

Publications and Training Solutions

Course Syllabus: 523-0825045

COURSE TITLE: Challenger 604 (CL-604) Pro Line Fusion Flight Line Maintenance CBT

PREREQUISITES:

1. Students should have basic knowledge of aircraft avionics systems.

PURPOSE:

This course provides line maintenance personnel with training to operate and perform flight line maintenance for the CL-604 Proline Fusion system.

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

1. Provide an overall understanding of the CL-604 Proline Fusion Avionics principles and operation.
2. Identify system components and the functional/operational characteristics of each line replaceable unit (LRU).
3. Identify aircraft system interface/system architecture.
4. Perform fault isolation to a faulty LRU using built-in test diagnostics and maintenance manuals.

COURSE LENGTH: 8 Hours

REFERENCES:

1. Bombardier Challenger 604 Pro Line Fusion Installation Manual 523-0825301
2. Bombardier Challenger 604 Pro Line Fusion Operator Guide 523-0825299
3. Bombardier Challenger 604 Pro Line Fusion Quick Reference Guide 523-0825302
4. Bombardier Challenger 604 Pro Line Fusion Fault Isolation Manual 523-0825300

Publications and Training Solutions

Course Syllabus: 523-0825045

COURSE OUTLINE

0. Introduction

- A. General Navigation
- B. Course Description

1. Overview

- A. Familiarization of the CL-604 Pro Line Fusion system
- B. Description of system components and their locations
- C. Description of system component controls and indicators

2. Operation

- A. Navigating and Operating the CL-604 Pro Line Fusion System

3. Theory of Operation

- A. Block Diagram and System Interface description

4. Software Loading

- A. USB Building Databases
- B. Database Loading
- C. Reload Display software
- D. License Management (APM configuration)

5. Corrective Maintenance

- A. Onboard Maintenance System (OMS)/FIM Overview
- B. OMS access and downloading
- C. Description of maintenance related pages
- D. Operational Tests for the Pro Line Fusion System
- E. Troubleshooting/Fault Isolation procedures
- F. Remove/Replace Procedures

Publications and Training Solutions

Course Syllabus: 523-0825045

EQUIPMENT TYPE:

EQUIPMENT	NOMENCLATURE	PART NUMBER
AFD-3700	Adaptive Flight Display	822-3065-001
APM-5000	Aircraft Personality Module	822-2195-001
CCP-3500	Cursor Control Panel	822-2754-010
MKP-3500	Multifunction Keypad Panel	822-2568-010
SKP-3500	Single Knob Panel, Barometric	822-3163-010
AFDR-3700	Adaptive Flight Display Runtime	810-0346-002
APCT-3700	Airframe Parameter Configuration Table	810-0422-400
ATF-3510	Advanced Terrain Functions	810-0391-002
ECDA-6000	Emulated Control Display Application	810-0233-120
EICAS-6000	Engine Indication and Crew Alert System	810-0245-4B0001
FDSA-6500	Flight Display System Application	810-0234-4B0001
FMSA-6010	Flight Management System Application	810-0163-4B0001
FSA-6000	File Server Application	810-0072-304
IMAT-3700	Integrated Modular Avionics Table	810-0352-100
ODLA-3500	Onboard Data Loader Application	810-0345-1R0001
OMSA-6000	Onboard Maintenance System Application	810-0106-350
OMST-6000	Onboard Maintenance System Table	810-0099-4B0001
PMA-6000	Protocol Manager Application	810-0192-040
RTSA-6000	Radio Tuning System Application	810-0048-702

Publications and Training Solutions

Course Syllabus: 523-0825045

EQUIPMENT	NOMENCLATURE	PART NUMBER
ATN-6200	ATN CPDLC Key	810-0187-001
CHTX-3500	Charts Extension Key	810-0476-001
DLWX-3500	Data Link Weather Key (Optional)	810-0353-001
ECH-3500	Electronic Charts Key	810-0361-001
FAN-6200	FANS 1/A Key	810-0186-001
FSAX-3500	Outboard Enhanced Maps and Graphical Weather Key	810-0354-001
OVL-3500	Enhanced Map Overlays Key	810-0360-001
RNP-6000	RNP AR ≥ 0.3 Key	810-0201-001
VID-3500	Video Key (Optional)	810-0476-001
VSDK-3500	Vertical Situation Display Key	810-0113-001
WXRK-4001	Multiscan Weather Radar Key	810-0267-001
XMWK-3500	XM Weather Key	810-0355-001
ACP-4110	Audio Control Panel	822-1861-XXX
ACP-4130	Audio Control Panel	822-2381-XXX
ADC-850E	Air Data Computer	822-0842-421/621
ALT-55B	Radio Altimeter Transceiver	622-2855-011
RAC-870	Radio Altitude Converter	622-7209-002
FCP-4003	Flight Control Panel	822-0182-001
CSU-4100	Configuration Strapping Unit	822-1363-002
DCU-3001	Data Concentration Unit	822-1483-2XX
DME-4000	DME Transceiver	822-1466-001

Publications and Training Solutions

Course Syllabus: 523-0825045

EQUIPMENT	NOMENCLATURE	PART NUMBER
ECU-3000	External Compensation Unit (CMU-4000)	822-1200-996
FDU-3000	Flux Detector Unit	822-1193-001
FCC-4006	Flight Control Computer	822-0809-810
GPS-4000S	Global Positioning System, SBAS Capable	822-2189-004/-010/-101
HF-9031A	High Frequency Transceiver (HF)	822-0101-002
ICC-4007	Integrated Card Cage	822-1459-001
IEC-4000	IAPS Environmental Control Module	822-1167-001
IOC-4100	Input / Output Concentrator	822-1362-710
LTN-101	Inertial Reference Unit	856-0075-010
NAV-4000	VOR/ILS/MKR/ADF Receiver	822-1465-001
NAV-4500	VOR/ILS/MB Receiver	822-1579-001
OCM-3100	Option Control Module	822-1484-XXX
PWR-3000	Power Supply Module	822-1137-001
RTA-854	Turbulence Weather Radar Transmitter/Antenna	622-8440-003
SMT-65	Servo Mount, Aileron	622-5735-021
SMT-65	Servo Mount, Rudder	622-5735-022
SMT-65	Servo Mount, Elevator	622-5735-023
SVO-3000	Primary Servo, Elevator & Rudder	822-1168-001
SVO-3000	Primary Servo, Aileron	822-1168-002
TDR-94D	Mode S Transponder, ADS-B Out	622-9352-501
TTR-4000	TCAS II Transmitter/Receiver	822-1294-0XX

Publications and Training Solutions

Course Syllabus: 523-0825045

EQUIPMENT	NOMENCLATURE	PART NUMBER
VHF-4000	VHF Comm Transceiver	822-1468-110
VHF-4000	VHF Comm Transceiver (Datalink)	822-3365-001
XMWR-1000S	SXM Weather Receiver	822-2031-002