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Federal Aviation Administration
Washington, DC

Flight Standardization Board Report

Revision: 1
Date: XX/XX/XXXX

Manufacturer Textron Aviation, Inc.

Type Certificate Data Sheet (TCDS)	TCDS Identifier	Marketing Name	Pilot Type Rating
A00010WI	390	Premier 1 Models 390 RB-4 thru RB-101 and RB-103 thru RB-134. Premier 1A Models 390 RB- 102, RB-135, and after.	RA-390 RA-390S

Approved by the Aircraft Evaluation Division

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1. RECORD OF REVISIONS

Revision Number	Section(s)	Date
Original	All	12/02/2002
1	All	XX/XX/XXX

2. INTRODUCTION

Aircraft Evaluation Groups (AEG) are responsible for working with aircraft manufacturers and modifiers, during the development and Federal Aviation Administration (FAA) certification of new and modified aircraft to determine:

- 1) The pilot type rating,
- 2) Flightcrew member training, checking, and currency requirements, and
- 3) Operational suitability.

This report lists those determinations for use by:

- 1) FAA employees who approve training programs,
- 2) FAA employees and designees who certify airmen, and
- 3) Aircraft operators and training providers, to assist them in developing their flightcrew member training, checking, and currency.

3. HIGHLIGHTS OF CHANGE

Revision 1: Entire report converted to Section 508 compliance. No change bars were added; the entire report has been revised/updated.

4. BACKGROUND

The Small Aircraft AEG formed a Flight Standardization Board (FSB) in Wichita, KS on March 19, 2001 that evaluated the Textron Premier 1, Model 390 as defined in FAA Type Certificate Data Sheet (TCDS) No. A00010WI. The evaluation was conducted using the methods described in FAA Advisory Circular (AC) 120-53B, Guidance for Conducting and Use of Flight Standardization Board Evaluations.

5. ACRONYMS

- 14 CFR Title 14 of the Code of Federal Regulations
- AC Advisory Circular
- ACFT Aircraft
- ACS Airman Certification Standards
- AEG Aircraft Evaluation Group
- ATP Airline Transport Pilot
- AV Audiovisual Presentation
- CPT Cockpit Procedures Trainer

- FAA Federal Aviation Administration
- FFS Full Flight Simulator
- FMS Flight Management System
- FSB Flight Standardization Board
- FSBR Flight Standardization Board Report
- FSTD Flight Simulation Training Device
- FTD Flight Training Device
- HO Handout
- ICBI Interactive Computer-Based Instruction
- MDR Master Differences Requirements
- MFF Mixed Fleet Flying
- NAS National Airspace System
- PTT Part Task Trainer
- SIC Second in Command
- SU Stand-Up Instruction
- TC Type Certificate
- TCBI Tutorial Computer-Based Instruction
- TCDS Type Certificate Data Sheet
- V_{REF} Reference Landing Speed
- V_{S0} Stalling Speed or the Minimum Steady Flight Speed in the Landing Configuration

NOTE: Reference landing speed (V_{REF}) is the airspeed equal to the landing 50-ft point speed (1.23 stalling speed or the minimum steady flight speed in the landing configuration (V_{S0})) with flaps 30 and landing gear extended.

6. DEFINITIONS

These definitions are for the purposes of this report only.

- 6.1 Base Aircraft.** An aircraft identified for use as a reference to compare differences with another aircraft.
- 6.2 Current.** A crewmember meets all requirements to operate the aircraft under the applicable operating part.
- 6.3 Differences Tables.** Describe the differences between a pair of related aircraft, and the minimum levels operators must use to conduct differences training and checking of flightcrew members. Differences levels range from A to E.
- 6.4 Master Differences Requirements (MDR).** Specifies the minimum levels of training and checking required between a pair of related aircraft, derived from the highest level in the Differences Tables.
- 6.5 Mixed Fleet Flying (MFF).** The operation of a base aircraft and one or more related aircraft for which credit may be taken for training, checking, and currency events.

- 6.6 Operational Evaluation.** The AEG process to determine pilot type rating, minimum flightcrew member training, checking and currency requirements, and unique or special airman certification requirements (e.g., specific flight characteristics, no-flap landing).
- 6.7 Operational Suitability.** The AEG determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 121, 133, and 135).
- 6.8 Qualified.** A flightcrew member holds the appropriate airman certificate and ratings as required by the applicable operating part.
- 6.9 Related Aircraft.** Any two or more aircraft of the same make with either the same or different type certificates (TC) that have been demonstrated and determined by the Administrator to have commonality.
- 6.10 Seat-Dependent Tasks.** Maneuvers or procedures using controls that are accessible or operable from only one flightcrew member seat.
- 6.11 Special Emphasis Area.** A training requirement unique to the aircraft, based on a system, procedure, or maneuver, which requires additional highlighting during training. It may also require additional training time, specialized flight simulation training devices (FSTD), or training equipment.
- 6.12 Specific Flight Characteristics.** A maneuver or procedure with unique handling or performance characteristics that the FSB has determined must be checked.

7. PILOT TYPE RATING

- 7.1 Type Rating.** The Textron Model 390 Premier has two separate type rating designations.
- a) “RA-390” for those applicants requiring a second in command (SIC).
 - b) “RA-390S” for those applicants completing a practical test as a single pilot.
- 7.2 Common Type Ratings.** Not applicable.
- 7.3 Military Equivalent Designations.** Military aircraft that qualify for the RA-390/RA-390S type rating can be found at www.faa.gov under “Licenses & Certificates,” “Airmen Certification,” “Online Services,” “Aircraft Type Rating Designators.” This webpage is kept up-to-date and can be found at https://www.faa.gov/licenses_certificates/airmen_certification/.

8. RELATED AIRCRAFT

- 8.1 Related Aircraft on Same TCDS.** Not applicable.
- 8.2 Related Aircraft on Different TCDS.** Not applicable.

9. PILOT TRAINING

- 9.1 Airman Experience.** Airmen receiving initial Textron Model 390 Premier training should have previous training in high-altitude operations in multiengine turbojet or turboprop aircraft, new generation avionics, and flight management system (FMS) experience. Pilots without this experience may require additional training.
- 9.2 Special Emphasis Areas.** Pilots must receive special emphasis on, and perform the following areas during flight training: Lift Dump System. This item must be included in initial and recurrent training.
- 9.3 Specific Flight Characteristics.** Maneuvers or procedures required to be checked as referenced in the Airline Transport Pilot (ATP) and Type Rating for Airplane Airman Certification Standards (ACS), as applicable.
- NOTE:** There are no specific flight characteristics.
- 9.4 Seat-Dependent Tasks.** There are no seat-dependent tasks.
- 9.5 Regulatory Training Requirements Which Are Not Applicable to the Textron Model 390 Premier.** Title 14 CFR part 135, § 135.345(b)(3): Part 135 Ground Training, Propellers.
- 9.6 FSTDs.** There are no specific systems, procedures, or maneuvers that are unique to the Textron Model 390 Premier that require a specific FSTD for training.
- 9.7 Training Equipment.** There are no specific systems or procedures that are unique to the Textron Model 390 Premier that require specific training equipment.
- 9.8 Differences Training Between Related Aircraft.** Not applicable.

10. PILOT CHECKING

- 10.1 Landing from a No-Flap or Nonstandard Flap Approach.** The probability of flap extension failure on the Textron Model 390 Premier is not extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification or a § 61.58 proficiency check, § 91.1065 competency check, or § 135.293 competency check is required. Refer to Order 8900.1, Volume 5, Airman Certification, when the test or check is conducted in an aircraft versus an full flight simulator (FFS).
- 10.2 Specific Flight Characteristics.** Maneuvers or procedures required to be checked as referenced in the ATP and Type Rating for Airplane ACS, as applicable.
- NOTE:** There are no specific flight characteristics.
- 10.3 Seat-Dependent Tasks.** There are no seat-dependent tasks.
- 10.4 Other Checking Items.** Not applicable.

10.5 FSTD. There are no specific systems, procedures, or maneuvers that are unique to the Textron Model 390 Premier that require a specific FSTD for checking.

10.6 Equipment. There are no specific systems or procedures that are unique to the Textron Model 390 Premier that require specific equipment.

10.7 Differences Checking Between Related Aircraft. Not applicable.

11. PILOT CURRENCY

There are no additional currency requirements for the Textron Model 390 Premier other than those already specified in parts 61, 91, and 135.

11.1 Differences Currency Between Related Aircraft. Not applicable.

12. OPERATIONAL SUITABILITY

The Textron Model 390 Premier is operationally suitable for operations under parts 91 and 135. The list of operating rules evaluated is on file at the Small Aircraft AEG.

NOTE: The original model 390 Premier Flight Standardization Board Report (FSBR) incorrectly stated that the Premier does not have a separate alternate static source as required by part 135. Section 135.163(e) requires an alternate source of static pressure for the altimeter, airspeed, and vertical speed indicator. Section 135.163(e) does not require the static sources to be separate, but only to be alternate. The Premier was designed with a redundant static system that allows all sources requiring static air to receive air from two static ports. Operation of the static selector is “NORM” unless required to be in “ISOLATE” for the accomplishment of an abnormal procedure. Therefore, the Premier is compliant with § 135.163(e).

13. MISCELLANEOUS

13.1 Forward Observer Seat. Textron Model 390 Premier aircraft do not have a dedicated forward observer seat. No specific aircraft interior passenger seating configuration has been evaluated. A forward-facing passenger seat adjacent to the cabin entry door or second pilot seat may be acceptable for compliance with § 135.75(b).

13.2 Landing Minima Categories. Refer to 14 CFR part 97, § 97.3. The Textron Model 390 Premier is considered Category “B” aircraft for the purposes of determining normal “straight-in” landing weather minima. This is based on the maximum certificated landing weight V_{REF} for flaps “DN” (30°). The minimum indicated airspeed is V_{REF} for the selected flap position and the actual gross weight of the aircraft, plus any additional speed additives for the conditions during the approach, until aligned with the landing runway. If operating at a speed in excess of the upper limit of the speed range for the aircraft’s category, the minimums for the higher category must be used.

13.3 Normal Landing Flaps. The normal “final flap setting” per § 91.126(c) is Flaps “DN” (30°).

APPENDIX 1. DIFFERENCES LEGEND

Training Differences Legend

Differences Level	Type	Training Method Examples	Conditions
A	Self-Instruction	<ul style="list-style-type: none"> • Operating manual revision (handout (HO)) • Flightcrew operating bulletin (HO) 	<ul style="list-style-type: none"> • Crew has already demonstrated understanding on base aircraft (e.g., updated version of engine). • Minor or no procedural changes required. • No safety impact if information is not reviewed or is forgotten (e.g., different engine vibration damping mount). • Once called to attention of crew, the difference is self-evident.
B	Aided Instruction	<ul style="list-style-type: none"> • Audiovisual presentation (AV) • Tutorial computer-based instruction (TCBI) • Stand-up instruction (SU) 	<ul style="list-style-type: none"> • Systems are functionally similar. • Crew understanding required. • Issues need emphasis. • Standard methods of presentation required.
C	Systems Devices	<ul style="list-style-type: none"> • Interactive (full-task) computer-based instruction (ICBI) • Cockpit Procedures Trainers (CPT) • Part task trainers (PTT) • Level 4 or 5 flight training device (FTD 4-5) 	<ul style="list-style-type: none"> • Training can only be accomplished through systems training devices. • Training objectives focus on mastering individual systems, procedures, or tasks versus highly integrated flight operations or “real-time” operations. • Training devices are required to assure attainment or retention of crew skills to accomplish more complex tasks usually related to aircraft systems.
D	Maneuvers Devices	<ul style="list-style-type: none"> • Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B) 	<ul style="list-style-type: none"> • Training can only be accomplished in flight maneuver devices in a real-time environment. • Training requires mastery of interrelated skills versus individual skills. • Motion, visual, control-loading, and specific environmental conditions may be required.
E	Level C/D FFS or Aircraft	<ul style="list-style-type: none"> • Level C or D full flight simulator (FFS C-D) • Aircraft (ACFT) 	<ul style="list-style-type: none"> • Motion, visual, control-loading, audio, and specific environmental conditions are required. • Significant full-task differences that require a high fidelity environment. • Usually correlates with significant differences in handling qualities.

Checking Differences Legend

Differences Level	Checking Method Examples	Conditions
A	None	None
B	<ul style="list-style-type: none"> • Oral or written exam • Tutorial computer-based instruction (TCBI) self-test 	Individual systems or related groups of systems.
C	<ul style="list-style-type: none"> • Interactive (full-task) computer-based instruction (ICBI) • Cockpit Procedures Trainers (CPT) • Part task trainers (PTT) • Level 4 or 5 flight training device (FTD 4-5) 	<ul style="list-style-type: none"> • Checking can only be accomplished using systems devices. • Checking objectives focus on mastering individual systems, procedures, or tasks.
D	<ul style="list-style-type: none"> • Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B) 	<ul style="list-style-type: none"> • Checking can only be accomplished in flight maneuver devices in a real-time environment. • Checking requires mastery of interrelated skills versus individual skills. • Motion, visual, control-loading, and specific environmental conditions may be required.
E	<ul style="list-style-type: none"> • Level C or D full flight simulator (FFS C-D) • Aircraft (ACFT) 	Significant full-task differences that require a high fidelity environment.

APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE

Not Applicable.

APPENDIX 3. DIFFERENCES TABLES

Not Applicable.