

(d) Envelope limiting functions on Computer Controlled Aircraft.

Reduce airspeed to below level flight buffet onset speed, start a turn, and check the following:

(e) High Speed buffet increases with G loading.

Reduce throttles to idle and start descent, deploy the speedbrake, and check the following:

(f) Speedbrake indications.

(g) Symmetrical deployment.

(h) Airframe buffet.

(i) Aircraft response hands off.

(3) Yaw Damper Operation. Switch off yaw dampers and autopilot. Initiate a Dutch roll and check the following:

(a) Aircraft dynamics.

(b) Simulator motion effects.

Switch on yaw dampers, re-initiate a Dutch roll and check the following:

(c) Damped aircraft dynamics.

(4) APU Operation.

(5) Engine Gravity Feed.

(6) Engine Shutdown and Driftdown Check: FMC operation Aircraft performance.

(7) Engine Relight.

l. *Descent.* Select one of the following test cases:

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

(2) Cabin Depressurization/Emergency Descent.

m. *Medium Altitude Checks.* Select one or several of the following test cases:

(1) High Angle of Attack/Stall. Trim the aircraft at 1.4 Vs, establish 1 kt/sec<sup>2</sup> deceleration rate, and check the following—

(a) System displays/operation satisfactory.

(b) Handling characteristics satisfactory.

(c) Stall and Stick shaker speed.

(d) Buffet characteristics and onset speed.

(e) Envelope limiting functions on Computer Controlled Aircraft.

Recover to straight and level flight and check the following:

(f) Handling characteristics satisfactory.

(2) Turning Flight. Roll aircraft to left, establish a 30° to 45° bank angle, and check the following:

(a) Stick force required, satisfactory.

(b) Wheel requirement to maintain bank angle.

(c) Slip ball response, satisfactory.

(d) Time to turn 180°.

Roll aircraft from 45° bank one way to 45° bank the opposite direction while maintaining altitude and airspeed—check the following:

(e) Controllability during maneuver.

(3) Degraded flight controls.

(4) Holding Procedure (check the following:)

(a) FMC operation.

(b) Autopilot auto thrust performance.

(5) Storm Selection (check the following:)

(a) Weather radar controls.

(b) Weather radar operation.

(c) Visual scene corresponds with WXR pattern.

(Fly through storm center, and check the following:)

(d) Aircraft enters cloud.

(e) Aircraft encounters representative turbulence.

(f) Rain/hail sound effects evident.

As aircraft leaves storm area, check the following:

(g) Storm effects disappear.

(6) TCAS (check the following:)

(a) Traffic appears on visual display.

(b) Traffic appears on TCAS display(s).

As conflicting traffic approaches, take relevant avoiding action, and check the following:

(c) Visual and TCAS system displays.

n. *Approach and Landing.* Select one or several of the following test cases while monitoring flight control and hydraulic systems for normal operation and with malfunctions selected:

(1) Flaps/Gear Normal Operation. Check the following:

(a) Time for extension/retraction.

(b) Buffet characteristics.

(2) Normal Visual Approach and Landing.

Fly a normal visual approach and landing—check the following:

(a) Aircraft handling.

(b) Spoiler operation.

(c) Reverse thrust operation.

(d) Directional control on the ground.

(e) Touchdown cues for main and nosewheel.

(f) Visual cues.

(g) Motion cues.

(h) Sound cues.

(i) Brake and anti-skid operation.

(3) Flaps/Gear Abnormal Operation or with hydraulic malfunctions.

(4) Abnormal Wing Flaps/Slats Landing.

(5) Manual Landing with Control Malfunction.

(a) Aircraft handling.

(b) Radio aids and instruments.

(c) Airport model content and cues.

(d) Motion cues.

(e) Sound cues.

(6) Non-precision Approach—All Engines Operating.

(a) Aircraft handling.

(b) Radio Aids and instruments.

(c) Airport model content and cues.

(d) Motion cues.

(e) Sound cues.

(7) Circling Approach.

(a) Aircraft handling.

(c) Radio Aids and instruments.

(d) Airport model content and cues.

(e) Motion cues.

(f) Sound cues.

(8) Non-precision Approach—One Engine Inoperative.