

Figure 30 shows the percentage of malfunction-turn impacts in 5° sectors for no breakup, and for breakup $q\alpha$'s of 20,000, 10,000, and 5,000 deg-lb/ft². The three breakup $q\alpha$'s produced impact distributions that were surprisingly similar, possibly due to the vehicle's higher acceleration. Theoretical Mode-5 impact distributions are also plotted in the figure for B = 1,000 and best-fit values of A. This value of B was chosen since it is currently used by RTI in making launch-area risk studies for 45 SW/SE. For all except the no-breakup case, values of A were found that produced good fits between the malfunction-turn and Mode-5 impact distributions in the sectors from $\pm 60^\circ$ to $\pm 180^\circ$.

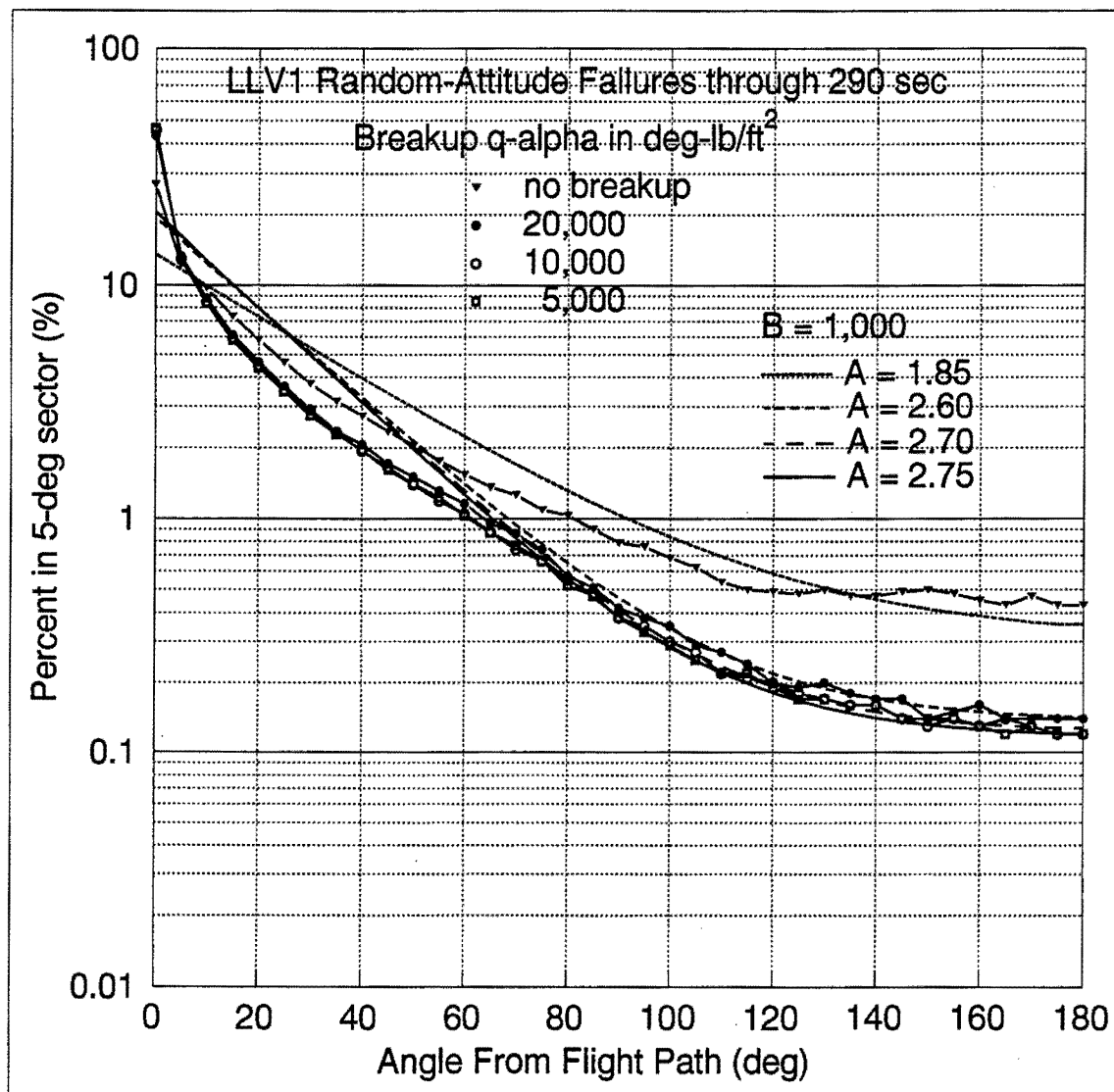


Figure 30. LLV1 Simulation Results with B = 1,000