

Kollsman Servoed Altimeter

with Automatic Pressure Standby

Type A41322 10 015 (AAU 34/A)



FUNCTION

This counter-drum pointer servoed altimeter displays the corrected altitude output from an air data computer or altitude computer such as the CPU-46/A. In case of a power failure or servo failure, the altimeter automatically reverts to its pneumatic mode and operates as a precision pressure altimeter. A secondary output of voltage is provided as a function of barometric settings

CHARACTERISTICS

The altimeter consists of a precision dual diaphragm altimeter mechanism, a drag cup motor, a Synchrotel, and servo amplifier. The Synchrotel, which is geared to the altitude

display, is electrically connected to the output synchro of an altitude computer. If the altimeter is not indicating the same as the output of the computer, due to static system error and/or the correlation of the pneumatic altimeter mechanism, an error signal is generated. This signal is amplified and drives the drag cup motor, so that the altimeter displays the computed value.

With power off, or in the event of a monitor trip, the unit reverts to a standard pressure altimeter. The instrument is carefully monitored for runaway signals, power failure, computer failure and over corrections, all of which cause the altimeter to revert to the pressure mode. A switch on the front of the instrument allows selection of either mode.

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Specifications

Altitude Range	-10,000 ft to +80,000 ft	Power	115V, 400 Hz (Servo) 5V AC or DC (Lighting) 28V DC (Vibrator) 30V DC (Pot)
Barometric Setting Range	* inches of mercury 28.1 to 31.0	Integral Lighting	Red (MIL-L-25467) White (MIL-L-27160)
Accuracy		Weight	4.5 lbs.
Servoed Mode	± 20 feet	Mounting	MS 33556
Pressure Mode	MIL A 83419A (AAU-34/A)		
Correction Range	± 4500 feet max		

