



Publications and Training Solutions Course Syllabus: 523-0779464

COURSE TITLE: PRO LINE 4 Hawker 400XP (AMS 5000)
Level I Operations & Flightline Maintenance

EQUIPMENT TYPE:

EQUIPMENT	NOMENCLATURE	PART NUMBER
IAPS Card Cage	ICC-4008	822-1029-101
IAPS Environmental Controller	IEC-4001	822-0333-001
I/O Concentrator	IOC-4000	822-9814-511
Lightning/HIRF Protection (Left)	LHP-4000	822-0287-801
Lightning/HIRF Protection (Right)	LHP-4001	822-0332-801
IAPS Power Supply	PWR-4000	622-9945-001
Configuration Strapping Unit	CSU-4000	822-0049-002
Maintenance Diagnostic Computer	MDC-4000	622-9818-751
Electronic Flight Display	EFD-871	622-9345-201
Multifunction Display	MFD-871	622-9434-211
Sensor Display Unit	SDU-640B	622-9735-001
Sensor Display Driver	SDD-640A	622-9347-001
Air Data Computer	ADC-850D	822-0389-129
Air Data Reference Panel	ARP-851	622-9500-011
Signal Interface Adapter	SIA-850	622-9732-001, -002
Attitude Reading Computer	AHC-85E	622-9336-002, -400
Internal Compensation Unit	ICU-85	622-6189-002
Flux Detector Unit	FDU-70	622-5812-001
Mode Select Panel (With VNAV)	MSP-850A	622-8330-003
Autopilot Panel	APP-85	622-6208-204
Flight Control Computer	FCC-4007	822-1019-013
Automatic Trim Coupler	ATC-4000	622-9817-001
Aileron Servo	SVO-85B	622-5027-002
Elevator and Rudder Servo	SVO-85C	622-6717-004
Flight Management Computer	FMC-5000	822-0891-001

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EQUIPMENT	NOMENCLATURE	PART NUMBER
Control Display Unit	CDU-5000	822-0892-011
Display Control Panel	DCP-5000	822-1028-011
Altitude Awareness Panel	AAP-851	822-0328-011
Data Base Unit	DBU-4100	822-0014-002
Radio Tuning Unit	RTU-870T	622-9856-111, -131
Mode S Transponder	TDR-94D	622-9210-003
TCAS II Directional Antenna	TRE-920	622-8973-001
TCAS II Transmitter-Receiver	TTR-920	622-8971-120
VHF COMM Transceiver	VHF-422A	622-7292-101
VHF Navigation Receiver	VIR-432	622-7194-101
DME Transceiver	DME-442	622-7309-101
ADF Receiver	ADF-462	622-7382-101
ADF Antenna	ANT-462A	622-7383-001
Radio Altimeter	ALT-55B	622-2855-001, -011
Radio Altitude Converter	RAC-870	622-7209-001, -002
Global Positioning System	GPS-4000	822-0931-002
GPS antenna	GPS-ANT	847-0006-010
Receiver/Transmitter/Antenna	RTA-854	622-8440-003, -011
Data Acquisition Unit	DAU-650	622-9344-101

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PREREQUISITES: Students should have basic knowledge of aircraft avionics systems.

PURPOSE: This course provides line maintenance personnel with training to operate and perform flightline maintenance for the PRO LINE 4 AVIONICS (AMS 5000) system. This course is designed as a system overview and does not include internal maintenance of any component.

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

1. Provide an overall understanding of PRO LINE 4 AVIONICS (AMS 5000) principles, and operations.
2. Identify system components and the functional/operational characteristics of each line replaceable unit (LRU).
3. Identify typical aircraft system interface/system architecture.
4. Perform fault isolation to a faulty LRU using built-in test diagnostics.

COURSE LENGTH: 4 Days

TRAINING DEVICES:

- AMS-5000 Test Rig, Cedar Rapids (if available)

TRAINING MATERIALS:

1. PowerPoint Presentation
2. Student Training Manual
3. Information sheets
4. Course Notebook

REFERENCES:

- | | |
|---|-------------|
| 1. Beechjet 400A Avionics System Manual | 523-0775807 |
| 2. Beechjet 400A Avionics System Diagnostic Guide | 523-0777736 |

PRO LINE 4 Hawker 400XP (AMS 5000) COURSE OUTLINE**I. Welcome**

- A. Training Overview (Customer Ambassador)
 - 1. Welcome
 - 2. Student Registration
 - 3. Student Policies and Procedures
- B. Course Materials
 - 1. Student workbook
 - 2. Beechjet 400A System Manual Appendix
 - 3. Other materials and handouts as required
- C. Test Equipment
 - 1. AMS-5000 system rig (Cedar Rapids, if available)

II. Equipment Description, Locations, and Troubleshooting

- A. IAPS – Integrated Avionics Processor System
 - 1. System familiarization
 - 2. System overview diagram
 - 3. Diagnostic word analysis and troubleshooting
- B. IDS – Instrument Display System
 - 1. System familiarization and operation
 - 2. System overview diagram
 - 3. Diagnostic word analysis and troubleshooting
- C. ADS – Air Data System
 - 1. System familiarization and operation
 - 2. System overview diagram
 - 3. Diagnostic word analysis and troubleshooting
- D. AHS – Attitude Heading and Reference System
 - 1. System familiarization and operation
 - 2. System overview diagram
 - 3. Diagnostic word analysis and troubleshooting
 - 4. AHS-85 compass swing procedure
- E. FMS – Flight Management System
 - 1. System familiarization and operation
 - 2. System overview diagram
 - 3. 28 day data bus loading procedures

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- F. FCS – Fight Control System
 1. System familiarization and operation
 2. System overview diagram
 3. Diagnostic word analysis and troubleshooting
 4. Flight controls systems diagnostics

- G. WXR – Weather Radar System
 1. System familiarization and operation
 2. Hazards of microwave radiation exposure (AC 20-68B)
 3. Proper Radome Maintenance (AC 43-14)
 4. System overview diagram
 5. Diagnostic word analysis and troubleshooting

- H. ADAS – Aircraft Data Acquisition System
 1. System familiarization and operation
 2. System overview diagram
 3. Diagnostic word analysis and troubleshooting

- I. MDC – Maintenance Data Computer
 1. System familiarization and operation
 2. System overview diagram
 3. Diagnostic word analysis and troubleshooting
 4. LRU fault history download and interpretation procedures

- J. RSS – Radio Sensor System
 1. System familiarization and operation
 2. System overview diagram
 3. Diagnostic word analysis and troubleshooting

III. Final Review

- A. Review
- B. Course Critique