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Cessna 680 CE-680, 680+

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RECORD OF REVISIONS

Revision Number	Sections	Pages Affected	Date
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Revision 1	All	All	12/10/2010
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HIGHLIGHTS OF CHANGE

Original Issue Established Type Rating

Revision 1 Added EFB evaluation, MDR tables, and ODR tables

Revision 2 Added Garmin 5000 Integrated Flight Suite with Synthetic Vision, Differences Training requirements, reformatted document.

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1. PURPOSE AND APPLICABILITY

1.1 Primary Purpose. The primary purpose of this report is to specify Federal Aviation Administration (FAA) master training, checking and currency requirements applicable to flight crews operating Cessna Model 680 (CE-680) aircraft. This report can assist Title 14 Code of Federal Regulation (14 CFR) part 91 subpart K (91K) fractional ownership program, part 135 air carrier operators and part 142 training centers in the development and approval of the training programs by their Principal Operations Inspector (POI) and FAA Training Center Program Managers (TCPM).

Note: All regulatory references within this report are found in 14 CFR, unless otherwise indicated.

The guidelines in this report also apply to operations inspectors, Aircrew Program Managers (APM), 14 CFR part 135 air carrier check airmen and instructors, airline transport pilots instructing in air transportation service, certificated flight and ground instructors, aircrew program designees, Training Center Evaluators (TCE), and part 61, 135, 141 and 142 training providers.

This report also provides information which is advisory in nature, but may be mandatory (under part 91K management specifications and part 135 operation specifications) if the designated configurations apply and if approved for that operator.

Provisions of this report:

- a) Identify Pilot "type rating" requirements assigned to the CE-680,
- b) Describe any unique requirement applicable to initial, transition, upgrade, or recurrent training,
- c) Describe "Master Difference Requirements (MDR)" for flight crews requiring differences qualification for mixed-fleet-flying or transition,
- d) Provide examples of acceptable "Operator Difference Requirements (ODR)" tables,
- e) Describe acceptable training program and training device characteristics when necessary to establish compliance with applicable MDR table,
- f) Identify checking and currency standards to be applied by FAA or operators,
- g) Report Electronic Flight Bag (EFB) evaluations, and
- h) Provide a listing of regulatory compliance status (compliance checklist) for the pertinent 14 CFR, Advisory Circulars (AC), and other operationally related criteria that was reviewed and evaluated by the Aircraft Evaluation Group (AEG).

1.2 This report addresses CE-680 series aircraft as specified in the FAA Type Certificate Data Sheet (TCDS) #T00012WI. This report is applicable to all training and checking in the aircraft as well as currency and experience requirements.

1.3 The provisions of this Flight Standardization Board (FSB) report are effective until amended, superseded, or withdrawn by subsequent revisions to this report.

1.4 Determinations made in this report are based on the evaluations of specific CE-680 aircraft equipped in a given configuration and in accordance with current regulations and guidance. Modifications and upgrades made to the models described herein, or introduction of new related aircraft, may require amendment of the findings in this report. The FSB reserves responsibility/authority to re-evaluate and modify sections of this report based on new or revised Advisory Circular material or revisions to parts 91, and 135, aircraft operating experience, or the testing of new or modified aircraft under the provisions of AC 120-53, Guidance for Conducting and Use of Flight Standardization Board Evaluations, as amended.

1.5 Relationship between this FSB report and an AQP program. Differences between this FSB report and an operator's proposed training, checking, and currency requirements under an Advanced Qualification Program (AQP), must be justified and documented as part of the applicant's AQP approval process. Program approvals under AQP need to ensure the basic provisions and requirements of this report have been addressed and, where necessary, coordination with the appropriate Flight Standardization Board has been completed.

1.6 Terminology. The term "must" is used in this FSB report and certain MDR footnotes, if used, even though it is recognized that this report (as well as AC 120-53A, on which it's based) provides one acceptable means, but not necessarily the only means of compliance with part 91K or part 135. The term "must" acknowledges the need for operators to fully comply with this FSB report and MDR and ODR provisions of AC 120-53, are to be used by the operator as the means of complying with part 91K and part 135.

1.7 This report includes:

- a) Minimum training, checking, and currency requirements for operator programs for approval by FAA field offices, (e.g. MDRs, Type Rating designations, etc.),
- b) General advisory information which may be approved for that operator (e.g., MDR footnotes, acceptable ODR tables),
- c) Information which is used to facilitate FAA review of an aircraft type or related aircraft that is proposed for use by an operator (e.g., compliance checklist), and
- d) Requirement for Inspectors and Designees/Check Airmen to receive initial and recurrent training on both CE-680 (#0001 thru 0500) and CE-680+ (#0501 and On), to administer checks.

Various sections of this report are qualified as to whether compliance (considering the provisions of AC 120-53) is required or is advisory in nature.

1.8 This report also provides:

Information which is advisory in nature, but may be mandatory (under 14 CFR part 91K Management Specifications or part 135 operations specifications for particular operators) if the designated configurations apply and if approved for that operator.

1.9 Relevant acronyms are defined as follows:

14 CFR	Title 14, Code of Federal Regulations
AC	Advisory Circular
ACO	Aircraft Certification Office
ADS	Automatic Dependent Surveillance
AEG	Aircraft Evaluation Group
AFM	Airplane Flight Manual
AFS	Flight Standards Service
ANP	Actual Navigation Performance
APD	Aircrew Program Designee
APM	Aircrew Program Manager
AP	Autopilot
APM	Aircrew Program Manager
AQP	Advanced Qualification Program
ASI	Aviation Safety Inspector
AT	Automatic Thrust System
ATD	Aviation Training Device
ATP	Airline Transport Pilot
CAT II	ILS Category II Instrument Approach
CCD	Cursor Control Device
CFR	Code of Federal Regulations
CHDO	Certificate Holding District Office
CNS	Communications, Navigation, and Surveillance
CPDLC	Controller Pilot Data Link Communication
DC	Display Controller
DP	Departure Procedure
EFB	Electronic Flight Bag
EFIS	Electronic Flight Instrument System
EGPWS	Enhanced Ground Proximity Warning System
EICAS	Engine Indicating and Crew Alerting System
FAA	Federal Aviation Administration
FADEC	Full Authority Digital Engine Control
FANS	Future Air Navigation Systems
FFS	Full Flight Simulator
FGS	Flight Guidance System
FMA	Flight Mode Annunciator

FMS	Flight Management System
FSB	Flight Standardization Board
FTD	Flight Training Device
GTC	Garmin Touchscreen Controller
IPT	Integrated Procedures Trainer
IMC	Instrument Metrological Conditions
IRS	Inertial Reference System
LOE	Line Oriented Evaluation
LOFT	Line Oriented Flight Training
MMEL	Master Minimum Equipment List
MCDU	Multi-Function Control Display Units
MDR	Master Differences Requirements
MFD	Multi-Function Display
MFF	Mixed Fleet Flying
MKC-AEG	Kansas City Aircraft Evaluation Group
NSP	National Simulator Program
ODR	Operator Differences Requirements
PF	Flying Pilot
PFD	Primary Flight Display
PIC	Pilot in Command
PNF	Pilot Not Flying
POI	Principal Operations Inspector
PTS	Practical Test Standard
QRH	Quick Reference Handbook
RFMU	Radio Frequency Management Unit
RVSM	Reduced Vertical Separation Minimum
SIC	Second-in-Command
SOE	Supervised Operating Experience
STAR	Standard Terminal Arrival Route
SVS	Synthetic Vision System
TAWS	Terrain Awareness and Warning System
TCAS	Traffic Alert and Collision Avoidance System
TCDS	Type Certificate Data Sheet
TCE	Training Center Evaluator
TCPM	Training Center Program Manager
VMC	Visual Metrological Conditions
VNAV	Vertical Navigation
V ₁	Takeoff Decision Speed
V _R	Takeoff Rotation Speed
V ₂	Takeoff Safety Speed
V _{REF}	The airspeed equal to the landing 50-foot point speed (1.23 VSR0) with flaps 35° and landing gear extended.
91K	14CFR Part 91 Subpart K

2. PILOT "TYPE RATING" REQUIREMENTS

2.1 Pilot-In Command Type Rating. In accordance with the provisions of parts 1, 61, 91, 91K and 135, the specific pilot type rating assigned to the CE-680 aircraft is designated "CE-680"

2.2 Second-In-Command (SIC) Type Rating. In accordance with the provisions of § 61.55, FAA Order 8900.1 Volume 5 Chapter 2, Section 5, Paragraph 5-325, a SIC Privileges Only type rating can be issued as "CE-680" with Limitation for "CE-680 SIC Privileges Only".

3. "MASTER DIFFERENCE REQUIREMENTS" (MDR)

3.1 Common Requirements (All CE-680).

3.1.1. Autopilot Engage Altitudes. As referenced by approved AFMs, the CE-680 has specifically been evaluated for autopilot suitability for engagement at or above 400 feet AGL during takeoff. Autopilot engaged takeoff is not authorized.

3.1.2. Minimum Altitude for Autopilot Use/Non-Precision Approaches. The CE-680 has specifically been evaluated for autopilot suitability for continued use during non-precision approaches to an altitude of not less than 200 feet AGL.

3.1.3 Landing Minima Categories § 97.3. The CE-680 is considered Category "B" aircraft for the purposes of determining normal "straight-in" landing weather minima. For circling, the minima to be used are as specified in operations specifications for each operator as follows:

- a) For operators with Automated Standard Operations Specifications (Paragraph C53(c)), circling minimums are as specified for the actual approach speed (KIAS) to be used for a circling maneuver, or
- b) If automated operations specifications have not been issued, circling minimums are as designated by current Standard Operations Specifications and the pertinent § 97.3.

3.1.4 Normal "Final Landing Flap Setting". The normal "final landing flap setting" per § 91.126(c) is considered to be "Flaps 35/Full" for all CE-680 aircraft.

3.2 Master Difference Requirements.

3.2.1 Requirements for particular CE-680 Related Aircraft Combinations. Master Difference Requirements (MDRs) for related aircraft of the CE-680 are shown in Appendix 1. These provisions apply when differences between related aircraft exist which affect flight crew knowledge, skills, or abilities related to flight safety (e.g., Level A or greater differences as defined in AC 120-53, as amended).

3.2.2 MDR Footnotes. Footnotes to MDR requirements define acceptable "required means" or "alternate means" of compliance. A footnote can indicate requirements that are less restrictive than the basic designation, or more restrictive than the basic designation, depending on the significance of the differences between related aircraft.

4. "OPERATOR DIFFERENCE REQUIREMENTS" (ODR) TABLES

4.1 ODR Tables. ODR tables are developed by each individual part 91K and part 135 operator when differences exist which affect crew qualification. ODR tables are used to show an operator compliance methods. Detailed generic sample ODR tables are on file with the Kansas City AEG. Copies are available on request. These ODR tables are provided as generic tables, and therefore may not include items that are applicable to particular operators.

4.2 Operator Preparation of ODR Tables. Operators flying a "mixed fleet" of CE-680 (#0001 thru 0500) and CE-680+ (#0501 and On) aircraft must have approved ODR tables pertinent to their fleet. The POI should coordinate this action with the FSB Chair, AFS-200 and AFS-800 (as appropriate).

4.3 ODR Table Coordination. Unless identical or equivalent ODR tables have been previously approved by the FAA, new ODR tables proposed by operators should be coordinated with the FSB prior to FAA approval and implementation. FSB coordination ensures consistent treatment of related CE-680 aircraft between various operators, and compatibility of each ODR table with MDR provisions.

4.4 ODR Table Distribution. Original FAA approved ODR tables are to be retained by the operator. Copies of FAA approved ODR tables are to be retained by the Certificate Holding District Office (CHDO) and should be provided to the CE-680 FSB Chair at the Kansas City Aircraft Evaluation Group (AEG).

5. FSB SPECIFICATIONS FOR TRAINING

5.1 General

5.1.1 Assumptions Regarding Airmen's Previous Experience. The provisions of this Section apply to programs for airmen who have experience in part 91K or part 135 operations, former military, commuter or corporate pilots and multi-engine transport turbojet aircraft, including glass cockpit and FMS experience. For airmen not having this experience, additional requirements may be appropriate as determined by the POI, TCPM, FSB, and/or AFS-200/800.

5.1.2 Training for Seat Dependent Tasks. Accomplishment of certain tasks, procedures, or maneuvers requires training of a crewmember for a particular crew position (e.g. captain, first officer, international relief officer, check airman, etc.). Training programs should recognize and address the necessary seat/position related tasks for the applicable crewmember. Accordingly, training programs should address seat dependent tasks or maneuvers to the extent necessary to satisfy crew qualification objectives and should be in accordance with ODR tables when applicable.

5.1.3 Second-In-Command Training. Flight Crews qualify to serve as SIC must accomplish certain tasks, procedures or maneuvers for the SIC crew position. Training programs should address all training elements of § 61.55. SIC Pilot Type Rating may be issued in accordance with § 61.55, provided training tasks stipulated by this report, are also completed.

5.1.4 Future Air Navigation Systems (FANS)/RNP/ANP/CNS/CPDLC/ADS. Flight Crews operating aircraft equipped with FANS software should receive appropriate instruction in its general operational functions, appropriate uses for areas of operation, routes, or procedures to be flown. General training should address communications, navigation, and surveillance (CNS) functions covered by FANS, RNP, and ANP. In addition, sufficient training in use of data link communication and Automatic Dependent Surveillance (ADS) to ensure adequate knowledge, skill, and proficiency for flight crews to operate the above system(s) in typical daily operations (requiring their use) should be provided.

5.2 Pilots Initial, Transition and Upgrade Training

5.2.1 Pilots Initial, Transition and Upgrade Ground Training. Initial, transition, or upgrade ground training for the CE-680 is accomplished as specified by §§ 61.155, 91.1101 and 135.345.

5.2.2 Pilots Initial, Transition and Upgrade Flight Training. Initial, transition, or upgrade flight training for the CE-680 is accomplished as specified by §§ 61.157, 91.1103 and 135.347.

5.2.3 Crewmember Emergency Training. Crewmember emergency training should be conducted for the CE-680 in accordance with part 61, part 91K and part 135. The objective of emergency training for the CE-680 aircraft is to provide crewmembers with the necessary knowledge concerning emergency equipment, situations, and procedures, to ensure implementation of the correct actions in the event of an emergency.

Emergency training consists of instruction on the location, function, and operation of emergency equipment that is different in each related aircraft of the CE-680 and from other aircraft in the operator's fleet. Where emergency equipment is common, instruction may be adjusted for crewmembers qualified and current on this equipment, provided records are available which demonstrate that crewmembers meet §§ 91.1083 or 135.331 requirements. For example, if the fire extinguishers are common to fire extinguishers on other aircraft in the operator's fleet, training may be simultaneously credited for both aircraft. Conversely, for equipment that is unique to the CE-680, training on the emergency equipment for each related aircraft is required. Emergency training also consists of instruction in crewmember emergency assignments and procedures including crew coordination and communication, the handling of emergency or other unusual situations, and emergency performance and observation drills that are specific to each related aircraft of the CE-680.

In accordance with §§ 91.1083, 135.331 and FAA Order 8900.1, Volume 3, Chapter 19, Section 4, emergency training requirements refer to two types of training: "general" emergency training and "aircraft-specific" emergency training. General emergency training is instruction on those emergency items that are common to all CE-680 aircraft in the operator's fleet, e.g., instruction on fire extinguishers and firefighting procedures, if common to all aircraft. Aircraft-specific emergency training is training on those items that are specific to the CE-680 aircraft.

As part of an approved training program, an operator may use many methods when conducting aircraft-specific emergency training, including classroom instruction, pictures, videotape, and ground training devices, computer-based instruction, and static aircraft training.

There are no specified training program hours for Crewmember Emergency Training. A chart addressed in FAA Order 8900.1 Volume 3, Chapter 19, Section 4, table 3-47 provides "National Norms" for the approval of the general emergency training program hours. The complexity of the different related aircraft of the CE-680 and the complexity of the type of operation to be conducted should be considered when approving the CE-680 aircraft-specific emergency training.

5.2.4 Areas of Emphasis. The following areas of emphasis should be addressed during ground and flight training:

Ground training in the following subjects for the CE-680 is required:

- a) Crew Resource Management
- b) Cockpit Familiarization
- c) Aircraft General Description (Interior/Exterior)
- d) Review of the AFM and Operating Manuals to include Normal & Abnormal Procedures and Limitations
- e) Lighting Systems
- f) EICAS (Engine Indicating and Crew Alerting System)
- g) Powerplant
- h) Fire Protection System
- i) Electrical System
- j) Fuel System
- k) Hydraulic System
- l) Landing Gear, Power/Anti-skid Brake Systems
- m) Flight Controls
- n) Pneumatics
- o) Air Conditioning System
- p) Ice & Rain Protection Systems
- q) Oxygen System
- r) Pressurization System
- s) Preflight Procedures
- t) PFD and MFD Displays & Controls and Avionics Systems (Epic vs G5000)
- u) Flight Management System (FMS)
- v) Systems Integration Training

- w) MMEL Procedures
- x) Introduction to Performance
- y) Weight & Balance Procedures
- z) Aircraft Performance Procedures and Limitations
- aa) Automatic Flight Control System and Autothrust
- bb) High Altitude Operations
- cc) Electronic Flight Bag (EFB)

Particular emphasis should be placed upon takeoff and landing performance. The definitions of and the significance of: V_1 , V_R , V_2 , and V_{ref} , should be thoroughly explained. The determination of maximum takeoff and landing weight due to climb capability, obstacle clearance requirements, and brake energy limits should be thoroughly understood by the student.

Flight training for the CE-680: Flight Training should focus on the following events or maneuvers:

- a) Exterior inspection.
- b) Cockpit/Cabin Familiarization.
- c) Systems Tests and Checks.
- d) Multiple approaches requiring reprogramming of approaches into the avionics system.
- e) Stalls to first indication of stall warning (with and without Autothrust available, #0501 and On).
- f) No Flap Landing Procedures.
- g) Normal Procedures.
- h) Abnormal Procedures.
- i) Emergency Procedures to include an approach simulating using only Emergency power.
- j) Flight Operations in the Reversionary Display Modes.
- k) VMC and IMC approaches (with and without Synthetic Vision, #0501 and On)
- l) Engine failure, after V_1 and/or missed approach (with and without Autothrust, #0501 and On).

5.2.5 Training for Seat Dependent Tasks. Accomplishment of certain tasks, procedures, or maneuvers require training of a crewmember for a particular crew position (i.e. captain, first officer, check airman, etc.). Training programs should recognize and address the necessary seat/position related tasks for the applicable crewmember. Accordingly, training programs should address seat dependent tasks or maneuvers to the extent necessary to satisfy crew qualification objectives, and IAW ODR tables when applicable.

5.2.6 Second-In-Command Crew Training. SIC crew training is accomplished as specified in § 61.55. Training programs should address tasks stipulated in FSB Specifications for Training; Areas of Emphasis, Training for Seat Dependent Tasks and SIC Crew Training are accomplished.

5.3 Differences Training. Differences Training for CE-680 (#0001 thru #0500) base to CE-680+ (#0501 and On) variant and Differences Training for CE-680+ (#0501 and On) base to CE-680 (#0001 thru #0500) variant : refer to Appendix 4.

5.3.1 General. Unless an initial or transition program is completed for each related aircraft, differences training is necessary for each related aircraft or type, as provided in MDR and ODR tables (reference §§ 91.1103 or 135.347). Detailed generic sample ODR tables may be obtained through the Kansas City AEG. Copies are available on request. MDR and ODR tables provide guidelines for differences training requirements applicable to particular aircraft equipage.

- a) A Differences Training Program prerequisite is that a trainee has completed initial, upgrade, or transition training in one related aircraft and will receive differences training for the other related aircraft.
- b) When a Differences Training Program involves related aircraft having the same Pilot Type Rating, coverage of differences may be completed either coincident with each phase of an initial, upgrade, or transition training course, or following completion of that training course. The differences training must be consistent with the provisions of the approved applicable MDR/ODR Tables.

5.3.2 Differences Ground Training. Differences ground training is required on the topics applicable to the pertinent related aircraft and is shown by applicable ODR tables.

5.3.3 Differences Flight Training. Difference flight training is required in the topics and maneuvers applicable to the pertinent related aircraft that is shown by applicable ODR tables.

5.4 Recurrent Training:

5.4.1 Recurrent Ground Training. Courses must include appropriate training in accordance with §§ 91.1107 or 135.351 for each related CE-680 aircraft as specified by MDR and ODR tables for differences training.

5.4.2 Recurrent Flight Training. Courses require appropriate maneuvers and procedures identified in §§ 91.1107 or 135.351 or as otherwise described in this report. Maneuvers and procedures must account for differences between each related CE-680 aircraft operated. The ODR table(s) must identify the differences.

5.4.3 Mixed Fleet Operations Recurrent Training Considerations. For mixed fleet flying, Recurrent Training will alternate between CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On).

5.5 Operating Experience:

5.5.1 Operating Experience Pertinent to Each Flight Crewmember. Operating experience must be obtained while serving in a primary crew position.

5.5.2 Separate Operating Experience for Single Fleet Operations. Operating experience for the CE-680 will be accomplished in the appropriate variant CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On).

5.5.3 Operating experience for Mixed Fleet Flying Operations. Separate operating experience applies to the CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On).

5.5.4 Supervised Operating Experience (SOE). SOE required for a PIC Type Rating in accordance with part 61 pilot certification, must be accomplished from the left pilot seat. SOE required by pilot certification should include the tasks listed in 5.2.3 Crewmember Emergency Training, 5.2.4 Areas of Emphasis, 5.2.5 Training of Seat Dependent Tasks, and use of Synthetic Vision and Autothrust operation.

5.6 Other Training:

5.6.1 Line Oriented Flight Training (LOFT) Programs. When operators have LOFT programs and operate base and variant CE-680 aircraft, POIs should review LOFT credits to assure suitability for each related CE-680 aircraft.

5.6.2 Instrument Approaches. ILS Category II (CAT II) instrument approach was not evaluated for CE-680+ (#0501 and On).

Note: Operators should assure that flight crews are familiar with appropriate use of the flight control automation, including modes to be used, for the types of instrument approaches to be flown. This emphasis is also appropriate for aircraft that do not have certain navigation system sensors, such as ADF, installed.

5.6.3 Long Range/Extended Range/Overwater Flights. Due to criticality of fuel computations, flight crews should be familiar with all aspects of fuel management to include normal and abnormal procedures, published flight planning information, and the manner in which fuel computations are made.

5.6.4 Hazardous Weather and Winter Operations. Proper precautions and procedures regarding hazardous weather/winter operations should be addressed.

5.6.5 Controlled Flight Into Terrain (CFIT). Emphasis on altitude awareness, Ground Proximity Warning Systems (GPWS) warnings, situational awareness and crew coordination.

5.6.6 Reduced Vertical Separation Minimums (RVSM). Operating practices and procedures to include Traffic Alert and Collision Avoidance System (TCAS) alerts and annunciations.

5.6.7 Future Air Navigation Systems (FANS). Instruction in general operational functions, appropriate uses for areas of operation, routes, or procedures to be flown. Training to address Communications, Navigation, and Surveillance (CNS) functions, Required Navigation Performance (RNP), and Actual Navigation Performance (ANP). Training in Controller Pilot Data Link Communication (CPDLC) and Automatic Dependent Surveillance (ADS) to ensure adequate knowledge, skill, and proficiency to operate the above systems in typical daily operations should be provided (when installed).

5.6.8 Training Objective. The objective of both ground and flight training is train to proficiency.

6. FSB SPECIFICATIONS FOR CHECKING

6.1 General

6.1.1 Checking Items. Pertinent knowledge, procedures, and maneuvers specified by part 61, part 91K, part 135 and FAA Airline Transport Pilot and Aircraft Type Rating Practical Test Standards (PTS), document number FAA-S-8081-5F, as amended.

6.1.2 Areas of emphasis. The following areas of emphasis should be addressed during checks as necessary:

- a) Proficiency with manual and automatic flight must be demonstrated.
- b) Proper selection and use of PFD/MFD displays, raw data, flight director, and Flight Guidance System modes should be demonstrated, particularly during instrument approaches.
- c) Demonstration of FMS navigation (departures, arrivals, holds and approaches) proficiency.
- d) Proper outside visual scan without prolonged fixation on FMS operation should be demonstrated, and failure of component(s) of the FMS should be addressed.

6.1.3 No Flap Landings. Demonstration of a No Flap approach and landing during a check is appropriate. In accordance with Order 8900.1 Volume 5, Chapter 3, Section 2, paragraph 5-832, when the flight test is conducted in the airplane in actual flight, a touchdown from a no flap is not required. The approach should be flown to the point where the inspector, check airman or examiner can determine whether the landing would or would not occur in the touchdown zone.

6.2 Type Ratings

6.2.1 Oral Examinations. Oral examinations for the CE-680 may be completed at the end of the academic phase of training. When an airman is qualifying in only the CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On), oral test items need only address the model for which the test is being conducted.

6.2.2 Practical Tests. Practical tests may follow standard provisions of part 61, or approved Line Operational Evaluation (LOE) provisions of AQP and PTS. The satisfactory completion of a practical type rating evaluation in any CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On) will meet the requirement for the CE-680 type rating. In order to operate another related aircraft, crewmembers operating under part 91K or part 135 are required to satisfactorily comply with the requirements of the MDR and ODR tables in Appendices 1 and 2. The same requirement should be followed by flight crewmembers operating under part 91.

6.2.3 Application For and Issuance Of Type Ratings. Airmen completing pertinent part 61, part 91K or part 135 requirements in either a CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On) in accordance with FSB requirements described in this report, may apply to the FAA for the CE-680 type rating endorsement. Upon completion of required tests, and submission of an application via Integrated Airman Certification and/or Rating Application (IACRA) or FAA Form 8710-1 (Airman Certification and/or Rating Application), an authorized designee or qualified ASI may issue the necessary pilot certificate with type rating. These checks must be administered by an authorized designee, or ASI who has been qualified on the specific variant of CE-680.

6.3 Proficiency Checks

6.3.1 General. Proficiency Checks are administered in accordance with part 61, part 91K or part 135. A proficiency check in either the CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On) suffices for the type, provided initial qualification, recurrent qualification and differences are conducted IAW MDR and approved ODR tables for that operator. These checks must be administered by an authorized check airman or qualified ASI who has been qualified on the specific variant of CE-680. Satisfactory completion of a proficiency check may be substituted for recurrent flight training as permitted in part 91K or part 135.

6.3.2 Proficiency Check for Mixed Fleet Flying. Proficiency Checks for Mixed Fleet Flying will alternate checks each 6 months for PIC's and annually for SIC's between CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On) aircraft. Aircraft differences must be addressed IAW the MDR and approved ODR tables for that operator.

7. FSB SPECIFICATIONS FOR RECENCY OF EXPERIENCE

7.1 Recency of Experience. Each aircraft type is addressed separately unless otherwise approved. Recency of experience must include operation and programming of the FMS/G5000 and use of AFCS/Autopilot for departure, enroute, arrival and approaches.

7.1.1 Takeoff and landing credit. Takeoff and landing performed in CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On) are equivalent and may be credited to either aircraft.

7.2 Currency for Mixed Fleet Flying. These are shown in MDR/ODR tables.

7.2.1 Level B Currency. When MDR/ODR specifies Level B Currency, currency is maintained by operating the variant aircraft within the previous 180 days. Currency may be re-established by review of all ODR Level B items identified for the pertinent variant aircraft to include Bulletins, Placards, Memos, Limitation, Operating Procedures and Manual Updates prior to operating the related aircraft. A proficiency check in the variant aircraft or by completing applicable differences training requirements for the variant airplane is also an acceptable means to re-establish currency.

7.2.2 Level C Currency. When MDR/ODR specifies Level C Currency, currency is maintained by operating/flying the variant aircraft through a complete flight cycle (takeoff, departure, arrival, approach and landing) including an instrument approach procedure within the previous 90 days. Currency may be reestablished by operating the variant aircraft, Full Flight Simulator (FFS), or Level 6-7 Flight Training Device (FTD) with a qualified PIC for a minimum of one complete flight cycle, completing an approved differences course, completing a type rating practical test, completing any of the following checks in the variant aircraft, FFS or FTD by an authorized Check Airman, qualified Check Pilot, authorized TCE, Designated Examiner, a person qualified by the Administrator or a qualified ASI: §§ 61.57(d), 61.58, 91.1065, 91.1069, 135.293, 135.297, and 135.299. Section 135.299 check must be completed in the variant airplane.

7.2.3 When MDR/ODR specifies Level D Currency, currency is maintained by operating the variant aircraft through 3 complete flight cycles (takeoff, departure, arrival, approach and landing) within the previous 90 days. Currency may be reestablished by operating the variant aircraft, Full Flight Simulator (FFS), or Level 6-7 Flight Training Device (FTD) with a qualified PIC for a minimum of three complete flight cycles, completing an approved differences course, completing a type rating practical test, completing any of the following checks in the variant aircraft, FFS or FTD by an authorized Check Airman, qualified Check Pilot, authorized TCE, Designated Examiner, a person qualified by the Administrator or a qualified ASI: §§ 61.57(d), 61.58, 91.1065, 91.1069, 135.293, 135.297, and 135.299. Section 135.299 check must be completed in the variant airplane.

7.2.4 The currency level for flight crews, who are trained and qualified in both the CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On), and who will be operating both CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On), a pilot in command (PIC) must:

Within the 6 calendar months preceding the month of the flight, that person performed and logged at least the following tasks and iterations in both the CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On):

Six flight cycles, a cycle includes: takeoff, departure, arrival, approach and landing, and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

A PIC who is engaged in mixed fleet flying, with the CE-680+ (#0501 and On) and another type rated aircraft, need only perform and log six flight cycles in the CE-680+ (#0501 and On), and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

7.2.5 Use of a flight simulator (FFS) or flight training device (FTD) for maintaining recency of experience. Within the 6 calendar months preceding the month of the flight, that person performed and logged at least the following tasks and iterations in an FFS or FTD, provided the FFS or FTD represents the CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On).

Six flight cycles, a cycle includes: takeoff, departure, arrival, approach and landing, and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

A PIC who is engaged in mixed fleet flying, with the CE-680+ (#0501 and On) and another type rated aircraft, need only perform and log six flight cycles in the CE-680+ (#0501 and On), and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

7.2.6 Use of an Aviation Training Device (ATD) for maintaining recency of experience. Within the 2 calendar months preceding the month of the flight, that person performed and logged at least the following tasks in both, CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On).

Six flight cycles, a cycle includes: takeoff, departure, arrival, approach and landing, and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

A PIC who is engaged in mixed fleet flying, with the CE-680+ (#0501 and On) and another type rated aircraft, need only perform and log six flight cycles in the CE-680+ (#0501 and On), and

Meet the currency requirements of 7.2.1, 7.2.2 and 7.2.3 listed above.

7.2.7 Combination of completing instrument experience in an aircraft, FFS, FTD, and ATD. A person who elects to complete the instrument experience with a combination of an aircraft, FFS, FTD, and ATD must have performed and logged the following within the 6 calendar months preceding the month of the flight in both, CE-680 (#0001 thru #0500) and CE-680+ (#0501 and On)

Six flight cycles, a cycle includes: takeoff, departure, arrival, approach and landing, and

Meet the currency requirements of 7.2.1, 7.2.2, and 7.2.3 listed above.

A PIC who is engaged in mixed fleet flying, with the CE-680+ (#0501 and On) and another type rated aircraft, need only perform and log six flight cycles in the CE-680+ (#0501 and On), and

Meet the currency requirements of 7.2.1, 7.2.2, and 7.2.3 listed above.

7.2.8 Instrument proficiency check. Except as provided in this section, a person who has failed to meet the instrument experience requirements for more than six calendar months may reestablish instrument currency only by completing an instrument proficiency check. The instrument proficiency check must consist of the areas of operation and instrument tasks required in the instrument rating practical test standards in the configuration applicable CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On).

7.2.9 Part 142 Instructor Currency. Part 142 Instructors conducting the complete practical training CE-680 (#0001 thru #0500) and/or CE-680+ (#0501 and On) within the previous 90 days are considered to be current for applicable variant.

8. AIRCRAFT REGULATORY COMPLIANCE CHECKLIST

8.1 Compliance Checklist (see Appendix 7).

Compliance checklists are provided as an aid to FAA Certificate Holding District Offices (CHDO) in identifying those specific rules or policies for which compliance has already been demonstrated to the FAA for aircraft having a particular aircraft type, and variant. The compliance checklist also notes rules or policies not demonstrated to the FSB, which must be demonstrated to CHDOs by operators. The Regulatory compliance checklist is located in Appendix 7.

8.2 Discussion of Specific Compliance Checklist Items. Operational approval information is provided as an aid to CHDOs for identifying specific regulatory compliance.

8.2.1 Forward Observer Seat. Cessna 680 aircraft are not equipped with a dedicated forward observer seat, and Cessna does not offer a dedicated forward observer seat as an option. Due to the availability of various passenger configurations, the determination of suitability for use of a forward passenger seat for use in conducting enroute inspections will need to be determined by the CHDO or Inspector conducting enroute inspections.

8.2.2 Emergency Evacuation. Part 135 Operators must meet the requirements of § 135.123.

8.2.3 CE-680 Emergency Exits. Cessna 680 aircraft are equipped with, and required to carry a water barrier during all flights per an equivalent level of safety. The water barrier must also be accessible during all flights. The passenger briefing and passenger briefing cards must include instructions on water barrier location and use. The water barrier is required per flight manual procedures to be placed in the cabin door opening, in the event of a water landing. The water barrier is part of an equivalent level of safety in lieu of meeting § 25.807 requirements for ditching emergency exits for passengers. Flight crews must receive training on water barrier procedures as required by §§ 91.1083 and 135.331.

8.2.4 Ditching Demonstration. While no specific requirement for a ditching demonstration exists under parts 91/91K/135, operators/crewmembers must comply with the requirements of §§ 91.1083 and 135.331, and must be familiar with the general handling characteristics and procedures outlined in the aircraft flight manual.

8.2.5 Proving and Validation Tests. Proving and validation tests in accordance with §§ 91.1041 and 135.145 are appropriate in accordance with FAA Order 8900.1, Volume 3, Chapter 29, Section 3, when the CE-680 is new to a particular operator. When an operator is currently operating either CE-680 (#0001 thru #0500) or CE-680+ (#0501 and On) aircraft and adds the other variant aircraft in the same kind of operation, proving tests are not required.

8.2.6 Electronic Flight Bag. CE-680 (#0001 thru #0500) is equipped with Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather. Findings for use of this configuration are located in Appendix 3 of this report. CE-680+ (#0501 and On) is equipped with Garmin 5000 Integrated Flight Suite. Findings for use of this configuration are located in Appendix 5 of this report.

8.2.7 Electronic Checklist. Electronic Checklists were not evaluated. Printed Pilot Checklists are required for compliance with §§ 91.503, 91.1033 and 135.83.

8.2.8 Electronic Charts. CE-680 (#0001 thru #0500) is equipped with Honeywell Primus Epic Charts, refer to Appendix 3 of this report. CE-680+ (#0501 and On) is equipped with Garmin 5000 Integrated Flight Suite, refer to Appendix 5 of this report.

8.2.9 Cessna Aircraft Company CESNAV. Cessna Aircraft Company offers computer software for Cessna 680 aircraft. The software package is the Cessna Aircraft Company CESNAV.

CESNAV includes the following programs or documents:

Citation Loading Calculator (CLCalc)
Citation Performance Calculator (CPCalc)
Citation Electronic Operating Manual (EOM)
MMEL O&M Procedures Guide
Operating Manual (Reference Only)
Flight Manual (Reference Only)

Pilots Checklist (Reference Only)

The following is specific information on CESNAV components.

CLCalc is a computer based software program designed to allow users to calculate and graph loading Weight and Balance of their aircraft. The Limitations Section of FAA approved Airplane Flight Manual for the 680 aircraft indicates the airplane must be operated in accordance with the approved loading schedule and refers to Weight and Balance Data Sheet and FAA Approved Weight and Balance Manual Model 680 Citation Sovereign. The FAA Approved Weight and Balance Manual indicates CLCalc is approved for use as an alternative source to the FAA Approved Weight and Balance Manual to determine weight and balance data.

CPCalc is a computer based software program which if used in accordance with Cessna Aircraft Company CPCalc AFMS provides an alternate source to the takeoff and landing data presented in Section IV of the basic FAA approved AFM. The program also provides advisory (not FAA approved) Section VII Wet Landing performance information. For the program to be approved for use, the Airplane Flight Manual Supplement must be issued for the specific airplane flight manual. Operators using CPCalc must adhere to CPCalc AFMS limitations and procedures.

EOM is a computer based software program which provides advisory (not FAA approved) information for planning purposes.

8.2.10 Optional Garmin GMX-200. Cessna 680 can be equipped with single or dual Garmin GMX-200 Multi-Function Display. If a GMX-200 is installed, electronic charts are an option available. The FSB has not conducted an operation suitability evaluation of the electronic chart functions to determine if they meet the requirements of AC 120-76A (Guidelines for the Certification, Airworthiness, and Operational Approval of Electronic Flight Bag Computing Devices). Operators and FAA Principals should contact the Kansas City Aircraft Evaluation Group to seek guidance on use of the Garmin GMX-200.

8.2.11 Optional Universal Avionics Cockpit Display. Cessna 680 can be equipped with Universal Avionics Cockpit Display. The FSB has not conducted an operational suitability evaluation of the electronic chart functions to determine if they meet the requirements of AC 120-76A. Operators and FAA Principals should contact the Kansas City Aircraft Evaluation Group to seek guidance on use of the Universal Avionics Cockpit Display.

8.2.12 Passenger briefing cards. The CHDO will need to verify passenger briefing cards meet requirements of §§ 91.1035 and 135.117, and match the interior configuration and emergency equipment installed. If the aircraft was delivered by Cessna with rafts and/or life preservers installed, passenger briefing cards normally include information on raft and/or life preserver location and use.

9. FSB SPECIFICATIONS FOR DEVICES AND SIMULATORS

9.1 Device and Simulator Characteristics. Device and simulator characteristics are designated in AC 120-40, Airplane Simulator Qualification and 120-45, Airplane Flight Training Device Qualification (as amended) or part 60. The acceptability of differences between devices, simulators, and aircraft must be determined for each approved training program. Credits for training, checking, and currency in an approved FFS or FTD is allowed in accordance with the Airline Transport Pilot (ATP) and Aircraft Type Rating PTS, Appendix 1- Airplane Task vs Simulation Device Credit, as applicable, except where the report is more restrictive. When variants are flown in mixed fleets, the combination of simulators and devices used to satisfy MDR and ODR provisions should address specific variants flown by that operator. The acceptability of differences between devices, simulators, and aircraft operated must be addressed by the POI.

9.2 Device Approval. Requests for device approval to be utilized during approved training should be made to the POI/TCPM. The POI/TCPM may approve these devices for that operator if their characteristics clearly meet the established FAA criteria and have been qualified by the National Simulator Program (NSP). Where devices do not clearly satisfy a given level, the POI/TCPM should request advice from the FSB Chair, NSP or AFS-200.

10. APPLICATION OF FSB REPORT

10.1 This report becomes effective when approved by the FAA (see Cover Sheet or Record of Revision page).

10.2 Training, checking and currency for the CE-680 aircraft must be conducted in accordance with all provisions of this report.

10.3 All FAA Approved Training Programs must incorporate the latest FAA Approved AFM Procedures, AFM checklists, manufacturer's recommendations and bulletins, training maneuvers and provisions of this report.

11. ALTERNATE MEANS OF COMPLIANCE

11.1 Approval Level and Approval Criteria. Alternate means of compliance to the requirements of this report must be approved by the Kansas City AEG, FSB Chair. If alternate means of compliance is sought, operators must show that the proposed alternate means provides an equivalent level of safety to the provisions of AC 120-53 (as amended) and this FSB report. Analysis, demonstrations, proof of concept testing, differences documentation, or other evidence may be required.

11.2 Equivalent Safety. In the event alternate means of compliance is sought, training program hour reductions, simulator approvals, and device approvals, may be significantly limited and reporting requirements may be increased to assure equivalent safety. FAA will generally not consider relief through alternate means of compliance unless sufficient lead time has been planned by an operator to allow for any necessary testing and evaluation.

11.3 Interim Programs. In the event unforeseen circumstances make it impossible for an operator to comply with MDR provisions, the operator may seek interim program approval rather than a permanent, alternate compliance method. Financial arrangements, scheduling adjustments, and similar reasons are not considered to be "unforeseen circumstances" for the purposes of this provision. Interim program approvals must be approved by the FSB Chair.

12. MISCELLANEOUS

12.1 FSB Board Record (CE-680 #0001 thru 0500)

12.1.1 Background. The historical record for the original FSB for the CE-680 is located in Appendix 6, of this report.

12.2 FSB Board Record CE-680+ Block Point Change (CE-680+ #0501 and On)

12.2.1 Background. Cessna made application for type rating determination for Model CE-680+ Block Point Change in November 2011, to include adding: Garmin G5000 Flight Suite, winglets, engine alignment, and minor interior modifications.

12.2.2 Board Composition. The FSB Board consisted of the Chair, an Aircraft Certification Office (ACO) Test Pilot, an AEG member, a NSP Inspector, a National Resource Inspector (CE-680) and an ASI.

12.2.3 Applicant's Proposal. The applicant submitted an application proposing MDR and ODR tables with training, checking and currency levels C/C/C.

12.2.4 Tests. As a result of the applicant's proposal, the FSB conducted T2 Testing (Handling Qualities Comparison) in a CE-680 (#0001 thru 0500) and a conformed CE-680+ (#0501 and On) test aircraft at Wichita, Kansas during November of 2013. The FSB noted no handling qualities differences and the T2 Test passed.

The FSB conducted T3 Test (System Differences Test and Validation of Training and Checking) CE-680 (#0001 thru 0500) to CE-680+ (#0501 and On) during December of 2013 at FlightSafety International, Cessna Training Center, Wichita, KS. The FSB determined that level C/C/C differences were required and MDR and ODR tables were completed. T3 Test (System Differences Test and Validation of Training and Checking) CE-680+ (#0501 and On) to CE-680 (#0001 thru 0500) was conducted during April of 2014 at FlightSafety International, Cessna Training Center, Wichita, KS. The FSB determined that level C/C/C differences were required and MDR and ODR tables were completed.

APPENDIX 1

MASTER DIFFERENCE REQUIREMENTS (MDR) TABLE

Aircraft Type Rating: CE-680		TO AIRPLANE		
		Cessna 680 (#0001 thru 0500)	Cessna 680 with Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather Map	CE-680+ (#0501 and On)
FROM AIRPLANE	Cessna 680 (#0001 thru 0500)	A/A/B*	C/C/C	C/C/C
	Cessna 680 with Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather Map	A/A/B*	A/A/B*	C/C/C
	CE-680+ (#0501 and On)	C/C/C	C/C/C	A/A/B*

A/A/B* accounts for installation of optional equipment

APPENDIX 2

ACCEPTABLE OPERATOR DIFFERENCE REQUIREMENTS (ODR) TABLES

Definitions used in the ODR Tables:	
X	= Pilot's Operating Handbook and or Flight Manual Supplement
FTD	= Flight training devices at appropriate level

CE-680 to CE-680 with Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather

BASE AIRCRAFT: CE-680 DIFFERENCE AIRCRAFT: CE-680 with Honeywell Charts and/or MFD Uplink Graphical Weather APPROVED BY (POI) _____					COMPLIANCE METHOD				
					TRAINING				CHKG/CURR
DESIGN	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
Cessna 680 with Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather	Added capability of displaying aeronautical information, such as charts and weather.	None	Minor			C		C	C

ACCEPTABLE OPERATOR DIFFERENCE REQUIREMENTS (ODR) TABLES

Operator Differences Requirements

Definitions used in the ODR Tables:	
X	= Pilot's Operating Handbook and or Flight Manual Supplement
SU	= Stand Up Instruction
CBT	= Computer Based Training
ICBT	= Interactive Computer Based Training
FTD-6	= Level 6 Flight Training Device
CPT	= Cockpit Procedure Trainer
AC	= Aircraft

DIFFERENCE AIRCRAFT: Cessna 680+ BPC COMPLIANCE METHOD	
(#0501 and On)	
BASE AIRCRAFT: Cessna 680	
(#0001 thru #0500)	
APPROVED BY	
(POI) _____	

				TRAINING				CHKG/CURR	
DESIGN FEATURE	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
Airplane Configuration	Winglets added. Thrust reverser nozzle canted 4° outboard	Minor	No		SU/ CBT			B	B
Cockpit Panel	Garmin G5000 avionics replaces Honeywell P2000 Autothrottle added	No	Major		SU/ CBT			B	B
Aircraft Weight	30,775 lb. MTOW (475 lb. increase) 27,575 lb. MLW (475 lb. increase)	Minor	No		SU/ CBT			B	B

DIFFERENCE AIRCRAFT: Cessna 680+ BPC COMPLIANCE METHOD (#0501 and On)									
BASE AIRCRAFT: Cessna 680 (#0001 thru #0500)									
APPROVED BY (POI) _____									
TRAINING							CHKG/CURR		
SYSTEM	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
21 Environmental Control	Temperature and pressurization control accomplished via GTC 570 touch screen controllers	No	Major		SU/ CBT			B	B
22 Auto Flight	Garmin G5000 AFCS replaces Honeywell AFCS. Autothrottle added	No	Major			FTD-6		B	B
23 Communications	Four Garmin GTC 570 touch screen controllers replace MCDUs and MFD/EICAS radio tuning. Backup tuning provided by two GCU 275	No	Major			FTD-6		B	B
24 Electrical Power	Two Transformer Rectifier Units (TRU) added	No	Major		SU/ CBT			B	B
26 Fire Protection	APU Fire switch relocated to center pedestal	No	Minor		SU/ CBT			B	B
28 Fuel	Fuel crossfeed knob and L-R boost pump switches relocated to center pedestal	No	Major		SU/ CBT			B	B
31 Indicating and Recording	Rotary Test knob deleted Systems test automated or incorporated in GTC 570 touch screen controllers	No	Major			FTD-6		B	B
31 Indicating and Recording	Summary synoptic display on MFD	No	Major		SU/ CBT			B	B

33 Lights	Interior and Exterior lighting controls relocated to overhead lighting panel added GTC 570 soft keys for Nav, Beacon and Pulse lights added	No	Major		SU/ CBT			B	B
34 Navigation	Garmin G5000 PFD/MFD replaces Honeywell Epic PFD/MFD	No	Major			FTD-6		C	C
34 Navigation	Garmin Synthetic Vision Technology added	No	Major			FTD-6		C	C
34 Navigation	Dual Litef LCR 100 Hybrid Navigation System replaces existing AHRS.	No	Major		SU/ CBT			B	B
34 Navigation	Dual Garmin G5000 FMS replaces dual Honeywell Epic FMS	No	Major			FTD-6		C	C
35 Oxygen	Mechanical oxygen pressure gages deleted Low pressure warning lights deleted Misc/FLT Controls/Oxygen pressure synoptic on MFD added	No	Major		SU/ CBT			B	B
49 Airborne Auxiliary Power	APU Hobbs meter deleted APU RPM, EGT and Volts indicators deleted APU parameters displayed on Garmin G5000 EIS display APU hours and cycles displayed on GTC 570 propulsion page APU controls relocated to center pedestal	No	Major		SU/ CBT			B	B

74 Ignition	Engine ignition control switches deleted Ignition soft keys added on GTC-570 Propulsion System Page	No	Major		SU/ CBT			B	B
76 Engine Controls	Throttle lever idle/cut-off triggers deleted Engine run/stop switches added FADEC in-control indication toggle switches deleted FADEC in control indication soft keys in GTC 570 added Thrust reverser piggy-back levers deleted Throttle levers with thrust reverser paddles and pull-through for reverse throttle levers added Cruise and climb thrust detents deleted Cruise and climb thrust indication on EIS display (G5000)	No	Major			FTD-6		B	B

DIFFERENCE AIRCRAFT: Cessna 680+ BPC COMPLIANCE METHOD (#0501 and On) BASE AIRCRAFT: Cessna 680 (#0001 thru #0500) APPROVED BY (POI)_____									
TRAINING							CHKG/CURR		
MANEUVER	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
Rejected Takeoff	With autothrottle ON	Minor	Yes			FTD-6		C	C
Multi-engine go-around	With autothrottle OFF	No	No			FTD-6		C	C
Multi-engine go-around	With autothrottle ON	Minor	Yes			FTD-6		C	C
Low Altitude Level Off	With autothrottle ON	Minor	Yes			FTD-6		C	C
Deployment and stowing of thrust reversers	New throttle quadrant with paddles in lieu of piggy-back levers	No	Yes			FTD-6		C	C
Modulation of reverse thrust	Reverse thrust is modulated moving the thrust levers aft of the IDLE REV detent after thrust reversers deployment	No	Yes			FTD-6		C	C

DIFFERENCE AIRCRAFT: Cessna 680		COMPLIANCE METHOD							
		(#0001 thru #0500)							
BASE AIRCRAFT: Cessna 680+ BPC									
(#0501 and On)									
APPROVED BY									
(POI)_____									
		TRAINING				CHKG/CURR			
DESIGN	REMARKS	FLT	PROC	LVL	LVL	LVL	LVL	CHK	CURR
FEATURE		CHAR	CHNG	A	B	C	D		
Airplane Configuration	No Winglets Thrust reverser nozzle canted 4° inboard	Minor	No		SU/ CBT			B	B
Cockpit Panel	Honeywell P2000 avionics replaces Garmin 5000 No Autothrottle system	No	Major		SU/ CBT			B	B
Aircraft Weight	30,300 lb. MTOW (475 lb. decrease) 27,100 lb. MLW (475 lb. decrease)	Minor	No		SU/ CBT			B	B

DIFFERENCE AIRCRAFT: Cessna 680		COMPLIANCE METHOD							
		(#0001 thru #0500)							
BASE AIRCRAFT: Cessna 680+ BPC									
(#0501 and On)									
APPROVED BY									
(POI)_____									
		TRAINING				CHKG/CURR			
SYSTEM	REMARKS	FLT	PROC	LVL	LVL	LVL	LVL	CHK	CURR
		CHAR	CHNG	A	B	C	D		
21 Environmental Control	Temperature and pressurization controls copilot's tilt panel	No	Major		SU/ CBT			B	B
22 Auto Flight	Honeywell Epic AFCS replaces Garmin G5000 AFCS.	No	Major			FTD-6		B	B

DIFFERENCE AIRCRAFT: Cessna 680 (#0001 thru #0500)				COMPLIANCE METHOD					
BASE AIRCRAFT: Cessna 680+ BPC (#0501 and On)									
APPROVED BY (POI) _____									
				TRAINING			CHKG/CURR		
SYSTEM	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
34 Navigation	Dual Honeywell Epic FMS	No	Major			FTD-6		C	C
35 Oxygen	Mechanical oxygen pressure gages Low pressure warning lights	No	Major		SU/ CBT			B	B
49 Airborne Auxiliary Power	APU Hobbs meter APU RPM, EGT and Volts indicators APU controls relocated to copilot side panel	No	Major		SU/ CBT			B	B
74 Ignition	Engine ignition control switches	No	Major		SU/ CBT			B	B
76 Engine Controls	Throttle lever idle/cut-off triggers Engine run/stop switches deleted FADEC in-control indication toggle switches Thrust reverser piggy-back levers added Throttle levers with thrust reverser paddles and pull-through for reverse throttle levers deleted Cruise and climb thrust detents Cruise and climb thrust indication on EIS display (Honeywell Epic)	No	Major			FTD-6		B	B

DIFFERENCE AIRCRAFT: Cessna 680 COMPLIANCE METHOD (#0001 thru #0500) BASE AIRCRAFT: Cessna 680+ BPC (#0501 and On) APPROVED BY (POI)_____									
TRAINING							CHKG/CURR		
MANEUVE R	REMARKS	FLT CHAR	PROC CHNG	LVL A	LVL B	LVL C	LVL D	CHK	CURR
Rejected Takeoff		Minor	Yes			FTD-6		C	C
Multi-engine go-around		Minor	Yes			FTD-6		C	C
Low Altitude Level Off		Minor	Yes			FTD-6		C	C
Deployment and stowing of thrust reversers	New throttle quadrant with piggy-back levers in lieu of paddles	No	Yes			FTD-6		C	C
Modulation of reverse thrust	Reverse thrust is modulated moving the piggy-back levers after thrust reversers deployment	No	Yes			FTD-6		C	C

Appendix 3

Class 3 Electronic Flight Bag Operational Evaluation

Cessna 680 Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather

Table of Contents

1. Purpose and Applicability
2. EFB Suitability Determination
3. EFB Description
4. FSB Specifications for Training
5. FSB Specifications for Checking
6. FSB Specifications for Currency
7. Continued Airworthiness
8. List of EFB Affected Document

1. Purpose and Applicability

The following is provided for the benefit of FAA Principal Inspectors and aircraft operators for their use in determining the acceptance of EFB applications. As described in AC 120-76A, Guidelines for the Certification, Airworthiness, and Operational Approval of Electronic Flight Bags Computing Devices, the Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather is certified Class 3 EFB Hardware and Type C applications. Class 3 hardware is installed equipment and requires AIR involvement and AEG involvement. Applications are classified as Type C due to the interactivity of the Electronic Charts with the aircraft. The charts can be manipulated (i.e. zoomed, scrolled, etc.) as Type B, but are classified Type C because aircraft present position is provided on the installed display on the airport depictions and charts. Aircraft present position symbol displayed on the electronic charts provides supplemental airplane situational awareness information. It is not intended as a means for navigation or flight guidance. The airplane symbol is not to be used for conducting instrument approaches or departures, and it should not be relied upon during low visibility taxi operations. Position accuracy, orientation, and related guidance must be assured by other means of required navigation.

This Appendix is applicable for operational approval of the Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather.

2. EFB Suitability Determination

The EFB evaluation determined Cessna 680 Honeywell Primus Epic chart display functions are suitable as one source, for electronic display of airport diagrams, approach plates, arrival procedures, and departure procedures. Since chart information cannot be displayed while on emergency power, or in the event of certain avionics failures, a suitable backup is required. All

Flight Manual limitations must be complied with regarding use of Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather as an electronic flight bag.

3. EFB Description

Honeywell Primus Epic Charts

The following is a list of the items which that can be displayed through the chart function.

- Airport charts
- SID charts
- STAR charts
- Approach charts
- Noise charts
- NOTAMs
- Airspace charts.

MFD Uplink Graphical Weather

The following is a list of the items which that can be displayed through the Uplink Graphical Weather Function.

- Uplinked graphical weather
- Geo--political boundaries
- Graphical representation of the active flight plan
- Magnetic heading
- Bearing pointers
- Navigational aids (NAVAIDS)
- Airways
- Airspace

4. FSB Specifications for Training

As a minimum the crew should use the EFB electronic chart functions to pull up the airport depiction charts, SID's, Arrival Procedures, and approach charts. Pilots should master the graphic weather depiction functions to obtain METARS and TAF's for origin, destination, and alternate airports

5. FSB Specification for Checking

Recommended tasks include demonstrating competency in using the FMS to integrate use of the electronic chart functions to display departures, arrivals, and approaches, and utilizing the graphical weather text functions.

6. FSB Specification for Currency

Currency level is variable as set in MDR table. Recommended tasks include demonstrating competency in using the FMS to integrate use of the electronic chart functions to display departures, arrivals, and approaches, and utilizing the graphical weather text functions.

7. Continued Airworthiness

Instructions for Continued Airworthiness for Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather are addressed in accordance with aircraft certification requirements and available through normal ICA distribution processes.

8. LIST of EFB Affected Document

The following is a list of Procedures, Documents and Affected Manuals concerning Operational Approval of the Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather for use as an Electronic Flight Bag:

- Honeywell Primus Epic for the Cessna Citation Sovereign Pilot's Guides
- Operations Manual
- Flight Crew Training Program
- Training Courseware (Flight Crew, Maintenance Personnel, Operations Personnel)
- Company Maintenance Procedures
- Component Maintenance Manuals
- Minimum Equipment List
- Data Delivery and Management Procedures
- EFB Configuration Control Procedures

APPENDIX 4

Differences Training CE-680 (#0001 thru 0500) to CE-680+ (#0501 and On)

Program Hours (per Pilot)

The Citation Sovereign 680+ Differences Course consists of the following minimum hours:

Aircraft Systems Differences	2.0 Hrs
Avionics Lecture	6.0 Hrs
Avionics Ground Training	4.0 Hrs
Simulator/FTD/Aircraft Flight Training	8.0 Hrs (4.0 PF/4.0 PNF)
Demonstration of Proficiency (Partial Proficiency Check)	2.0 Hrs (each PIC)
Minimum Total Hours	22.0

Aircraft Systems

The training modules presented in the aircraft systems subject area consist of a breakdown of the various systems of the aircraft. These modules may be taught in any sequence, however all modules will be covered.

SYSTEMS

- A. Aircraft General
- B. Electrical
- C. Lighting
- D. Master Warning
- E. Fuel
- F. APU
- G. Powerplant / Thrust Reversers
- H. Fire Protection
- I. Pneumatics
- J. Ice and Rain Protection
- K. Air Conditioning
- L. Pressurization
- M. Hydraulics
- N. Landing Gear and Brakes
- O. Flight Controls
- P. Avionics
- Q. Oxygen

A. AVIONICS

- B. General Overview
- C. Displays
 - a. PFDs
 - b. MFD
 - c. GTCs
 - d. Standby Flight Display
- D. AHRS / ADC
- E. Radio and Audio Systems
- F. Hazard Avoidance
 - a. Weather
 - b. Terrain
 - c. TCAS II
- G. Flight Guidance
- H. Autothrottles
- I. Additional Features
 - a. Safe Taxi
 - b. ChartView
 - c. FliteCharts
 - d. Satellite Phone / Datalink
 - e. WiFi
 - f. XM Radio
 - g. Scheduled Messages
 - h. Electronic Documents
- J. Limitations
- K. Avionics Initialization

Demonstration of Proficiency

Completion Standards

The pilot must be able to describe, locate, and identify aircraft systems; perform normal, abnormal, and emergency checklists; and demonstrate proficiency with the Garmin G5000 Avionics.

The Demonstration of Proficiency is a partial proficiency check administered in a Line Oriented Evaluation (LOE) profile of approximately 1:30. The tasks listed below will be evaluated during the LOE. A sample LOE would include: Preflight and Before Takeoff checks, Departure, Climb to a cruise altitude, Descent, Arrival, Instrument approach and missed approach, Load and fly a different instrument approach, After Landing and Shutdown checks. The evaluator would provide normal ATC instructions, weather, weight and balance data, etc. The crew is expected to perform the tasks without assistance from the evaluator. Normally, the evaluator is not the instructor that trained the Flight Crewmembers.

The Demonstration of Proficiency minimum tasks include:

1. Avionics Initialization
 - a. Check database expiry dates
 - b. Input appropriate Weight & Balance information
 - c. Load and activate a flight plan
 - d. Accomplish Systems Tests
 - e. Set v-speeds and display on airspeed tape
2. Access and display an appropriate instrument procedure (IP) chart
3. Select/Deselect SVT for display
4. Tune/swap a COM frequency
5. Tune/swap a NAV frequency
6. Set a Transponder code
7. Manually change navigation source
8. Change altimeter setting on PFD
9. Change altimeter setting on SFD
10. Change between Full and Split mode on PFD
11. Change between Full and Half mode on MFD
12. Insert and delete flight plan waypoints
13. Select and fly "Direct-To" a waypoint
14. Program and initiate a VNAV descent
15. Change arrival airport and procedure
16. Create/enter/depart a holding pattern
17. Identify LOS for an RNAV approach
18. Set minimums for an approach
19. Select/deselect/adjust Auto-Throttles

Sample Evaluation Sheet
(Minimum tasks to be Evaluated)

Satisfactory completion of the Demonstration of Proficiency requires a minimum score of 80%
(corrected to 100%).

Place an “S” in the box is Satisfactorily demonstrated and an “N” if Not Satisfactorily demonstrated.

Task #	Area	Task	1st Attempt	Retrain	2nd Attempt
1.	Avionics Initialization	Check database expiry dates			
2.	Avionics Initialization	Input appropriate Weight & Balance information			
3.	Avionics Initialization	Load and activate a flight plan			
4.	Avionics Initialization	Accomplish Systems Tests			
5.	Avionics Initialization	Set v-speeds and display on airspeed tape			
6.	Charts	Access and display an appropriate IP chart			
7.	Hazard Avoidance	Select/Deselect SVT for display			
8.	Radio Tuning	Tune/swap a COM frequency			
9.	Radio Tuning	Tune/swap a NAV frequency			
10.	Radio Tuning	Set a Transponder code			
11.	Navigation	Manually change navigation source			
12.	Navigation	Insert and delete flight plan waypoints			
13.	Navigation	Select and fly “Direct-To” a waypoint			
14.	Navigation	Program and initiate a VNAV descent			
15.	Navigation	Change arrival airport and procedure			
16.	Navigation	Create/enter/depart a holding pattern			
17.	Navigation	Identify LOS for an RNAV approach			

18.	Navigation	Set minimums for an approach			
19.	Displays	Change altimeter setting on PFD			
20.	Displays	Change altimeter setting on SFD			
21.	Displays	Change between Full and Split mode on PFD			
22.	Displays	Change between Full and Half mode on MFD			
23.	Autothrottle	Select/deselect/adjust Autothrottle			
24.	Autothrottle	Multi-engine go around with Autothrottle engaged			
25.	Autothrottle	Multi-engine go around without Autothrottle engaged			
26.	Autothrottle	Low altitude level off with autothrottle engaged			

Completion of an Initial Qualification Course or Recurrent Training Course in a CE-680+ aircraft (#0501 and On), or simulator configured to match (#0501 and On) satisfy the requirements of this Differences Course and Demonstration of Proficiency. A log book entry, Training Record of successful completion of the Demonstration of Proficiency in CE-680+ (#0501 and On), Check Ride form for a 61.58 check in a CE-680+ (#0501 and On), or a copy of FAA Type Rating application (FAA 8710-1) in CE-680+ (#0501 and On) is required to show completion of training.

Differences Training CE-680+ (#0501 and On) to CE-680 (#0001 thru 500)

Program Hours (per Pilot)

The Citation Sovereign 680 Differences Course consists of the following minimum hours:

Aircraft Systems Differences	2.0 Hrs
Avionics Lecture	6.0 Hrs
Avionics Ground Training	4.0 Hrs
Simulator/FTD/Aircraft Flight Training	8.0 Hrs (4.0 PF/4.0 PNF)
Demonstration of Proficiency (Partial Proficiency Check)	2.0 Hrs (each PIC)
Minimum Total Hours	22.0

Aircraft Systems

The training modules presented in the aircraft systems subject area consist of a breakdown of the various systems of the aircraft. These modules may be taught in any sequence, however all modules will be covered.

SYSTEMS

- A. Aircraft General
- B. Electrical
- C. Lighting
- D. Master Warning
- E. Fuel
- F. APU
- G. Powerplant / Thrust Reversers
- H. Fire Protection
- I. Pneumatics
- J. Ice and Rain Protection
- K. Air Conditioning
- L. Pressurization
- M. Hydraulics
- N. Landing Gear and Brakes
- O. Flight Controls
- P. Avionics
- Q. Oxygen

AVIONICS

- A. General Overview
- B. Displays
 - a. PFDs
 - b. MFD
 - c. Standby Flight Display
- C. AHRS / ADC
- D. Radio and Audio Systems
- E. Hazard Avoidance
 - a. Weather
 - b. Terrain
 - c. TCAS II
- F. Flight Guidance
- G. Limitations
- H. Avionics Initialization
- I. Charts (Honeywell Primus Epic Charts and/or MFD Uplink Graphical Weather)

Demonstration of Proficiency

Completion Standards

The pilot must be able to describe, locate, and identify aircraft systems; perform normal, abnormal, and emergency checklists; and demonstrate proficiency with the Honeywell Epic.

The Demonstration of Proficiency is a partial proficiency check administered in a Line Oriented Evaluation (LOE) profile of approximately 1:30. The tasks listed below will be evaluated during the LOE. A sample LOE would include: Preflight and Before Takeoff checks, Departure, Climb to a cruise altitude, Descent, Arrival, Instrument approach and missed approach, Load and fly a different instrument approach, After Landing and Shutdown checks. The evaluator would provide normal ATC instructions, weather, weight and balance data, etc. The crew is expected to perform the tasks without assistance from the evaluator. Normally, the evaluator is not the instructor that trained the Flight Crewmembers.

The Demonstration of Proficiency minimum tasks include:

1. Avionics Initialization
 - a. Check database expiry dates
 - b. Input appropriate Weight & Balance information
 - c. Load and activate a flight plan
 - d. Accomplish Systems Tests
 - e. Set v-speeds/display on airspeed tape
2. Access and display an appropriate instrument procedure (IP) chart
3. Tune/swap a COM frequency
4. Tune/swap a NAV frequency
5. Set a Transponder code
6. Manually change navigation source
7. Change altimeter setting on PFD
8. Change altimeter setting on SFD
9. Insert and delete flight plan waypoints
10. Select and fly "Direct-To" a waypoint
11. Program and initiate a VNAV descent
12. Change arrival airport and procedure
13. Create/enter/depart a holding pattern
14. Identify LOS for an RNAV approach
15. Set minimums for an approach
16. Use of Cursor Control Device (CCD)

Sample Evaluation Sheet
(Minimum tasks to be Evaluated)

Satisfactory completion of the Demonstration of Proficiency requires a minimum score of 80% (corrected to 100%).

Place an “S” in the box is Satisfactorily demonstrated and an “N” if Not Satisfactorily demonstrated.

Task #	Area	Task	1st Attempt	Retrain	2nd Attempt
1	Avionics Initialization	Check database expiry dates			
2	Avionics Initialization	Input appropriate Weight & Balance information			
3	Avionics Initialization	Load and activate a flight plan			
4	Avionics Initialization	Accomplish Systems Tests			
5	Avionics Initialization	Set v-speeds/display on airspeed tape			
6	Charts	Access and display an appropriate IP chart			
7	Hazard Avoidance	Select/Deselect Terrain on display			
8	Radio Tuning	Tune/swap a COM frequency			
9	Radio Tuning	Tune/swap a NAV frequency			
10	Radio Tuning	Set a Transponder code			
11	Navigation	Manually change navigation source			
12	Navigation	Insert and delete flight plan waypoints			
13	Navigation	Select and fly “Direct-To” a waypoint			
14	Navigation	Program and initiate a VNAV descent			
15	Navigation	Change arrival airport and procedure			
16	Navigation	Create/enter/depart a holding pattern			
17	Navigation	Identify LOS for an RNAV approach			

18	Navigation	Set minimums for an approach			
19	Displays	Change altimeter setting on PFD			
20	Displays	Change altimeter setting on SFD			
21	Displays	Use of Cursor Control Device (CCD)			

Completion of an Initial Qualification Course or Recurrent Training Course in a CE-680 aircraft (#0001 thru 0500), or simulator configured to match (#0001 thru 0500) satisfy the requirements of this Differences Course and Demonstration of Proficiency. A log book entry, Training Record of successful completion of the Demonstration of Proficiency in CE-680 (#0001 thru 0500), Check Ride form for a 61.58 check in a CE-680 (#0001 thru 0500), or a copy of FAA Type Rating application (FAA 8710-1) in CE-680 (#0001 thru 0500) is required to show completion of training.

Appendix 5

Class 3 Electronic Flight Bag Operational Evaluation

Cessna 680+ (#0501 and On) Garmin 5000 Integrated Flight Suite

Table of Contents

1. Purpose and Applicability
2. Suitability Determination
3. Description
4. Mounting
5. Display and Reflectivity
6. Database Revisions
7. Specifications for Training
8. Specifications for Checking
9. Specifications for Currency
10. Environmental Testing (HIRF, EMI)
11. Continued Airworthiness
12. List of Affected Document

1. Purpose and Applicability

The following is provided for the benefit of FAA Principal Inspectors and aircraft operators for their use in determining the acceptance of EFB applications. As described in AC 120-76A, Guidelines for the Certification, Airworthiness, and Operational Approval of Electronic Flight Bags Computing Devices, the G5000 electronic charts are certified Class 3 EFB Hardware and Type C applications. Class 3 hardware is installed equipment and requires AIR involvement and AEG involvement. Applications are classified as Type C due to interaction of the Electronic Charts with the aircraft. The charts can be manipulated (i.e. zoomed, scrolled, etc.) as Type B, but are classified Type C because aircraft present position is provided on the installed display on the airport depictions and charts.

2. Suitability Determination

The EFB evaluation determined chart display functions to be suitable as one source for electronic display of airport diagrams, approach plates, arrival procedures, and departure procedures. Since chart information cannot be displayed in the event of certain avionics failures, a suitable backup is required. Approved airplane flight manual provides operating limitations for the installation.

3. Description

The G5000 includes “FliteChart” and optional “ChartView” electronic charts. A specific system description for the system configuration appropriate to the installation is available in the approved airplane flight manual, and Garmin G5000 Integrated Flight Deck Pilot’s Guide for the Cessna Citation (Model 680+ #0501 and On).

4. Mounting

EFB applications are displayed on the Multi-function Display and have been certified as part of the type design.

5. Display and Reflectivity

The EFB has been evaluated as part of the type design.

6. Database Revisions

The database currency requirements are specified in the approved airplane flight manual, and Garmin G5000 Integrated Flight Deck Pilot’s Guide for the Cessna Citation (Model 680+ #0501 and On).

7. Specifications for Training

As a minimum, the crew should use the FMS to flight plan and the EFB electronic chart functions to display the airport depiction charts, SID’s, Arrival Procedures, and approach charts. Pilots should master the weather functions to obtain METARS and TAF’s for origin, destination, and alternate, airports if XM weather functions are enabled.

8. Specification for Checking

Recommended tasks include demonstrating competency in using the FMS to integrate use of the electronic chart functions to display departures, arrivals, and approaches, and utilizing the graphical weather functions if XM weather functions are enabled.

9. Specification for Currency

Currency level is variable as set in MDR table. If level C currency is indicated by MDR table, recommended tasks include demonstrating competency in using the FMS to integrate use of the electronic chart functions to display departures, arrivals, and approaches, and utilizing the graphical functions if XM weather functions are enabled.

10. Environmental Testing (HIRF, EMI)

Intensity Radiated Fields and Indirect Effects of Lightning for system were tested per High Intensity Radiated Fields (HIRF) and Indirect Effects of Lightning Test Procedure. The system meets Certification Basis requirements and special conditions for High Intensity Radiated Fields and Indirect Effects of Lightning.

11. Continued Airworthiness

Instructions for Continued Airworthiness for the system are addressed in accordance with aircraft certification requirements and available through normal ICA distribution processes.

12. LIST of Affected Document

The following is a list of Procedures, Documents and Affected Manuals concerning Operational Approval of G5000 electronic charts for use as an Electronic Flight Bag:

- Airplane Flight Manual
- Garmin G5000 Integrated Flight Deck Pilot's Guide for the Cessna Citation (Model 680+ #0501 and On)
- Operations Manual
- Flight Crew Training Program
- Training Courseware (Flight Crew, Maintenance Personnel, Operations Personnel)
- Company Maintenance Procedures
- Component Maintenance Manuals
- Minimum Equipment List
- Data Delivery and Management Procedures
- EFB Configuration Control Procedures

APPENDIX 6

HISTORICAL TYPE RATING DETERMINATION INFORMATION FROM ORIGINAL 680 REPORT

1. PURPOSE

This FSB report specifies master training, checking, and currency requirements applicable to pilots and flight crews operating Cessna Model 680 aircraft under part 91 and part 135. Maximum passenger capacity is 12.

2. FSB COMPOSITION

Douglas L. Edwards	Chairman	MKC-AEG
Roman Buettner	Operations	MKC-AEG
Steve Davis	Operations	MCI-FSDO (National Resource)
Daniel Buerki	Operations	ICT-FSDO (TCPM)
Ralph Rissmiller	Flight Test	ICT ACO
B.J. Simpson	Operations	National Simulator Evaluation Team

All inspectors were type rated in turbojet aircraft. All Board members attended ground school conducted by Flight Safety International. All flight training was conducted in the aircraft by Cessna Engineering Flight Test pilots. Board members performed and evaluated the Areas of Operation required by the Airline Transport Pilot and/or Type Rating Practical Test Standard, essentially the T-5 test as described in AC 120-53.

3. BACKGROUND

The Model 680 is a high-speed, long range aircraft certificated under part 25. It is powered by two Pratt and Whitney Canada PW306C turbofan engines, each providing 5,770 pounds of static thrust at sea level up to 87 degrees Fahrenheit. The aircraft is certified for sustained flight from sea level to 47,000 feet.

4. APPLICATION OF FSB REPORT

The guidelines set forth in the FSB report apply to:

- a) Certified Flight Instructors
- b) Airline Transport Pilots instructing in air transportation service
- c) Certificated Ground Instructors associated with a training center
- d) Aviation Safety Inspectors
- e) Designated Pilot Examiners
- f) Pilot Proficiency Examiners
- g) Part 135 Air Carrier Check Airmen and Instructors

5. PILOT TYPE RATING DETERMINATION

In accordance with part 1 and part 61, the pilot type rating for the Cessna Model 680(Sovereign) is designated as "CE-680". All part 61, Appendix A maneuvers were evaluated. Airmen who successfully complete a practical examination in the Model 680 (Sovereign) receive a CE-680 type rating on his/her pilot certificate.

6. MASTER COMMON REQUIREMENTS

STEEP TURNS. Train and evaluate at 200 KIAS.

STALLS. During the landing configuration stall with landing gear down and full flaps, set no less than 50% N1. This minimizes the time it takes to spool up the engines for recovery.

ENGINE FAILURE, INFLIGHT SHUTDOWN. Pratt and Whitney recommends that the engine be at idle power for 2 minutes prior to engine shutdown and that the restart be accomplished within one minute, or if the restart can not be accomplished within one minute, that the engine restart be delayed for 10 minutes. Leave engine at idle power for two minutes prior to advancing.

SINGLE ENGINE APPROACH. All single engine approaches, including circling approaches, should be conducted using 15 degrees of flaps, including the landing.

LANDING MINIMA. Model 680 aircraft use Category B for straight in approaches and Category C for circling approaches.

NO FLAP APPROACHES. No flap approaches are not waived. No flap approaches should be trained and evaluated.

FULL FLAP NON-PRECISION APPROACHES. It should be noted that it is the normal practice to execute non-precision instrument approaches and the circling maneuver with full flaps extended.

APPENDIX 7

OPERATING RULES COMPLIANCE CHECKLIST

FAA OPERATIONAL REQUIREMENTS/COMPLIANCE CE-680
PART 91 GENERAL OPERATING AND FLIGHT RULES

Section 91.9 CIVIL AIRCRAFT FLIGHT MANUAL, MARKING AND PLACARD
REQUIREMENTS

PARAGRAPH: § 91.9(a)

REQUIREMENT: Compliance with Flight Manual, Markings, and Placard Markings

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.9(b)(1)

REQUIREMENT: Availability of current Airplane Flight Manual in Aircraft

COMPLIANCE: Operator responsibility.

REMARKS: An approved Airplane Flight Manual complying with § 25.1581 is provided with
each aircraft.

FSB FINDINGS: Complies

PARAGRAPH: § 91.9(b)(2)

REQUIREMENT: Airplane Flight Manual not required by § 21.5

COMPLIANCE: See b.1

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.9(c)

REQUIREMENT: Identification of aircraft in accordance with part 45

COMPLIANCE: A fireproof Identification Plate complying with part 45 is included in the
standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: 91.9(d)

REQUIREMENT: Helicopters: operation outside of height/speed envelope

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.191

REQUIREMENT: Category II and Category III Manual

COMPLIANCE: It is an operator responsibility to develop and obtain approval of a Category II Manual.

REMARKS: The Cessna 680 AFM provides Category II Limits. Specific operational approval and crew qualification is required for Category II operations. The Cessna 680 is not approved for Category III operations.

FSB FINDINGS: Agrees

Section 91.203 CIVIL AIRCRAFT: CERTIFICATIONS REQUIRED

PARAGRAPH: § 91.203(a)

REQUIREMENT: Valid C of A, Flight Permit, Registration Certificate

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.203(b)

REQUIREMENT: Display of C of A Flight Permit

COMPLIANCE: A plastic pocket on the back of the left hand forward cabinet is provided.

REMARKS:

FSB FINDINGS: COMPLIES- Viewable from entrance stairs.

PARAGRAPH: § 91.203(c)

REQUIREMENT: Fuel Tanks in the Passenger Compartment

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.203(d)

REQUIREMENT: Compliance with part 34 (fuel venting and emissions)

COMPLIANCE: Compliance with part 34 has been demonstrated during Type Certification.

REMARKS:

FSB FINDINGS: COMPLIES

Section 91.205 INSTRUMENT AND EQUIPMENT REQUIREMENTS

PARAGRAPH: § 91.205(a)

REQUIREMENT: General

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.205(b)

REQUIREMENT: Day VFR

COMPLIANCE: All equipment specified for Day VFR, as applicable to a turbine engine aircraft is included in the green baseline configuration except for: Item (11) - Pyrotechnic signal devices are not provided. Crew life vests are standard. Pax life vests are located under each seat.

REMARKS: Exceptions are operator responsibility.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.205(c)

REQUIREMENT: Night VFR

COMPLIANCE: All equipment specified for Night VFR, Items (2) thru (6) are included in the standard configuration except for: Item (6) - Spare fuses are not provided since all re-settable circuits are protected by circuit breakers.

REMARKS: Exceptions are operator responsibility.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.205(d)

REQUIREMENT: IFR

COMPLIANCE: All equipment specified for IFR flight, Items (2) thru (9) are included in the standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.205(e)

REQUIREMENT: Flight at and above FL240

COMPLIANCE: DME equipment is provided as part of the standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: §91.205(f) REQUIREMENT: Category II Operations.

COMPLIANCE: All equipment prescribed in paragraph (d) and part 91, Appendix A are required for Category II operations.

REMARKS: The Cessna 680 AFM indicates Category II operations are prohibited unless the airplane is equipped for Category II operations (SB680-34-09, Navigation - Category II Operations or factory Category II Operations option). Specific operational approval and crew qualification is required for Category II operations. The Cessna 680 is not approved for Category III operations.

FSB FINDINGS: Agrees

Section 91.215 ATC TRANSPONDER AND ALTITUDE REPORTING EQUIPMENT AND
USE

PARAGRAPH: § 91.215(a)

REQUIREMENT: Transponder performance and environmental requirements

COMPLIANCE: Honeywell XS-855A Dual Mode-S Diversity Transponders P/N 75174000-855
is Standard. No AFM Sup.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.215(b)(c)(d)

REQUIREMENT: Transponder operations

COMPLIANCE: Transponder operation is an operator responsibility.

REMARKS:

FSB FINDINGS: N/A

Section 91.217 DATA CORRESPONDENCE BETWEEN AUTOMATICALLY-REPORTED
PRESSURE ALTITUDE DATA AND PILOT'S REFERENCE

PARAGRAPH: § 91.217(a)

REQUIREMENT: ATC-directed deactivation

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.217(b)

REQUIREMENT: Encoded altitude accuracy

COMPLIANCE: Mode C altitude-encoding equipment capable of transmitting altitude with at
least 125-foot accuracy is provided in the standard configuration.

REMARKS: Periodic testing and calibration is an operator responsibility.

FSB FINDINGS: COMPLIES

Section 91.219 ALTITUDE ALERTING SYSTEM OR DEVICE: TURBO-JET POWERED
CIVIL AIRPLANES

PARAGRAPH: § 91.219(a)

REQUIREMENT: Operational requirement for system

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.219(b)

REQUIREMENT: Altitude alerting system Requirements

COMPLIANCE: An altitude alerting system which complies with Requirements (1) thru (5) is included in the standard configuration as a basic function of the P2000 system.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.219(c)(d)

REQUIREMENT: Operational procedures

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.409

REQUIREMENT: Inspections

COMPLIANCE: An approved maintenance schedule contained in Chapter 5 of the Aircraft Maintenance Manual complying with § 25.1529 and Appendix H.

REMARKS: Operator responsible for accomplishing required maintenance.

FSB FINDINGS: Maintenance manual is approved.

PARAGRAPH: § 91.411

REQUIREMENT: Altimeter System and Altitude Reporting Equipment Tests and Inspections

COMPLIANCE: The maintenance Manual includes the tests and inspections required by part 43 and Appendices.

REMARKS: Operator responsible for conducting test and inspections.

FSB FINDINGS: Maintenance Manual approved.

PARAGRAPH: § 91.413

REQUIREMENT: ATC Transponder Tests and Inspections

COMPLIANCE: As above for § 91.411.

REMARKS: As above for § 91.411.

FSB FINDINGS: As above for § 91.411.

Section 91.503 FLYING EQUIPMENT AND OPERATING INFORMATION

PARAGRAPH: § 91.503(a)(1)

REQUIREMENT: Flashlights

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.503(a)(2)

REQUIREMENT: Cockpit checklist

COMPLIANCE: Checklists are provided in the Airplane Flight Manual/Operating Manual. Abbreviated checklist also provided.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.503(a)(3)(4)

REQUIREMENT: Aeronautical charts

COMPLIANCE: Operator responsibility.

REMARKS: Appendix three of this FSB report indicates Cessna 680 Honeywell Primus Epic chart display functions are suitable as one source, for electronic display of airport diagrams, approach plates, arrival procedures, and departure procedures. The Cessna 680 Honeywell Primus Epic chart display functions do not include en route navigation charts.

FSB FINDINGS: Agrees.

PARAGRAPH: § 91.503(a)(5)

REQUIREMENT: One engine inoperative climb performance data

COMPLIANCE: The Airplane Flight Manual and Operating Manual contain the required data.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.503(b)(c)

REQUIREMENT: Cockpit checklist contents

COMPLIANCE:

REMARKS:

FSB FINDINGS: Same as (a)(2).

PARAGRAPH: § 91.503(d)

REQUIREMENT: Use of data by crew

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.603

REQUIREMENT: Aural Speed Warning Device

COMPLIANCE: Speed warning devices which comply with § 25.1303(c)(1) are included in the standard configuration.

REMARKS: Both aural and visual are standard.

FSB FINDINGS: COMPLIES

Section 91.609 FLIGHT RECORDERS AND COCKPIT VOICE RECORDERS

PARAGRAPH: § 91.609(a)

REQUIREMENT: Operation with inactive flight recorder or cockpit voice recorder

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.609(b)

REQUIREMENT: Operation by other than holder of air carrier or commercial certificate

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.609(c)

REQUIREMENT: Requirements for flight recorder

COMPLIANCE: Operator responsibility.

REMARKS: Optional L3 FA2100 P/N 2100-2042-00, No AFM Sup. exists.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.609(d)

REQUIREMENT: Flight recorder operation

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 91.609(e)

REQUIREMENT: Requirement for cockpit voice recorder

COMPLIANCE: L3 FA2100 P/N 2100-1020-02 is Standards. No AFM Sup.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.609(f)

REQUIREMENT: Erasure feature

COMPLIANCE: At least 30 minutes of CVR recording will be retained.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 91.609(g)

REQUIREMENT: Erasure of flight recorder data or cockpit voice recording

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

FAA OPERATIONAL REQUIREMENTS/COMPLIANCE CE-680
PART 135 - GENERAL OPERATING AND FLIGHT RULES

PARAGRAPH: § 135.21
REQUIREMENT: Manual Requirements
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

Section 135.23 MANUAL CONTENTS

PARAGRAPH: § 135.23(a)
REQUIREMENT: Authorized management
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(b)
REQUIREMENT: Weight & balance
COMPLIANCE: Operator responsibility.
REMARKS: An approved weight and balance manual,68WB-00 Weight and Balance Manual is
provided for each airplane.
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.23(c)
REQUIREMENT: Operations Spec
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(d)
REQUIREMENT: Accident notification
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(e)
REQUIREMENT: Return to service approved
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(f)
REQUIREMENT: Defects
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 132.23(g)
REQUIREMENT: Defect rectification
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(h)
REQUIREMENT: Pilots maintenance, request procedures
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(i)
REQUIREMENT: M.E.L.
COMPLIANCE: Operator responsibility.
REMARKS: An approved airplane flight manual, covering abnormal procedures is provided
with each aircraft.
FSB FINDINGS: AFM approved.
REMARKS: MMEL is available via FSIMS.
FSB FINDINGS: MMEL approved.

PARAGRAPH: § 135.23(j)
REQUIREMENT: Re-fueling procedures
COMPLIANCE: Operator responsibility.
REMARKS: System procedures for re-fueling is included in approved maintenance manual
provided with each aircraft.
FSB FINDINGS: Maintenance Manual approved.

PARAGRAPH: § 135.23(k)
REQUIREMENT: Pilots briefing
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(l)
REQUIREMENT: Flight locating procedures
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(m)
REQUIREMENT: Emergency procedures compliance
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(n)
REQUIREMENT: On route qualification procedures
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(o)
REQUIREMENT: Approved aircraft inspection program
COMPLIANCE: Operator responsibility.
REMARKS: Maintenance manual, including airworthiness limitations in accordance with §
25.1529 is provided with each aircraft.
FSB FINDINGS: Maintenance Manual approved.

PARAGRAPH: § 135.23(p)
REQUIREMENT: Procedures for hazardous material
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.23(q)
REQUIREMENT: Procedures for evacuation
COMPLIANCE: Operator responsibility.
REMARKS: FSB FINDINGS: N/A

PARAGRAPH: § 135.23(r)
REQUIREMENT: Other procedures & policies
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

Section 135.143 GENERAL REQUIREMENTS

PARAGRAPH: § 135.143(a)
REQUIREMENT: Regulations
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.143(b)
REQUIREMENT: Approved/Operable instruments and equipment
COMPLIANCE: Operator responsibility.
REMARKS: All equipment and instruments included in the standard configuration is approved and operable with the exception of CVR, see § 91.609 (e)
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.143(c)
REQUIREMENT: ATC transponder performance and environmental conditions
COMPLIANCE: ATC transponders included in standard configuration meet applicable TSO conditions.
REMARKS:
FSB FINDINGS: COMPLIES

Section 135.149 EQUIPMENT REQUIREMENTS: GENERAL

PARAGRAPH: § 135.149(a)
REQUIREMENT: Altimeter
COMPLIANCE: Sensitive altimeter is included in standard configuration.
REMARKS:
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.149(b)
REQUIREMENT: Carburetor deicing
COMPLIANCE: N/A
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.149(c)
REQUIREMENT: Third artificial horizon
COMPLIANCE: Third artificial horizon is included in standard configuration.
REMARKS:
FSB FINDINGS: COMPLIES - Powered by standby power pack after loss of main DC power.

PARAGRAPH: § 135.149(d)
REQUIREMENT: (Reserved)
COMPLIANCE:
REMARKS:
FSB FINDINGS:

PARAGRAPH: § 135.149(e)
REQUIREMENT: Any other equipment
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS:

Section 135.151 COCKPIT VOICE RECORDERS

PARAGRAPH: § 135.151(a)
REQUIREMENT: Requirement effectivity
COMPLIANCE: L3 FA2100 P/N 2100-1020-02 is standard. No AFM sup.
REMARKS:
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.151(b)
REQUIREMENT: Requirement effectivity
COMPLIANCE: N/A
REMARKS:
FSB FINDINGS:

PARAGRAPH: § 135.151(c)
REQUIREMENT: Recorded information
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.151(d)
REQUIREMENT: Use of boom microphone
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.151(e)
REQUIREMENT: Erasure Feature
COMPLIANCE: At least 30 minutes of CVR recording will be retained.
REMARKS:
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.152
REQUIREMENT: Flight Recorders
COMPLIANCE: Operator responsibility.
REMARKS: OPTIONAL 13 FA2100 P/N 2100-2042-00 No Supplement.
FSB FINDINGS:

PARAGRAPH: § 135.152(a)
REQUIREMENT: Requirement effectivity
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.152(b)
REQUIREMENT: Requirement effectivity
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.152(c)
REQUIREMENT: Continuous operation
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.152(d)
REQUIREMENT: Retention of recorded data
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.152(e)
REQUIREMENT: Recorded information
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: Not all required parameters recorded.

PARAGRAPH: § 135.152(f)
REQUIREMENT: Installation requirements
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.152(g)
REQUIREMENT: Recorder locator
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

Section 135.153 GROUND PROXIMITY WARNING SYSTEM

PARAGRAPH: § 135.153(a)
REQUIREMENT: Approved G.P.W.S. equipment
COMPLIANCE: Operator responsibility.
REMARKS: Standard. Honeywell EGP-100 Enhanced Ground Proximity Warning Module
(EGPWM) (EPIC Module) P/N 7028419-1903-Supplement 4.
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.153(b)
REQUIREMENT: Alternate system
COMPLIANCE: N/A
REMARKS:
FSB FINDINGS:

PARAGRAPH: § 135.153(c)
REQUIREMENT: GPWS
COMPLIANCE: Standard. Honeywell EGP-100 Enhanced Ground Proximity Warning Module
(EGPWM) (EPIC Module) P/N 7028419-1903-Supplement 4.
REMARKS:
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.153(d)
REQUIREMENT: Deactivation of GPWS
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.153(e)
REQUIREMENT: Recording deactivation
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

Section 135.155 FIRE EXTINGUISHERS: PASSENGER CARRYING AIRCRAFT

PARAGRAPH: § 135.155(a)

REQUIREMENT: Type and suitability of agent

COMPLIANCE: Operator responsibility.

REMARKS: A standard flight deck fire extinguisher (Halon 1211) is located under the copilot's seat.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.155(b)

REQUIREMENT: Flight deck

COMPLIANCE: Operator responsibility.

REMARKS: A flight deck fire extinguisher (halon) is included in the standard configuration.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.155(c)

REQUIREMENT: Passenger compartment

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.157

REQUIREMENT: Oxygen Equipment Requirements

COMPLIANCE: Operator Responsibility.

REMARKS: 76 cu. ft. single bottle is standard. Optional extended range as a dual bottle 152 cubic feet is optional.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.157(a)

REQUIREMENT: Unpressurized aircraft

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS:

PARAGRAPH: § 135.157(b)

REQUIREMENT: Pressurized aircraft

COMPLIANCE: Operator responsibility.

REMARKS: Crew oxygen masks are not approved for sustained operation at a cabin altitude greater than 40,000 feet. Passenger oxygen masks are not approved for sustained operation at a cabin altitude greater than 25,000 feet.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.157(c)

REQUIREMENT: Equipment required

COMPLIANCE: Operator responsibility.

REMARKS: Indication of flight crew oxygen supply and pilots use of undiluted oxygen is provided as part of the standard configuration.

FSB FINDINGS: COMPLIES

Section 135.158 PITOT HEAT INDICATION SYSTEMS

PARAGRAPH: § 135.158(a)

REQUIREMENT: Compliance date 12/04/81

COMPLIANCE: A pitot heat system with indications certified in accordance with § 25.1326 is included in the standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.158(b)

REQUIREMENT: Compliance extension

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS:

PARAGRAPH: § 135.159

REQUIREMENT: Equipment requirements: Passengers under VFR at Night or under VFR Over-the-top

COMPLIANCE: All equipment required by this section, with exception of (f)(3) (Flashlight) are provided as part of the standard configuration.

Note: With the exception of standby instruments gyroscopic instruments are replaced by electronic equivalent.

REMARKS: Flashlight: Per § 135.159(f)(3) is an operator responsibility.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.161

REQUIREMENT: Radio and Navigational Equipment: Carrying Passengers under VFR at Night or under VFR over-the-top

COMPLIANCE: All radio and navigation equipment required by this section is provided as part of the standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.163

REQUIREMENT: Equipment requirements: Aircraft Carrying Passengers under IFR

COMPLIANCE: All equipment and applicable requirements of this section are included and provided for as part of the standard configuration, with the exception of sub section (e) alternate source of static pressure is covered by equivalent means, in that the standby instruments are supplied by 3rd independent pilot/static source, for a total of 3 independent systems.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.165

REQUIREMENT: Radio and Navigational Equipment: Extended overwater or IFR Operations

COMPLIANCE: All dual radio and navigation equipment required by this section is provided as part of standard configuration, including headsets.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.167

REQUIREMENT: Emergency Equipment: Extended overwater Operation

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

Section 135.169 ADDITIONAL AIRWORTHINESS REQUIREMENTS

PARAGRAPH: § 135.169(a)(1)

REQUIREMENT: §§ 121.213 through 121.283. Special airworthiness requirements

COMPLIANCE: N/A

REMARKS: Aircraft certified to part 25 requirements.

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.169(a)(2)

REQUIREMENT: § 121.307 Engine instruments

COMPLIANCE:

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.169

REQUIREMENT: § 121.307 (a)(b)(f)(h)(l) Piston engine/propeller aircraft

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.169

REQUIREMENT: § 121.307 (c) Fuel pressure, (d) Fuel flowmeter, (e) Fuel quantity, (g) Oil pressure, (i) Oil temperature, (j) Tachometer, (k) Fuel pressure warning

COMPLIANCE: Indication of these parameters required by (c) (d) (e) (g) (i) (j) (k) is provided for in the standard configuration, together with other engine parameters required by § 25.1305.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.169(a)(3)

REQUIREMENT: § 121.309 Emergency equipment

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.169(b)

REQUIREMENT: Reciprocating or turbo prop

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.169(c)

REQUIREMENT: Small airplane

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.169(d)

REQUIREMENT: Cargo or baggage compartments

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.170

REQUIREMENT: Materials for Compartment Interiors

COMPLIANCE: Materials for compartment interiors per an STC are operator's responsibility.

REMARKS: Interior materials used in flight deck are certified to § 25.853 standards.

FSB FINDINGS: COMPLIES

Section 135.171 SHOULDER HARNESS INSTALLATION AT FLIGHT CREW STATIONS

PARAGRAPH: § 135.171(a)

REQUIREMENT: Approved shoulder harness

COMPLIANCE: Approved shoulder harness for each flight crew member is provided as part of the standard configuration.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.171(b)

REQUIREMENT: Use of shoulder harness

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

Section 135.173 AIRBORNE THUNDERSTORM DETECTION REQUIREMENTS

PARAGRAPH: § 135.173(a)

REQUIREMENT: Airborne thunderstorm detection equipment

COMPLIANCE: Honeywell Primus 880 color weather radar R/T WU-880 P/N 7021450-801 is standard. No AFM Sup.

REMARKS:

FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.173(b)

REQUIREMENT: Helicopter requirements

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

REQUIREMENT: § Flight under IFR or night VFR

COMPLIANCE: N/A

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.173(d)

REQUIREMENT: Equipment inoperative en route

COMPLIANCE: Operator responsibility.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.173(e)

REQUIREMENT: Applicability

COMPLIANCE: Noted.

REMARKS:

FSB FINDINGS: N/A

PARAGRAPH: § 135.173(f)
REQUIREMENT: Power supply
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS: N/A

Section 135.175 AIRBORNE WEATHER RADAR EQUIPMENT REQUIREMENTS

PARAGRAPH: § 135.175(a)
REQUIREMENT: Airborne weather radar is required
COMPLIANCE: Honeywell Primus 880 color weather radar R/T WU-880 P/N 7021450-801 is standard. No AFM Sup.
REMARKS:
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.175(b)
REQUIREMENT: Flight under IFR or night VFR
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.175(c)
REQUIREMENT: Equipment inoperative on route
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.175(d)
REQUIREMENT: Applicability
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS:

PARAGRAPH: § 135.175(e)
REQUIREMENT: Power supply
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS:

PARAGRAPH: § 135.177
REQUIREMENT: Emergency Equipment Requirements for aircraft having a Passenger Seating Configuration of More than 19 Passengers
COMPLIANCE: N/A
REMARKS: Aircraft is not certified for passenger seating of more than 19.
FSB FINDINGS: N/A

Section 135.180 TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM

PARAGRAPH: § 135.180(a)
REQUIREMENT: Effectivity
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.180(b)
REQUIREMENT: Flight manual requirements
COMPLIANCE: AFM must contain information regarding use of the equipment, proper flight crew action, and outline of all input sources.
FSB FINDINGS: Not in AFM.

Section 135.181 PERFORMANCE REQUIREMENTS: AIRCRAFT OPERATED OVER-THE-TOP OR IN IFR CONDITIONS

PARAGRAPH: § 135.181(a)
REQUIREMENT: Climb requirements
COMPLIANCE: Operator responsibility.
REMARKS: Aircraft climb performance data is provided in aircraft flight manual.
FSB FINDINGS: Complies

PARAGRAPH: § 135.181(b)
REQUIREMENT: Helicopters
COMPLIANCE: N/A
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.181(c)
REQUIREMENT: Weather considerations
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.181(d)
REQUIREMENT: Continued flight VFR
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

Section 135.183 PERFORMANCE REQUIREMENTS: LAND AIRCRAFT OPERATED
OVERWATER

PARAGRAPH: § 135.183(a)
REQUIREMENT: Engine failure
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.183(b)
REQUIREMENT: Take-off or landing
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.183(c)
REQUIREMENT: Climb requirements
COMPLIANCE: Operator responsibility.
REMARKS: Aircraft climb performance data is provided in aircraft flight manual.
FSB FINDINGS: COMPLIES

PARAGRAPH: § 135.183(d)
REQUIREMENT: Helicopters
COMPLIANCE: N/A
REMARKS:
FSB FINDINGS: N/A

Section 135.185 EMPTY WEIGHT AND CENTER OF GRAVITY: CURRENCY
REQUIREMENT

PARAGRAPH: § 135.185(a)
REQUIREMENT: Aircraft weighing
COMPLIANCE: Operator responsibility.
REMARKS: Actual weight and balance manual provided with each aircraft.
FSB FINDINGS: Weight & Balance manual 68WB-00 Weight and Balance Manual provided
with each airplane.

PARAGRAPH: § 135.185(b)
REQUIREMENT: Applicability
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.269(b)(5)
REQUIREMENT: Flight Time Limitations and Rest Requirements
COMPLIANCE: Unscheduled Three and Four Pilot Crews Operator responsibility.
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.419
REQUIREMENT: Approved Aircraft Inspection Program
COMPLIANCE: Operator responsibility.
REMARKS: An approved maintenance schedule per the Aircraft Maintenance Manual is provided. Operator responsible for accomplishing required maintenance.
FSB FINDINGS: Maintenance manual approved.

PARAGRAPH: § 135.421
REQUIREMENT: Additional Maintenance Requirements
COMPLIANCE:
REMARKS: An approved maintenance schedule as per the Maintenance Manual is provided. Operator responsible for accomplishing required maintenance.
FSB FINDINGS: Maintenance manual approved.

PARAGRAPH: § 135.421(a)
REQUIREMENT: Nine seat or less
COMPLIANCE: Operator responsibility (dependent on interior seating capacity).
REMARKS:
FSB FINDINGS: N/A

PARAGRAPH: § 135.421(b)
REQUIREMENT: Definition
COMPLIANCE: Noted.
REMARKS:
FSB FINDINGS:

Section 135.427 MANUAL REQUIREMENTS

PARAGRAPH: § 135.427(a)
REQUIREMENT: Certificate holder organization
COMPLIANCE: Operator responsibility.
REMARKS: Operator responsible for accomplishing required maintenance.
FSB FINDINGS: N/A

PARAGRAPH: § 135.427(b)
REQUIREMENT: Manual requirements for maintenance and inspection
COMPLIANCE: Operator responsibility.
REMARKS:
FSB FINDINGS: N/A