The existing formulation of Super Corr-A CPC is qualified as a MIL-L-87177A, Type I, Grade B material for electrical connector applications. This lubricant has a proven performance for cleaning the surfaces of electronic and structural subsystems in Air Force aircraft and effectively displacing and preventing the ingress of moisture and other contaminants that initiate corrosion and component degradation or failure. The current solvent, AK225T, in the Super Corr-A lubricant contains the Class II Ozone Depleting Substances (ODS) HCFC-225ca and HCFC-225cb which have been banned for use in the European Union and Canada. Use of these ODSs will also be prohibited in the United States beginning in 2015.

The Air Force is currently funding a project to (1) identify less environmentally hazardous commercially-off-the-shelf (COTS) replacement solvents for use in the Super Corr-A lubricant, and (2) validate the performance (i.e., ease of application, cleaning efficiency and corrosion resistance) of the reformulated CPC on various electrical connector and structural materials. To determine the acceptability of the replacement solvents, a thorough qualification process is implemented comprising laboratory testing to evaluate the physical and chemical property requirements specified in the MIL-L-87177A along with additional laboratory and field exposure testing to comprehensively assess the performance requirements of the reformulated CPC. Test connectors, coupons, and corrosion sensors coated with lubricant samples containing the respective solvent candidates will be exposed to a corrosive laboratory environment at Battelle and two outdoor exposure test sites. A comparison of the lubricant performance in the laboratory testing and during 6 months of field exposure testing will be presented for discussion.