

VOLUME 5 AIRMAN CERTIFICATION

CHAPTER 3 AIRLINE TRANSPORT PILOT (ATP) CERTIFICATION UNDER TITLE 14 CFR PART 121, 135, OR 91 SUBPART K

Section 3 Conduct of Flight Tests in Airplane Flight Simulation Training Devices for ATP Applicants Engaged in Operations Under Part 121, 135, or 91 Subpart K

Source Basis:

- Section 61.4, Qualification and Approval of Flight Simulators and Flight Training Devices.
- Section 61.33, Tests: General Procedure.
- Section 61.39, Prerequisites for Practical Tests.
- Section 61.43, Practical Tests: General Procedures.
- Section 61.45, Practical Tests: Required Aircraft and Equipment.
- Section 61.64, Use of a Flight Simulator and Flight Training Device.
- Section 61.71, Graduates of an Approved Training Program Other Than Under This Part: Special Rules.
- Section 61.151, Applicability.
- Section 61.153, Eligibility Requirements: General.
- Section 61.157, Flight Proficiency.
- Section 61.165, Additional Aircraft Category and Class Ratings.
- Section 121.441, Proficiency Checks.
- Part 121 Appendix H, Advanced Simulation.

5-856 ACCEPTABLE METHODS FOR ACCOMPLISHING AN AIRPLANE FLIGHT TEST. There are three acceptable methods for accomplishing an airplane flight test. Flight tests may always be conducted entirely in an airplane. Under certain circumstances, flight tests may be conducted entirely in a full flight simulator (FFS). Flight tests may also be conducted in two segments in which certain specific events may be tested in a flight simulation training device (FSTD), while other events must be tested in an airplane. The method used depends on the qualification level of the FSTD and the Title 14 Code of Federal Regulations (14 CFR) part under which the operations are conducted. Explanations of these methods are as follows:

A. Level D FFS.

1) Title 14 CFR Parts 135 and 91 Subpart K (Part 91K). All applicants employed by a program manager conducting part 91K operations, or by a certificate holder conducting operations under part 135, are eligible for the entire flight test in a Level D FFS without a subsequent airplane segment.

2) Title 14 CFR Part 121 With an Approved Advanced Simulation Training Program. For certificate holders conducting operations under part 121 with an advanced simulation training program approved in accordance with part 121 appendix H, all applicants are eligible for the entire flight test in a Level D FFS without a subsequent airplane segment. See Volume 3, Chapter 19, Section 6, Paragraph 3-1243, Part 121 Appendix H, for information regarding part 121 appendix H requirements.

3) Part 121 Without an Approved Advanced Simulation Training Program.

When a Level D FFS is used for a flight test at a certificate holder conducting operations under part 121 without an advanced simulation training program, all applicants are required to complete a subsequent airplane flight test segment. Applicants must be tested in the airplane on the events specified in part 121 appendix F as “Inflight.”

4) Title 14 CFR Part 61, § 61.64 Limitation. All applicants who complete the entire flight test in a Level D FFS without a subsequent airplane segment must also meet the experience requirements of § 61.64 or the Airline Transport Pilot (ATP) Certificate must be issued with the limitation specified in § 61.64(f)(2).

B. Level C FFS.

1) Parts 135 and 91K. All applicants employed by a program manager conducting part 91K operations, or by a certificate holder conducting operations under part 135, are eligible for the entire flight test in a Level C FFS.

2) Part 121 With an Approved Advanced Simulation Training Program. For certificate holders conducting operations under part 121 with an advanced simulation training program approved in accordance with part 121 appendix H, all applicants are eligible for the entire flight test in a Level C FFS without a subsequent airplane segment. See Volume 3, Chapter 19, Section 6, paragraph 3-1243 for information regarding part 121 appendix H requirements.

3) Part 121 Without an Approved Advanced Simulation Training Program. When a Level C FFS is used for a flight test at a certificate holder conducting operations under part 121 without an advanced simulation training program, all applicants are required to complete a subsequent airplane flight test segment. Applicants must be tested in the airplane on the events specified in part 121 appendix F as “Inflight.”

4) Section 61.64 Limitation. All applicants who complete the entire flight test in a Level C FFS without a subsequent airplane segment must also meet the experience requirements of § 61.64 or the ATP Certificate must be issued with the limitation specified in § 61.64(f)(2).

C. Levels A and B FFS. When a Level A or Level B FFS is used for a flight test, events the device is qualified and approved for may be evaluated in the FFS. However, the evaluation of certain specified events in a subsequent airplane flight test segment is required for all applicants. Applicants at a certificate holder conducting operations under part 121 must be tested in the airplane on the events specified in part 121 appendix F as “Inflight.”

D. Level 4 and Higher Flight Training Devices (FTD). When a Level 4 or higher FTD is used for a flight test, all applicants are required to take a subsequent airplane flight test segment. When a Level 4 or higher FTD is used for a flight test, events the device is qualified and approved for may be evaluated in the FTD. Applicants at a certificate holder conducting operations under part 121 may only be tested in an FTD for those events specified in part 121 appendix F as “FTD.”

5-857 SELECTION OF FLIGHT TEST JOB AIDS. When conducting a flight test, inspectors and examiners must comply with the applicable regulatory requirements.

A. Part 121. In accordance with § 61.157(f)(1)(i), a satisfactory § 121.441 proficiency check meets the flight test requirements for an ATP Certificate and type rating. Inspectors and examiners should refer to Volume 3, Chapter 19, Section 7, Paragraph 3-1279, Part 121 Pilot Proficiency Check, and Figure 3-80, Part 121 Pilot Proficiency Check, for direction and policy regarding a § 121.441 proficiency check, including the required events and allowable use of FSTDs.

B. Parts 135 and 91K.

1) Single-Segment Flight Tests. When a flight test is conducted entirely in an airplane, or entirely in an FFS, inspectors and examiners should use the checklist titled Part 135 or 91K ATP/Type Rating Single-Segment Flight Test Job Aid—FFS or Airplane (see Figure 5-113).

2) Two-Segment Flight Tests—FFS and Airplane. When a flight test is conducted in two segments (the first segment in a Level A or higher FFS and the second segment in an airplane), there is a standard set of events that must be evaluated on the airplane segment. All remaining events are usually evaluated in the FFS segment. If an event normally evaluated in the FFS segment is not accomplished in that segment, it must subsequently be evaluated in the airplane segment. The events are listed on the checklist titled Part 135 or 91K ATP/Type Rating Two-Segment Flight Test Job Aid—FFS and Airplane (see Figure 5-114).

3) Two-Segment Flight Tests—FTD and Airplane. When a flight test is conducted in two segments (the first segment in a Level 4 or higher FTD and the second segment in an airplane), inspectors and examiners should use the checklist titled Part 135 or 91K ATP/Type Rating Two-Segment Flight Test Job Aid—FTD and Airplane (see Figure 5-115).

5-858 PLANNING AN FFS OR FTD FLIGHT TEST SEGMENT. The most important factor in conducting an efficient and effective flight test is proper planning. Principal Operations Inspectors (POI) should develop briefing guides for inspectors and examiners to use in planning flight tests. The events that may be accomplished in each FSTD should be specified in the briefing guide. Also specified should be the takeoff and landing minimums that the certificate holder is authorized to use and whether training has been conducted on circling approaches. If Category (CAT) II or CAT III operations are authorized, the additional approaches required for pilot qualification in those operations should be specified. The following recommended planning sequence is presented for guidance to inspectors and examiners.

A. Determine the Method of the Flight Test. Whether a flight test may be conducted entirely in an FFS depends on the level of the FFS to be used. If the applicant or FFS does not qualify for the complete test to be conducted in an FFS, the flight test must be conducted in two segments. The first segment must be conducted in an FSTD and the second segment in an airplane (see paragraph 5-856).

B. Select the Appropriate Job Aid. For part 135 and 91K, a job aid has been prepared for each acceptable method of conducting a flight test (see paragraph 5-857 and Figures 5-113 through 5-115).

C. Determine FFS and FTD Capabilities. Inspectors and examiners should familiarize themselves with the capabilities of the specific FSTD to be used.

1) Inspectors and examiners should determine what airport visual models the particular FFS is capable of generating.

2) Inspectors and examiners should review the approaches and departures that are available at these airports. It may be necessary and desirable for inspectors or examiners to conduct the flight test at multiple airports.

3) The problems and malfunctions to be programmed into the FSTD should be planned before beginning the flight test.

D. Review Operations Specifications (OpSpecs)/Management Specifications (MSpecs) Authorizations. Inspectors must acquaint themselves with the certificate holder or program manager's OpSpecs/MSpecs to determine the following:

- The types of authorized approaches,
- The authorized minimums for takeoffs and landings, and
- Any authorized special operations.

E. Determine CAT II or CAT III Approach Requirements. If CAT II or CAT III procedures are to be evaluated in conjunction with the certification, the inspector or examiner must coordinate with the POI or Aircrew Program Manager (APM) to determine the number and type of additional approaches that must be evaluated.

F. Review the Certificate Holder's Manual. The inspector must become acquainted with the certificate holder's manual, particularly the sections on authorized minimums, flight maneuvers, crew coordination, and procedures.

G. Issuance of an ATP Certificate or Type Rating to a Second in Command (SIC). Air carriers employing SICs without an ATP Certificate or aircraft type rating may choose to provide the training and checking required for the issuance of the certificate or rating. Carriers wishing to conduct certification utilizing a recurrent training program may be required to submit a revision to their SIC recurrent training curriculum or continuing qualification curriculum for Advanced Qualification Programs (AQP) to accommodate the additional training and evaluation requirements. The revised curriculum(s) must include training on any tasks and maneuvers required for ATP certification for which the SIC has not previously received flight training in new-hire, initial, transition, or recurrent training, or indoctrination (AQP), qualification (AQP), or continuing qualification (AQP) training for that carrier. Air carriers may continue to use their approved recurrent/continuing qualification (AQP) training curriculum for SICs who already hold an ATP Certificate with airplane category and multiengine class rating or type rating.

H. Seat and Duty Position Considerations. This subparagraph outlines some considerations for training and qualification programs that lead to ATP certification and/or a type rating. The POI and APM are best suited to evaluate the certificate holder's environment, procedures, and operational requirements to ensure the approved flightcrew member training and qualification program functionally supports the proposed operation. Although the guidance below provides some flexibility, training efficiencies should not supersede the objective of providing the most applicable training for the duty position to which the flightcrew member will be assigned.

1) Certificate holders can effectively train pilot crewmembers for a duty position without designating a specific time period for training in a particular seat position. The qualification and checking module in a traditional program or evaluation strategy in an AQP, in addition to the operating experience module, if applicable, will validate the training received.

2) Duty positions are defined by the knowledge and skills of specific job tasks. The pilot in command (PIC) and SIC duty positions' knowledge and skills may be demonstrated from either pilot seat. Training and qualification programs which include a qualification curriculum segment with a checking/evaluation module for the PIC duty position when the flightcrew member will be assigned the SIC duty position must also include a training module which trains to proficiency all the SIC duty position knowledge and skills not covered in the PIC curriculum, if any.

3) Additionally, certificate holders should be cognizant of unique aircraft configuration differences that may require seat-dependent maneuvers and procedures. Seat-dependent maneuvers and procedures are defined as maneuvers and procedures using controls that are accessible or operable from only one flightcrew member seat. Seat-dependent maneuvers and procedures may be identified by the airplane manufacturer, the certificate holder, or the Federal Aviation Administration (FAA). Inspectors and examiners should review the Flight Standardization Board (FSB) Report for the airplane type for any seat-dependent maneuvers and procedures identified during the FSB evaluation. Consequently, any certificate holder allowing pilot crewmembers to occupy either pilot seat must include a training module that trains to proficiency the identified seat-dependent maneuvers and procedures, if any. This module must also ensure the flightcrew member has sufficient time to develop the psychomotor acuity required to fly the aircraft from a seating position differing from the seat used in the checking/evaluation module.

I. Plan a Scenario. From the information learned in the previous steps, inspectors or examiners should be able to plan a scenario that permits efficient use of time. The scenario should present test events in a realistic sequence. The environmental conditions in which the events are presented must be planned before the flight test. It is recommended that inspectors and examiners use the job aid when planning the flight test. For example, the sequence for which events will be presented may be numbered in the blocks provided. When planning flight tests, the events and the environmental conditions should be varied from one flight test to another flight test. This variety ensures that applicants are presented with new problems and that the flight testing includes a sampling of the certificate holder's entire pilot training and qualification program over a period of time.

J. Determine FSTD Operation. Either the inspector or a certificate holder's employee may operate the FSTD's control panel during the flight test. Before an inspector operates an FSTD control panel, he or she must receive instruction and clearance from an authorized representative of the certificate holder. When a certificate holder's employee operates the FSTD control panel, that employee must be briefed on the sequence of events and signals to be used during the flight test. The inspector may not delegate the flight test planning function to a certificate holder's employee but must plan the sequencing of events and the conditions under which events are to be conducted. The inspector should act as the air traffic controller and issue all clearances.

5-859 APPLICANT BRIEFING. Before beginning the flight test, the inspector or examiner must brief an applicant on how the flight test is to be conducted and what is to be required of the applicant on the flight test. A briefing outline is included on applicable job aids. Inspectors and examiners are encouraged to develop their own expanded, individual supplements to the outline on the job aid.

5-860 SUPPORTING CREWMEMBERS. All crew positions required by the Airplane Flight Manual (AFM) must be occupied by qualified personnel during flight tests that are conducted in an FSTD. It is recommended that the supporting crewmember not be an applicant for a certificate or rating. These individuals do not have to be current. The inspector or examiner may not occupy a crew position during a flight test conducted in an FSTD.

A. Supporting Crewmember Preparation and Conduct. Inspectors and examiners must brief supporting crewmembers that they are to perform their duties as specified by the certificate holder's manual. Supporting crewmembers must provide normal crew coordination support; however, they are not permitted to lead the applicant when the applicant is expected to take the initiative.

B. Takeoff and Approach Data Evaluation. The inspector or examiner must evaluate the applicant's ability to compute takeoff and approach data on the oral test. Unless data computation is specifically the PIC's duty, it is not required during the flight test segment. Inspectors and examiners should coordinate with a supporting crewmember to provide the data required during the flight test.

5-861 CONDUCTING A FLIGHT TEST IN AN FSTD. Conducting a flight test in an FSTD is a skill requiring study and practice. Inspectors and examiners must endeavor to conduct flight tests in a manner that reproduces actual flight conditions as accurately as possible. Prior planning is an essential element. (See paragraph 5-858.)

A. Inspector/Examiner Conduct. Inspectors and examiners should avoid asking unnecessary questions and making comments, and must discourage conversations not specifically concerning the conduct of the flight test. Inspectors and examiners should take notes during the flight test for use during debriefing.

B. Flight Test Preparation. When possible, the inspector or examiner should program the initial flight test parameters into the FSTD before an applicant arrives. When this is not possible, the inspector or examiner should arrange to have someone else program the parameters.

The inspector or examiner should focus their attention on the actions of the applicant and crew during the flight deck preparation phase of the flight test.

C. Flight Test Authenticity. Inspectors and examiners must use correct air traffic control (ATC) terminology. Clearances should be issued as they would be issued in actual flight.

D. Repositioning and Freeze. Inspectors and examiners should usually avoid use of the repositioning and freeze features of the FFS during the flight test to ensure realism and to avoid disorienting the applicant. However, if an inspector or examiner chooses to include a high-altitude stall, altitude repositioning and freeze may be used to set up the event.

E. Pacing. The inspector or examiner must pace the flight test so that the applicant is not rushed. The inspector or examiner should present events in an orderly and efficient manner. Inspectors and examiners who regularly conduct flight tests usually require less time to conduct an adequate flight test than less experienced inspectors and examiners. Experience has shown that proficient inspectors and examiners can conduct a complete ATP or type rating FFS flight test in a multiengine transport category airplane in approximately 2 hours. A flight test lasting more than 2½ hours (assuming no FFS malfunctions occur) may indicate poor performance on the part of the applicant or poor technique on the part of the inspector or examiner.

1) Waiving events can reduce the time; however, events must not be waived for the purpose of completing a flight test within a time schedule. It is not an acceptable practice for a certificate holder to place a maximum on the time allotted for a certification flight test.

2) Inspectors and examiners are required to evaluate those normal, abnormal, and emergency procedures that are published in the certificate holder's aircraft operating manual and qualification segment. It is not practical or necessary to evaluate the applicant in every event in which the applicant has received training. Two or three of these events is a reasonable number per flight test and should accomplish the purpose of ensuring that the applicant is proficient throughout the range of events in which training was conducted. The flight test is a test of proficiency and not of endurance. The inspector or examiner should not extend a flight test when the applicant's proficiency is in question. If the inspector or examiner is not convinced of the applicant's basic proficiency from observing the required events, the applicant's level of proficiency is usually not acceptable.

F. FSTD Malfunction. When an FSTD malfunctions, it may appear to the applicant to be a problem with an aircraft system. When this or any other problem occurs, the applicant should not assume that the problem is an FSTD malfunction, but should deal with it as though it has been encountered in an airplane. If a malfunction affects handling qualities, the inspector or examiner should suspend the flight test until maintenance can be conducted. Inspectors and examiners must exercise judgment in such cases. It is undesirable to cause unnecessary delays, but it is unacceptable to conduct a flight test in an FSTD that does not accurately represent the airplane's handling qualities. When the FSTD's handling quality is in doubt, it is appropriate for the inspector or examiner to fly the FSTD to assess the state of its handling qualities.

G. Flight Test Interruptions. Occasionally, a flight test will be delayed or interrupted due to malfunctions or power failures. When such interruptions occur, the inspector or examiner should be aware of the nervous and fatigue state of the applicant. In fairness to the applicant, it may become necessary for the inspector or examiner to reschedule the remaining portion of the flight test segment.

5-862 DEBRIEFING. The inspector or examiner must inform the applicant of the results of the flight test segment during the debriefing (see Volume 5, Chapter 1, Section 3, Paragraph 5-58, Flight Test Phase for Parts 121 and 135).

**Figure 5-113. Part 135 or 91K ATP/Type Rating Single-Segment Flight Test Job Aid—
FFS or Airplane**

GROUND OPERATIONS

Preflight Inspection	[]
Taxiing or Sailing	[]
Powerplant Checks	[]

TAKEOFFS

Normal	[]
Instrument	[]
Crosswind	[]
With Powerplant Failure	[]
Rejected Takeoff	[]

INSTRUMENT PROCEDURES

Area Departure	[]* 1, But not both
Area Arrival	[]* May be waived
Holding	[]*
Normal Instrument Landing System (ILS) Approach	[] With F/D
Autopilot Coupled ILS	[] If equipped
Engine-Out ILS	[]
Nonprecision Approach	[]
Second Nonprecision Approach	[]
Circling Approach (Not required if the certificate holder does not train for the event.)	[]
Missed Approach from an ILS	[]
Engine-Out Missed Approach	[]

IN-FLIGHT MANEUVERS

Steep Turns	[]*
Approaches to Stalls	[]* 2 May be waived
Specific Flight Characteristics	[]* If required
Powerplant Failure	[]

VISUAL APPROACHES

No-Flap/Partial-Flap Approach	[] If required
With 50% Powerplants Inoperative	[]

LANDINGS

(Landings may be combined – minimum of 3 required)

Normal Landing	[]
Landing from an ILS	[]
Crosswind Landing	[]
Landing with 50% Powerplants Inoperative	[]
From Circling Approach	[] If required
Rejected Landing	[]
Accuracy Landings, Single-Engine Only (3)	[] If no commercial

Events annotated with * may be waived, if appropriate conditions are met.

NORMAL, ABNORMAL, AND EMERGENCY PROCEDURES—SAMPLES

[] Anti-Icing and Deicing; Hydraulic, Electrical, Pneumatic, and Other Systems Failures; Gear, Flaps, Control Systems; Navigation and Communications Equipment; Fire in Flight, Smoke Control; Decompression, Emergency Descent, Emergency Landing, and Evacuation.

BRIEFINGS

- [] A. Brief Applicant:
 - 1. Departure point, destination, route, weather.
 - 2. Aircraft weight and fuel load.
 - 3. Role of inspector.
 - 4. Use of crewmembers and autopilot (applicant is in command and must perform command duties successfully).
 - 5. Review minimums to be used on test.
- [] B. Brief Supporting Crewmembers:
 - 1. Crew will perform normal duties of their positions.
 - 2. Will act in support role and not initiate – may be asked to delete calls, altitude alerts, etc.
 - 3. Duties of safety pilot.
- [] C. Safety Pilot Briefing:
 - 1. Touch-and-go procedures.
 - 2. Use of hood.
 - 3. Transfer of controls.
 - 4. Simulated emergencies.
 - 5. Response to an actual emergency.
 - 6. Engine failure on takeoff.
 - 7. Other specific events.

**Figure 5-114. Part 135 or 91K ATP/Type Rating Two-Segment Flight Test Job Aid—
FFS and Airplane**

APPLICANT NAME: _____

INSPECTOR OR EXAMINER NAME:	FFS	AIRPLANE
OFFICE:	_____	_____
DATE:	_____	_____

Events annotated with * may be waived, if appropriate conditions are met. Indicate those events not evaluated in the simulator with an “NE” in the [] for the event.

GROUND OPERATIONS

Preflight Inspection	FFS	AIRPLANE
Taxiing or Sailing	[]<flight deck	[]*<exterior
Powerplant Checks	[]	[]

TAKEOFFS

Normal	[]
Instrument	[]
Crosswind	[]
With Powerplant Failure	[]
Rejected Takeoff	[]

INSTRUMENT PROCEDURES

Area Departure	[]* 1, But not both
Area Arrival	[]* May be waived
Holding	[]*
Normal Instrument Landing System (ILS)	[] With F/D
Approach	
Autopilot Coupled ILS	[] If equipped
Engine-Out ILS	[]
Nonprecision Approach	[]
Second Nonprecision Approach	[]
Circling Approach (Not required if the certificate holder does not train for the event.)	[]
Missed Approach from an ILS	[]
Engine-Out Missed Approach	[]
Missed Approach in Airplane	[]

IN-FLIGHT MANEUVERS

Steep Turns	[]*
Approaches to Stalls	[]* 2 May be waived
Specific Flight Characteristics	[]* If required by FSB
Powerplant Failure	[]

VISUAL APPROACHES

No-Flap	[] If required
With 2 Engines Inoperative	[] 3- & 4-engine airplanes

LANDINGS	FFS	AIRPLANE
Normal Landing	[]	[]
Landing from an ILS	[]	[]
Crosswind Landing	[]	[]
Landing with 2 Engines Inoperative	[] 3- & 4-engine airplanes	
Engine-Out Landing	[]	[]
From Circling Approach	[]	[] If required
Rejected Landing	[]	
Accuracy Landings (3) Single-Engine Only		[] If no commercial

NOTE: Landings may be combined. A minimum of 3 must be accomplished in the airplane;

however, if the landing from an ILS is completed in the FFS, only two landings need to be accomplished in the airplane.

NORMAL, ABNORMAL, AND EMERGENCY PROCEDURES—SAMPLE

[] Anti-Icing and Deicing; Hydraulic, Electrical, Pneumatic, and Other Systems Failures; Gear, Flaps, Control Systems; Navigation and Communications Equipment; Fire in Flight, Smoke Control; Decompression, Emergency Descent, Emergency Landing, and Evacuation.

BRIEFINGS

- [] A. Brief Applicant:
 - 1. Departure point, destination, route, weather.
 - 2. Aircraft weight and fuel load.
 - 3. Role of inspector.
 - 4. Use of crewmembers and autopilot (applicant is in command and must perform command duties successfully).
 - 5. Review minimums to be used on test.
- [] B. Brief Supporting Crewmembers:
 - 1. Crew will perform normal duties of their positions.
 - 2. Will act in support role and not initiate – may be asked to delete calls, altitude alerts, etc.
 - 3. Duties of safety pilot.
- [] C. Safety Pilot Briefing:
 - 1. Touch-and-go procedures.
 - 2. Use of hood.
 - 3. Transfer of controls.
 - 4. Simulated emergencies.
 - 5. Response to an actual emergency.
 - 6. Engine failure on takeoff.
 - 7. Other specific events.

**Figure 5-115. Part 135 or 91K ATP/Type Rating Two-Segment Flight Test Job Aid—
FTD and Airplane**

APPLICANT NAME: _____

INSPECTOR OR EXAMINER NAME:	FTD	AIRPLANE
OFFICE:	_____	_____
DATE:	_____	_____

Events annotated with * may be waived, if appropriate conditions are met. Indicate those events not evaluated in the FTD with an “NE” in the [] for the event.

GROUND OPERATIONS

	FTD	AIRPLANE
Preflight Inspection	[]	[]* <flight deck
Taxiing or Sailing	[]	[]
Powerplant Checks	[]	[]

TAKEOFFS

Normal	[]
Instrument	[]
Crosswind	[]
With Powerplant Failure	[]
Rejected Takeoff	[]

INSTRUMENT PROCEDURES

Area Departure	[]*	[]* 1, But not both
Area Arrival	[]*	[]* May be waived
Holding	[]*	[]*
Normal Instrument Landing System (ILS)		[] With F/D
Approach		
Autopilot Coupled ILS	[]	[] If equipped
Engine-Out ILS	[]	[]
Nonprecision Approach	[]	[]
Second Nonprecision Approach	[]*	[]
Circling Approach (Not required if the certificate holder does not train for the event.)	[]	
Missed Approach from an ILS	[]	[]
Engine-Out Missed Approach	[]	[]
Missed Approach in Airplane		[]

IN-FLIGHT MANEUVERS

Steep Turns	[]*	[]*
Approaches to Stalls	[]*	[]* 2 may be waived
Specific Flight Characteristics	[]*	[]* If required by FSB
Powerplant Failure	[]	

VISUAL APPROACHES

No-Flap	[]	If required
With 2 Engines Inoperative		[] 3- & 4- engine airplanes

LANDINGS	FTD	AIRPLANE
Normal Landing	[]	
Landing from an ILS	[]	
Crosswind Landing	[]	
Landing with 50% Powerplants Inoperative	[]	
From Circling Approach	[]	If required
Rejected Landing	[]	
Accuracy Landings (3) Single-Engine Only	[]	If no commercial

NOTE: Landings may be combined; however, a minimum of 3 must be accomplished.

NORMAL, ABNORMAL, AND EMERGENCY PROCEDURES—SAMPLE

[] Anti-Icing and Deicing; Hydraulic, Electrical, Pneumatic, and Other Systems Failures; Gear, Flaps, Control Systems; Navigation and Communications Equipment; Fire in Flight, Smoke Control; Decompression, Emergency Descent, Emergency Landing, and Evacuation.

BRIEFINGS

- [] A. Brief Applicant:
 - 1. Departure point, destination, route, weather.
 - 2. Aircraft weight and fuel load.
 - 3. Role of inspector.
 - 4. Use of crewmembers and autopilot (applicant is in command and must perform command duties successfully).
 - 5. Review minimums to be used on test.
- [] B. Brief Supporting Crewmembers:
 - 1. Crew will perform normal duties of their position.
 - 2. Will act in support role and not initiate – may be asked to delete calls, altitude alerts, etc.
 - 3. Duties of safety pilot.
- [] C. Safety Pilot Briefing:
 - 1. Touch-and-go procedures.
 - 2. Use of hood.
 - 3. Transfer of controls.
 - 4. Simulated emergencies.
 - 5. Response to an actual emergency.
 - 6. Engine failure on takeoff.
 - 7. Other specific events.

RESERVED. Paragraphs 5-863 through 5-880.