

Publications and Training Solutions

Course Syllabus: 523-0824827

COURSE TITLE: Integrated Processing System (IPS) and Data Concentration System (DCS) Installation and Handling
Flight Line Maintenance (Level I)

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

PURPOSE: This course provides flight line maintenance personnel with familiarization training on the components of the Integrated Processing System (IPS) and Data Concentration System (DCS), and training to perform the installation and removal of the cabinets and their associated Line Replaceable Modules (LRM).

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

1. Identify the Integrated Processing System (IPS) equipment.
2. Identify the Data Concentration System (DCS) equipment.
3. Perform the Installation and Removal of Line Replaceable Modules (LRM).
4. Perform the Installation and Removal of the Cabinets.

COURSE LENGTH: Approximately 20 minutes

REFERENCES:

1. IPC-6210/-6220/-6230 Integrated Processing System and
CEM-6210/-6220/-6230 Cover and Environmental Module
Component Maintenance Manual 523-0818160
2. DMC-6000 DCU Module Cabinet with CEM-6000 Cover and
Environmental Module Component Maintenance Manual 523-0818236

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COURSE OUTLINE

O. Introduction

- A. Overview
- B. IPS Equipment
 - i. Integrated Processing Cabinet (IPC)
 - ii. Cover and Environmental Module (CEM)
- C. DCS Equipment
 - i. Data Concentrator Module Cabinet (DMC)
 - ii. Cover and Environmental Module (CEM)
- D. IPS Line Replaceable Modules (LRM)
 - i. Power and Environment Module (PEM)
 - ii. Common Computing Module (CCM)
 - iii. Terrain Awareness System (TAWS) Common Computing Module (CCM)
 - iv. Terrain Awareness System (TAWS) Processing Module (TPM)
 - v. Digital Switching Module (DSM)
 - vi. Synthetic Vision Module (SVM)
- E. DCS Line Replaceable Modules (LRM)
 - i. Power Producing Module (PPM)
 - ii. Input/Output Modules (IOM)
 - iii. Data Concentration Module (DCM)
- F. LRM Handling Considerations

1. Cabinet Installation

- A. Cabinet Installation
 - i. Mounting Options
 - ii. Backplane Protective Cover
 - iii. Connector Installation

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iv. IPC Mounting Installation

B. LRM Installation

i. LRM Installation into Cabinet

ii. Specific LRM Installation

1. TPM-6000 - Power Switch (IPC)
2. PEM-6210 – Protective Foam (IPC)
3. PPM-6000 – Protective Foam (DMC)
4. SVM-6110/-6110H – Jack Screw (IPC)
5. DCM-6000 – Center Handles (DMC)

C. CEM Installation

2. Cabinet Removal

A. CEM Removal

B. LRM Removal

i. Handling Techniques

ii. Specific LRM Removal

1. SVM-6110/-6110H – Jack Screw (IPS)
2. DCM-6000 – Center Handles (DMC)

C. Cabinet Removal

i. Backplane Protective Cover

ii. IPC J7 Connector Removal

iii. Cabinet Removal

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EQUIPMENT TYPE:

EQUIPMENT	NOMENCLATURE	PART NUMBER
Integrated Processing Cabinet	IPC-6210	822-2404-101/-201
Cover and Environmental Module	CEM-6210	822-2405-101
Integrated Processing Cabinet	IPC-6220	822-2142-101/-205
Cover and Environmental Module	CEM-6220	822-2406-101
Integrated Processing Cabinet	IPC-6230	822-2813-101/-251
Cover and Environmental Module	CEM-6230	822-2814-101
Power and Environment Module	PEM-6210	822-2352-001
Common Computing Module	CCM-5110	822-1991-002
Terrain Awareness System (TAWS) Common Computing Module	CCM-6210	822-2192-002
Terrain Awareness System (TAWS) Processing Module	TPM-6000	822-2586-001
Digital Switching Module	DSM-5110	822-2133-001
Synthetic Vision Module	SVM-6110	822-2323-001
Synthetic Vision Module	SVM-6110H	822-2539-001
Data Concentrator Unit (DCU) Module Cabinet	DMC-6000	822-2403-101
Cover and Environmental Module	CEM-6000	822-2401-001

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EQUIPMENT	NOMENCLATURE	PART NUMBER
Power Producing Module	PPM-6000	822-2395-002
Input/Output Module	IOM-6000	822-2396-002
Input/Output Module	IOM-6500	822-2397-001
Data Concentration Module	DCM-6000	822-2394-002