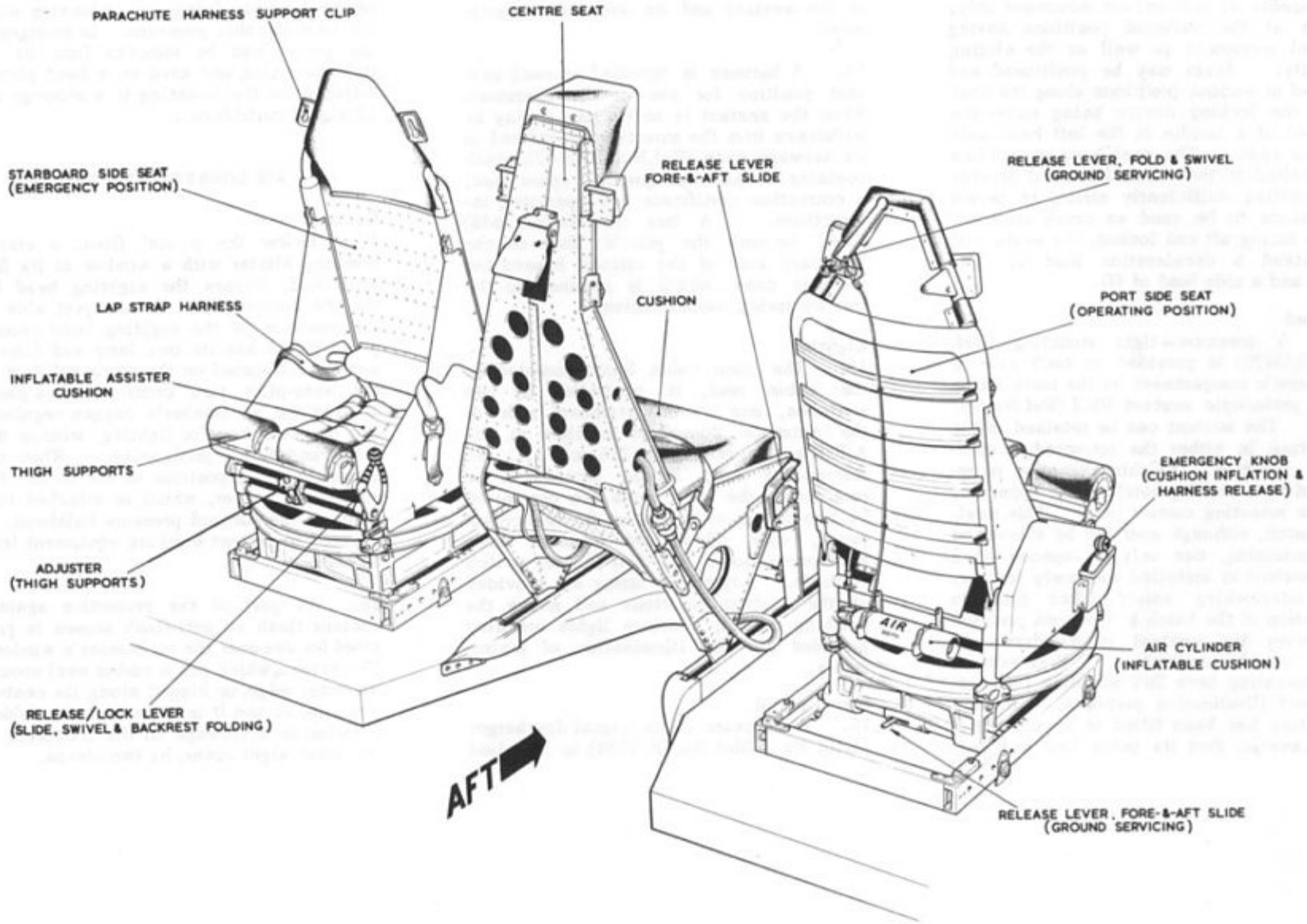

Fig.9 Seats at crew stations
(Mod.2147 incorporated)

12. Subsequent to Mod.1696, swivel and sliding seats are provided at the rear crew members stations. The centre seat is capable of fore-and-aft movement only, those at the outboard positions having swivel movement as well as the sliding facility. Seats may be positioned and locked at various positions along the seat rail, the locking device being under the control of a handle at the left hand side of the seat. The seat base assemblies are bolted to the crews floor and provide a mounting sufficiently strong to permit the seats to be used as crash stations. When facing aft and locked, the seats will withstand a deceleration load of up to 25G. and a side load of 4G.

Sextant

13. A pressure-tight mounting (Ref. No.6B/3470) is provided on each side of the crew's compartment for the installation of a periscopic sextant Mk.2 (Ref.No.6B/559). The sextant can be retained in the mounting in either the retracted or operative position. Cabin pressure is retained by a sealing hatch at the upper end of the mounting carrier tube. This sealing hatch, although operated by a lever on the mounting, can only be opened when the sextant is installed and ready for use. An interlocking safety catch prevents operation of the hatch to the open position whenever the sextant is withdrawn and prior to its introduction. Both sextant and mounting have 28V supplies for heating and illumination purposes. After a mounting has been fitted to an aircraft it is essential that its index line and sextant be aligned in the manner described in A.P.1275B, Vol.1, Sect.13, Chap.6, which also contains descriptive information of the sextant and its associated equipment.

14. A harness is provided at each sextant position for use of the operators. When the sextant is not in use it may be withdrawn from the mounting and placed in its stowage case (Ref.No.6B/2642), which contains a spare eye guard, a spare lead, a correction certificate and operating instructions. A tray (Ref.No.6B/2648) fitted beneath the pilot's floor on the starboard side of the aircraft houses the stowage case, which is retained in the tray by spring loaded cables.

Lighting

15. The main cabin lamp, mounted in the cabin roof, is controlled by two switches, one at the starboard side of the entrance door and another at the A.E.O's station. Four 115-volt A.C. red fluorescent strip lights, located in the roof above the crew seats, are controlled by two toggle switches on the rear crews' panel, upon which are mounted three anglepoise lamps and their dimmer switch controls. Adjustable lamps are provided at the sextant positions and above the bombing panels; various lights are also provided for the illumination of instruments.

Signal pistol

16. A pressure cabin signal discharger pistol Mk.2 (Ref.No.7B/1784) is installed in an air-tight mounting (Ref.No.7B/1785) in the fuselage wall above the port window. The pistol and mounting are designed to permit loading, firing and unloading without loss of cabin pressure. In emergency the pistol can be removed from its air tight mounting and used as a hand pistol. Adjacent to the mounting is a stowage for 12 signal cartridges.

AIR BOMBER'S STATION

General

17. Below the pilots' floor, a visual bombing blister with a window at its forward end, houses the sighting head for the T4 bombsight. On the port side of the position is the sighting head control panel which has its own lamp and dimmer switch. Mounted on the starboard side is the auto-pilot turn control and a panel holding the air bomber's oxygen regulator and the switches for lighting, window de-icing and bomb jettisoning. When the visual bombing position is not in use the bombsight cover, which is attached to a hinge at the forward pressure bulkhead, is lowered to protect bombing equipment from damage.

18. As part of the protection against nuclear flash an anti-flash screen is provided for use over the air bomber's window. The screen, which has a rubber seal around its outer edge, is hinged along its centre. When not in use it is retained in its folded position in a stowage on the underside of the bomb sight cover, by two straps.

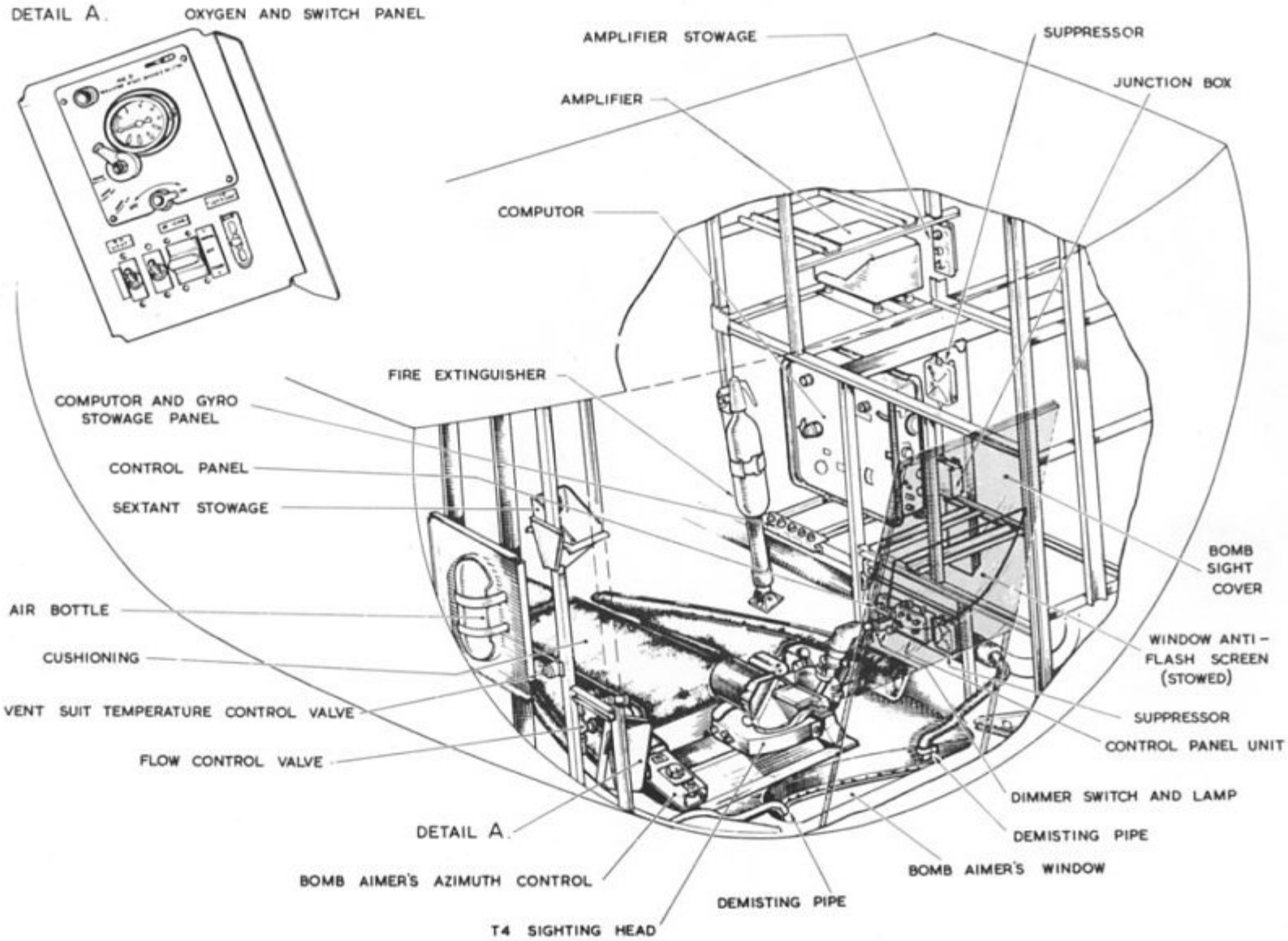

Fig.10 Controls - air bomber's station

V.2.1A. 1680

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