

TABLE A2E—ALTERNATIVE DATA SOURCES, PROCEDURES, AND INSTRUMENTATION—Continued

QPS REQUIREMENTS The standards in this table are required if the data gathering methods described in paragraph 9 of Appendix A are not used.				Information
Table of objective tests	Sim level		Alternative data sources, procedures, and instrumentation	Notes
Test entry number and title	A	B		
2.a.9. Handling qualities. Static control tests. Brake pedal position vs. force and brake system pressure calibration.	X	X	Use of design or predicted data is acceptable. Data may be acquired by measuring deflection at “zero” and “maximum” and calculating deflections between the extremes using the airplane design data curve.	
2.c.1. Handling qualities. Longitudinal control tests. Power change dynamics.	X	X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and throttle position.	
2.c.2. Handling qualities. Longitudinal control tests. Flap/slat change dynamics.	X	X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and flap/slat position.	
2.c.3. Handling qualities. Longitudinal control tests. Spoiler/speedbrake change dynamics.	X	X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and spoiler/speedbrake position.	
2.c.4. Handling qualities. Longitudinal control tests. Gear change dynamics.	X	X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and gear position.	
2.c.5. Handling qualities. Longitudinal control tests. Longitudinal trim.	X	X	Data may be acquired through use of an inertial measurement system and a synchronized video of flight deck controls position (previously calibrated to show related surface position) and the engine instrument readings.	
2.c.6. Handling qualities. Longitudinal control tests. Longitudinal maneuvering stability (stick force/g).	X	X	Data may be acquired through the use of an inertial measurement system and a synchronized video of calibrated airplane instruments; a temporary, high resolution bank angle scale affixed to the attitude indicator; and a wheel and column force measurement indication.	
2.c.7. Handling qualities. Longitudinal control tests. Longitudinal static stability.	X	X	Data may be acquired through the use of a synchronized video of airplane flight instruments and a hand held force gauge.	
2.c.8. Handling qualities. Longitudinal control tests. Stall characteristics.	X	X	Data may be acquired through a synchronized video recording of a stop watch and calibrated airplane airspeed indicator. Hand-record the flight conditions and airplane configuration.	Airspeeds may be cross checked with those in the TIR and AFM.
2.c.9. Handling qualities. Longitudinal control tests. Phugoid dynamics.	X	X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and force/position measurements of flight deck controls.	
2.c.10. Handling qualities. Longitudinal control tests. Short period dynamics.		X	Data may be acquired by using an inertial measurement system and a synchronized video of calibrated airplane instruments and force/position measurements of flight deck controls.	