Section 9

Structural Repairs

The structural integrity of a force of operational aircraft is primarily ensured by implementing the periodic inspection and maintenance program defined in the Force Structural Maintenance (FSM) plan in the associated technical order (T.O.)-3 repair and -36 inspection manuals. In addition to this formal method of addressing known or potential cracking problems, the structural integrity of individual aircraft is also ensured through the timely identification of new cracking problems and by implementing repairs that will return cracked structure to a safe operational condition. This section is presented as a supplement to the other sections and only specifically addresses those guidelines applicable to ensuring that adequate damage tolerance exists in structural repairs. Adequate damage tolerance implies that cracks do not reduce the structure’s load carrying capability below a predefined level throughout a required period of in-service usage.