

A handling qualities experiment was run on the Vertical Motion Simulator using the GenHel math model configured for a UH60A Blackhawk helicopter. In order to obtain valid handling qualities ratings, the simulation system including the math model were optimized to provide realistic cues. The aircraft math model was adjusted to account for the simulator motion system delays and the motion system's gains and washouts were tuned for the bob-up, precision hover and sidestep tasks. The handling qualities ratings from this experiment showed good correlation to flight ratings