

**L3 COMMUNICATIONS FA2100 COCKPIT VOICE RECORDER - DESCRIPTION AND OPERATION****1. General**

- A. The L3 Communications FA2100 Cockpit Voice Recorder (CVR) System is a 120 minute recorder that accepts the four cockpit audio input streams and processes these four audio input streams into six internal audio streams. Four of these audio streams, Channel 1 through Channel 4, are high quality audio streams with a minimum of 30 minutes recording time.
  - (1) The fifth and sixth audio streams are internal to the recorder and provide a minimum of 120 minutes of standard quality recording time. The fifth audio stream is a summation of the inputs on Channels 1, 2 and 3. The sixth audio stream is a standard quality recording of the cockpit area microphone (CAM) input on Channel 4. The six audio streams are then changed into a digital format for storage in the crash protected solid-state memory.

**2. FA 2100 Cockpit Voice Recorder Description**

- A. The FA2100 Cockpit Voice Recorder System consists of a tailcone mounted recorder unit, underwater locator beacon (ULD) and a control panel mounted with the radio stack in the instrument panel.
- B. The FA2100 Cockpit Voice Recorder System is designed to operate with an area microphone. The area microphone is permanently mounted as part of the S162 Control Panel. The area microphone senses conversation from the airplane cockpit.
- C. An Underwater Locator Device (ULD) is mounted on the front panel of the FA2100 CVR. It is designed to transmit a locator signal, should the aircraft ever become submerged in water. The battery replacement decal is also located on the front panel. Battery must be replaced every six years.
- D. The impact switch is located under the aft avionics shelf near the cockpit voice recorder. It is designed to remove electrical power with an impact of 5 G's or more. This action is designed to open the electrical circuit to the voice recorder to preserve the recorded data. The data could be erased automatically if recorder operation were to continue.

**3. FA2100 Cockpit Voice Recorder Operation**

- A. The FA2100 Cockpit Voice Recorder System automatically comes on when electrical power is applied to the airplane. All data in and out of the solid-state memory is controlled by a microprocessor.
- B. A self-test function is started by pushing the TEST button located on the CVR control panel. The CVR control panel is normally located at the bottom of the radio stack but location may vary, depending upon specific customer orders.