



U.S. Department of Transportation
Federal Aviation Administration
Washington, DC

Flight Standardization Board Report

Revision: 4
Date: XX/XX/XXXX

Manufacturer Cirrus Design Corporation

Type Certificate Data Sheet (TCDS)	TCDS Identifier	Marketing Name	Pilot Type Rating
A00018CH	SF50 S/N 0004 and subsequent for aircraft part numbers 26000-001 and 26000-003 28,000 ft MSL	Vision Jet FL 280 Configuration	SF-50
A00018CH	SF50 S/N 0008, 0089, 0094, and subsequent except aircraft part number 26000-003 31,000 ft MSL	Vision Jet FL 310 Configuration	SF-50
A00018CH	SF50 S/N	Vision Jet FL 310 Configuration with CPDLC	SF-50

Approved by the Aircraft Evaluation Division
Federal Aviation Administration
General Aviation Branch
AFS-130
800 Independence Avenue, S.W.
Washington, DC 20591

Office Email: 9-AVS-AFS-100@faa.gov

TABLE OF CONTENTS

Section	Page
1. RECORD OF REVISIONS.....	3
2. INTRODUCTION.....	3
3. HIGHLIGHTS OF CHANGE	3
4. BACKGROUND	3
5. ACRONYMS	4
6. DEFINITIONS	5
7. PILOT TYPE RATING	6
8. RELATED AIRCRAFT	7
9. PILOT TRAINING.....	7
10. PILOT CHECKING.....	10
11. PILOT CURRENCY	10
12. OPERATIONAL SUITABILITY.....	12
13. MISCELLANEOUS	12
APPENDIX 1. DIFFERENCES LEGEND.....	13
APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE	15
APPENDIX 3 DIFFERENCES TABLES.....	16

1. RECORD OF REVISIONS

Revision Number	Section(s)	Date
Original	All	03/17/2017
1	9, 10, 12	08/07/2018
2	1, 3 thru 5, 8, 9, 10, 12, 13, Appendices 2 and 3	03/22/2019
3	All	05/18/2021
4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, Appendices 2 and 3	XX/XX/XXXX

2. INTRODUCTION

The Aircraft Evaluation Division (AED) is 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

The purpose of this revision is to address the installation of Controller-Pilot Data Link Communications (CPDLC), Visual Approach functionality, taxiway routing, an increase in Maximum Mach Operating Speed (M_{MO}), and a new passenger seating limitation to the Cirrus SF50 Vision Jet.

4. BACKGROUND

The AED General Aviation Branch (formerly the Small Aircraft AEG) formed a Flight Standardization Board (FSB) that evaluated the Cirrus SF50 Vision Jet as defined in FAA Type Certificate Data Sheet (TCDS) No. A00018CH. The evaluation was conducted in March 2026 with an FSB using the methods described in the current edition of FAA Advisory Circular (AC) 120-53, Flight Standardization Board Evaluations.

In March 2026, at the request of the Cirrus Design Corporation, an FSB was formed in Alcoa, TN for the purpose of evaluating the SF50 for the addition of Controller-Pilot Data Link Communications (CPDLC), SafeTaxi routing and Visual Approach functionality under Title 14 of the Code of Federal Regulations (14 CFR) part 91 and part 135. The aircraft

utilized was N735VJ, Serial No. 0735. This aircraft was randomly selected and it is representative of the SF50 fleet for the purpose of this FSB.

The FSB evaluated enhanced features that the manufacturer is incorporating into production aircraft. Many of these changes are minor improvements to the original certificated aircraft that do not significantly alter operations or procedures utilized in the original aircraft.

For the purpose of this report, manufactured aircraft that incorporate the new features are referred to as the SF50 Vision Jet FL 310 configuration with CPDLC. Aircraft not so equipped are referred to as the SF50 Vision Jet FL 280 or SF50 Vision Jet FL 310 configuration. An SF50 reference in this report would indicate that the information associated would apply to either configuration.

In September 2025, the Cirrus Design Corporation requested a revision of the Flight Standardization Board Report (FSBR) for the purpose of evaluating the SF50 FL 310 Configuration with CPDLC capabilities. Additional capabilities included SafeTaxi routing and a Visual Approach feature.

5. ACRONYMS

- 14 CFR Title 14 of the Code of Federal Regulations
- AC Advisory Circular
- ACFT Aircraft
- ACS Airman Certification Standards
- ADF Automatic Direction Finder
- AED Aircraft Evaluation Division
- AEG Aircraft Evaluation Group
- AFM Airplane Flight Manual
- AGL Above Ground Level
- AOA Angle of Attack
- ATP Airline Transport Pilot
- AV Audiovisual Presentation
- BLE Boundary Layer Energizer
- CAPS Cirrus Airframe Parachute System
- CAS Crew Alerting System
- CPDLC Controller-Pilot Data Link Communications
- CPT Cockpit Procedures Trainer
- EAL Emergency Autoland
- ECL Electronic Checklist
- EDM Emergency Descent Mode
- EFB Electronic Flight Bag
- EFIS Electronic Flight Instrument System
- ESP Electronic Stability and Protection
- EVS Enhanced Vision System
- FAA Federal Aviation Administration

- FADEC Full-Authority Digital Engine Control
- FFS Full Flight Simulator
- FL Flight Level
- FMS Flight Management System
- FSB Flight Standardization Board
- FSBR Flight Standardization Board Report
- FSTD Flight Simulation Training Device
- FTD Flight Training Device
- GNSS Global Navigation Satellite System
- HO Handout
- IAP Instrument Approach Procedure
- ICBI Interactive Computer-Based Instruction
- IFR Instrument Flight Rules
- ITT Interstage Turbine Temperature
- MDR Master Differences Requirements
- MFF Mixed Fleet Flying
- M_{MO} Maximum Operating Mach
- NAS National Airspace System
- PFD Primary Flight Display
- PIC Pilot in Command
- PIM Pilot Information Manual
- PTS Practical Test Standards
- PTT Part Task Trainer
- RVSM Reduced Vertical Separation Minimum
- SAS Stability Augmentation System
- SEIFR Single-Engine Instrument Flight Rules
- SFO Single-Engine Flameout
- SRM Single-Pilot Resource Management
- STD Standard
- SU Standup Instruction
- TC Type Certificate
- TCBI Tutorial Computer-Based Instruction
- TCDS Type Certificate Data Sheet
- W&B Weight and Balance

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 AED 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 AED determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., 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 Cirrus Vision Jet type rating designation is SF-50.
- 7.2 Common Type Ratings.** Not applicable.
- 7.3 Military Equivalent Designations.** Military aircraft that qualify for the SF-50 designation type rating can be found on the FAA Airmen Certification web page at https://www.faa.gov/licenses_certificates/airmen_certification under “Quick Links,” “Pilot Certificate Aircraft Type Designations.” This document is kept up-to-date and can be accessed directly at <https://registry.faa.gov/typeratings/>.

8. RELATED AIRCRAFT

8.1 Related Aircraft on Same TCDS. The SF50 Vision Jet FL 280 and SF50 Vision Jet FL 310 configurations are related to the SF50 Vision Jet FL 310 configuration with CPDLC.

8.2 Related Aircraft on Different TCDS. Not applicable.

9. PILOT TRAINING

9.1 Airman Experience. The SF50 is a single-engine turbojet aircraft outfitted with a technologically advanced integrated avionics installation. This report was predicated upon the airman holding a private pilot certificate in the airplane category with a single-engine land class rating and an instrument airplane rating. Airmen entering SF50 training should have recent flight experience in accordance with 14 CFR part 61, § 61.57 and be proficient with instrument cross-country flight planning. Airmen should have training in technologically advanced aircraft equipped with a flight management system (FMS) or a Global Navigation Satellite System (GNSS) and Single-Pilot Resource Management (SRM). Pilots without this experience may require additional training.

9.2 Special Emphasis Areas.

9.2.1 Pilots must receive special emphasis on the following areas during ground training:

- a) SRM, risk assessment, and risk management. Initial training/recurrent training.
- b) Crew Alerting System (CAS). Initial training/recurrent training.
- c) Full-authority digital engine control (FADEC). Initial training/recurrent training.
- d) Cirrus Perspective Touch™ by Garmin Integrated Avionics System. Initial training/recurrent training.
- e) Autothrottle system. Initial training/recurrent training.
- f) Stall protection system (e.g., stick shaker/pusher visual and aural warnings, angle of attack (AOA) gauge). Initial training/recurrent training.
- g) Flight controls and electronic stability and protection (ESP) system to include underspeed, overspeed, pitch nose high/low, and overbank with and without autopilot on. Initial training/recurrent training.
- h) Yaw and stability augmentation system (SAS). Initial training/recurrent training.

- i) Ice protection systems to include icing condition preflight check. Initial training/recurrent training.
- j) Cirrus Airframe Parachute System (CAPS) function and deployment strategy. Initial training/recurrent training.
- k) EAL function, operation, and passenger briefing. Initial training/recurrent training.
- l) Aircraft optional items such as Enhanced Vision System (EVS), XM Sirius, CPDLC, Iridium Communications, SafeTaxi routing and Visual Approach functionality as equipped. Initial training/recurrent training.

9.2.2 Pilots must receive special emphasis on, and perform the following areas during flight training:

- a) Exterior inspection of wing Boundary Layer Energizer (BLE), aileron fences root vortex generators, and T strips affixed to wings, tail, and control surfaces. Initial training/recurrent training.
- b) Cirrus Perspective Touch™ by Garmin initialization and programing to include database usage and flight plan routing, instrument approaches, and holds. Initial training/recurrent training.
- c) Autothrottle system. Initial training/recurrent training.
- d) Slow flight. Initial training/recurrent training.
- e) Stall prevention with recovery at the first indication of stall, and stall recovery with use of stick pusher activation. For the purposes of the Airline Transport Pilot (ATP) and Type Rating for Airplane Airman Certification Standards (ACS), activation of the stick pusher should be considered full stall. Stalls should be trained with and without the autopilot activated. Initial training/recurrent training.
- f) Electronic checklist (ECL) procedures. Initial training/recurrent training.
- g) Flight by reference to instruments in reversionary mode. Initial training/recurrent training.
- h) Pilot awareness of turbojet spool-up times in maneuvers such as balked landing, go-arounds with and without autopilot engaged. Initial training/recurrent training.
- i) Engine failure procedures to include single-engine flameout (SFO) and CAPS deployment simulated if training is being conducted in the airplane in flight. Initial training/recurrent training.

- j) Taxi, takeoff, and rollout procedures in normal and crosswind conditions practicing use of differential braking to steer with additional emphasis on brake limitations. Initial training/recurrent training.

9.3 Specific Flight Characteristics. Maneuvers or procedures required to be checked as referenced in the ATP and Type Rating for Airplane Category ACS (FAA-S-ACS-11). There are no specific flight characteristics.

9.4 Seat-Dependent Tasks. There are no seat-dependent tasks. The Airplane Flight Manual (AFM) requires one pilot and does not specify which seat the pilot should occupy during operations.

9.5 Regulatory Training Requirements Which Are Not Applicable to the SF50.

- Ditching—14 CFR part 91, § 91.1083(c)(1), § 135.331(c)(1).
- Evacuation chutes/slides—14 CFR § 91.1083(c)(4), § 135.331(c)(4).
- Life rafts—14 CFR § 91.1083(c)(6), § 135.331(c)(6).
- Life vests—14 CFR § 91.1083(c)(7), § 135.331(c)(7).
- Propellers—14 CFR § 135.345(b)(3).

9.6 Flight Simulation Training Devices (FSTD). There are no specific systems, procedures, or maneuvers that are unique to the SF50 that require a specific FSTD for training.

9.7 Training Equipment. There are no specific systems or procedures that are unique to the SF50 that require specific training equipment.

9.8 Differences Training Between Related Aircraft. Pilots must receive differences training between the SF50 Vision Jet FL 280 configuration, SF50 Vision Jet FL 310 configuration and SF50 Vision Jet FL 310 configuration with CPDLC. The level of training is specified in Appendix 3, Differences Tables.

9.9 Special Considerations for Training in Actual Aircraft. The FSB identified the following special considerations when conducting SF50 flight training:

- a) No-flap landings. May be trained in the aircraft. If trained in the aircraft, the instructor must be attentive to airspeed control, available runway length, and surface condition. The instructor must also observe brake limitations while conducting this training.
- b) Stick pusher system. The FSB recommends that all pilots in SF50 training practice and demonstrate this system in flight or in a full flight simulator (FFS) and understand that an altitude loss in a stall can be significant if the stick pusher activates. During stall recovery training with stick pusher activation, altitude loss in excess of 500 to 1,000 ft should be expected. It is recommended that training maneuvers for stalls up to stick pusher be initiated at an altitude to allow complete recovery no lower than 3,000 ft above ground level (AGL).

- c) Forward slips. During the SF50 evaluation, the FSB discovered an unfavorable stall protection system reaction during the input of a forward slip. The FSB recommends that all pilots in SF50 training avoid the use of forward slips or any other uncoordinated flight during operations below 200 ft AGL when the yaw damper is automatically disengaged.

10. PILOT CHECKING

10.1 Landing from a No-Flap or Nonstandard Flap Approach. The probability of flap extension failure on the SF50 is not extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification is required. During a 14 CFR § 61.58 proficiency check, § 91.1065 competency check, or § 135.293 competency check, this task may be required. Refer to Order 8900.1, Volume 5, Airman Certification, when the test or check is conducted in an aircraft versus an FFS. If checked in the aircraft, the evaluator must be attentive to airspeed control and available runway length and surface condition. The evaluator must also observe brake limitations while conducting this checking.

10.2 Specific Flight Characteristics. Maneuvers or procedures required to be checked as referenced in the ATP and Type Rating for Airplane Category ACS. There are no specific flight characteristics.

10.3 Seat-Dependent Tasks. There are no seat-dependent tasks.

10.4 Other Checking Items.

10.4.1 Plans of action. Evaluators are encouraged to draw from the special emphasis areas in subparagraph 9.2 to develop their plans of action for checking in this aircraft.

10.4.2 Pilots operating aircraft with EAL or MFF of EAL and non-EAL aircraft should be checked during the oral portion on their knowledge and understanding of the operation and function of this system. In particular, the integration between EAL and other automated aircraft systems to include Emergency Descent Mode (EDM) should be checked.

10.4.3 Forward slip to a landing. The FSB evaluated this maneuver and does not recommend the forward slip or significant sustained uncoordinated flight in the SF50. The AED recommends that this maneuver be omitted on the SF50 type rating practical test. If the SF-50 type rating practical test is conducted concurrently with any other practical test (i.e., combined SF-50 type rating with the initial issuance of a commercial pilot certificate), this maneuver must be trained and checked in a separate airplane capable of the maneuver.

NOTE: During the FSB, the pilot had to manually deactivate the automatic yaw damper system during this event. The slip caused erroneous AOA indications and initiated stall warning and stick shaker events.

- 10.4.4 Power off 180-degree accuracy approach and spot landing. The FSB evaluated this maneuver and does not recommend the maneuver be performed in the SF50. The AED recommends that this maneuver be omitted on the SF50 type rating practical test. If the SF50 type rating practical test is conducted concurrently with any other practical test (i.e., combined SF50 type rating with the initial issuance of a commercial pilot certificate), this maneuver must be trained and checked in a separate airplane capable of the maneuver.

NOTE: During the FSB, the maneuver was flown in accordance with the ATP and Aircraft Type Rating Practical Test Standards (PTS) for Airplane. Several risks were identified. The PTS required this maneuver to be performed from an altitude of 1,000 ft AGL or less. Flying the maneuver starting at 1,000 ft AGL required the pilot to place the aircraft on downwind closer to the runway than desired. Due to the closeness of the downwind leg, the turns to base and final were greater than 30° of bank. In addition, it was noted that, if the pilot needed to arrest the descent and reject the maneuver, timely application of thrust would be critical. ACS has replaced PTS and the current ACS standard for this maneuver no longer specifies 1,000 ft AGL as the entry altitude. The recommended traffic pattern altitude by Cirrus for the SF50 is 1,500 ft AGL. Since the conclusion of the original FSB, Cirrus has changed the strategy for the deployment of the CAPS. Below 600 ft AGL, the CAPS must not be deployed, and Cirrus recommends limited maneuvering and does not recommend a 180-degree turn at those altitudes. Between 600 ft AGL and 2,000 ft AGL, CAPS should be deployed immediately if the engine fails. Above 2,000 ft AGL, Cirrus has recommended that the pilot has the time and altitude to assess the situation to determine the best course of action.

- 10.4.5 The SF50 is certificated in accordance with 14 CFR part 23 in the normal category. All non-aerobatic maneuvers other than the waived maneuvers listed above and contained in the limitations section of the AFM may be performed.

10.5 FSTDs. There are no specific systems, procedures, or maneuvers that are unique to the SF50 that require a specific FSTD for checking.

10.6 Equipment. There are no specific systems or procedures that are unique to the SF50 that require specific equipment.

10.7 Differences Checking Between Related Aircraft. Pilots must receive differences checking between the SF50 Vision Jet FL 280 configuration, SF50 Vision Jet FL 310 configuration and SF50 Vision Jet FL 310 configuration with CPDLC. The level of checking is specified in Appendix 3.

11. PILOT CURRENCY

There are no additional currency requirements for the SF50 other than those already specified in 14 CFR parts 61 and 135. If a pilot has not flown the SF50 within 180 days, the FSB recommends the pilot regain proficiency by flying with an appropriately rated

instructor either in the aircraft or FSTD with emphasis on operation of the Cirrus Perspective Touch™ by Garmin Integrated Avionics System.

11.1 Differences Currency Between Related Aircraft. Not applicable.

12. OPERATIONAL SUITABILITY

The SF50 is suitable for operations under 14 CFR parts 91 and 135, including single-engine instrument flight rules (SEIFR) passenger-carrying operations. The list of operating rules evaluated is on file at the AED General Aviation Branch.

13. MISCELLANEOUS

13.1 Forward Observer Seat. The SF50 is a single-pilot aircraft and the primary forward observer seat would be the right flight deck seat. In the event that right flight deck seat would be occupied during a check, the SF50 has a middle row designated by the Cirrus AFM and Pilot Information Manual (PIM) as seats 3, 4, and 5. Seats 3, 4, and 5 would be alternate observer seats. The FSB evaluated and determined that these seats are suitable for observing checks.

13.2 Aircraft Approach Category. The SF50 is considered a Category A aircraft for the purposes of determining the appropriate instrument approach procedure (IAP) category in accordance with 14 CFR § 97.3.

13.3 Normal Landing Flaps. The SF50 normal “final flap setting” per 14 CFR § 91.126(c) is 100 percent for normal conditions and 50 percent for operations in icing conditions or crosswind conditions per the AFM.

13.4 Electronic Flight Bag (EFB).

13.4.1 The EFB was evaluated during the FSB. The current editions of AC 120-76, Authorization for Use of Electronic Flight Bags and AC 91-78, Use of Electronic Flight Bags, were utilized in the review of the SF50 EFB. The Cirrus Perspective Touch™ by Garmin Integrated Avionics System contains a navigation database and approach charts as well as an ECL. This system was found to be suitable for all approved operations.

13.4.2 The manufacturer also requested review of an electronic AFM, PIM, and aircraft Weight and Balance (W&B) data on a Class 1 hardware device with Type B EFB software. The FSB determined that this system is operationally suitable for use in the SF50. It is noted that the operator/pilot in command (PIC) is responsible for ensuring that the latest revision of all required charts, manuals, and forms are on board the aircraft prior to flight and kept up-to-date. In addition, it is the pilot’s responsibility to determine and ensure the battery life of the electronic AFM/PIM device is sufficient for the flight.

APPENDIX 1. DIFFERENCES LEGEND

Training Differences Legend

Differences Level	Type	Training Method Examples	Conditions
A	Self-Instruction	• Operating manual revision (handout (HO)) • Flightcrew operating bulletin (HO)	• 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	• Audiovisual presentation (AV) • Tutorial computer-based instruction (TCBI) • Stand-up instruction (SU)	• Systems are functionally similar. • Crew understanding required. • Issues need emphasis. • Standard methods of presentation required.
C	Systems Devices	• 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)	• 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	• Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B)	• 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	• Level C or D full flight simulator (FFS C-D) • Aircraft (ACFT)	• 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	• Oral or written exam • Tutorial computer-based instruction (TCBI) self-test	Individual systems or related groups of systems.
C	• 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)	• Checking can only be accomplished using systems devices. • Checking objectives focus on mastering individual systems, procedures, or tasks.
D	• Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B)	• 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	• 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

These are the minimum levels of training and checking required, derived from the highest level in the Differences Tables in Appendix 3. Differences levels are arranged as training/checking.

To Related Aircraft ↓	From Base Aircraft →	SF50 Vision Jet FL 280 Configuration	SF50 Vision Jet FL 310 Configuration	SF50 Vision Jet FL 310 Configuration with CPDLC
SF50 Vision Jet FL 280 Configuration		Not Applicable	Not Evaluated	Not Evaluated
SF50 Vision Jet FL 310 Configuration		D/D	Not Applicable	B/B
SF50 Vision Jet FL 310 Configuration with CPDLC		Not Evaluated	B/B	Not Applicable

NOTES:

- (1) Installation of EAL System is B/B.
- (2) Installation of radar altimeter system is B/B.

APPENDIX 3. DIFFERENCES TABLES

This Design Differences Table, from the SF50 Vision Jet FL 280 configuration to the SF50 Vision Jet FL 310 configuration, was proposed by Cirrus Design Corporation and validated by the FSB in September 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: SF50 Vision Jet FL 280 Configuration TO RELATED AIRCRAFT: SF50 Vision Jet FL 310 Configuration	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Autothrottle	Added autothrottle system to autopilot function. Autothrottle control panel added to power quadrant. Autothrottle primary flight display (PFD) status indications added. Autothrottle CAS messages added.	No	Yes	D	D
	Aircraft Limitations and Aircraft Performance	Max operating altitude raised to FL 310. Performance differences related to higher true airspeed and lower fuel consumption. Increase in payload by 150 lb.	No	Yes	B	B
	Limitations Engine	Interstage Turbine Temperature (ITT) limits adjusted to Williams FJ33-5A engine due to operations at FL 310.	No	No	B	A

FROM BASE AIRCRAFT: SF50 Vision Jet FL 280 Configuration TO RELATED AIRCRAFT: SF50 Vision Jet FL 310 Configuration	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	New Aileron Design	Removal of static aerodynamic devices.	Yes	No	B	A
	Cabin Design Changes and New Optional Features	Cabin seats altered and optional seating available with executive console. Door seal redesign.	No	No	B	B
	Flight Instruments	Added instrument flight rules (IFR) Low and High charts and sectional charts to map menus. Font and graphics changes to Electronic Flight Instrument System (EFIS) screens. Automatic Direction Finder (ADF) added as an option.	No	No	B	A
	Electrical Panel Change	Change in overhead panel deleting switch no longer required. Aircraft battery change.	No	Yes	B	A
	Minor Changes in Design Not Affecting Limitations or Procedures		No	No	B	A

This Maneuver Differences Table, from the SF50 Vision Jet FL 280 configuration to the SF50 Vision Jet FL 310 configuration, was proposed by Cirrus Design Corporation and validated by the FSB in September 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: SF50 Vision Jet FL 280 Configuration TO RELATED AIRCRAFT: SF50 Vision Jet FL 310 Configuration	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Visual and Instrument Departure	With autothrottle ON.	No	Yes	D	D
	Climb and Descent	With autothrottle ON.	No	Yes	D	D
	Visual and Instrument Approach to Landing	With autothrottle ON.	No	Yes	D	D

This Design Differences Table, from the SF50 Vision Jet FL 310 Configuration to the SF50 Vision Jet FL 310 Configuration with CPDLC, was proposed by Cirrus Design Corporation and validated by the FSB in March 2026. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: SF50 Vision Jet FL 310 Configuration TO RELATED AIRCRAFT: SF50 Vision Jet FL 310 with CPDLC Configuration	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Controller-Pilot Data Link Communications (CPDLC)	Datalink communications are integrated with Garmin avionics suite.	No	Yes	B	B
	Increased M _{MO}	Increase from .53 Mach to .54 Mach at certain altitudes.	No	No	B	B
	Passenger Seating Limitations	No limitations on seats 6 and 7, the rear bench seat now limits passengers based on fit.	No	No	B	B
	Black De-Icing Boots	Black deicing boots are now an option.	No	No	A	A
	Louver for Air Conditioning System	The Air Conditioning door has been replaced by a louver panel.	No	No	A	A
	Taxiway Routing	Taxiway route feature in the Garmin avionics suite allows pilots to program assigned taxi route.	No	Yes	B	B

FROM BASE AIRCRAFT: SF50 Vision Jet FL 310 Configuration TO RELATED AIRCRAFT: SF50 Vision Jet FL 310 with CPDLC Configuration	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Visual Approach Functionality	Visual approach guidance includes base and downwind legs.	No	No	B	B
	Total and Flight Time Readings Moved	The flight and total times are now only displayed in the avionics on the status page.	No	Yes	A	A
	Altimeter Setting Transition	The altimeter will switch to and from STD when transitioning to and from Class A airspace.	No	Yes	A	A
	New Wingtips	Wingtips have been redesigned, with no change to inspection criteria.	No	No	A	A