Intercommunication Set Control
C-2106A/AIC-18 (A81-13-1, A81-92)
C-3942(P)/AIC-18 (A81-52, A81-91)
C-6567/AIC-25 (A81-49, A81-87)

FACILITIES AND OPERATING CONTROLS

All operating controls are mounted on the front panel.

TALK OPERATION: A rotary selector switch provides for selection, control and voice modulation of several transmitters. The extreme CW position of the selector provides Intercommunication on the INTERPHONE line.

CALL OPERATION: A momentary, push button switch provides emergency call operation on the CALL line exalted 6 dB above all monitored signals.

HOT MIKE OPERATION: One Hot Mike talk switch for Hot Mike Intercommunication on the Hot Mike line.

MONITORING: Monitor switch-volume control assemblies provide for individual selection and level settings of seven or eight audio input lines. Operation is by means of a push-pull knob.

LEVEL ADJUSTMENT: A master volume control permits adjustment of the headset level.

DESCRIPTION AND USE

These Set Controls are panel-mounted assemblies, designed to provide high intelligibility intercommunication and radio monitoring facilities for aircraft installations and for ground installations. They also provide for selection, control and modulation of radio transmitters for communication with other airborne, ground, or mobile stations.

Each Set Control contains individual Microphone and Headset Amplifiers. The Amplifiers are solid state, plug-in, completely encapsulated units.


This Unit is Used on the Following Aircraft:
• C-130
GENERAL CHARACTERISTICS

PERFORMANCE
A81-87............................................................................... ASNAC-70-1
A81-13-1............................................................................. MIL-I-27543
A81-52............................................................................... ASNL561-26B
Environmental..................................................................... MIL-E-5400, Class 2
Mean Time Between Failure................................................. 2000 hours
Longevity............................................................................ 3000 hours
Size.................................................................................. 5 3/4” W x 3 3/4” H x 6-25/32” D*
Weight............................................................................... 4.2 lbs. maximum

TEMPERATURE
Continuous operation......................................................... -54˚C to +71˚C
Storage............................................................................ -65˚C to +95˚C
Input Voltage....................................................................... 27.5 VDC (17-29 V)

POWER REQUIREMENTS
Talk condition................................................................. 5.7 W
Listen condition............................................................. 4.0 W
Panel lamps @ 6.0V DC................................................. 2.4 W
Panel lamps @ 27.5V DC............................................... 2.2 W
EMI.................................................................................... MIL-I-6181
Connectors......................................................................... Cannon K02-21-30 PN & K02-21-30 SN
Mating Connectors......................................................... K03-21-30 SN & K03-21-30 PN

OPERATIONAL PERFORMANCE
Gain @ 1 KHz - Listen.................................................. 22 dB +/-5 dB
Gain - Talk...................................................................... 68 dB +/-5 dB
Headset Output............................................................. 1.0 W
Monitor Volume Range................................................ 18 dB +/-3 dB
Volume Control Range............................................... 31 dB +/-3 dB
Frequency....................................................................... 300 to 6000 Hz
Noise............................................................................. 2 mV Maximum
Call Exalt........................................................................ 6 dB

SIDETONE LEVEL
Interphone Operation..................................................... 6 dB
Call Operation............................................................. 12 dB

<table>
<thead>
<tr>
<th>P/N</th>
<th>Monitor Switches</th>
<th>Sel. Sw. Pos.</th>
<th>Panel Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>A81-13-1</td>
<td>7</td>
<td>6</td>
<td>27.5V DC Red Filter</td>
</tr>
<tr>
<td>A81-52</td>
<td>8</td>
<td>7</td>
<td>6.0V AC or DC White Filter</td>
</tr>
<tr>
<td>A81-87</td>
<td>8</td>
<td>7</td>
<td>6.0V AC or DC Red Filter</td>
</tr>
</tbody>
</table>

*With monitor knob in extended position (ON).