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DATA DEVELOPMENT TECHNICAL SUPPORT DOCUMENT FOR
THE AIRCRAFT CRASH RISK ANALYSIS METHODOLOGY (ACRAM)
STANDARD

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and rollout portions; normal in-flight includes climb to cruise, cruise between an originating airfield and an operations area, if applicable, and cruise descent portions; and special in-flight includes low level and maneuvering operations in restricted airspace.

The number of impacting mishaps for each subcategory of aircraft and flight phase, appropriate flight information and the resulting estimates of crash frequencies are summarized in Table 4.5.

Crash frequencies for takeoffs and landings are per takeoff/landing. Crash frequencies for "normal" inflight operation, are "per mile." The estimated mileage derived to estimate inflight rates is based on an analysis of the expected number of miles flown during "normal" flight. This analysis attempted to account for the time in the takeoff and landing phases of flight as well as the time in maneuvers and other special operations. This required a considerable amount of judgment by the analyst.

For some facilities, particularly hardened structures, a more appropriate estimate of a crash frequency may be one based on only considering impact mishaps in which the crashing aircraft was destroyed. Of the 1093 impact mishaps, a crashing aircraft was classified as "destroyed" in 819 mishaps. These impact destroyed mishaps were partitioned in the same way as impact mishaps as shown in Figure 4.1. A summary of this data and the resulting estimates of crash frequencies are given in Table 4.6.

Basic mishap data, flight information and partitioning of mishaps by aircraft subcategory and flight phase were developed by T. Lin at Sandia National Laboratory [Ref. 4.6]. Development of estimated miles flown during "normal" inflight operations is based on an analysis of aircraft operations by Logicon RDA [Ref. 4.7].

Resnikoff. No, partitioned ordnance was included.
must use impact mishaps, all.

Crash rate
military data { Class A < Destroyed
Class B 100,000 to \$1M

Destroyed
Class A
Class B