

each FTD is subjected to the general FTD requirements in Attachment 1 of this appendix, the objective tests listed in Attachment 2 of this appendix, and the subjective tests listed in Attachment 3 of this appendix. The evaluations described herein will include, but not necessarily be limited to the following:

(1) Helicopter responses, including longitudinal and lateral-directional control responses (see Attachment 2 of this appendix).

(2) Performance in authorized portions of the simulated helicopter's operating envelope, to include tasks evaluated by the NSPM in the areas of surface operations, takeoff, climb, cruise, descent, approach and landing, as well as abnormal and emergency operations (see Attachment 2 of this appendix).

(3) Control checks (see Attachment 1 and Attachment 2 of this appendix).

(4) Flight deck configuration (see Attachment 1 of this appendix).

(5) Pilot, flight engineer, and instructor station functions checks (see Attachment 1 and Attachment 3 of this appendix).

(6) Helicopter systems and sub-systems (as appropriate) as compared to the helicopter simulated (see attachment 1 and attachment 3 of this appendix).

(7) FTD systems and sub-systems, including force cueing (motion), visual, and aural (sound) systems, as appropriate (see Attachment 1 and Attachment 2 of this appendix).

(8) Certain additional requirements, depending upon the qualification level sought, including equipment or circumstances that may become hazardous to the occupants. The sponsor may be subject to Occupational Safety and Health Administration requirements.

o. The NSPM administers the objective and subjective tests, which include an examination of functions. The tests include a qualitative assessment of the FTD by an NSP pilot. The NSP evaluation team leader may assign other qualified personnel to assist in accomplishing the functions examination and/or the objective and subjective tests performed during an evaluation when required.

(1) Objective tests provide a basis for measuring and evaluating FTD performance and determining compliance with the requirements of this part.

(2) Subjective tests provide a basis for:

(a) Evaluating the capability of the FTD to perform over a typical utilization period;

(b) Determining that the FTD satisfactorily simulates each required task;

(c) Verifying correct operation of the FTD controls, instruments, and systems; and

(d) Demonstrating compliance with the requirements of this part.

p. The tolerances for the test parameters listed in Attachment 2 of this appendix reflect the range of tolerances acceptable to the NSPM for FTD validation and are not to

be confused with design tolerances specified for FTD manufacture. In making decisions regarding tests and test results, the NSPM relies on the use of operational and engineering judgment in the application of data (including consideration of the way in which the flight test was flown and way the data was gathered and applied), data presentations, and the applicable tolerances for each test.

q. In addition to the scheduled continuing qualification evaluation, each FTD is subject to evaluations conducted by the NSPM at any time without prior notification to the sponsor. Such evaluations would be accomplished in a normal manner (i.e., requiring exclusive use of the FTD for the conduct of objective and subjective tests and an examination of functions) if the FTD is not being used for flight crewmember training, testing, or checking. However, if the FTD were being used, the evaluation would be conducted in a non-exclusive manner. This non-exclusive evaluation will be conducted by the FTD evaluator accompanying the check airman, instructor, Aircrew Program Designee (APD), or FAA inspector aboard the FTD along with the student(s) and observing the operation of the FTD during the training, testing, or checking activities.

r. Problems with objective test results are handled as follows:

(1) If a problem with an objective test result is detected by the NSP evaluation team during an evaluation, the test may be repeated or the QTG may be amended.

(2) If it is determined that the results of an objective test do not support the qualification level requested but do support a lower level, the NSPM may qualify the FTD at a lower level.

s. After an FTD is successfully evaluated, the NSPM issues an SOQ to the sponsor. The NSPM recommends the FTD to the TPAA, who will approve the FTD for use in a flight training program. The SOQ will be issued at the satisfactory conclusion of the initial or continuing qualification evaluation and will list the tasks for which the FTD is qualified, referencing the tasks described in Table D1B in Attachment 1 of this appendix. However, it is the sponsor's responsibility to obtain TPAA approval prior to using the FTD in an FAA-approved flight training program.

t. Under normal circumstances, the NSPM establishes a date for the initial or upgrade evaluation within ten (10) working days after determining that a complete QTG is acceptable. Unusual circumstances may warrant establishing an evaluation date before this determination is made. A sponsor may schedule an evaluation date as early as 6 months in advance. However, there may be a delay of 45 days or more in rescheduling and completing the evaluation if the sponsor is unable to meet the scheduled date. See Attachment 4, of this appendix, Figure D4A,