g. Visual Scene—Ground Assessment. Select 3 different airport models and perform the following checks with Day, Dusk and Night selected, as appropriate:

(1) Visual Controls.

(a) Daylight, Dusk, Night Scene Controls.

(b) Flight deck ''Daylight'' ambient lighting.

(c) Environment Light Controls.

(d) Runway Light Controls.

(e) Taxiway Light Controls.

(2) Airport Model Content.

(a) Ramp area for buildings, gates, airbridges, maintenance ground equipment, parked aircraft.

(b) Daylight shadows, night time light pools.

(c) Taxiways for correct markings, taxiway/runway, marker boards, CAT I and II/III hold points, taxiway shape/grass areas, taxiway light (positions and colors).

(d) Runways for correct markings, lead-off lights, boards, runway slope, runway light positions, and colors, directionality of runway lights.

(e) Airport environment for correct terrain and significant features.

(f) Visual scene quantization (aliasing), color, and occulting levels.

(3) Ground Traffic Selection.

(4) Environment Effects.

(a) Low cloud scene.

(i) Rain:

(A) Runway surface scene.

(B) Windshield wiper—operation and sound.

(ii) Hail:

(A) Runway surface scene.

(B) Windshield wiper—operation and sound.

(b) Lightning/thunder.

(c) Snow/ice runway surface scene.

(d) Fog.

h. Takeoff. Select one or several of the following test cases:

(1) T/O Configuration Warnings.

(2) Engine Takeoff Readings.

(3) Rejected Takeoff (Dry/Wet/Icy Runway) and check the following:

(a) Autobrake function.

(b) Anti-skid operation.

(c) Motion/visual effects during deceleration.

(d) Record stopping distance (use runway plot or runway lights remaining).

Continue taxiing along the runway while applying brakes and check the following:

(e) Center line lights alternating red/white for 2000 feet/600 meters.

(f) Center line lights all red for 1000 feet/300 meters.

(g) Runway end, red stop bars.

(h) Braking fade effect.

(i) Brake temperature indications.

(4) Engine Failure between VI and V2.

(5) Normal Takeoff:

(a) During ground roll check the following:

(i) Runway rumble.

(ii) Acceleration cues.

(iii) Groundspeed effects.

(iv) Engine sounds.

(v) Nosewheel and rudder pedal steering.

(b) During and after rotation, check the following:

(i) Rotation characteristics.

(ii) Column force during rotation.

(iii) Gear uplock sounds/bumps.

(iv) Effect of slat/flap retraction during climbout.

(6) Crosswind Takeoff (check the following):

(a) Tendency to turn into or out of the wind.

(b) Tendency to lift upwind wing as airspeed increases.

(7) Windshear during Takeoff (check the following):

(a) Controllable during windshear encounter.

(b) Performance adequate when using correct techniques.

(c) Windshear Indications satisfactory.

(d) Motion cues satisfactory (particularly turbulence).

(8) Normal Takeoff with Control Malfunction.

(9) Low Visibility T/O (check the following):

(a) Visual cues.

(b) Flying by reference to instruments.

(c) SID Guidance on LNAV.

i. Climb Performance. Select one or several of the following test cases:

(1) Normal Climb—Climb while maintaining recommended speed profile and note fuel, distance and time.

(2) Single Engine Climb—Trim aircraft in a zero wheel climb at V2.

NOTE: Up to 5° bank towards the operating engine(s) is permissible. Climb for 3 minutes and note fuel, distance, and time. Increase speed toward en route climb speed and retract flaps. Climb for 3 minutes and note fuel, distance, and time.

j. Systems Operation During Climb.

Check normal operation and malfunctions as appropriate for the following systems:

(1) Air conditioning/Pressurization/Ventilation.

(2) Autoflight.

(3) Communications.

(4) Electrical.

(5) Fuel.

(6) Icing Systems.

(7) Indicating and Recording Systems.

(8) Navigation/FMS.

(9) Pneumatics.

k. Cruise Checks. Select one or several of the following test cases:

(1) Cruise Performance.

(2) High Speed/High Altitude Handling (check the following):

(a) Overspeed warning.

(b) High Speed buffet.

(c) Aircraft control satisfactory.