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Washington, DC

Flight Standardization Board Report

Revision: 9
Date: XX/XX/XXXX

Manufacturer:
Bombardier, Inc.

Type Certificate Data Sheet (TCDS)	TCDS Identifier	Marketing Name	Pilot Type Rating
T00003NY	BD-700-1A10	Global Express	BBD-700
T00003NY	BD-700-1A10	Global Express XRS	BBD-700
T00003NY	BD-700-1A10	Global 6500	BBD-700
T00003NY	BD-700-1A10	Global 6000	BBD-700
T00003NY	BD-700-1A11	Global 5500	BBD-700
T00003NY	BD-700-1A11	Global 5000	BBD-700
T00003NY	BD-700-1A11	Global 5000 GVFD	BBD-700

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2. INTRODUCTION

The Aircraft Evaluation Division (AED) is responsible for working with aircraft manufacturers and modifiers during the development and Federal Aviation Administration (FAA) certification of new and modified aircraft to determine:

1) The pilot type rating;
2) Flight crewmember training, checking, and currency requirements; and
3) Operational suitability.

This report lists those determinations for use by:

1) FAA employees who approve training programs;
2) FAA employees and designees who certify airmen; and
3) Aircraft operators and training providers to assist them in developing their flight crewmember training, checking, and currency for certificated operators.

3. HIGHLIGHTS OF CHANGE

The purpose of this revision is to identify the training, checking, and currency requirements for BD-700-1A10 (Global 6500) and BD-700-1A11 (Global 5500) aircraft equipped with the new functionality of the Runway Overrun Awareness and Alerting System (ROAAS) in accordance with the current edition of FAA Advisory Circular (AC) 120-53, Guidance for Conducting and Use of Flight Standardization Board Evaluations, and a Flight Standardization Board (FSB) conducted in February 2025.

4. BACKGROUND

In May 1999, the Transport Aircraft Long Beach AEG formed an FSB that evaluated the BD-700-1A10 as defined in FAA Type Certificate Data Sheet (TCDS) No. T00003NY using the methods described in AC 120-53. Global Express is a marketing designation for the Model BD-700-1A10 aircraft. The Global Express was found to be operationally suitable.

In August and September 2004, the FSB evaluated the BD-700-1A11 aircraft as defined in TCDS No. T00003NY. The evaluation was conducted using the methods described in AC 120-53. Global 5000 is a marketing designation for the Model BD-700-1A11 aircraft. The Global 5000 was found to be operationally suitable.

In the fall of 2004, the FSB evaluated the Thales Head-Up Display (HUD) System for the Global Express and Global 5000 aircraft. It, as well as the associated Airplane Flight Manual (AFM) change, was found to be operationally suitable for all phases of flight, including U.S. Category (CAT) I and II operations when authorized. Training, checking, and currency requirements are listed in Appendix 4, Thales HUD System.

From December 2004 through May 2005, the FSB evaluated the EFVS for the Global Express and Global 5000 aircraft. It, as well as the associated AFM change, was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 5, Enhanced Flight Vision System.

In January 2005, Bombardier introduced changes to the BD-700-1A10 Global Express aircraft. These changes included improved performance, increased range with the addition of a forward fuel tank, fast refueling technology, and new cabin features, such as increased cabin pressurization. Other optional features became standard equipment, including the EFVS. This improved version of the BD-700-1A10 became the new production model and is marketed as the Global Express XRS. The Global Express and Global Express XRS may be referenced together in this report as "Global Express/XRS."

In January and February 2012, the FSB evaluated the BD-700-1A10 aircraft equipped with Global Vision Flight Deck (GVFD), which is marketed as the Global 6000, and also the BD-700-1A11 aircraft equipped with GVFD, which is marketed as the Global 5000 GVFD. The evaluation was conducted using the methods described in AC 120-53. The GVFD software version evaluated was Software Version 4.3.1. The Global 6000 and Global 5000 GVFD were both found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 6, Global Express/XRS to Global 6000 and Global 5000 to Global 5000 GVFD.

In December 2012, the FSB evaluated the Global Express and Global 5000 Honeywell Batch 3 Software Upgrade. It, as well as the associated AFM change, was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 7, Honeywell Batch 2+ to Batch 3 Software Upgrade.

In June 2013, the FSB evaluated the GVFD Software Version 4.3.1 (Version 3) to 4.5.8 (Version 4.5) Software Upgrade. It, as well as the associated AFM change, was found to be

operationally suitable. Training and checking requirements are listed in Appendix 8, GVFD Software Upgrade Version 4.3.1 (Version 3) to 4.5.8 (Version 4.5).

On June 20, 2013, an FSB was convened to evaluate operational suitability and to determine training, checking, and currency requirements for conducting steep approaches in the Global 5000 and Global 6000 aircraft. FSB member training and flying took place at the Bombardier Aerospace facility in Wichita, KS.

In April 2016, the FSB evaluated the GVFD Software Version 4.5.8 (Version 4.5) to 5.1.3 (Version 5) Software Upgrade. It, as well as the associated AFM change, was found to be operationally suitable. Training and checking requirements are listed in Appendix 10, GVFD Software Upgrade Version 4.5.8 (Version 4.5) to 5.1.3 (Version 5.0).

In November 2019, an FSB was established to evaluate the training, checking, and currency requirements between the Global 5000 GVFD/Global 6000 (base aircraft) and Global 5500/Global 6500 (related aircraft). The FSB was conducted from November 5 through 11, 2019 at the CAE Civil Aviation Training Solutions (CATS) center in Montreal QC, Canada. The FSB evaluated handling qualities between the base and related aircraft. The FSB used a Global 6000 (C-GDRU) and the Global 6500 (C-GDRX). Training and checking requirements are listed in Appendix 12, Global 5000 GVFD/Global 6000 to Global 5500/Global 6500 Differences Training. Training and checking was found to be suitable.

In August 2022, an FSB was established to evaluate the Global 5500 and Global 6500 for EFVS, RNP AR, and Steep Approach operations as well as the associated AFM changes. It was found to be operationally suitable. The Transport Aircraft Long Beach AEG was designated the Corporate Aviation Branch as a part of a reorganization of the AED.

In January 2023, an FSB was established to evaluate the Global Vision 5000/5500/6000/6500 Collins Software Version 5.8 upgrade and the associated options as well as the AFM changes. It was found to be operationally suitable.

In March through April 2023, an FSB was established to evaluate the Global 5000GVFD/5500/6000/6500 ground and FFS training on EFVS Approach (EFVS-A) and EFVS Landing (EFVS-L) with and without optional synthetic elements added to the HUD as well as the associated AFM changes. It was found to be operationally suitable.

In October 2023, an FSB was established to identify the training, checking, and currency requirements for Global Vision 5000/5500/6000/6500 aircraft equipped with the upgraded Enhanced Flight Vision System (EVFS) EVS-3600 Sensor and evaluate the associated AFM changes. It was found to be operationally suitable.

In February 2025, an FSB was established to identify the training, checking, and currency requirements for Global 5500/6500 aircraft equipped with the Runway Overrun Awareness and Alerting System and evaluate the associated AFM changes. It was found to be operationally suitable.

5. ACRONYMS

- 14 CFR   Title 14 of the Code of Federal Regulations
- AC   Advisory Circular
- ACFT   Aircraft
- ACO   Aircraft Certification Office
- ACP   Audio Control Panel
- ACS   Airman Certification Standards
- ADF   Automatic Direction Finder
- ADS-B   Automatic Dependent Surveillance-Broadcast
- ADS-C   Automatic Dependent Surveillance-Contract
- AED   Aircraft Evaluation Division
- AEG   Aircraft Evaluation Group
- AEO   All-Engines-Operating
- AFCS   Automatic Flight Control System
- AFD   Airport Facility Directory
- AFM   Airplane Flight Manual
- AFMS   Airplane Flight Manual Supplement
- AGL   Above Ground Level
- AMM   Airport Moving Map
- A/P   Autopilot
- AT   Auto Throttle
- ATP   Airline Transport Pilot
- ATS   Air Turbine Start
- AV   Audiovisual Presentation
- BATC   Bombardier Aircraft Training Center
- CAFM   Computerized Airplane Flight Manual
- CAI   Computer-Assisted Instruction
- CAS   Crew Alerting System
- CAT   Category
- CATS   Civil Aviation Training Solutions
- CBT   Computer-Based Training
- CCP   Curser Control Panel
- CIFP   Computerized In-Flight Performance
- CNS   Communication, Navigation, and Surveillance
- CPDLC   Controller-Pilot Data Link Communications
- CPT   Cockpit Procedures Trainer
- CRM   Crew Resource Management
- CTP   Control Tuning Panel
- DA   Decision Altitude
- DC   Direct Current
- DU   Display Unit
- EASA   European Union Aviation Safety Agency

- ECL   Electronic Checklist
- EDM   Emergency Descent Mode
- EFB   Electronic Flight Bag
- EGPWS   Enhanced Ground Proximity Warning System
- EFIS   Electronic Flight Instrument System
- EFVS   Enhanced Flight Vision System
- EICAS   Engine Indicating and Crew Alerting System
- EMS   Electrical Management System
- EVS   Enhanced Vision System
- FAA   Federal Aviation Administration
- FAF   Final Approach Fix
- FANS   Future Air Navigation System
- FCOC   Fuel Cooler Oil Cooler
- FCOM   Flightcrew Operating Manual
- FDA   Flight Director Annunciator
- FFS   Full Flight Simulator
- FGC   Flight Guidance Computer
- FGP   Flight Guidance Panel
- FMA   Flight Mode Annunciator
- FMS   Flight Management System
- FPM   Feet per Minute
- FPV   Flight Path Vector
- FSB   Flight Standardization Board
- FSBR   Flight Standardization Board Report
- FSTD   Flight Simulation Training Device
- FTD   Flight Training Device
- GNSS   Global Navigation Satellite System
- GPS   Global Positioning System
- GVFD   Global Vision Flight Deck
- HF   High Frequency
- HO   Handout
- HSI   Horizontal Situation Indicator
- HUD   Head-Up Display
- IAF   Initial Approach Fix
- IAC   Integrated Avionic Computer
- IAP   Instrument Approach Procedure
- ICBI   Interactive Computer-Based Instruction
- IFIS   Integrated Flight Information System
- ILT   Instructor-Led Training
- IMA   Integrated Modular Avionics
- IMC   Instrument Meteorological Conditions
- IR   Infrared
- ISA   International Standard Atmosphere

- ISI   Integrated Standby Instrument
- KIAS   Knots Indicated Airspeed
- LNAV   Lateral Navigation
- LPV   Localizer Performance with Vertical Guidance
- MDR   Master Differences Requirements
- MEL   Minimum Equipment List
- MFD   Multifunction Display
- MFF   Mixed Fleet Flying
- MFW   Multifunction Window
- MKP   Multifunction Keypad
- MLW   Maximum Landing Weight
- MMO   Maximum Mach Number
- MTO   Maximum Takeoff
- MTOW   Maximum Takeoff Weight
- NAS   National Airspace System
- NM   Nautical Mile
- OE   Operational Evaluation
- OEI   One-Engine-Inoperative
- OMR   Operating Manual Revision
- OMS   On-Board Maintenance System
- PBN   Performance-Based Navigation
- PFD   Primary Flight Display
- PF   Pilot Flying
- PIC   Pilot in Command
- PM   Pilot Monitoring
- PTG   Pilot Training Guide
- PTT   Part Task Trainer
- QRH   Quick Reference Handbook
- RA   Resolution Advisory
- RCC   Runway Condition Code
- RF   Radius to Fix
- RMS   Resource Management System
- RNP   Required Navigation Performance
- RNP AR   Required Navigation Performance Authorization Required
- ROAAS   Runway Overrun Awareness and Alerting System
- RPM   Revolutions per Minute
- RSP   Reversionary Selection Panel
- SATCOM   Satellite Communications
- SB   Service Bulletin
- SBAS   Satellite-Based Augmentation System
- SL   Sea Level
- SN   Serial Number
- SOP   Standard Operating Procedures

- SIC — Second in Command
- STC — Supplemental Type Certificate
- SU — Stand-Up Instruction
- SVS — Synthetic Vision System
- TAWS — Terrain Awareness and Warning System
- TC — Type Certificate
- TCAS — Traffic Alert and Collision Avoidance System
- TCBI — Tutorial Computer-Based Instruction
- TCCV — Turbine Case-Cooling Valve
- TCDS — Type Certificate Data Sheet
- TOLD — Takeoff and Landing Data
- TDZE — Touchdown Zone Elevation
- TFR — Temporary Flight Restriction
- V_1 — Takeoff Decision Speed
- VGP — Vertical Glidepath
- VHF — Very High Frequency
- VMC — Visual Meteorological Conditions
- V_{MCA} — Minimum Control Speed (Air)
- V_{MCG} — Minimum Control Speed (Ground)
- V_{MCL} — Minimum Control Speed (Landing)
- VPTH — Vertical Path
- V_R — Takeoff Rotation Speed
- V_{REF} — Landing Reference Speed
- VSD — Vertical Situation Display
- W&B — Weight and Balance
- WAAS — Wide Area Augmentation System
- WXR — Weather Radar
- XM — Satellite Radio

6. DEFINITIONS

These definitions are for the purposes of this report only.

6.1 Base Aircraft. An aircraft identified for use as a reference to compare differences with another aircraft.

6.2 Current. A crewmember meets all requirements to operate the aircraft under the applicable operating part.

6.3 Differences Tables. Describe the differences between a pair of related aircraft, and the minimum levels operators must use to conduct differences training and checking of flightcrew members. Differences levels range from A to E.

6.4 Master Differences Requirements (MDR). Specifies the minimum levels of training and checking required between a pair of related aircraft, derived from the highest level in the Differences Tables.

6.5 Mixed Fleet Flying (MFF). The operation of a base aircraft and one or more related aircraft for which credit may be taken for training, checking, and currency events.

6.6 Operational Evaluation. The AED process to determine pilot type rating, minimum flightcrew member training, checking and currency requirements, and unique or special airman certification requirements (e.g., specific flight characteristics, no-flap landing).

6.7 Operational Suitability. The AED determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 121, 133, and 135).

6.8 Qualified. A flightcrew member holds the appropriate airman certificate and ratings as required by the applicable operating part.

6.9 Related Aircraft. Any two or more aircraft of the same make with either the same or different type certificates (TC) that have been demonstrated and determined by the Administrator to have commonality.

6.10 Seat-Dependent Tasks. Maneuvers or procedures using controls that are accessible or operable from only one flightcrew member seat.

6.11 Special Emphasis Area. A training requirement unique to the aircraft, based on a system, procedure, or maneuver, which requires additional highlighting during training. It may also require additional training time, specialized flight simulation training devices (FSTD), or training equipment.

6.12 Specific Flight Characteristic. A maneuver or procedure with unique handling or performance characteristics that the FSB has determined must be checked.

7. PILOT TYPE RATING

7.1 Type Rating. The Bombardier Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 all share the same pilot type rating, which is designated as BBD-700.

7.2 Common Type Ratings. Not applicable.

7.3 Military Equivalent Designations. Military aircraft that qualify for the BBD-700 type rating can be found at www.faa.gov under "Licenses & Certificates," "Airmen Certification," "Online Services," "Aircraft Type Rating Designators." This webpage is kept up-to-date and can be found at https://www.faa.gov/licenses_certificates/airmen_certification/.

8. RELATED AIRCRAFT

8.1 Related Aircraft on Same TCDS. The Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 are all related.

8.2 Related Aircraft on Different TCDS. Not applicable.

9. PILOT TRAINING

9.1 Airman Experience. Airmen receiving initial Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, or Global 6500 training should have prior experience operating multiengine, large, transport category, and turbojet aircraft, in accordance with 14 CFR part 91, 121, 125, or 135. Additionally, a working knowledge of systems, such as automatic flight control system (AFCS), Auto Throttle (AT), Automatic Braking System (ABS), flight management system (FMS), HUD, Nosewheel Steering (NWS) Tiller, and advanced integrated avionics systems with electronic flight displays is highly recommended. Pilots without this experience may require additional training.

9.2 Special Emphasis Areas.

9.2.1 Pilots must receive special emphasis on the following areas during initial, transition, differences, upgrade, and recurrent ground training:

a) Flight management system (FMS).
b) Fuel characteristics and fuel temperature management at high altitudes and cold temperatures.
c) Wing leading edge contamination and its effect on clean (slats IN/flaps up) stall speed.
d) Direct current (DC) power system failure modes with emphasis on loss of all DC electrical power, including the relationship and significance of thermal circuit breakers in the cockpit circuit breaker panel.
e) HUD (see Appendix 4).
f) EFVS (see Appendix 5).
g) Fuel recirculation inhibits.
h) FMS landing field length.
i) Contaminated runway distances in the AFM performance charts have been estimated by assuming that the runway is completely contaminated.
j) Two-Section MMEL/MEL utilization and deferral process in conjunction with manufacturer publications on how crewmembers can complete selected system/component isolation/deactivation/reconfiguration by using procedures which are part of their normal duties.

9.2.2 Pilots must receive special emphasis on the following areas during initial, transition, differences, upgrade, and/or recurrent Systems Integration Training:

a) Automatic flight control system (AFCS).
b) Primary flight display (PFD) and Flight Director Annunciator (FDA).

c) FMS.
d) Electrical Management System (EMS).
e) HUD (see Appendix 4).
f) EFVS (see Appendix 5).
g) Guidance panel indications/selections for autopilot (A/P), yaw damper, and coupling.

9.2.3 Pilots must receive special emphasis on the following items during initial, transition, differences, upgrade, and/or recurrent flight training:

a) Aileron/elevator disconnect (jammed controls in each axis).
b) PFD, multifunction display (MFD), and engine indicating and crew alerting system (EICAS) reversionary modes.
c) Integrated use of EICAS messages, switch positions, and synoptic pages to determine aircraft system status.
d) Delayed engine response to full power applications at high altitude (especially high altitude stalls).
e) Low energy rejected landing from idle thrust.
f) High altitude (above 45,000 ft) handling characteristics with the A/P and yaw damper inoperative.
g) AFCS Pitch mode characteristics (flight path vs. pitch angle).
h) Traffic Alert and Collision Avoidance System (TCAS).
i) HUD (see Appendix 4).
j) EFVS (see Appendix 5).
k) Loss of all DC Power.
l) Stall warning advance.
m) Management of AT during one-engine-inoperative (OEI) flight.

9.2.4 The FSB also found that early exposure to the AFCS, AT, and FMS is important, especially for pilots with no previous electronic flight instrument system (EFIS), AT, or FMS experience. Establishing early confidence in manually flying the aircraft, converting from manual to automatic (FMS-controlled) flight mode and back, is equally important due to heavy reliance on the AFCS. In the event of a flight path deviation due to input error or system malfunction, the flightcrew must be able to comfortably transition from automatic to manual operation and back in an orderly fashion consistent with certificate holder's automation philosophy.

9.3 Specific Flight Characteristics. Maneuvers or procedures required to be checked as referenced in the Airline Transport Pilot (ATP) and Type Rating for Airplane Airman Certification Standards (ACS). There are no specific flight characteristics.

9.4 Seat-Dependent Tasks. Pilots must receive training in these seat-dependent tasks:

a) Tiller usage (left seat): initial, recurrent, upgrade, and transition training.
b) HUD (left/right seat as applicable): initial, recurrent, upgrade, and transition training.
c) EFVS (left/right seat as applicable): initial, recurrent, upgrade, and transition training.

9.5 Regulatory Training Requirements Which Are Not Applicable to the BD-700-1A10 and BD-700-1A11. None.

9.6 FSTDs.

    a) Aircraft systems integration training should be completed in a Level 5 FSTD or higher.

    b) Thales HUD (single or dual installation) training must be completed in a Thales HUD system-equipped aircraft or a Thales HUD system-equipped Level C FFS, with a daylight visual display or a Level D FFS (see Appendix 4).

    c) Collins HUD (single or dual installation) training must be completed in a Collins HUD system-equipped aircraft or a Collins HUD system-equipped Level C FFS, with a daylight visual display or a Level D FFS (see Appendix 4).

9.7 Training Equipment. There are no specific systems or procedures that are unique to the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 that require specific training equipment.

9.8 Differences Training Between Related Aircraft. Pilots must receive differences training between the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 if applicable. The level of training is specified in Appendix 3, Differences Tables.

10. PILOT CHECKING

10.1 Landing from a No-Flap or Nonstandard Flap Approach. The probability of flap extension failure on the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 is extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification is not required.

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

10.3 Seat-Dependent Tasks. Pilots must be checked in these seat-dependent task:

    a) Tiller Usage (left seat); initial, recurrent, upgrade, and transition checking.

    b) HUD (left seat/right seat as applicable), if installed. Initial, recurrent, upgrade, and transition checking (see Appendix 4 for specific checking requirements).

    c) EFVS (left seat/right seat as applicable), if installed. Initial, recurrent, upgrade, and transition training (see Appendix 5 for specific checking requirements).

10.4 Other Checking Items.

a) Proficiency in manual and automatic (including FMS) flight in normal, abnormal, and emergency situations must be demonstrated at each proficiency/competency check by all crewmembers.
b) The use of manual modes to operate systems such as electrical, hydraulic, pressurization, environmental, etc., and emergency equipment must be demonstrated at each proficiency/competency check by all crewmembers.

10.5 FSTD. Thales HUD must be checked in a Thales HUD system-equipped Level C FFS with a daylight visual display or a Level D FFS (see Appendix 4). Collins HUD must be checked in a Collins HUD system-equipped Level C FFS with a daylight visual display or a Level D FFS (see Appendix 4).

10.6 Equipment. There are no specific systems or procedures that are unique to the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 that require specific equipment.

10.7 Differences Checking Between Related Aircraft. Pilots must receive differences checking between the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 if applicable. The level of checking is specified in Appendix 3.

11. PILOT CURRENCY

Pilots must maintain currency in the following:

a) HUD Systems if installed (see Appendix 4 for specific currency requirements).
b) EFVS, if installed (see Appendix 5 for specific currency requirements).

11.1 Differences Currency Between Related Aircraft. Pilots must receive differences currency for MFF of the Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 as follows: One line segment in a Global Express/XRS or Global 5000 airplane or approved FFS and one line segment in a Global 5000 GVFD, Global 6000, Global 5500, or Global 6500 airplane or approved FFS every 90 days.

12. OPERATIONAL SUITABILITY

The BD-700-1A10 was found operationally suitable for operations under 14 CFR parts 91, 125, and 135. The FSB determined operational compliance by conducting an evaluation of a Global Express aircraft serial number 9004 on June 8, 1999.

The BD-700-1A11 was found to be operationally suitable for operations under 14 CFR parts 91, 125, and 135. The FSB determined operational compliance by conducting an evaluation of a Global 5000 aircraft serial number 9130 during September 13 through 20, 2004.

13. MISCELLANEOUS

13.1 Flightcrew Sleeping Facilities (14 CFR Part 135). Flightcrew Sleeping Facilities are installed via complete interior installation Supplemental Type Certificates (STC). Certain STC installed Flightcrew Sleeping Facilities have been evaluated by the AED and found to meet the requirements of 14 CFR part 135, the guidance in AC 121-31, Flight Crew Sleeping Quarters and Rest Facilities, and FAA Order 8900.1, Flight Standards Information Management System. Please contact the AED, Corporate Aircraft Branch (AFS-120) for additional information regarding approved Flightcrew Sleeping Facilities.

13.2 Forward Observer Seat. Forward observer seats are installed via complete interior installation STCs. Certain STC-installed forward observer seats have been evaluated by the AED and found to meet the requirements of 14 CFR § 135.75(b) and/or § 125.317(b). Please contact the AED, Corporate Aircraft Branch (AFS-120) for additional information regarding approved forward observer seats.

13.3 Aircraft Approach Category. The Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 are considered Category C aircraft for the purpose of determining the appropriate instrument approach procedure category in accordance with 14 CFR part 97, § 97.3.

13.4 Normal Landing Flaps. The Global Express/XRS, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 normal "final flap setting" per 14 CFR § 91.126(c) is Flaps 30.

APPENDIX 1. DIFFERENCES LEGEND

Training Differences Legend

Differences Level	Type	Training Method Examples	Conditions
A	Self-Instruction	• Operating manual revision (OMR) (handout (HO)) • Flightcrew operating bulletin (HO)	• Crew has already demonstrated understanding on base aircraft (e.g., updated version of engine). • Minor or no procedural changes required. • No safety impact if information is not reviewed or is forgotten (e.g., different engine vibration damping mount). • Once called to attention of crew, the difference is self-evident.
B	Aided Instruction	• Audiovisual presentation (AV) • Tutorial computer-based instruction (TCBI) • Stand-up instruction (SU)	• Systems are functionally similar. • Crew understanding required. • Issues need emphasis. • Standard methods of presentation required.
C	Systems Devices	• Interactive (full-task) computer-based instruction (ICBI) • Cockpit Procedures Trainers (CPT) • Part task trainers (PTT) • Level 4 or 5 flight training device (FTD 4-5)	• Training can only be accomplished through systems training devices. • Training objectives focus on mastering individual systems, procedures, or tasks versus highly integrated flight operations or "real-time" operations. • Training devices are required to assure attainment or retention of crew skills to accomplish more complex tasks usually related to aircraft systems.
D	Maneuvers Devices	• Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B)	• Training can only be accomplished in flight maneuver devices in a real-time environment. • Training requires mastery of interrelated skills versus individual skills. • Motion, visual, control-loading, and specific environmental conditions may be required.
E	Level C/D FFS or Aircraft	• Level C or D full flight simulator (FFS C-D) • Aircraft (ACFT)	• Motion, visual, control-loading, audio, and specific environmental conditions are required. • Significant full-task differences that require a high fidelity environment. • Usually correlates with significant differences in handling qualities.

Checking Differences Legend

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

APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE

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

To Related Aircraft ↓	From Base Aircraft →	Global Express/XRS	Global 5000	Global 6000	Global 5000 GFVD	Global 5500	Global 6500
Global Express/XRS		Not Applicable	A/A	C/C	C/C	Not Evaluated	Not Evaluated
Global 5000		A/A	Not Applicable	C/C	C/C	Not Evaluated	Not Evaluated
Global 6000		C/C	C/C	Not Applicable	A/A	Not Evaluated	Not Evaluated
Global 5000 GVFD		C/C	C/C	A/A	Not Applicable	Not Evaluated	Not Evaluated
Global 5500		Not Evaluated	Not Evaluated	D/C	D/C	Not Applicable	A/A
Global 6500		Not Evaluated	Not Evaluated	D/C	D/C	A/A	Not Applicable

NOTE: Global 5500 and Global 6500 with Runway Overrun Awareness and Alerting System (ROAAS) differences have been evaluated at B/B.

APPENDIX 3. DIFFERENCES TABLES

Global Express to Global 5000

This Design Differences Table, from the Global Express to the Global 5000 was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. This table is for aircraft up to Batch 2+ software.

FROM BASE AIRCRAFT: BD-700-1A10 Global Express TO RELATED AIRCRAFT: BD-700-1A11 Global 5000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Aircraft General	Fuselage Length: 96 ft, 10 in (29.5 m). Decrease of 32 in (0.81 m). Reduction of two side windows. Wingspan: 93 ft, 6 in (28.65 m). No change. Tailspan: 31 ft, 9 in (9.68 m). No change. Height (Satellite Communications (SATCOM)): 25 ft, 8 in (7.83 m). No change.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express TO RELATED AIRCRAFT: BD-700-1A11 Global 5000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Aircraft General	Performance Maximum Takeoff Weight (MTOW): 92,500 lb (41,957 kg). Decrease of 8,300 lb (3,766 kg). Maximum Landing Weight (MLW): 78,600 lb (35,655 kg). No change. Fuel Capacity: 36,187 lb (16,413 kg). Decrease of 7,363 lb (3,421 kg).	No	No	A	A
	ATA 20 Aircraft General	Wheelbase Nose to Main Wheels: 40 ft, 2 in (12.25 m). Decrease of 2 ft, 8 in (0.81 m).	No	No	A	A
	ATA 28 Fuel	Removal of aft fuel tank.	No	No	A	A
	ATA 28 Fuel	Fuel recirculation is now an automatic system. Fuel RECIRC switches are inhibited.	No	Yes	A	A
	ATA 28 Fuel	Reduction in center tank capacity.	No	No	A	A
	ATA 28 Fuel	Minor EICAS/Synoptic page changes.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express TO RELATED AIRCRAFT: BD-700-1A11 Global 5000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Fuel control panel, deletion of switches, and switch labels changed.	No	Yes	A	A
	ATA 28 Fuel	Refueling panel, deletion of switches, and switch labels changed.	No	No	A	A
	ATA 31 Indicating/Recording Systems	New fuel synoptic page.	No	No	A	A

This Maneuver Differences Table, from the Global Express to the Global 5000, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. This table is for aircraft up to Batch 2+ software.

FROM BASE AIRCRAFT: BD-700-1A10 Global Express TO RELATED AIRCRAFT: BD-700-1A11 Global 5000	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 9 Towing and Taxi	Turning radius decreases from 68 ft (20.9 m) to 64 ft, 1 in (19.5 m).	No	No	A	A

Global 5000 to Global Express

This Design Differences Table, from the Global 5000 to the Global Express, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. This table is for aircraft up to Batch 2+ software.

FROM BASE AIRCRAFT: BD-700-1A11 Global 5000 TO RELATED AIRCRAFT: BD-700-1A10 Global Express	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Aircraft General	Fuselage Length: 99 ft, 5 in (30.30 m). Increase of 32 in (0.81 m). Addition of two side windows. Wingspan: 93 ft, 6 in (28.65 m). No change. Tailspan: 31 ft, 9 in (9.68 m). No change. Height (SATCOM): 25 ft, 8 in (7.83 m). No change.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A11 Global 5000 TO RELATED AIRCRAFT: BD-700-1A10 Global Express	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Aircraft General	Performance MTOW: 96,000 lb (43,546 kg). Increase of 8,300 lb (3,766 kg). MLW: 78,600 lb (35,655 kg). No change. Fuel Capacity: 43,550 lb (19,750 kg). Increase of 7,350 lb (3,421 kg).	No	No	A	A
	ATA 20 Aircraft General	Wheelbase Nose to Main Wheels: 42 ft, 10 in (13.1 m). Increase of 2 ft, 8 in (0.81 m).	No	No	A	A
	ATA 28 Fuel	Addition of aft fuel tank.	No	No	A	A
	ATA 28 Fuel	Fuel recirculation is now a manual system. Fuel RECIRC switches have On/Off functions.	No	Yes	A	A
	ATA 28 Fuel	Increase in center tank capacity.	No	No	A	A
	ATA 28 Fuel	Minor EICAS/Synoptic page changes.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A11 Global 5000 TO RELATED AIRCRAFT: BD-700-1A10 Global Express	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Fuel control panel, addition of switches, and switch labels changed.	No	Yes	A	A
	ATA 28 Fuel	Refueling panel, addition of switches, and switch labels changed.	No	No	A	A
	ATA 31 Indicating/Recording Systems	New fuel synoptic page.	No	No	A	A

This Maneuver Differences Table, from the Global 5000 to the Global Express, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. This table is for aircraft up to Batch 2+ software.

FROM BASE AIRCRAFT: BD-700-1A10 Global 5000 TO RELATED AIRCRAFT: BD-700-1A11 Global Express	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 9 Towing and Taxi	Turning radius increases from 64.1 ft (19.5 m) to 68 ft (20.76 m).	No	No	A	A

Global 5000 GVFD/Global 6000 to the Global 5500/Global 6500

This Design Differences Table, from the Global 5000 GVFD/Global 6000 to the Global 5500/Global 6500, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Dimensions	Flaps: Inboard section of flap is extended 5 in and tapers to 0 in at inboard.	No	No	B	B
	Dimensions	Ailerons: Rigged trailing edge down droop of 0.5°, previously 3° down.	No	No	B	B
	Maximum Mach Number (MMO)	Envelope speed extension to Mach 0.9 (previously 0.89).	No	Yes	C	C
	Engine	New Pearl 15 Engine (BD-700-710D5-21), same nacelle, same inlet.	No	No	B	B
	Computerized Airplane Flight Manual (CAFM)	Introduction of CAFM replacing AFM performance charts.	No	No	C	C
	Quick Reference Handbook (QRH)	Modification of performance data presentation and layout.	No	No	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	New speed placard installed in cockpit.	No	No	B	B
	Performance	New minimum control speed (ground) (V_{MCG}): 82 kts. New minimum control speed (air) (V_{MCA}): 88 kts. New minimum control speed (landing) (V_{MCL}): 87 kts.	No	No	B	B
	ATA 21 Pressurization	Auxiliary pressurization (AUX PRESS) system operations are prohibited at altitudes greater than 37,000 ft.	No	Yes	B	B
	ATA 21 Pressurization	TRIM AIR LEAK. RAM AIR FAIL. New line – maximum altitude 41,000 ft.	No	Yes	B	B
	ATA 21 Pressurization	L BLEED LEAK. R BLEED LEAK. New item – ANTI-ICE WING OFF if above 41,000 ft.	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 21 Pressurization	L(R) BLEED SYS FAIL. New item – ANTI-ICE WING OFF if above 41,000 ft and ANTI-ICE WING XBLEED Select opposite side.	No	Yes	B	B
	ATA 27 Flight Controls	Spoiler extension in expanded region.	No	Yes	D	C
	ATA 28 Fuel	L-R FUEL FILTER – checklist terminology change fuel cooler oil cooler (FCOC).	No	No	B	B
	ATA 30 Ice and Rain Protection	Minimum engine speed changed to charted values in AFM.	No	No	B	B
	ATA 30 Ice and Rain Protection	L(R) COWL A/ICE FAIL – New Item ANTI-ICE WING as required at 41,000 ft or below and Ice Dispersal Procedure.	No	Yes	B	B
	ATA 30 Ice and Rain Protection	L(R) WING A/ICE FAIL - New Item – ANTI-ICE WING as required at 41,000 ft or below and Ice Dispersal Procedure.	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/ Recording Systems	Overspeed marker logic for MMO 0.9 Mach on integrated standby instrument (ISI) and PFD.	No	No	B	B
	ATA 31 Indicating/ Recording Systems	New Crew Alerting System (CAS) Messages: L(R) ENGINE Turbine Case-Cooling Valve (TCCV) FAIL. L(R) ENGINE TCCV FAULT. MMO SPLR DEPLOYED.	No	No	B	B
	ATA 31 Indicating/ Recording Systems	Modified Logic CAS message – FLT SPLR DEPLOYED.	No	No	B	B
	ATA 32 Landing Gear	Tire speed limit increased to 225 mph (196 kts) to increase maximum brake energy.	No	No	B	B
	ATA 36 Pneumatic	Bleed source modification to 4th and 7th stage.	No	No	B	B
	ATA 71 Powerplant	Modified table values and note max N1 to 102.1%.	No	No	B	B
	ATA 71 Powerplant	Engine-driven pump offload.	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 71 Powerplant	Engine-starting crank procedure.	No	Yes	B	B
	ATA 71 Powerplant	Modified in flight start envelope.	No	Yes	B	B
	ATA 71 Powerplant	New TCCV procedures.	No	Yes	B	B
	ATA 71 Powerplant	The starter must not be used if indicated revolutions per minute (RPM) exceeds 42% N2 limitation has been removed.	No	Yes	B	B
	ATA 71 Powerplant	3% increase engine thrust at sea level (SL) and International Standard Atmosphere (ISA), increase to 9% at 9,000 ft and ISA +27°C.	No	No	B	B
	ATA 71 Powerplant	Maximum oil consumption, on each engine, is 0.189 liters per hour (0.2 US quarts per hour) (previous limitation was 0.2 liters per hour/0.21 quarts per hour).	No	No	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 71 Powerplant	L(R) ENG OVERSPEED. L(R) ENG FLAMEOUT. L(R) FADEC OVHT. New item added: ANTI-ICE WING OFF if above 41,000 ft.	No	Yes	B	B
	ATA 71 Powerplant	L(R) ENG SAV FAIL. New note regarding amber START icon being posted on EICAS.	No	No	B	B
	ATA 71 Powerplant	L(R) ENGINE OVHT. Note added regarding possible N2 reduction to 96%.	No	No	B	B
	ATA 71 Powerplant	L(R) FADEC FAIL. Procedure modification.	No	Yes	B	B
	ATA 71 Powerplant	L(R) FADEC FAULT. Procedure modification – note added that thrust reverser may not deploy.	No	Yes	B	B
	ATA 71 Powerplant	DUAL ENGINE OUT – target airspeed for Air Turbine Start (ATS) relight is less than 270 kts.	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 71 Powerplant	Crosswind items modified: • 25-kt engine start component added. • Crosswind components based on pressure altitude added. • At 30 knots indicated airspeed (KIAS) promptly set maximum takeoff (MTO) thrust. When takeoff crosswind component exceeds 35 kts takeoff is prohibited.	No	Yes	B	B
	Limitations	SB 700-46-6503 installation of satellite radio (XM) graphical weather radar. Use of the Temporary Flight Restriction (TFR) function on the multifunction window (MFW) Symbols menu is prohibited.	No	No	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Limitations	Maximum airport pressure altitude for takeoff is 10,000 ft.	No	No	B	B
	Limitations	Use of FMS Takeoff and Landing Data (TOLD) is prohibited.	No	No	B	B
	Limitations	Dispatch in Alternate N1 Mode is prohibited.	No	No	B	B

This Maneuver Differences Table, from the Global 5000 GVFD/Global 6000 to the Global 5500/Global 6500, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. See Appendix 12 for additional details regarding differences training content.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global 5000 GVFD/Global 6000 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global 5500/ Global 6500	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Approach	Steep approach with cowl anti-ice on.	No	Yes	B	B
	Engine Relight	Engine relight in flight envelope.	No	Yes	B	B
	Cruise	MMO envelope to 0.9 Mach.	Yes	Yes	D	C

Global 5500 to the Global 6500

This Design Differences Table, from the Global 5500 to the Global 6500, was proposed by Bombardier and validated by the FSB.
It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A11 Global 5500 TO RELATED AIRCRAFT: BD-700-1A10 Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Aircraft General	Fuselage Length: 99 ft, 5 in (30.30 m). Increase of 32 in (0.81 m). Addition of two side windows. Pilot Eye Position Above Runway During Landing: 15.60 ft (4.75 m).	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A11 Global 5500 TO RELATED AIRCRAFT: BD-700-1A10 Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Aircraft General	Performance MTOW (Varies): 99,500 lb (45,132 kg). 98,000 lb (44,452 kg). Maximum Ramp & Taxi Weight (Varies): 99,750 lb (45,246 kg). 98,250 lb (44,565 kg). Minimum Flight Weight: 48,200 lb (21,863 kg). Fuel Capacity: 45,100 lb (20,425 kg). Maximum Operating Empty Weight: 45,000 lb (20,412 kg).	No	No	A	A
	ATA 28 Fuel	Addition of aft fuel tank.	No	Yes	A	A
	ATA 28 Fuel	Increase in center tank capacity.	No	No	A	A
	ATA 28 Fuel	Minor EICAS/Synoptic page changes.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A11 Global 5500 TO RELATED AIRCRAFT: BD-700-1A10 Global 6500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Fuel control panel, addition of switches, and switch labels changed.	No	No	A	A
	ATA 28 Fuel	Refueling panel, addition of switches, and switch labels changed.	No	No	A	A
	ATA 31 Indicating/Recording Systems	New fuel synoptic page.	No	No	A	A

This Maneuver Differences Table, from the Global 5500 to the Global 6500, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A11 Global 5500 TO RELATED AIRCRAFT: BD-700-1A10 Global 6500	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Taxi	Increase in minimum pavement width for 180° turn.	No	Yes	A	A

Global 6500 to the Global 5500

This Design Differences Table, from the Global 6500 to the Global 5500, was proposed by Bombardier and validated by the FSB.
It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10 Global 6500 TO RELATED AIRCRAFT: BD-700-1A11 Global 5500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Aircraft General	Fuselage Length: 96 ft, 9 in (29.49 m). Decrease of 32 in (0.81 m). Removal of two-sided windows. Pilot Eye Position Above Runway During Landing: 15.40 ft (4.69 m).	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global 6500 TO RELATED AIRCRAFT: BD-700-1A11 Global 5500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Aircraft General	MTOW (Varies): 92,500 lb (41,957 kg). 89,700 lb (40,687 kg). 88,700 lb (40,233 kg). 87,700 lb (39,780 kg). Maximum Ramp & Taxi Weight (Varies): 92,750 lb (42,071 kg). 89,950 lb (40,801 kg). 88,950 lb (40,347 kg). 87,950 lb (39,893 kg). Minimum Flight Weight: 51,200 lb (23,224 kg). Fuel Capacity: 36,200 lb (16,425 kg). 39,250 lb (17,800 kg). Maximum Operating Empty Weight: 48,000 lb (21,772 kg).	No	No	A	A
	ATA 28 Fuel	Removal of aft fuel tank.	No	Yes	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global 6500 TO RELATED AIRCRAFT: BD-700-1A11 Global 5500	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Reduction in center tank capacity.	No	No	A	A
	ATA 28 Fuel	Minor EICAS/Synoptic page changes.	No	No	A	A
	ATA 28 Fuel	Fuel control panel, deletion of switches, and switch labels changed.	No	No	A	A
	ATA 28 Fuel	Refueling panel, deletion of switches, and switch labels changed.	No	No	A	A
	ATA 31 Indicating/Recording Systems	New fuel synoptic page.	No	No	A	A

This Maneuver Differences Table, from the Global 6500 to the Global 5500, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10 Global 6500 TO RELATED AIRCRAFT: BD-700-1A11 Global 5500	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Taxi	Decrease in Minimum Pavement Width for 180° Turn: 65 ft, 4 in (19.92 m).	No	Yes	A	A

Global Express/XRS to Global 6000

This Design Differences Table, from the Global Express/XRS to the Global 6000, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Aircraft General	Flight Deck panel layout modified to accommodate GVFD and stylizing changes.	No	No	B	B
	ATA 20 Aircraft General	Stylized control panels, new background color.	No	No	A	A
	ATA 22 AFCS	New Flight Control Panel.	No	Yes	A	A
	ATA 22 AFCS	Auto pilot Emergency Descent Mode (EDM) button on FCP.	No	Yes	B	A
	ATA 22 AFCS	Auto pilot and auto throttles engage for EDM when manually initiated.	No	Yes	C	C
	ATA 22 AFCS	Manaul speed control available during EDM operation	No	Yes	C	C
	ATA 22 AFCS	Auto-throttle engages for under-speed protection.	No	Yes	C	C
	ATA 22 AFCS	Auto Nav to Nav Transfer on Missed Approach.	No	Yes	B	B
	ATA 22 AFCS	Autopilot remains engaged during OEI missed approach.	No	Yes	C	C

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 22 AFCS	Auto-throttle operative during OEI flight including go-around.	No	Yes	C	C
	ATA 22 AFCS	Autopilot remains coupled for 2 seconds and pitches up during windshear recovery.	No	Yes	C	C
	ATA 22 AFCS	TCS/Sync button relocated.	No	No	A	A
	ATA 22 AFCS	AFCS 1-2 switch relocated to reversion switch panel (RSP).	No	No	A	A
	ATA 22 AFCS	Altitude knob PUSH FINE function.	No	Yes	B	A
	ATA 22 AFCS	New Yaw Dampers.	No	No	A	A
	ATA 22 AFCS	TO mode is speed hold with a min pitch floor FD will drive towards the set speed if FLC not selected.	No	Yes	C	C
	ATA 23 Communications	HF Control Page allows presetting frequencies (GV Version 4.5.8 software).	No	Yes	B	B
	ATA 23 Communications	Supports naming and presetting frequencies on all VHF COM, NAV and ADF radios (GV Version 5 software).	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 23 Communications	Minor ADS-C and CPDLC functionality differences between Batch 3 Honeywell and RC Vision avionics suite.	No	Yes	B	A
	ATA 23 Communications	New Audio Control Panels (ACP).	No	No	B	A
	ATA 23 Communications	Comm radios controlled at two (2) Control Tuning Panels (CTP) on glareshield.	No	No	B	A
	ATA 23 Communications	FMS RADIO tuning window, new Comm/Nav Systems (CNS) button.	No	No	B	A
	ATA 23 Communications	Exterior antennas – relocated.	No	No	A	A
	ATA 24 Electrical	Guarded DC EMER switch relocated from center pedestal to electrical control panel.	No	No	A	A
	ATA 24 Electrical	Synoptic pages, minor differences in graphical depiction of buses.	No	No	A	A
	ATA 24 Electrical	CBP1 behind pilot. Named GALLEY CB Panel contains conventional thermal circuit breakers.	No	No	A	A
	ATA 26 Fire	EICAS page, FIRE icons repositioned.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 27 Flight Controls	Pitch, rudder, aileron trims depicted on Flt Ctrl synoptic page.	No	No	A	A
	ATA 27 Flight Controls	EICAS Status page, new depiction of slats and flaps.	No	No	A	A
	ATA 27 Flight Controls	Trim panel relocated.	No	No	A	A
	ATA 27 Flight Controls	Control yokes, flight spoiler handle, flap lever, aesthetics changed.	No	No	A	A
	ATA 28 Fuel	Panel labeling changed.	No	No	A	A
	ATA 30 Ice and Rain	Intuitive synoptic page changes.	No	No	A	A
	ATA 31 Indicating/Recording	Preselect altitudes appear in feet and meters (Differs from Batch 2 aircraft only).	No	No	A	A
	ATA 31 Indicating/Recording	Color changes for non-normal navigation sources (Differs from Batch 2 aircraft only).	No	No	A	A
	ATA 31 Indicating/Recording	RNP and EPU symbology added (Differs from Batch 2 aircraft only).	No	No	A	A
	ATA 31 Indicating/Recording	Altimeter default on startup differs Version 5 Software.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/Recording	Four (4) Adaptive Flight Displays (AFD)/Display Units (DU) installed.	No	No	A	A
	ATA 31 Indicating/Recording	EICAS moved to other display units.	No	No	B	A
	ATA 31 Indicating/Recording	Synoptic pages reoriented and other minor changes.	No	No	A	A
	ATA 31 Indicating/Recording	EICAS – Some engine and system indications differ slightly in presentation.	No	No	A	A
	ATA 31 Indicating/Recording	CTP is the primary panel for PFD selection.	No	No	B	A
	ATA 31 Indicating/Recording	Aircraft system EICAS messages minor changes.	No	Yes	A	A
	ATA 31 Indicating/Recording	EICAS Synoptic page selection controlled by CHK/SYS key on the multi-function keyboard panel (MKP).	No	No	A	A
	ATA 31 Indicating/Recording	Multifunction Keyboard Panel (MKP).	No	No	B	A
	ATA 31 Indicating/Recording	Cursor Control Panels (CCP).	No	No	B	A
	ATA 31 Indicating/Recording	DU presentation, nine (9) memory selections.	No	No	B	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/Recording	Electronic Checklist (ECL) linked to selected CAS messages. (Version 4.5.8 software and later).	No	No	B	A
	ATA 31 Indicating/Recording	Revision Switch Panel differs in layout and functionality.	No	No	A	A
	ATA 31 Indicating/Recording	Digital LCD Head-Up Display (HUD) differs in symbology. Capable of displaying EVS or Synthetic Vision System (SVS) Controlled at CTP.	No	No	B	A
	ATA 31 Indicating/Recording	Enhanced Vision System (EVS) controlled at CTP, CVS knob on pilot's glareshield and CVS button on pilot's yoke.	No	No	A	A
	ATA 31 Indicating/Recording	EVS Head-Down Display (HDD) can be presented on any MFW.	No	No	A	A
	ATA 31 Indicating/Recording	Synthetic Vision enhances situational awareness. Presented on PFD and HUD - Controlled at CTP and CVS button on pilot's yoke.	No	No	B	A
	ATA 31 Indicating/Recording	Optional Video presentation on MFWs of external or internal cameras.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/Recording	Optional Integrated Flight Information System (IFIS). Electronic Charts, XM Graphical Wx, Datalink Wx, Enhanced Maps, Document Reader.	No	No	B	A
	ATA 31 Indicating/Recording	TAWS overlaid on MFW, VSD and HUD.	No	No	A	A
	ATA 31 Indicating/Recording	TCAS presented on MFW and HUD.	No	No	A	A
	ATA 31 Indicating/Recording	Optional printer moved to behind pilot's seat.	No	No	A	A
	ATA 31 Indicating/Recording	Paperless or "less paper" cockpit.	No	No	A	A
	ATA 31 Indicating/Recording	Remote Maintenance Diagnostics.	No	No	A	A
	ATA 32 Landing Gear	Landing gear panel relocated.	No	No	A	A
	ATA 32 Landing Gear	Autobrake selector moved from GLD to landing gear panel.	No	No	A	A
	ATA 33 Lights	Some cockpit lighting changed to LED.	No	No	A	A
	ATA 34 Navigation	FMS Rockwell Collins Fusion Flight Deck/Bombardier Global Vision Avionics suite.	No	Yes	C FTD 5	C

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 34 Navigation	Minor changes to TAWS overlay (GV Version 4.5.8 software).	No	No	A	A
	ATA 34 Navigation	Vertical Situation Display (VSD) added (GV Version 4.5.8 software).	No	No	B	A
	ATA 34 Navigation	Surface Management System added (GV Version 5 software).	No	No	B	A
	ATA 34 Navigation	Laseref 6 IRSs. No IRS (MSU) control panel.	No	Yes	A	A
	ATA 34 Navigation	Nav radios controlled at two (2) Control Tuning Panels (CTP) on Glareshield.	No	No	B	A
	ATA 34 Navigation	FMS has visual approach as a selection option.	No	Yes	B	B
	ATA 34 Navigation	Same Integrated Electronic Standby (IESI) Instrument but repositioned and minor bezel changes.	No	No	A	A
	ATA 34 Navigation	PFD's Nav Source, Course and bearing pointers controlled primary via CTP with backup functionality provided.	No	No	B	A
	ATA 34 Navigation	Triple FMS installation with full time synchronization.	No	No	B	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 34 Navigation	FMS format and functionality differs. Controlled at MKP, CTP, CCP and soft buttons on displays.	No	Yes	C FTD	C
	ATA 34 Navigation	FMS – graphical flight planning.	No	Yes	C FTD	C
	ATA 34 Navigation	FMS supports RNP, FANS, SBAS and LPV (Differs from Batch 2 aircraft only).	No	Yes	B	B
	ATA 34 Navigation	GNSS Added (Differs from Batch 2 aircraft only).	No	Yes	B	B
	ATA 34 Navigation	FMS Performance calculation (TOLD).	No	Yes	B	A
	ATA 34 Navigation	FMS Weight and Balance calculation.	No	Yes	B	A
	ATA 34 Navigation	New weather radar.	No	Yes	B	A
	ATA 34 Navigation	Flight Path Vector (caged and uncaged) vice flight director command bars.	No	Yes	C FTD	C
	ATA 34 Navigation	FPV Cage button on yoke.	No	No	A	A
	ATA 34 Navigation	Takeoff mode pitch target box.	No	Yes	B	A
	ATA 34 Navigation	Standby HSI on CTP.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 34 Navigation	RNP indications on PFD differs from Honeywell Batch 3 RNP indications.	No	No	A	A
	ATA 34 Navigation	Vertical Situation Display (VSD) selectable on MFWs.	No	Yes	B	A
	ATA 45 Central Maintenance Systems	On-Board Maintenance Systems (OMS).	No	No	A	A
	ATA 70 Powerplant	ENG RUN switches differ.	No	No	A	A
	ATA 70 Powerplant	N1/EPR switches relocated.	No	No	A	A
	ATA 70 Powerplant	Thrust levers resized.	No	No	A	A
	ATA 70 Powerplant	Primary EICAS changes in N1/EPR presentation.	No	No	A	A
	ATA 70 Powerplant	Oil replenishment panel relocated.	No	No	A	A

This Maneuver Differences Table, from the Global Express/XRS to the Global 6000, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	MANUEVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Takeoff Preparation and Takeoff	Cockpit setup differs including FMS, radio, Nav Aids, FD, Wx radar, TAWS, overlays, MFWs etc.	No	Yes	C FTD 5	C
	Instrument Procedures	Use of FGP differs.	No	Yes	C FTD 5	C
	Go Around	Auto-throttle remains engaged for OEI missed approached and go-around.	No	Yes	C FTD	C
	Go Around	Autopilot remains engaged for OEI go around.	No	Yes	C FTD	C
	Windshear	Guidance available (Differs from Batch 2).	No	Yes	C FTD	C
	Windshear	The autopilot remains coupled for 2 seconds and pitches up.	No	Yes	C FTD	C
	Emergency Descent	Auto pilot and auto throttle engages for Emergency Descent Mode when initiated manually.	No	Yes	B	B
	Emergency Descent	Manual speed control available during EDM operation.	No	Yes	B	B

FROM BASE AIRCRAFT: BD-700-1A10 Global Express/XRS TO RELATED AIRCRAFT: BD-700-1A10 Global 6000	MANUEVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Stall Recovery	Auto-throttle engages to prevent stall (underspeed protection).	No	Yes	C FTD	C
	Steep Approach	Steep approach capable offered as specialty course (GV Version 4.5.8 software and after).	No	Yes	D	D
	RNP AR	RNP AR supported capable offered as specialty course GV Version 4.5.8 software and after).	No	Yes	D	D

Global Vision 5000/5500/6000/6500 Software Version 5.5 to the Global Vision 5000/5500/6000/6500 with Collins 5.8 Software Upgrade (Technical Insert 1)

This Design Differences Table, from the Global Vision 5000/5500/6000/6500 with Collins Software Version 5.5 to the Global Vision 5000/5500/6000/6500 with Collins software upgrade version 5.8 (Technical Insert 1) and options, was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.5 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.8	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Collins Software Version 5.8	AFCS, EFIS, EICAS, HUD, IFIS, Integrated Modular Avionics (IMA), OMS, Resource Management System (RMS), TCAS, Transponder, SVS, Weather Radar (WXR).	No	No	B	B
	Collins Software Version 5.8 Limitation	Autothrottle use is allowed when only a single autothrottle is available.	No	No	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.5 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.8	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Automatic Dependent Surveillance-Broadcast In (ADS-B) In (option)	New System.	No	Non-Normal	B	B
	ADS-B Limitation	In Trail Procedure and Separation Assurance are prohibited.	No	No	B	B
	Airport Moving Map (AMM) & SVS Taxi (option)	New System.	No	Non-Normal	B	B
	AMM Limitation	Airplane symbol on SVS taxi is for situational awareness only. Airplane symbol on AMM is for situational awareness only.	No	No	B	B
	Predictive Windshear (option)	New System.	No	Emergency, Non-Normal	B	B

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.5 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.8	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	SiriusXM WXR (option)	Upgraded System.	No	No	B	B
	SiriusXM WXR Limitation	TFR function on the MFW symbols is allowed.	No	No	B	B
	Vertical WXR (option)	New System.	No	No	B	B

This Maneuver Differences Table, from the Global Vision 5000/5500/6000/6500 to the Global Vision 5000/5500/6000/6500 with Collins software upgrade version 5.8 and options was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.5 TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 Software Version 5.8	MANUEVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	N/A	N/A	N/A	N/A	N/A	N/A

Global Vision 5000/5500/6000/6500 CMA-2700 to the Global Vision 5000/5500/6000/6500 EVS-3600 Sensor

This Design Differences Table, from the Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor to the Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	CAS Messages	EVS HEAT FAIL CAS changed from Caution to Advisory.	No	No	A	A
	CAS Messages	EVS HEAT OVHT CAS caution message removed.	No	No	A	A
	CAS Messages	EVS DEFOG FAULT CAS advisory message removed.	No	No	A	A
	CAS Messages	EVS TEMP CAS advisory message added along with PFD/HUD annunciations.	No	No	A	A
	CAS Messages	EVS ALIGN MODE CAS (maintenance function) advisory message added along with HUD annunciation.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	CAS Messages	EVS ON status CAS message removed.	No	No	A	A
	EVS Sensor	Not cryogenically cooled.	No	No	A	A
	EVS Sensor	Halo effect may be seen in the EVS image.	No	No	A	A
	Ice Protection	The EVS-3600 Fairing is not heated.	No	No	A	A
	Ice Protection	The EVS-3600 sensor lenses are heated automatically.	No	No	A	A
	Design	EVS-3600 includes 3 sensors: Short Wave IR, Long Wave IR and Visible Light.	No	No	A	A
	Design	Visible Light sensor is disabled on approach below 150ft.	No	No	A	A
	Design	Vertical Field of View on EVS-3600 camera is 24 degrees instead of 30 degrees.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Controls & Indications	Sensor is turned on automatically upon aircraft power.	No	Yes	A	A
	Controls & Indications	EVS SENSOR ON/OFF control removed from CTP.	No	Yes	A	A
	Controls & Indications	EVS CAL removes image for approximately 10 seconds.	No	Yes	A	A
	Controls & Indications	Auto EVS calibration removes image for approximately 0.75 seconds.	No	Yes	A	A
	Controls & Indications	Auto EVS calibration disabled during taxi, takeoff and approach.	No	Yes	A	A
	Controls & Indications	FRMT menu on the PFD can control the OVLY MODE when both CTPs disabled (SVS/CVS).	No	No	A	A

This Maneuver Differences Table, from the Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor to the Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor	MANUEVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	N/A	N/A	N/A	N/A	N/A	N/A

Global Vision 5000/5500/6000/6500 EVS-3600 to the Global Vision 5000/5500/6000/6500 CMA-2700 Sensor

This Design Differences Table, from the Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor to the Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	CAS Messages	EVS HEAT FAIL CAS changed from Advisory to Caution.	No	No	A	A
	CAS Messages	EVS HEAT OVHT CAS caution message added.	No	No	A	A
	CAS Messages	EVS DEFOG FAULT CAS advisory message added.	No	No	A	A
	CAS Messages	EVS TEMP CAS advisory Message removed.	No	No	A	A
	CAS Messages	EVS ALIGN MODE CAS advisory message removed.	No	No	A	A
	CAS Messages	EVS ON status CAS message added.	No	No	A	A
	EVS Sensor	Cryogenically cooled.	No	No	A	A

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	EVS Sensor	HUD Indications for cool down time have been added.	No	No	A	A
	Ice Protection	The CMA-2700 Fairing and window are heated.	No	No	A	A
	Ice Protection	The CMA-2700 heater is on when either left or right cowl anti-ice switch is ON.	No	No	A	A
	Design	CMA-2700 has one sensor covering SWIR and MWIR.	No	No	A	A
	Design	Vertical Field of View on CMA-2700 camera is 30 degrees instead of 24 degrees.	No	No	A	A
	Controls & Indications	Sensor is turned on through the CTP.	No	Yes	A	A
	Controls & Indications	EVS SENSOR ON/OFF control added to CTP.	No	Yes	A	A
	Controls & Indications	EVS CAL removes image for up to 40 seconds.	No	Yes	A	A

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Controls & Indications	Auto EVS calibration removed.	No	Yes	A	A
	Controls & Indications	FRMT menu on the PFD can control the OVLY MODE always disabled (SVS/CVS).	No	No	A	A

This Maneuver Differences Table, from the Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor to the Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor was proposed by Bombardier and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 EVS-3600 EFVS Sensor TO RELATED AIRCRAFT: BD-700-1A10/1A11 Global Vision 5000/5500/6000/6500 CMA-2700 EFVS Sensor	MANUEVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX 4. HEAD-UP DISPLAY (HUD) SYSTEMS

1. BACKGROUND

The FSB participated in an evaluation of the Thales HUD System during its development in the fall of 2004 using a Global Express aircraft and an FFS. The FSB conducted certification flight tests, along with the New York Aircraft Certification Office (ACO), in a Global Express aircraft in Wichita, KS. Flight testing consisted of approximately 40 HUD approaches at several different airports, using CAT I procedures, during day, night, visual meteorological conditions (VMC), and instrument meteorological conditions (IMC).

The Thales HUD is standard equipment on the Global Express XRS aircraft, but can also be installed on Global Express and Global 5000 aircraft. The Thales HUD System installations on Global Express/XRS and Global 5000 airplanes have been found to be functionally equivalent. If Thales HUD training and checking requirements are accomplished in one aircraft, training and checking does not need to be repeated in the other.

The FSB also evaluated the proposed Airplane Flight Manual Supplement (AFMS) for HUD operations.

In January and February 2012, the FSB evaluated the BD-700-1A10 aircraft equipped with Global Vision Flight Deck (GVFD), which is marketed as the Global 6000, and also the BD-700-1A11 aircraft equipped with GVFD, which is marketed as the Global 5000 GVFD. The Collins HUD is standard equipment on the Global 5000 GVFD and Global 6000.

In November 2019, an FSB was established to evaluate the Global 5500 and Global 6500. The Collins HUD is standard equipment on the Global 5500 and Global 6500.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

- Global Express.
- Global Express XRS.
- Global 5000.
- Global 5000 GVFD.
- Global 6000.
- Global 5500.
- Global 6500.

4. PILOT TRAINING

For single HUD installation, the HUD training focuses principally upon training events flown in the left seat by the pilot flying (PF). Training for the pilot monitoring (PM) is also required for any procedural differences when the PF is heads-up (compared to heads-down).

For dual HUD installation, training events can be flown in the left or right seat as PF. Training for the PM is also required for any procedural differences when the PF is heads-up (compared to heads-down).

4.1 HUD Initial Ground Training. Pilots training to serve as PF during HUD operations should receive a minimum of 2 hours of ground school training in the operation and use of the HUD.

    4.1.1   The initial ground training program should include the following elements:

        a) Classroom instruction covering HUD operational concepts, crew duties and responsibilities, and operational procedures including preflight, normal and abnormal operations; EICAS messages; use of QRH and checklists; miscompare, and failure flags.

        b) Classroom instruction or computer-based training (CBT) on the HUD symbology set and its interrelationship with airplane aerodynamics, inertial factors, environmental conditions, and comparison to PFD.

        c) A HUD pilot training manual or equivalent material in the Flightcrew Operating Manual (FCOM), which explains the limitations, all modes of operation, clear descriptions of HUD symbology, including limit conditions and failures, and incorporation of a crew procedures guide clearly delineating PF and PM duties, responsibilities, and procedural callouts and responses during all phases of flight during which HUD operations are anticipated.

    4.1.2   The FSB recommends special emphasis ground training in the following areas:

        a) Crew coordination,
        b) Crew briefings and callouts,
        c) Duties of PF and PM, and
        d) EICAS messages and use of QRH and checklists applicable to HUD.

4.2 HUD Initial Flight Training.

    4.2.1   Pilots training to serve as PF during HUD operations should receive a minimum of 2 hours of flight training in the operation and use of the HUD. A pilot who progresses through initial or transition flight training in a Global Express, Global 5000, Global 5000 GVFD, Global 6000, Global 5500, or Global 6500 aircraft and satisfactorily completes HUD system curriculum segments (recommended by an instructor) and a HUD proficiency check by a person authorized by the Administrator, does not need to complete the recommended 2 hours of flight training.

    4.2.2   For single HUD installation, flight training must be conducted from the left seat. For dual HUD installations, flight training may be conducted from either seat. Flight training may be conducted in a HUD system-equipped aircraft or a HUD system equipped-Level C FFS with a daylight visual display or a Level D FFS.

FFS approaches, utilizing the HUD, should begin no closer than the final approach fix (FAF) for instrument approaches, and should begin no closer than approximately 1,000 ft above ground level (AGL) (3–4 nautical miles (NM)) to the runway threshold for visual approaches.

4.2.3   Unless integrated with initial type rating training, flight training dedicated to HUD familiarization and proficiency is in addition to other required training elements.

4.2.4   The following HUD flight training program is generic in nature and should be considered as a guide only:

   4.2.4.1   Ground Operations:

   a) Deployment of HUD and stowage.
   b) Taxi using HUD under various lighting and visibility conditions.

   4.2.4.2   Airwork:

   a) Straight and level flight, accelerations, and decelerations.
   b) Normal and steep turns, climbs, and descents.
   c) Wind effects on HUD.
   d) Stall prevention and recovery.
   e) Recovery from unusual attitudes.

   4.2.4.3   Visual Takeoffs, Approaches, and Landings:

   a) Crosswind takeoff and landing.
   b) Visual approaches to runways at night with minimal lighting ("black hole" approaches) and use of Flight Path Vector (FPV) to achieve desired descent angle.
   c) Engine failure on takeoff.
   d) OEI landing.
   e) OEI go-around.

   4.2.4.4   Instrument Approaches:

   a) Approaches to the lowest authorized minima, including an approach and landing with OEI.
   b) Missed approach OEI.
   c) Non-precision and circling approaches (if applicable).

   4.2.4.5   Abnormal/Emergency Operations (as appropriate):

   a) Windshear escape.
   b) Enhanced ground proximity warning system (EGPWS) escape.
   c) TCAS Resolution Advisory (RA).
   d) HUD failure on approach.

e) Approaches with the aircraft in a non-normal slat/flap configuration.

4.2.5 The FSB recommends special emphasis flight training in the following areas:

a) Approaches to "black hole" airports.
b) Use of the flare symbol as a cue (not as guidance).
c) Recovery from unusual attitudes.
d) TCAS RA.
e) Crosschecking from HUD to cockpit displays, including EICAS and other cockpit indications.

4.3 HUD Recurrent Ground Training. Selected HUD-related ground training subjects as outlined in initial ground training above should be reviewed on a recurrent basis.

5. PILOT CHECKING

Pilots training to serve as PF during HUD operations must be administered a proficiency check conducted in a Level C FFS with a daylight visual display, Level D FFS, or on a HUD System-equipped aircraft. This proficiency check may be taken in conjunction with a pilot proficiency check conducted in accordance with 14 CFR part 61 or 135 or may be administered as a separate test.

Maneuvers to be evaluated during the HUD proficiency check include, as a minimum:

- One takeoff.
- One departure procedure.
- One instrument approach procedure (IAP).
- One landing.

Pilots should also be checked on PM duties during HUD approaches and emergencies.

5.1 HUD Recurrent Checking.

At least annually, in conjunction with a pilot in command (PIC) proficiency check required by 14 CFR part 61 or 135, a PIC must demonstrate proficiency using the HUD system by satisfactorily performing the maneuvers listed above.

During recurrent 14 CFR part 135 competency checks, second in commands (SIC) serving as PF during HUD operations should demonstrate proficiency using the HUD by satisfactorily performing the maneuvers listed above.

During recurrent 14 CFR part 135 competency checks, SICs serving as PM during HUD operations should be evaluated on Crew Resource Management (CRM) responsibilities and procedures when the PF is conducting HUD operations.

6. PILOT CURRENCY

Pilots should have completed at least three takeoffs, approaches, and landings using the HUD in the Global Express/XRS/Global 5000 or have completed three takeoffs, approaches, and landings as the PF using the HUD system in a Level C FFS with day and night visual displays or Level D FFS within the previous 90 days before acting as the PF using the HUD in revenue operations.

7. OPERATIONAL SUITABILITY

The HUD, as well as the associated AFM change, was found to be operationally suitable for all phases of flight, including CAT I and II operations when authorized.

APPENDIX 5. ENHANCED FLIGHT VISION SYSTEM (EFVS)

1. BACKGROUND

March through April 2023, a Joint Operational Evaluation Board (JOEB) operational evaluation (FAA and TCCA) convened in Montreal, Canada at CAE to evaluate the Bombardier Global 6500 ground and FFS training on EFVS Approach (EFVS-A) and EFVS Landing (EFVS-L) with and without synthetic elements added to the HUD. The optionally installed synthetic elements are referred to as a Combined Vision System (CVS) and only available on the Global 5000GVFD, Global 5500, Global 6000 and the Global 6500. The JOEB then relocated to Bradley, CT (KBDL) to conduct flights to make an operational suitability determination in Flight Test Vehicle 9313 (C-FTIO) with the Collins Aerospace CMA-2700. Numerous EFVS approaches were flown with and without CVS to minimal Runway Visual Ranges (RVRs) which included landings and go-around/missed approaches.

October 2023, a JOEB, (FAA, EASA and TCCA) convened in Montreal, Canada at CAE to evaluate the upgraded EFVS EVS-3600 sensor. A T1 test was conducted to evaluate the proposed training, checking and currency requirements. The JOEB then validated the proposal in a Global 6500 FFS. Review Appendix 3, Differences Tables for the appropriate differences training and checking when flightcrews have previously satisfactorily completed initial EFVS training in accordance with this appendix on the applicable sensor and transition from the CMA-2700 sensor to the EVS-3600 sensor or EVS-3600 sensor to the CMA-2700 sensor. There are no changes to the pilot currency requirements.

1.1 **Features of EFVS-A.** Bombardier refers to EFVS Operations to 100 feet above touchdown zone elevation (EFVS-100) as EFVS-A.

1.2 **Features of EFVS-L.** Bombardier refers to EFVS Operations to touch down and rollout (EFVS-TD) as EFVS-L.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

3.1 The following aircraft have the CMA-2600 sensor. Refer to the Operational Suitability Report, "Operational Credit for Enhanced Flight Vision Systems (EFVS)" for recommended EFVS operational credit.

- Global Express.
- Global Express XRS.
- Global 5000.

3.2 The following aircraft have the CMA-2700 sensor. Refer to the Operational Suitability Report, "Operational Credit for Enhanced Flight Vision Systems (EFVS)" for recommended EFVS operational credit.

- Global 5000 GVFD.
- Global 5500.
- Global 6000.
- Global 6500.

3.3 The following aircraft have the capability of having the EVS-3600 sensor. Refer to the Operational Suitability Report, "Operational Credit for Enhanced Flight Vision Systems (EFVS)" for recommended EFVS operational credit.

- Global 5000 GVFD.
- Global 5500.
- Global 6000.
- Global 6500.

4. PILOT TRAINING

Level D.

4.1 Experience/Prerequisite. The pilot must be:

a) Qualified and current on the Bombardier BD-700-1A10 / -1A11 aircraft for the EFVS operations (EFVS-A or EFVS-L) being conducted or authorized; or

b) In training in an initial, transition, upgrade, or recurrent course on the Bombardier BD-700-1A10 / -1A11 aircraft for the EFVS operations (EFVS-A and/or EFVS-L) being conducted or authorized.

4.2 Ground Training. Refer to 14 CFR part 61, § 61.66(a) and the current edition of AC 90-106, Enhanced Flight Vision System Operations, for EFVS operations training requirements.

4.3 Flight Training. Refer to 14 CFR part 61, § 61.66(b) and the current edition of AC 90-106, Enhanced Flight Vision System Operations, for EFVS operations training requirements.

4.4 Special Emphasis Areas. The following items are recommendations noted by the FSB/JOEB to enhance pilot training and understanding of EFVS operations.

4.4.1 A Pilot Incapacitation demonstration was conducted during the FSB for EFVS operations to Landing. If pilot incapacitation training is conducted during EFVS operations, the FSB recommends the Pilot Flying should become incapacitated with Pilot Monitoring assuming aircraft control at an altitude between 100 feet above minimums through 100 feet HAT as it is a time and altitude critical event and any delay in assumption of aircraft control could impact the safety of the flight.

4.4.2   Training conducted with degraded automation (without autopilot and AT): A complete EFVS approach with and without CVS profile flown with degraded automation.

4.4.3   Different regulatory requirements for conducting EFVS operations, e.g., EASA, FAA, TCCA, etc.

4.4.4   FPV display. The training to include the FPV transitioning to non-conformal below the applicable decision height/decision altitude.

4.4.5   Environmental conditions. The training to include effects of different environmental conditions during day and night operations, such as, fog, varying cloud bases, rain, snow, contaminated runway, winds, variable RVRs.

5. PILOT CHECKING

Level D.

5.1 Title 14 CFR Part 61. Title 14 CFR § 61.66(b) requires pilots to be proficient in the flight training elements for the EFVS operation to be conducted. The current edition of AC 90-106, Enhanced Flight Vision System Operations, includes suggested items to meet the regulatory requirements for EFVS training.

5.2 Title 14 CFR Part 91K and 135. Refer to the current edition of AC 90-106 and 14 CFR part 91, § 91.1065(g) or part 135, § 135.293(i) as applicable for EFVS task requirements during 14 CFR part 91 subpart K (part 91K) or part 135 competency checks.

6. PILOT CURRENCY

Refer to 14 CFR part 61, § 61.66 and the current edition of AC 90-106, "Enhanced Flight Vision System Operations" for recent flight experience.

7. OPERATIONAL SUITABILITY

The FSB determined that the CMA-2600 EFVS are operationally suitable for use during EFVS operations under 14 CFR § 91.176(b).

The FSB determined that the CMA-2700 EFVS with and without CVS are operationally suitable for use during EFVS operations under 14 CFR § 91.176(a) or (b).

The FSB determined that the EVS-3600 EFVS with and without CVS are operationally suitable for use during EFVS operations under 14 CFR § 91.176(a) or (b).

An operational suitability determination does not constitute an operational authorization.

APPENDIX 6. GLOBAL EXPRESS/XRS TO GLOBAL 6000 AND GLOBAL 5000 TO GLOBAL 5000 GVFD

1. BACKGROUND

The Global Express FSB participated in an evaluation of the training, checking, and currency differences that have occurred by the introduction of the GVFD. Additionally, the FSB was tasked to determine the appropriate type rating for the Global 6000.

For clarification, the FSB evaluation involved the following:

a) The differences between the Global Express/XRS aircraft and the Global 6000.
b) The differences between the Global 5000 aircraft and the Global 5000 GVFD.
c) The initial pilot type rating of the Global 6000 and the Global 5000 GVFD.

2. PILOT TYPE RATING

The FSB determined that the same aircraft type rating designation "BBD-700" is appropriate between the existing Global Express/XRS/Global 5000 and the Global 6000/Global 5000 GVFD variations. Differences training should be accomplished in a Level 5 FTD or higher FSTD.

3. RELATED AIRCRAFT

- Global Express.
- Global Express XRS.
- Global 5000.
- Global 5000 GVFD.
- Global 6000.

4. PILOT TRAINING

Differences training should be accomplished in a Level 5 FTD or higher FSTD. Due to the flightcrew differences, the FSB recommends special emphasis training in the following areas:

a) Flight deck display layout (Airport Facility Directory (AFD)/display unit (DU)) and functionality.
b) Control panels: Control Tuning Panel (CTP), Audio Control Panel (ACP), Communication, Navigation, and Surveillance (CNS), multifunction keypad (MKP), and Cursor Control Panel (CCP).
c) Emergency Descent Mode (EDM) and functionality.
d) Underspeed protection.
e) Nav to Nav transfer, Global Positioning System (GPS)/wide area augmentation system (WAAS)/localizer performance with vertical guidance (LPV)/Required Navigation Performance (RNP)/Performance-Based Navigation (PBN), and IAPs.
f) DC power failure modes with emphasis on loss of all DC electrical power.
g) AFCS modes, A/P all-engines-operating (AEO) in all phases of flight, including OEI in all phases of flight to include OEI go-around, PFD, FDA, and Flight Mode Annunciator (FMA) indications.

h) A/P response during windshear escape guidance.
i) Terrain Awareness and Warning System (TAWS) and EGPWS.
j) Use of Enhanced Vision System (EVS) and Synthetic Vision System (SVS) is for situational awareness only. EVS as described in this paragraph provides infrared (IR) imagery only on an MFD and is not suitable for operations prescribed in 14 CFR § 91.176.
k) Caution and warning messages on the EICAS and horizontal situation indicator (HSI) and associated human factors issues.
l) Use of FMS including takeoff preparation and EMS.
m) CRM with regards to the new functionalities.
n) OEI AT use and logic.

After completion of the differences training referred to in this paragraph, it is recommended that supervised line flying be completed as soon as possible with a line check pilot to consolidate training. It is further recommended that a minimum of two flights be flown, one as the PF and one as the PM.

When operating more than one variation, recurrent training should be alternated between the Global Express/XRS/Global 5000 and Global 6000/Global 5000 GVFD, addressing the differences of all applicable variations on each occasion.

5. PILOT CHECKING

Differences should be checked at Level C in a Level 5 FTD or higher FSTD. Due to the flightcrew differences, the FSB recommends special emphasis checking in the following areas:

a) Flight deck display layout (AFD/DU) and functionality.
b) Control panels: CTP, ACP, Reversionary Selection Panel (RSP), CNS, MKP, and CCP.
c) EDM and functionality.
d) Underspeed protection.
e) Nav to Nav transfer, GPS/WAAS/LPV/RNP/PBN, and IAPs.
f) DC power failure modes with emphasis on loss of all DC electrical power.
g) AFCS modes, A/P AEO in all phases of flight, including OEI in all phases of flight, to include OEI go-around, PFD, FDA, and FMA indications.
h) A/P response during windshear escape guidance.
i) TAWS and EGPWS.
j) Use of EVS and SVS is for situational awareness only. EVS as described in this paragraph provides IR imagery only on an MFD and is not suitable for operations prescribed by 14 CFR § 91.176(b).
k) Caution and warning messages on the EICAS and HSI and associated human factors issues.
l) Use of FMS, including takeoff preparation and EMS.
m) CRM with regards to the new functionalities.

When operating more than one variation, recurrent checking should be alternated between the Global Express/XRS/Global 5000 and Global 6000/Global 5000 GVFD, addressing the differences of all applicable variations on each occasion.

6. PILOT CURRENCY

When operating both the Global Express/XRS/Global 5000 and Global 6000/Global 5000 GVFD, the FSB recommends that flightcrews perform at least one flight as PF or PM in the "Global Express/XRS or Global 5000" variation and at least one flight in the "Global 6000 or Global 5000 GVFD" within the currency period (90 days).

This currency requirement between variations should address the following differences:

a) Takeoff preparation and takeoff.
b) Enroute use of the FMS.
c) IAPs.

7. OPERATIONAL SUITABILITY

The Global 6000 and Global 5000 GVFD, including GVFD Software Version 4.3.1 as well as the associated AFM, was found to be operationally suitable.

APPENDIX 7. HONEYWELL BATCH 2+ TO BATCH 3 SOFTWARE UPGRADE

1. BACKGROUND

In 2011, Bombardier introduced the Batch 3 software upgrade to the Global Express/XRS and Global 5000 Honeywell Avionics aircraft. Batch 3 adds improvements to the Integrated Avionics Computers (IAC) that affect the FMSs, Flight Guidance Computers (FGC), and displays. Updated Global Navigation Satellite System (GNSS) receivers with Satellite-Based Augmentation System (SBAS) that provide LPV approach capability, and Future Air Navigation System (FANS) 1/A capability (Automatic Dependent Surveillance-Contract (ADS-C) and Controller-Pilot Data Link Communication (CPDLC)) are available options.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

The Batch 3 software upgrade on Global Express/XRS and Global 5000 airplanes has been found to be functionally equivalent. If Batch 3 software training and checking requirements are accomplished in one aircraft, Batch 3 software training and checking does not need to be repeated in the other.

4. PILOT TRAINING

Pilots transitioning to Batch 3 software should complete Level B differences training. The differences training should include the following elements:

a) Flightcrews should be provided with and review the Pilot Training Guide (PTG), OMR, FCOM, QRH, and FMS pilot guide that detail the differences between Batch 2+ and Batch 3 for self-study prior to undertaking the Bombardier Aircraft Training Center (BATC) eLearning.

b) Flightcrews should clearly understand flight guidance panel (FGP) selections and PFD annunciations while conducting FMS-based approaches using lateral navigation (LNAV), vertical path (VPTH), vertical glidepath (VGP), and LPV (optional) functions.

c) CAUTION: The proper setting of the altitude pre-selector during approach operations should be clearly understood. The safety mitigations for conducting a go-around with the altitude pre-selector set to landing elevation should be emphasized. This training area is of particular importance for operators flying mixed Batch 2+ and Batch 3 aircraft configurations.

d) Bombardier and/or operator-developed standard operating procedures (SOP) related to CRM and human factors in the use of FANS CPDLC (optional), including division of duties, cross-confirmation, and aircraft flight path changes, etc.

5. PILOT CHECKING

Not applicable.

6. PILOT CURRENCY

There are no currency requirements for the Batch 2+ to Batch 3 software differences. In the event that flightcrews will be required to operate a mixed fleet of aircraft with Batch 2+ and Batch 3 software, currency should be maintained through self-review of the differences.

7. OPERATIONAL SUITABILITY

The Honeywell Batch 3 software upgrade, as well as the associated AFM change, was found to be operationally suitable.

APPENDIX 8. GVFD SOFTWARE UPGRADE VERSION 4.3.1 (VERSION 3) TO 4.5.8 (VERSION 4.5)

1. BACKGROUND

In 2012, Bombardier introduced the Rockwell Collins Fusion-based GVFD avionics suite into the Global Express/XRS and Global 5000 aircraft. BD-700-1A10 aircraft with GVFD is marketed as a Global 6000 while a BD-700-1A11 aircraft with GVFD is marketed as a Global 5000 GVFD.

GVFD Software Version 4.5.8 (marketed as Version 4.5) is the first major software upgrade to the GVFD avionics suite, which include an electronic checklist (ECL) function, vertical situation display (VSD), FMS TOLD performance, FMS speed control, a third FMS, and Required Navigation Performance Authorization Required (RNP AR) approach capability.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

The GVFD Version 4.5.8 software upgrade on Global 6000 and Global 5000 GVFD airplanes has been found to be functionally equivalent. If Version 4.5.8 software training and checking requirements are accomplished in one aircraft, Version 4.5.8 software training and checking does not need to be repeated in the other.

4. PILOT TRAINING

4.1 Prerequisites. Flightcrew members upgrading to software Version 4.5.8 (Version 4.5) must have previously been trained and found qualified on the software upgrade Version 4.3.1 (Version 3).

Pilots transitioning to Version 4.5.8 software should complete Level C differences training. It is expected that, at some time in the future, all GVFD aircraft will be updated to software Version 4.5.8 (or a later version), at which point this differences training will have been integrated into the full initial course, and integrated into the differences courses to transition from Global aircraft equipped with Honeywell avionics to aircraft equipped with Rockwell Collins avionics, making this differences course redundant. The differences training should include the following elements:

a) SOP and crew coordination using the ECL.
b) Use of the ECL backup (e.g., paper, Integrated Flight Information System (IFIS), Electronic Flight Bag (EFB), as applicable).
c) FMS TOLD and manual FMS TOLD entries.

NOTE: Flex takeoff RNP AR approach specific training is covered in Appendix 9, RNP AR 0.3.

5. PILOT CHECKING

Level A.

NOTE: RNP AR approach specific checking is covered in Appendix 9.

6. PILOT CURRENCY

There are no currency requirements for the GVFD Version 4.3.1 to Version 4.5.8 software differences. In the event that flightcrews will be required to operate a mixed fleet of GVFD aircraft with Version 4.3.1 and 4.5.8 software, currency should be maintained through self-review of the differences.

NOTE: RNP AR approach specific currency is covered in Appendix 9.

7. OPERATIONAL SUITABILITY

The GVFD Version 4.3.1 to Version 4.5.8 software upgrade, as well as the associated AFM change, was found to be operationally suitable.

APPENDIX 9. RNP AR 0.3

1. BACKGROUND

The RNP AR training described in this appendix does not replace the guidance or considerations in the current edition of FAA AC 90-101, Approval Guidance for RNP Procedures with AR. This report's requirements and recommendations are in addition to AC 90-101. Initial RNP AR training for the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 is defined as Level D training in accordance with Appendix 1 of this document.

As a prerequisite to RNP AR training, checking, and currency requirements as defined in this appendix, pilots operating the Global 6000 or Global 5000 GVFD must have met the requirements of Appendix 8 for qualification in Global 6000 or Global 5000 GVFD aircraft.

This appendix only applies to the Global 5500, Global 6500, Global 6000 and the Global 5000 GVFD aircraft that have the avionics upgrades installed as defined in Appendix 8 and has RNP AR avionics capability for which pilot training, checking, and currency is sought.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

RNP AR capability standard on the Global 5500, Global 6500, and RNP AR capability installed on Global 6000 and Global 5000 GVFD airplanes has been found to be functionally equivalent. If training, checking, and currency requirements are accomplished in one aircraft, RNP AR training, checking, and currency need not be repeated in the other.

4. PILOT TRAINING

In conducting RNP AR approaches, specified duties and procedures are assigned to both the pilot flying (PF) and pilot monitoring (PM). Therefore, the requirement for initial and recurrent training as defined below is applicable to both pilot in command (PIC) and second in command (SIC).

4.1 RNP AR Initial Training.

4.1.1 Initial ground training should fully meet the guidance of the current edition of AC 90-101 for the Global 6000 Global 5000 GVFD, Global 5500, or Global 6500.

4.1.2 Initial flight training should fully meet the guidance of the current edition of AC 90-101 for the Global 6000 Global 5000 GVFD, Global 5500, or Global 6500 RNP AR Recurrent Training.

4.2 RNP AR Recurrent Training.

4.2.1   Recurrent ground training must include, as a minimum, a review of "Pilot Procedures" and "Abnormal/Failures" as defined in the current edition of AC 90-101.

4.2.2   Recurrent flight training should fully meet the guidance of the current edition of AC 90-101 for the Global 6000, Global 5000 GVFD, Global 5500, or Global 6500.

4.3 Special Emphasis Training.
The FSB has determined that the following items should receive special emphasis in an approved RNP AR training program:

a) Required equipment for RNP AR approaches (minimum equipment list (MEL) review and in-flight equipment failure).
b) Missed approach procedures on RF legs.
c) Manually flown approaches and missed approaches.
d) Temperature compensation.

5. PILOT CHECKING

In conducting RNP AR approaches, specified duties and procedures are assigned to the PF and PM. Therefore, the requirement for initial and recurrent checking is applicable to both PIC and SIC.

5.1 Initial and Recurrent Checking Requirement.
RNP AR checking in a qualified FSTD, Global 6000, Global 5000 GVFD, Global 5500, or Global 6500 aircraft must include:

a) Two RNP AR approaches flown as PF.
b) One RNP AR approach flown to an RNP published missed approach.
c) One RNP AR approach flown to a landing.
d) One of the RNP AR approaches must have RF legs.

5.2 Instrument Competency/Proficiency Check Requirements Under 14 CFR §§ 135.293, 135.297, or PIC Proficiency Check Under 14 CFR Part 61, § 61.58.
For PICs qualified and authorized for RNP AR approaches, at least one RNP AR approach with RF legs must be demonstrated during a 14 CFR § 135.293(b) Competency Check, § 135.297 Instrument Proficiency Check, or during a PIC Proficiency Check under 14 CFR § 61.58. Additionally, the PM during the check must be RNP AR current and qualified in accordance with this appendix.

6. PILOT CURRENCY

To maintain currency in RNP AR operations, a PIC must have accomplished at least one RNP AR approach to either a missed approach or landing within the preceding 6 months. Additionally, the PM (SIC) used in meeting this currency requirement must be RNP AR-current and qualified as described in this appendix.

The RNP AR approach must have been accomplished in either an appropriately qualified FSTD, a Global 6000, Global 5000 GVFD, Global 5500, or Global 6500 aircraft.

Any checking under 14 CFR parts 61 or 135 that requires a demonstration of RNP AR approach competency that was accomplished within the preceding 6 months satisfies this currency requirement.

If RNP AR approach currency is lost, currency may be reestablished by completing the RNP AR recurrent training and checking elements defined in this appendix.

7. OPERATIONAL SUITABILITY

RNP AR capability, as well as the associated AFM change, was found to be operationally suitable.

APPENDIX 10. GVFD SOFTWARE UPGRADE VERSION 4.5.8 (VERSION 4.5) TO 5.1.3 (VERSION 5.0)

1. BACKGROUND

In 2012, Bombardier introduced the Rockwell Collins Fusion-based GVFD avionics suite into the BD-700-1A10 "Global Express" and BD-700-1A11 "Global 5000" aircraft. BD-700-1A10 aircraft with GVFD is marketed as a ''Global 6000'' while a BD-700-1A11 aircraft with GVFD is marketed as a "Global 5000 GVFD."

GVFD software Version 5.1.3 (marketed as Version 5.0) is the second major software upgrade to the GVFD avionics suite, which incorporates new functions and upgrades to the following systems: electronic displays, navigation and communications, and the FMS.

A small number of Global 6000 and Global 5000 GVFD aircraft may have Version 4.5.9 versus Version 4.5.8 software (both marketed as Version 4.5). The FSB only evaluated the GVFD Version 4.5.8 to Version 5.1.3 software upgrade.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

The GVFD Version 5.1.3 software upgrade on Global 6000 and Global 5000 GVFD airplanes has been found to be functionally equivalent. If Version 5.1.3 software training and checking requirements are accomplished in one aircraft, Version 5.1.3 software training and checking does not need to be repeated in the other. It is expected that, at some time in the future, all GVFD aircraft will be updated to software version 5.1.3 (or a later version), at which point this differences training will have been integrated into the full initial course and integrated into the differences courses to transition from Global aircraft equipped with Honeywell avionics to aircraft equipped with Rockwell Collins avionics, making this differences course redundant.

4. PILOT TRAINING

4.1 Prerequisites. Pilots upgrading to the GVFD software 4.5.8 (4.5) must have previously been trained and found qualified on the GVFD software Version 4.3.1 (Version 3). Pilots transitioning to Version 5.1.3 software should complete Level B differences training. The differences training should include the following elements:

4.1.1 Electronic Displays:

a) Altimeter setting memory.
b) New CAS Caution/Advisory messages.
c) Graphical weather annunciation.
d) SVS changes:

- Halos.
- Centerline extensions.
- MISCOMPARE.

4.1.2 Navigation and Communication:

a) Define Name Field for high frequency (HF), very high frequency (VHF), navigation, and automatic direction finder (ADF) radios.
b) TAWS:
   - Peaks reductions.
   - Display changes.
c) VSD proportional runway length.
d) Surface management system:
   - Operation.
   - Takeoff alerts (including "Not a Runway," "Short Runway," and "RUNWAY MISCOMPARE").
   - Landing alerts (including "Not a Runway" and "Short Runway").
   - Warnings, annunciations, and alerts.
   - CAS messages.
   - AFMSs and limitations.

4.1.3 FMS Upgrades:

a) Predictive step climbs and descents.
b) FMS speed target/manual speed target limitations and use.
c) Optimum takeoff decision speed (V_1)/takeoff rotation speed (V_R) calculations.
d) Out/6 overspeed function:
   - FMS calculations.
   - Manual AFMS calculations.
   - AEO/OEI procedures and pitch reductions.
e) Balanced field length function for out/0 configuration:
   - FMS calculations.
   - Manual AFMS calculations.
   - AFMSs and limitations (including FANS, CPDLC, holding, LPV approach, and temperature compensation).
f) AFMSs and limitations (including FANS, CPDLC, holding, LPV approach, and temperature compensation.
g) Nav to Nav transfer updates.
h) New PFD/MFD/FMS/HUD annunciations.

4.1.4 FCOM, QRH, and AFMS and limitation changes.

5. PILOT CHECKING

Pilots transitioning to Version 5.1.3 software should complete Level B differences checking.

6. PILOT CURRENCY

There are no currency requirements for the GVFD Version 4.5.8 to Version 5.1.3 software differences. In the event that flightcrews will be required to operate a mixed fleet of GVFD aircraft with Version 4.5.8 and Version 5.1.3 software, currency should be maintained through self-review of the differences.

7. OPERATIONAL SUITABILITY

The GVFD Version 4.5.8 to Version 5.1.3 software upgrade, as well as the associated AFM change, was found to be operationally suitable.

APPENDIX 11. GLOBAL 5000 GVFD, GLOBAL 6000, GLOBAL 5500, AND GLOBAL 6500 STEEP APPROACH OPERATIONS

1. BACKGROUND

An FSB was convened on June 20, 2013, to evaluate operational suitability and to determine training, checking, and currency requirements for conducting steep approaches in the Global 5000 GVFD aircraft. FSB member training and flying took place at the Bombardier Aerospace facility in Wichita, KS. Certification flight testing had been completed prior to the FSB.

Steep approaches in the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 are defined as those glidepaths greater than 4.5° and less than or equal to 5.5°. The Global 5000 GVFD, Global 6000, Global 5500, and Global 6500, as currently configured, is capable of flying steep approaches without modifications to the airframe or changes to the avionics system or FMS. The EGPWS database is able to recognize those airports that support steep approach operations and automatically apply an additional 500 feet per minute (FPM) descent rate to the "SINK RATE" alert and 200 FPM to the "PULL-UP" warning alert. Steep approaches must be flown with the spoilers - FULL.

Steep approaches were conducted during day conditions using 5.5° approach angles. Two-engine and single-engine steep approaches were flown, terminating either with a landing or execution of a missed approach or balked landing procedure. Although steep approaches in the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 must be conducted with both engines operative, the FSB evaluated piloting skills required to perform a single-engine extraction inside the FAF.

2. OPERATIONAL SUITABILITY ASSESSMENT

The FSB has determined that, when coupled to the A/P and AT, the conduct of steep approaches require no higher piloting skill level than that of normal (3°) approaches. Although the sight picture at flare is definitely steeper, a pilot is able to easily adapt to the slight increase in flare rate, or slight increase in flare altitude, as the aircraft is placed in the proper landing attitude. The use of the HUD in executing steep approaches is mandatory. Use of the A/P and AT from the FAF to the minimum use height of 250 ft above touchdown is mandatory during steep approaches in the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500. Therefore, competence in conducting steep approaches can be achieved through ground and flight training.

3. PREREQUISITES FOR STEEP APPROACH TRAINING

Prior to receiving steep approach training in the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 or unless steep approach training is integrated within the initial or recurrent Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 training and the steep approach training is conducted immediately preceding the competency/proficiency check, the pilot must have been previously qualified in the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 aircraft.

4. STEEP APPROACH TRAINING REQUIREMENTS

4.1 **Ground Training.** Ground training must consist of training in the following areas and is appropriate to any flightcrew member position:

    4.1.1   AFMS review to include limitations, procedures, Weight and Balance (W&B), performance, approach and landing configuration, landing flare, stall warning, and EGPWS Mode 1 operations.

    4.1.2   Stages of the steep approach to include stabilized approach concept (early configuration, including proper airspeed, flap settings, speedbrakes, and landing gear), glideslope capture, flare attitude, and appropriate change in pitch rate.

    4.1.3   Comparison of the steep approach sight picture to that of 3° (normal) approach.

    4.1.4   Pilot techniques to include early configuration, avoidance of abrupt control inputs, and ground rush illusions.

    4.1.5   Identification of airports with steep approaches to include the differences between landing distance data for London City Airport and other airports with steep approaches.

4.2 **Flight Training.** Flight training is required for the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 steep approaches assuming the ground training described above has been completed.

NOTE 1:   If steep approach training is desired, it is possible to program the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 FMS to fly a steep approach to any runway in the navigation database for which visual approach is available. Unless the airport has a designated steep approach in the FMS database, EGPWS alerts ("SINK RATE," PULL-UP) will be heard in the final phase of the approach and landing (below approximately 400 ft AGL). Steep approach flight training conducted in this manner should only be conducted in VMC. Before each approach, the flight instructor should brief the pilot on the EGPWS alerts that will be activated during the final phase of the approach and landing. The flight instructor should emphasize that, for the purpose of flight training only, the pilot should not react to these alerts.

NOTE 2:   Some airports with steep approaches require previous steep approach experience prior to conducting a steep approach at that airport. Practicing approaches at 5.5 degrees may be accomplished by the method described in NOTE 1.

5. STEEP APPROACH CHECKING REQUIREMENTS

There is no requirement for knowledge checking or flight proficiency testing for the Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 steep approach qualification. Proof of completion of Global 5000 GVFD, Global 6000, Global 5500, and Global 6500 steep approach training is sufficient for showing qualification.

6. STEEP APPROACH CURRENCY REQUIREMENTS

If within the past 6 months a pilot has not conducted at least one steep approach, then a review of all the listed items for ground training above must be completed and properly documented prior to conducting steep approach operations.

7. STEEP APPROACH RECURRENT REQUIREMENTS

As a minimum, regardless of the number of steep approaches completed, a review of all ground training items must be accomplished annually and documented in a manner acceptable to the Administrator.

APPENDIX 12. GLOBAL 5000 GVFD/GLOBAL 6000 TO GLOBAL 5500/GLOBAL 6500 DIFFERENCES TRAINING

1. BACKGROUND

In November 2019, an FSB convened in Montreal, Canada to determine the operational suitability and evaluate training, checking, and currency requirements for the Global 5500 and 6500 aircraft.

The FSB evaluated the handling qualities using a T2 process between the base and variant aircraft by both analysis and an evaluation flight.

A T3 test was used to evaluate ground ILT in the Global 6500 FFS and aircraft. The FSB used the Global 6000 (C-GDRU) for the T2 evaluation and the Global 6500 (C-GDRX) aircraft for the T2/T3 evaluation.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

- Global 5000 GVFD.
- Global 5500.
- Global 6000.
- Global 6500.

4. PILOT TRAINING

Training Differences Level: D.

4.1 Experience/Prerequisite. Flightcrew members must have previously been trained and found qualified in the Global 5000 GVFD or Global 6000.

4.2 Special Emphasis Areas. Special emphasis ground training is required for:

- CAFM/Computerized In-Flight Performance (CIFP) ILT.
- Operation on Contaminated Runways: Contaminated runway distances have been estimated assuming that the runway is completely contaminated.
- Spoiler extension in expanded region and MMO envelop to 0.90 Mach.

4.3 **Ground Training.** The Global 5000 GVFD/Global 6000 to Global 5500/Global 6500 differences ground training program should include the following elements:

4.3.1 Airframe and Avionics Upgrades:

- General differences.
- Flaps and aileron modifications.
- Pneumatic bleed source modifications.
- New and modified CAS messages.
- New, modified, and removed limitations.
- AFMSs.
- New/modified non-normal procedures.
- Powerplant differences and improvements.
- Airframe and Avionics improvements and benefits.
- Engine design.
- Bleed air: handling bleed valves.
- Bleed air: anti-ice.
- Bleed air: cooling and sealing.
- TCCV.
- Rotor bow.
- Engine-driven pump offload.
- Starter cranking limits (ground and air).
- In-flight engine start messages.
- Engine relight envelopes.
- Engine failure procedures.
- Engine operating limitations.
- Performance updates.
- Expanded MMO region.
- Spoiler extension in expanded MMO region.
- MMO spoiler envelope.
- FMS fuel calculations.
- Expanded M 0.90 airspeed indications.
- Normal procedures.
- Non-normal procedures.
- Limitations.

4.3.2 QRH Differences and Improvements:

- Global 6500 QRH format.
- Performance data examples.
- QRH layout.
- Brake energy tables.
- Takeoff performance.
- Takeoff performance corrections.
- Obstacle climb gradient and level off.

- Geometric to pressure height.
- OEI net takeoff climb gradient.
- OEI net takeoff wind correction.
- Thrust setting – MCT.

4.3.3 Performance:

- AFM and CFM.
- CIPF.
- Definition changes.
- Engine thrust settings.
- Runway surface conditions.

4.3.4 AFM (CAFM):

- Calculators.
- Takeoff performance.
- Thrust settings.
- Approach and landing performance.
- Other performance modules.
- CAFM/QRH comparison.

4.3.5 CIFP:

- Performance module.
- Altitude capability.
- Climb performance.
- Cruise performance.
- Descent performance.
- Driftdown performance.

4.4 Flight Training. System Integration Training:

4.4.1 MMO Spoiler Extended Envelope Training:

- Logic demonstration.
- Overspeed demonstration.
- Manual flight demonstration.
- MMO envelope.
- Use of spoilers.

5. PILOT CHECKING

Checking Differences Level: C.

6. PILOT CURRENCY

Not applicable.

7. OPERATIONAL SUITABILITY

The FSB determined the Global 5000 GVFD/Global 6000 to Global 5500/Global 6500 differences training and the Global 5500/Global 6500 aircraft to be operationally suitable.

APPENDIX 13. TECHNICAL INSERT 1 – COLLINS SOFTWARE VERSION 5.5 to VERSION 5.8 UPGRADE

1. BACKGROUND

In January 2023, an FSB convened in Montreal, Canada to determine the operational suitability and evaluate training, checking, and currency requirements for the Global 5000 GVFD, Global 5500, Global 6000 and 6500 aircraft.

A T3 test was used to evaluate ground TCBI in the Global 6500 FFS.

The Technical Insert 1; Collins Software Version 5.8 introduces a series of minor avionics changes on the AFCS, EFIS, EICAS, HUD, IFIS, IMA, OMS, Resource Management System (RMS), TCAS, Transponder, SVS and Weather Radar. Additional options that can be installed are ADS-B In, AMM and SVS Taxi, Predictive Windshear, SiriusXM Weather and Vertical Weather.

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

- Global 5000 GVFD.
- Global 5500.
- Global 6000.
- Global 6500.

4. PILOT TRAINING

Training Differences Level: B.

4.1 Experience/Prerequisite. Flightcrew members must have previously been trained and found qualified in the Global 5000 GVFD, Global 5500, Global 6000 or Global 6500.

4.2 Special Emphasis Areas. Not applicable.

4.3 Ground Training. The Global 5000 GVFD/Global 5500/Global 6000 and Global 6500 differences ground training program should include the following elements:

4.3.1   Avionics Upgrades and Limitations:

- Collins Software Version 5.8 Update.
- ADS-B In (optional equipment).
- AMM (optional equipment).
- SVS Taxi (optional equipment).
- Predictive Windshear (optional equipment).

- Sirius XM Weather (optional equipment).
- Vertical Weather (optional equipment).

4.4 Flight Training. Not applicable.

5. PILOT CHECKING

Checking Differences Level: B.

6. PILOT CURRENCY

Not applicable. There are no currency requirements for the Collins Software Version 5.8 differences. In the event flightcrews will be required to operate a mixed fleet of software versions in the Global 5000 GVFD/Global 5500/Global 6000/Global 6500 aircraft, currency should be maintained through self-review of the differences.

7. OPERATIONAL SUITABILITY

The FSB determined the Global 5000 GVFD/Global 5500/Global 6000/Global 6500 differences training to be operationally suitable.

APPENDIX 14. RUNWAY OVERRUN AWARNESS AND ALERTING SYSTEM (ROAAS)

1. BACKGROUND

In February 2025, an FSB was convened in conjunction with Transport Canada Civil Aviation (TCCA-Lead Authority) to evaluate training, checking, and currency requirements for the added ROAAS operations in the Bombardier Global 5500 (BD-700-1A11) and Global 6500 (BD-700-1A10) to determine operational suitability. EASA did not participate in the Operational Evaluation (OE) activity. They will be making their own determination/analysis using both FAA and TCCA OE findings.

> **NOTE:** This appendix does not apply to the Global Express, Global Express XRS, Global 5000, or Global 6000 variant.

The proposed courseware, which included the training program and Operations Manuals, were operationally evaluated by the FSB at the CAE Inc. training facility in Montreal, Canada.

Additionally, the FSB conducted flights in a Level D FFS to validate training in a Bombardier Global 6500. Numerous visual approaches were conducted to runway 27 and 32 at Boston Logan International Airport (KBOS) in the FFS. FFS scenarios were utilized to demonstrate the ROAAS system in unusual situations such as unstable approaches, approaches at V_{REF} plus 30 kts, and landing with runway conditions simulated to Runway Condition Code (RCC) 3, 5, and 6.

In accordance with European Organization for Civil Aviation Equipment (ED-250 Dec 2017), ROAAS is an alerting system designed and intended to reduce the risk of runway overrun. The ROAAS system is a feature of the TAWS system. The main functions of the ROAAS are to:

- Calculate in real-time the distance required to stop the airplane, based on its actual position and energy during approach and landing.
- Generate alerts when the ROAAS anticipates or detects a potential runway overrun.

These functions are designed to complement the flight crew's situational awareness when the possibility of exceeding the runway end during approach and landing, and assist in the decision making for:

- A go-around/missed approach.
- Application of maximum deceleration on the ground.

Use of ROAAS does not replace pilot actions, or alleviate flight crew's responsibilities for managing approach and landing including, but not limited to: Time-of-Arrival landing distance assessment, stabilized approach criteria, flare and landing technique, proper use of deceleration devices or actual braking performance monitoring.

1.1 Applicability. In accordance with EUROCAE (ED-250 Dec 2017), ROAAS is an alerting system designed and intended to reduce the risk of runway overrun and will be required on new large airplane designs and on certain new large airplanes operated in commercial air transportation and manufactured after a predetermined date.

The ROAAS will be offered through the optional SB 700-24-5524 (Global 5500)/ SB 700-34-6523 (Global 6500) on production aircraft beginning with SN 60182 and subsequent for the Global 5500 and SN 60154 for the Global 6500.

An in-service retrofit is available for both the Global 5500/6500. The retrofit requirement for both Global 5500/6500 is:

- Aircraft must have V5.9 software installed prior to installing for ROAAS, [ref: Preassigned optional SB 700-34-5523 (Global 5500); 700-34-6522 (Global 6500)].

2. PILOT TYPE RATING

Not applicable.

3. RELATED AIRCRAFT

Not applicable.

4. PILOT TRAINING

The FSB has determined that the minimum training is Level B.

In conducting ROAAS operations, specific duties and procedures are assigned to both the PF and PM. Therefore, the requirements for initial, transition, upgrade and recurrent training as defined below are applicable to both PIC and SIC.

4.1 Experience/Prerequisite. The pilots must be:

a) Qualified and current on the Bombardier Global 5500/6500 aircraft; or
b) In training in an initial, transition, upgrade, or recurrent course.

4.2 Special Emphasis Areas. The following items are recommendations noted by the FSB to enhance pilot training and understanding of ROAAS operations in the Bombardier Global 5500/6500.

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

4.2.1.1 Emphasis on operational process and the required conditional step as specified in the QRH for non-normal conditions addressing the specific QRH note requirements.

4.3 Ground Training.

4.3.1 The ground training segment presented has been found to be adequate to provide pilots with the necessary knowledge to understand:

- ROAAS operations.
- Operating logic.
- Procedures for modifying runway length in ROAAS FMS page.
- ROAAS limitations based on runway conditions.

4.3.2 For all operators, ground training is recommended at Level B training. Please refer to Appendix 2 of this document for specific training levels.

4.4 Flight Training.

Although this difference training does not require FFS training, training providers and operators may consider providing ROAAS training as part of initial, transition, upgrade and recurrent training.

5. PILOT CHECKING

The FSB has determined that the minimum checking is Level B. Satisfactory completion of ground training must be documented.

6. PILOT CURRENCY

Not applicable.

7. OPERATIONAL SUITABILITY

The FSB has found the Bombardier Global 5500/6500 ROAAS to be operationally suitable under 14 CFR parts 91 and 135.*

*An operational suitability determination does not constitute an operational authorization.