

F-16基礎/全功能模擬機



F-16 ULT/FMT

主計算機分系統:

- 執行飛控、空電及武器操作即時模擬。
- 採用一般商規電腦。
- 1000 Mbps乙太網路。
- Linux開放式作業系統，設計具可擴充性。

圖像電腦系統:

- 執行航頭顯示器、多功能顯示器、威脅警告及電子水平情況儀之繪圖顯示。
- 採用一般商規電腦。

資料鍵結電腦系統:

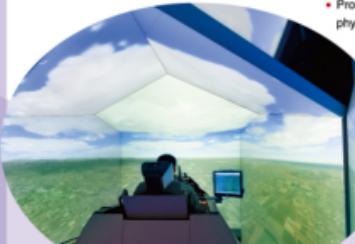
- 執行Link 16資料鍵結功能模擬。
- 採用一般商規電腦。

戰術環境系統:

- 負責戰術威脅環境模擬。
- 採用一般商規電腦。

教官台系統:

- 可執行全系統之間關機與系統備件測試。
- 提供練習作戰環境，可執行任務選取、武裝掛載及環境參數設定等操作功能。
- 提供電子地圖及3D地形地貌之戰術環境顯示。
- 提供四合一座艙畫像顯示。
- 提供座艙控制面板電門位置顯示。
- 採用一般商規電腦。
- Window作業系統，設計具可擴充性。



HOST Computer System

- The host computer is responsible for the real time simulation of flight control, avionics and weapon operation.
- Commercial off-the-shelf PC.
- IEEE802.3 1000 Mbps Ethernet network.
- Linux Open Operation System, Upgradeable for the future.

Graphic Computer System

- The graphic computer is responsible for the symbol rendering of HUD, MFD, RWR and EHSI.
- Commercial off-the-shelf PC.

Link 16 Computer System

- The Link 16 computer is responsible for the simulation of Link 16 data link function.
- Commercial off-the-shelf PC.

Tactical Environment System

- The TES computer is responsible for the simulation of tactical environment.
- Commercial off-the-shelf PC.

Instructor Operation Station

- System power up/down control and Daily Operation Ready Test.
- Flexible and user-friendly means for training management, including mission selection, weapon store and natural environment setting.
- Provides tactical situation display by electrical map and 3D terrain.
- Provides graphic repeater of HUD, MFD, and RWR in a screen.
- Provides virtual control panels that synchronize with the physical control panel inside the cockpit.
- Commercial off-the-shelf PC.
- Window Operation System, Upgradeable for the future.



座艙系統 :

- 係實機模型仿製艙內控制盒、模擬儀錶及各控制機構。
- 控制盒面板採用LED燈光照明。
- 專設船邊教官台。

輸出入介面分系統

- 工業標準19吋工規機箱、多插卡式背板。
- 提供即時／離線輸出入界面狀態監控與偵錯。
- 每日開機測試。

音效訊通系統 :

- 採美商ASTI公司音效產生器。
- 模擬環境音效、VHF/UHF通訊及語音警告音響。

檔案管理系統

- 集控式管理模擬機系統操作任務與戰術威脅資料。
- 採一般商規電腦。

萬用聯網架構

- 可任意選取基地內之模擬機，執行聯網演訓。
- 採MAK公司之RTI。
- 採美軍標準之RPR FOM。
- 採惠普公司pro-curve網路交換器。

任務支援系統

- 提供任務場景、戰術威脅及視效資料庫建構功能。
- 提供任務資料卡匣讀取功能。

任務錄訓系統

- 可重現或即時監看任務訓練操作過程之OTW影像及HUD/MFD/RWR圖像，提供教官與學員執行任務錄訓與檢討。

After Action Review system

- Provides the OTW image and HUD/MFD/RWR display for mission debriefing and live monitor.

Cockpit System

- High fidelity replicas of F-16 cockpit with fully simulated instruments, panels, and controls.
- Utilizes LED light source to illuminate the control panels.
- Provide cockpit-side I/Os.

I/O Interface system

- Industrial-grade PC with multi-I/O control cards.
- Provides online/offline system diagnostic and trouble shooting.
- Provides Daily readiness test.

Sound and Communication system

- Utilizes ASTI audio system.
- The sound system is responsible for simulating the environment sound created by the aircraft, VHF/UHF communication and voice warning message.

Archive Computer system

- Provides the concentrated management of mission files and technical threat data.
- Commercial off-the-shelf PC.

Network system

- The Multi-ship training can be executed by any combination of the trainers in the site.
- Using MAK Technologies' RTI version 3.1.2-HLA1.3
- FOM Mapper for MTC-fed v 1.5.0
- Using HP pro-curve switch HUB.

Mission Support system

- Provides mission scenario generator, tactical entity editor and database management system to support the mission training.
- Getting the mission file data from DTC reader.

