Galley floor tape

Improved fluid barrier film dramatically reduces corrosion problems caused by spillages.

The problem

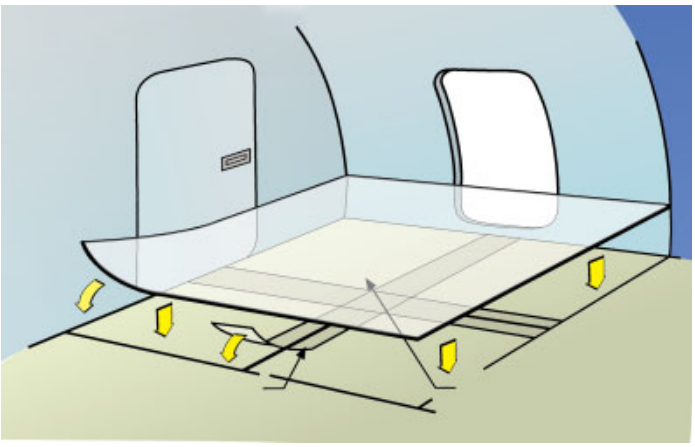
If spillages from aircraft galleys, toilets and doorways are not properly contained they can lead to corrosion of the airframe and cause problems with under floor electrical wiring. If such corrosion is not identified and stopped, it can lead to costly maintenance work and even the grounding of in-service aircraft. BA encountered this problem in the 1990s when the floor sealing system used on some of its Boeing 757 aircraft failed, leading to a number of corrosion issues.

The solution

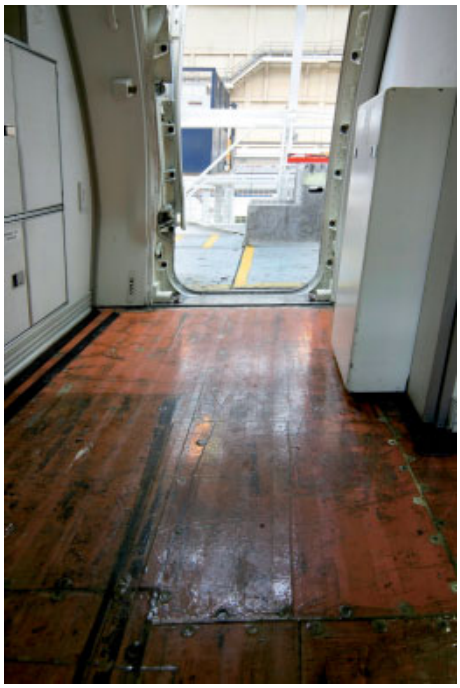
BA Engineering developed a fluid barrier protection system to replace the incumbent system that was failing in service, leading to corrosion problems. As part of the new system, they selected 3M polyurethane film 8663DL, which offered better adhesion, improved resistance to penetration and a superior surface (against which to bond) than the existing product. After successful trials on 757 aircraft, the new film has been fitted as standard to the 'wet' floor areas of the entire BA fleet.

The value

The early aircraft to have adopted the 3M solution have now been through a complete operational cycle between major service checks (typically five to seven years in service). Since the initial application, the number of aircraft identified with reportable corrosion has been reduced significantly. With a nominal industry cost of around £25,000 per lost flying hour, and including the costs involved with actual repairs (labour, materials jigs and tools), it can be judged that the financial benefits to BA are very significant.



3M polyurethane film 8663 DL application process



Boeing 757 forward galley