

Section 2

Fundamentals of Damage Tolerance

The basic elements of damage tolerant methodology are introduced in this section. The concept of crack growth behavior, from an initial flaw to failure, is introduced, with a discussion of some of the factors that affect the rate growth. The fundamentals of fracture mechanics, residual strength and life prediction methodology are presented. Many computer programs have been developed for life prediction calculations, and these are discussed in subsection 2.6.