

the FSTDs demonstrated technical and operational capabilities as prescribed in this part.

Qualification Performance Standard (QPS)—the collection of procedures and criteria used when conducting objective and subjective tests, to establish FSTD qualification levels. The QPS are published in the appendices to this part, as follows: Appendix A, for Airplane Simulators; Appendix B, for Airplane Flight Training Devices; Appendix C, for Helicopter Simulators; Appendix D, for Helicopter Flight Training Devices; Appendix E, for Quality Management Systems for Flight Simulation Training Devices; and Appendix F, for Definitions and Abbreviations for Flight Simulation Training Devices.

Qualification Test Guide (QTG)—the primary reference document used for evaluating an aircraft FSTD. It contains test results, statements of compliance and capability, the configuration of the aircraft simulated, and other information for the evaluator to assess the FSTD against the applicable regulatory criteria.

Quality Management System (QMS)—a flight simulation quality-systems that can be used for external quality-assurance purposes. It is designed to identify the processes needed, determine the sequence and interaction of the processes, determine criteria and methods required to ensure the effective operation and control of the processes, ensure the availability of information necessary to support the operation and monitoring of the processes, measure, monitor, and analyze the processes, and implement the actions necessary to achieve planned results.

Real-World Airport—as used in this part in reference to airport visual models, a computer generated visual depiction of an existing airport.

Representative—when used as an adjective in this part, typical, demonstrative, or characteristic of, the feature being described. For example, “representative sampling of tests” means a sub-set of the complete set of all tests such that the sample includes one or more of the tests in each of the major categories, the results of which provide the evaluator with an overall understanding of the performance and handling characteristics of the FSTD.

Reversible Control System—a control system in which movement of the control surface will backdrive the pilot’s control on the flight deck.

Roll—the airplane attitude with respect to, or around, the longitudinal axis expressed in degrees.

Set of Aircraft—aircraft that share similar handling and operating characteristics, similar operating envelopes, and have the same number and type of engines or powerplants.

Sideslip Angle—the angle between the relative wind vector and the airplane plane of

symmetry. (Note: this definition replaces the current definition of “sideslip.”)

Simulation Quality Management System (SQMS)—the elements of a quality management system for FSTD continuing qualification.

Snapshot—a presentation of one or more variables at a given instant of time.

Special Evaluation—an evaluation of the FSTD for purposes other than initial, upgrade, or continuing qualification. Circumstances that may require a special evaluation include movement of the FSTD to a different location, or an update to FSTD software or hardware that might affect performance or flying qualities.

Sponsor—a certificate holder who seeks or maintains FSTD qualification and is responsible for the prescribed actions as prescribed in this part and the QPS for the appropriate FSTD and qualification level.

Statement of Compliance and Capability (SOC)—a declaration that a specific requirement has been met and explaining how the requirement was met (e.g., gear modeling approach, coefficient of friction sources). The SOC must also describe the capability of the FSTD to meet the requirement, including references to sources of information for showing compliance, rationale to explain how the referenced material is used, mathematical equations and parameter values used, and conclusions reached.

Step Input—an abrupt control input held at a constant value.

Subjective Test—a qualitative assessment of the performance and operation of the FSTD.

Surge—FSTD movement with respect to or along the longitudinal axis.

Sway—FSTD movement with respect to or along the lateral axis.

T_f—Total time of the flare maneuver.

T_i—Total time from initial throttle movement until a 10% response of a critical engine parameter.

T_t—Total time from initial throttle movement to an increase of 90% of go around power or a decrease of 90% from maximum take-off power.

Time History—a presentation of the change of a variable with respect to time.

Training Program Approval Authority (TPAA)—a person authorized by the Administrator to approve the aircraft flight training program in which the FSTD will be used.

Training Restriction—a temporary condition where an FSTD with missing, malfunctioning, or inoperative (MMI) components may continue to be used at the qualification level indicated on its SOQ, but restricted from completing the tasks for which the correct function of the MMI component is required.

Transport Delay or “Throughput”—the total FSTD system processing time required for an input signal from a pilot primary flight control until motion system, visual system,