



TECHSAVIATION

Training Center

Este material em hipótese alguma substituirá os manuais do fabricante para qualquer ação de manutenção. Consulte os manuais correspondentes. **EDUCATIONAL PURPOSE ONLY**

Airplane Condition Monitoring Function

The Airplane Condition Monitoring Function (ACMF) monitors, records, and gives reports for selected airplane data such as:

- Maintenance data
- Performance data
- Troubleshooting data
- Trend monitoring.

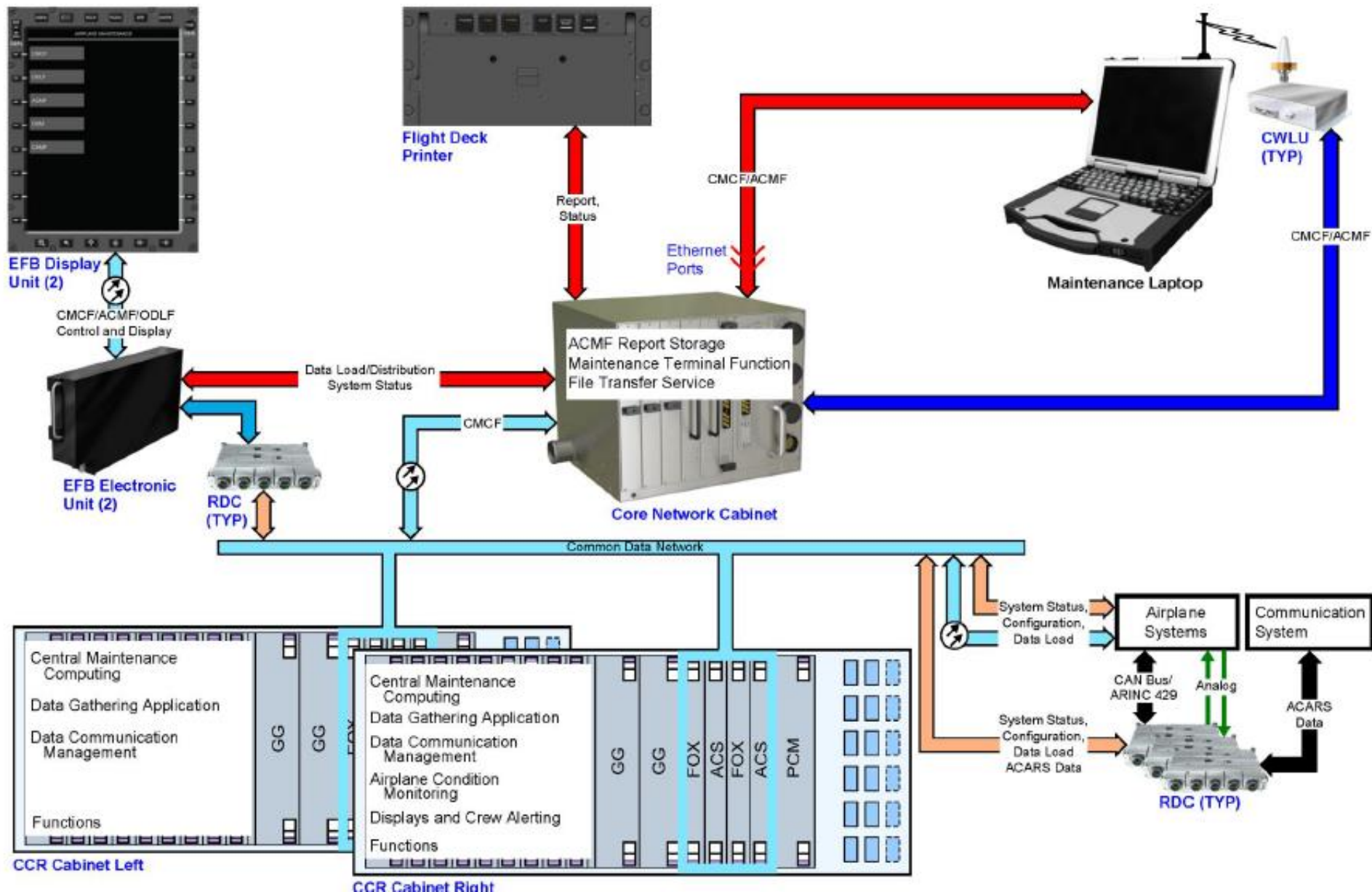
These are the components of the ACMF:

- ACMF software application in the right Common Computing Resource (CCR) cabinet
- Data Gathering Application (DGA) software.

Maintenance personnel can access the ACMF using the Maintenance Laptop (ML) or the Electronic Flight Bag (EFB) system.

The reports that are generated can be sent to:

- Flight deck printer
- Core network File Server Module (FSM)
- Airline ground server using the Aircraft Communications Addressing and Reporting System (ACARS) or the Terminal Wireless LAN Unit (TWLU)
- Boeing ground server using the ACARS or the TWLU.



Central Maintenance Computing Function

The Central Maintenance Computing Function (CMCF) collects, keeps, and shows maintenance data for most of the airplane systems. The CMCF is used for fault isolation and test.

These are the components of the CMCF:

- CMCF in the Common Computing Resource (CCR) cabinets
- Ground test switch
- Maintenance Laptop (ML) receptacles (3).

Maintenance personnel use the ML, Electronic Flight Bag (EFB), or a Multi-Function Display (MFD) to access the CMCF.

The ground test switch is used to enable different functions in the CMCF.

The CMCF gets fault reports from systems and stores this data in fault history. When the Primary Display System (PDS) shows a flight deck effect, the CMCF does a correlation of the fault with a maintenance message. This maintenance message shows which LRU had a failure.

The CMCF also permits ground tests on many systems.

Information from the CMCF can be printed using the flight deck printer or stored in the core network File Server Module (FSM).

It can also be downlinked using the Aircraft Communications Addressing and Reporting System (ACARS) or the terminal wireless LAN unit.

Maintenance Laptop

The Maintenance Laptop (ML) is used by maintenance personnel to access information systems and databases when they work on the airplane.

The desktop icons are used to access these functions and tools:

- Maintenance Control Display Function (MCDF)
- Software Maintenance Tool (SMT)
- Flight recorder download
- Core Network Maintenance (CNM)
- Core network initial data loader

The MCDF gives access to maintenance tools and Toolbox Remote.

The SMT is used to transport Loadable Software Airplane Parts (LSAP) to and from the airplane.

- This usually occurs if the terminal wireless Local Area Network (LAN) is not available.

The flight recorder download function is used to download information stored in the forward flight recorder.

The CNM is used to load data and perform maintenance in the core network cabinet.

The core network initial data loader function is used to load the core network Operational Program Software (OPS) on the airplane.



Data Management System

The data management system has these applications:

- Onboard Storage Management (OSM)
- Onboard Data Load Function (ODLF)
- Onboard Boeing Electronic Distribution of Software (OBEDS)
- Software Maintenance Tool (SMT).

The OSM lets maintenance personnel view and/or remove Loadable Software Airplane Parts (LSAP) from the core network File Server Modules (FSM). Operators use the Maintenance Laptop (ML) or the Electronic Flight Bag (EFB) system to access the OSM.

The ODLF is used to load LSAPs to those airplane systems that require them. Operators use the ML or the EFB system to access the ODLF.

The OBEDS manages the transfer of LSAPs between the ground server and the airplane and provides security for the LSAP transfers. There is no operator interface with OBEDS.

If the terminal wireless communication is unavailable, the SMT is used to transfer LSAPs from the customer servers to the airplane using the ML. The SMT can also be used to downlink data files from the airplane.

