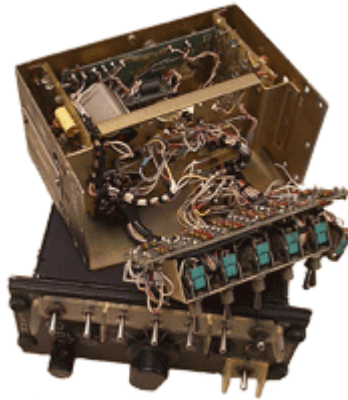


C6533A Communications System Control (CSC)



The C6533/ARC Communications System Control unit (or “Intercom”) is a communication device that provides audio monitoring and voice transmission selection capabilities to multiple radio channels, as well as internal communications between pilot and crew on rotary wing aircraft.

The Communications System Control unit is in use by five types of US Army rotary wing aircraft and their variations; AH-1, CH-47D, OH-58A/C, UH-1H/1V, and UH-60A/L. The current Intercom model was designed in 1969, and has been maintained unaltered while internal components have progressively become obsolete. Replacement units are no longer available and twenty (20) percent of the internal components are currently obsolete.

The original maintenance plan designated this assembly as a disposable unit. However the inability to purchase spares and the increasing obsolescence of internal components, forced the depot repair of the system. The Intercom design proved to be extremely difficult to repair and inherently un-reliable. Housed within are several small circuit boards, with discrete wires providing the interconnections. Noted during the repair process, these brittle wires tend to break while accessing the internal assemblies, adversely affecting the reliability of the system.

A replacement for the C6533/ARC has been successfully redesigned and tested for compatibility to its predecessor. The new unit, designated C6533A maintains the same physical characteristics, user interface, and performance. Production units have been installed into both the UH60A/L and the CH-47 for system compatibility checks. The C6533A system has satisfactorily met the original design requirements of providing a drop-in replacement system using readily available, COTS components. The redesigned system is essentially transparent to the user community with the exception of an enhanced volume control. Repair has been simplified by the reduction in number of sub-assemblies and utilization of commercially available components.

