



Publications and Training Solutions

Course Syllabus: 523-0826002

COURSE TITLE: Bombardier Global Vision 7500 Operator Training

PREREQUISITES:

Students should have a basic knowledge of aircraft avionics systems and a working command of the English language.

PURPOSE:

This course provides aircrew training necessary to operate the Collins Aerospace Fusion flight deck suite for the Global Express 7500 aircraft.

OBJECTIVES: Upon completing this course, the student should be able to:

1. Identify all Collins Aerospace system and subsystem components and identify their operational characteristics.
 1. Understand the features and theory of operation of all Collins Aerospace systems and subsystems.
2. Perform normal and abnormal flight operations using the Collins Aerospace avionics system.

COURSE LENGTH: 5 Days

TRAINING DEVICES:

1. Global Express 7500 Desktop Trainer

TRAINING MATERIALS:

1. Student Guide (Electronic) 523-0826002

REFERENCES:

1. ProLine Fusion Avionics System for the Bombardier Global Vision 523-0824308
 1. Bombardier Global 7500 Flight Management System 523-0824309
 2. CMU-900 Controller / Pilot Data Link Communication (CPDLC) App 523-0818772
2. RTA-4218 Series MultiScan™ Automatic Weather Radar 523-0818856



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COURSE OUTLINE

0. Welcome & Introductions

- A. Course Overview
 - i. Welcome
 - ii. Student Registration

1. Chapter 1 – Overview

- A. Introduction
- B. General Description
- C. Component Locations
- D. System Interface
- E. Controls
- F. Display Features
- G. Flight Management System
- H. Status
- I. Hands-on Exercises

2. Chapter 2 – Displays

- A. Adaptive Flight Displays (AFDs)
- B. Control Tuning Panels (CTPs)
- C. Cursor Control Panels (CCPs)
- D. Multifunction Keyboard Panels (MKPs)
- E. Reversion Switch Panel (RSP)

3. Chapter 3 – Integration Processing System

- A. Integrated Processing Cabinets (IPC) and installed modules
 - i. IPC-6210
 - ii. IPC-6220
- B. Installed application software



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4. Chapter 4 – Data Concentration System

- A. Data Concentrator Unit Module Cabinet (DMC)
- B. Aircraft Personality Module (APM)
- C. Installed software applications
- D. Engine Indicating Crew Alerting System (EICAS)

5. Chapter 5 – HUD & Enhanced Vision System

- A. Component Description
- B. Component Operation
- C. Maintenance & Troubleshooting

6. Chapter 6 – Synthetic Vision System

- A. Components
- B. Display

7. Chapter 7 – Air Data System

- A. Smart Probe
- B. Aircraft Configuration Table
- C. Indications
- D. Reversionary modes
- E. Troubleshooting

8. Chapter 8 – Attitude / Heading System

- A. Displays and Indications
- B. Reversionary modes

9. Chapter 9 – Integrated Flight Information System

- A. Electronic Charts
- B. Enhanced Map Overlays
- C. Graphical Weather
- D. Document Reader



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10. Chapter 10 – Automated Flight Control System

- A. Flight Control System Application
- B. Flight Control Panel
- C. Flight Director
- D. Flight Deck Controls

11. Chapter 11 – Flight Management System

- A. Controls
- B. Inputs / Outputs
- C. Display
- D. Formats
- E. Faults
- F. RAIM / RNP

12. Chapter 12 – Communication

- A. Digital Audio System
- B. Radio Management
- C. VHF-4000
- D. HF-9031A

13. Chapter 13 – Navigation

- A. NAV-4000
- B. DME-4000
- C. GPS-4000S
- D. ALT-4000 (Radio Altimeter)

14. Chapter 14 – Traffic Surveillance System & Terrain Awareness Warning System

- A. Component Description
- B. Component Location
- C. System Operation



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15. Chapter 15 – Weather Radar

- A. Receiver / Transmitter Assembly (RTA)
- B. Weather Radar (WXR) Fundamentals
- C. MultiScan™ Theory
- D. WXR Operation
- E. Vertical Weather
- F. Manual Operation

16. Chapter 16 – Summary

- A. Summary
- B. Questions

EQUIPMENT TYPE:

EQUIPMENT	NOMENCLATURE	PART NUMBER
Audio Control Panel	ACP-6000	822-2928-570
Radio Interface Unit	RIU-4010	822-1863-671
Radio Interface Unit	RIU-4110	822-1864-176
VHF Comm Transceiver - 8.33kHz	VHF-4000	822-1468-110
VHF Comm Transceiver - 8.33kHz, Data Link	VHF-4000	822-1468-390
HF Transceiver	HF-9031A	822-0101-002
VOR/ILS/MB/ADF Receiver	NAV-4000	822-1465-101
DME Transceiver	DME-4000	822-1466-001
Global Positioning System	GPS-4000S	822-2189-100



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EQUIPMENT	NOMENCLATURE	PART NUMBER
Radio Altimeter	ALT-4000	822-0615-207
MultiScan™ / FLW Weather Radar, 18"	RTA-4218	822-2259-002
Traffic Surveillance System	TSS-4100	822-2132-002
TAWS Processing Module	TPM-6000	822-2586-001
Common Computing Module, 440 Processor	CCM-6210	822-2192-002
Adaptive Flight Display, 15.1"	AFD-6520	822-2332-420
Control Tuning Panel	CTP-6000	822-2493-050
Cursor Control Panel	CCP-6000	822-2831-002
Multi-Function Key Panel	MKP-6000	822-2471-050
Reversion Switch Panel	RSP-6200	822-2335-010
DCU Module Cabinet	DMC-6000	822-2403-271
Data Concentrator Module	DCM-6000	822-2394-002
Aircraft Personality Module	APM-5000	822-2195-001
Lamp Driver Unit	LDU-4000	622-9822-101
Engine Indication Crew Alert System	EICAS-6000	810-0245-3B0001
Integrated Processing Cabinet, Common Computing	IPC-6210	822-2404-101



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EQUIPMENT	NOMENCLATURE	PART NUMBER
Integrated Processing Cabinet, Situational Awareness	IPC-6220	822-2142-101
Digital Switching Module (24 Port ARINC 664 Switch)	DSM-5110	822-2133-020
Common Computing Module	CCM-5110	822-1991-002
Flight Control Panel	FCP-5120	822-2468-020
Synthetic Vision Module with Integrated Head-up Display	SVM-6110H	822-2539-021
Information Management System	IMS-6010	822-3132-101
HUD Overhead Unit	OHU-6600	1500-3100-002
HUD Combiner, Left	CMB-6600	1500-3110-005
Enhanced Vision Sensor	EVS-3600	1500-4010-001
Lightning Protection Unit	LPU-6016	822-3237-001
Cockpit Printer	PRNTR-30	866-0155-110
Synthetic Vision Module	SVM-6110	822-2323-001
HUD Combiner, Right	CMB-6600	1500-3110-006
XM Weather Receiver	XMWR-1000	822-2031-003