Development of a Room Temperature Curing Flame Retardant Coating for Airplane Interiors John N. Harris, Material & Process Technology, Boeing Commercial Aircraft, Seattle, WA

A flame retardant coating system has been developed for use in airplane interiors. The coating system was initially developed for use on in-service insulation blanket film covers as a means of restoring the flammability properties of aged polyethylene terephthalate (PET) films. The coating system can be applied to surfaces using standard application methods, such as high volume low pressure (HVLP) spray and will cure at room temperature. Key material property requirements have been met regarding water resistance, flame propagation, non-corrosiveness, electrical non-conductivity, and smoke density & toxicity. The presentation will summarize the development and testing of the current flame retardant coating system as well as future efforts being directed at coating optimization.