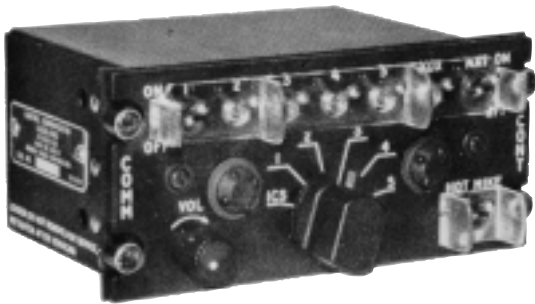


Intercommunication System Control Model A301-1 (C6533/ARC)

**Model A301-1****THIS UNIT IS USED ON THE
FOLLOWING AIRCRAFT:**

- Sikorsky Blackhawk
- S-70
- UH-60
- Bell AH-1 Cobra

FACILITIES AND OPERATING CONTROLS

All operating controls are mounted on the front panel.

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

HOT MIKE OPERATION: A HOT MIKE talk switch provides HOT MIKE operation on the INTERPHONE line.

MONITORING: Seven monitor switches provide for individual selection and mixing of eight audio input lines. One switch controls two inputs.

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

OPTIONS: Night Vision capabilities available.

DESCRIPTION AND USE

The Andrea Model A301-1, Intercommunication System Control, is designed to be the basic control unit for a two or three position intercommunication system of advance design.

Systems employing the A301-1 are currently providing excellent service in a variety of helicopters, commercial aircraft, pleasure aircraft and small boats of all descriptions. The small size, lightweight, high reliability and versatility of the A301-1 makes it adaptable to many applications.

The A301-1 contains microphone and headset amplifiers and the necessary switching facilities to provide for intercommunication (with or without hot mike) and modulation, monitoring and control of up to 5 transceivers.

C46-5372 Rev C

SPECIFICATIONS *

GENERAL CHARACTERISTICS

Mean Time between Failure	18,000 hrs. calculated
Input Voltage.....	27.5 VDC (21-29 V)
Input Power.....	3.75 W Maximum
Weight.....	1.85 lbs. Maximum
Size.....	3 3/4" W x 2 5/8" H x 5" D
Lighting.....	Two 27.5 V lamps w/red filters

ENVIRONMENTAL..... MIL-E-5400 CLASS 1

Temperature	
Continuous Operation.....	-54° C to +55° C
Intermittent Operation.....	+55° C to +71° C
EMI.....	MIL-STD-461

IMPEDANCE LEVELS

Microphone input.....	5 ohms (Dynamic microphone)
Talk-out (INT & XMIT).....	150 ohms load
Receiver Input.....	150 ohms load
Headset Output.....	8 ohms load

POWER LEVELS

Microphone input.....	-80 to -30 dBm
INT. Talk-out.....	50 mW (2.75 V)
Transmit Talk-out.....	0 dBm (1 mW = .4 V) Adjustable ±3 dB
Receiver Input.....	50 mW (2.75 V)
Headset Output.....	200 mW (1.25 V)

MICROPHONE AMP PERFORMANCE

AGC.....	The AGC maintains constant output for wide variations in input
Breakpoint.....	0.2 to 0.5 V applied to the 5000 to 5 Ohm pad
Slope.....	3 dB max. output change for 20 dB input change
Attack Time.....	0.2 Sec. Maximum
Release Time.....	7 Sec. +/-20%
Distortion.....	3% Maximum for -50 dBm input, 5% Maximum up to -30 dBm input

HEADSET AMP PERFORMANCE

Distortion.....	10% Maximum for 200 mW output
Freq. Response.....	+1 dB, -3 dB, 300 to 6000 Hz (both amps)
Ripple.....	5 mV maximum for both amps with 1.0 V on the power line, 400 to 6000 Hz

ISOLATION AT 1 KHz

Open Monitor Switch.....	-60 dB minimum
Audio Input Lines.....	-60 dB below 50 mW
Transit Lines.....	-70 dB below 50 mW (2.75 V)
Volume Control Range.....	28 to 37 dB

* Specifications subject to change without notice.