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Abstract : A wind tunnel test program was conducted to determine the effect of spin on the aerodynamic forces and moments and the shape and movement of the boundary-layer transition zone on 9-deg (half-angle) cone configurations. The effects of nose geometry, mass addition, angle of attack, Mach number, and Reynolds number were investigated at various spin rates. A wind tunnel test program was conducted to determine the effect of spin on the aerodynamic forces and moments and the shape and movement of the boundary-layer transition zone on 9-deg (half-angle) cone configurations. similar to the boundary layer behavior on two-dimensional airfoils. Blades of series 3 and 4 were borrowed from the Bell Helicopter Company and were used to determine the streamwise transition patterns. The boundary layer flow on the disk is visualized by the oil flow method, and velocity in the boundary layer is measured by the hot-wire method. For the oil flow pattern in the case of spinning motion only, streaks are - Measurements Boundary Layer Transition Spinning Addition