time is ''grandfathered'' or held to the standards that were in effect during that time period. The grandfathered standards remain applicable to each FSTD manufactured during the stated time period regardless of any subsequent modification to those standards and regardless of the sponsor, as long as the FSTD remains qualified or is maintained in a non-qualified status in accordance with the specific requirements and time periods prescribed in this part.

Gross Weight—For objective test purposes:

Basic Operating Weight (BOW)—the empty weight of the aircraft plus the weight of the following: Normal oil quantity; lavatory servicing fluid; potable water; required crewmembers and their baggage; and emergency equipment.

Light Gross Weight—a weight chosen by the sponsor or data provider that is not more than 120% of the BOW of the aircraft being simulated or the minimum practical operating weight of the test aircraft.

Medium Gross Weight—a weight chosen by the sponsor or data provider that is within 10% of the average of the numerical values of the BOW and the maximum certificated gross weight.

Near Maximum Gross Weight—a weight chosen by the sponsor or data provider that is not less than the BOW of the aircraft being simulated plus 80% of the difference between the maximum certificated gross weight (either takeoff weight or landing weight, as appropriate for the test) and the BOW.

Ground Effect—the change in aerodynamic characteristics due to of the change in the airflow past the aircraft caused by the proximity of the earth's surface to the airplane.

Hands Off—a test maneuver conducted without pilot control inputs.

Hands On—a test maneuver conducted with pilot control inputs as required.

Heave—FSTD movement with respect to or along the vertical axis.

Height—the height above ground level (or AGL) expressed in meters or feet.

''In Use'' Runway—as used in this part, the runway that is currently selected, able to be used for takeoffs and landings, and has the surface lighting and markings required by this part. Also known as the ''active'' runway.

Integrated Testing—testing of the FSTD so that all aircraft system models are active and contribute appropriately to the results. With integrated testing, none of the models used are substituted with models or other algorithms intended for testing only.

Irreversible Control System—a control system where movement of the control surface will not backdrive the pilot's control on the flight deck.

Locked—a test condition where one or more variables are held constant with time.

Manual Testing—FSTD testing conducted without computer inputs except for initial setup, and all modules of the simulation are active.

Master Qualification Test Guide (MQTG)—the FAA-approved Qualification Test Guide with the addition of the FAA-witnessed test results, applicable to each individual FSTD.

Medium—the normal operational weight for a given flight segment.

National Simulator Program Manager (NSPM)—the FAA manager responsible for the overall administration and direction of the National Simulator Program (NSP), or a person approved by that FAA manager.

Near Limiting Performance—the performance level the operating engine must be required to achieve to have sufficient power to land a helicopter after experiencing a single engine failure during takeoff of a multiengine helicopter. The operating engine must be required to operate within at least 5 percent of the maximum RPM or temperature limits of the gas turbine or power turbine, or operate within at least 5 percent of the maximum drive train torque limits. Near limiting performance is based on the existing combination of density altitude, temperature, and helicopter gross weight.

Nominal—the normal operating configuration, atmospheric conditions, and flight parameters for the specified flight segment.

Non-Normal Control—a term used in reference to Computer Controlled Aircraft. It is the state where one or more of the intended control, augmentation, or protection functions are not fully working. Note: Specific terms such as ALTERNATE, DIRECT, SECONDARY, or BACKUP may be used to define an actual level of degradation.

Normal Control—a term used in reference to Computer Controlled Aircraft. It is the state where the intended control, augmentation, and protection functions are fully working.

Objective Data—quantitative data, acceptable to the NSPM, used to evaluate the FSTD.

Objective Test—a quantitative measurement and evaluation of FSTD performance.

Pitch—the airplane attitude with respect to, or around, the lateral axis expressed in degrees.

Power Lever Angle (PLA)—the angle of the pilot's primary engine control lever(s) on the flight deck. This may also be referred to as THROTTLE or POWER LEVER.

Predicted Data—estimations or extrapolations of existing flight test data or data from other simulation models using engineering analyses, engineering simulations, design data, or wind tunnel data.

Protection Functions—systems functions designed to protect an airplane from exceeding its flight maneuver limitations.

Pulse Input—a step input to a control followed by an immediate return to the initial position.

Qualification Level—the categorization of an FSTD established by the NSPM based on