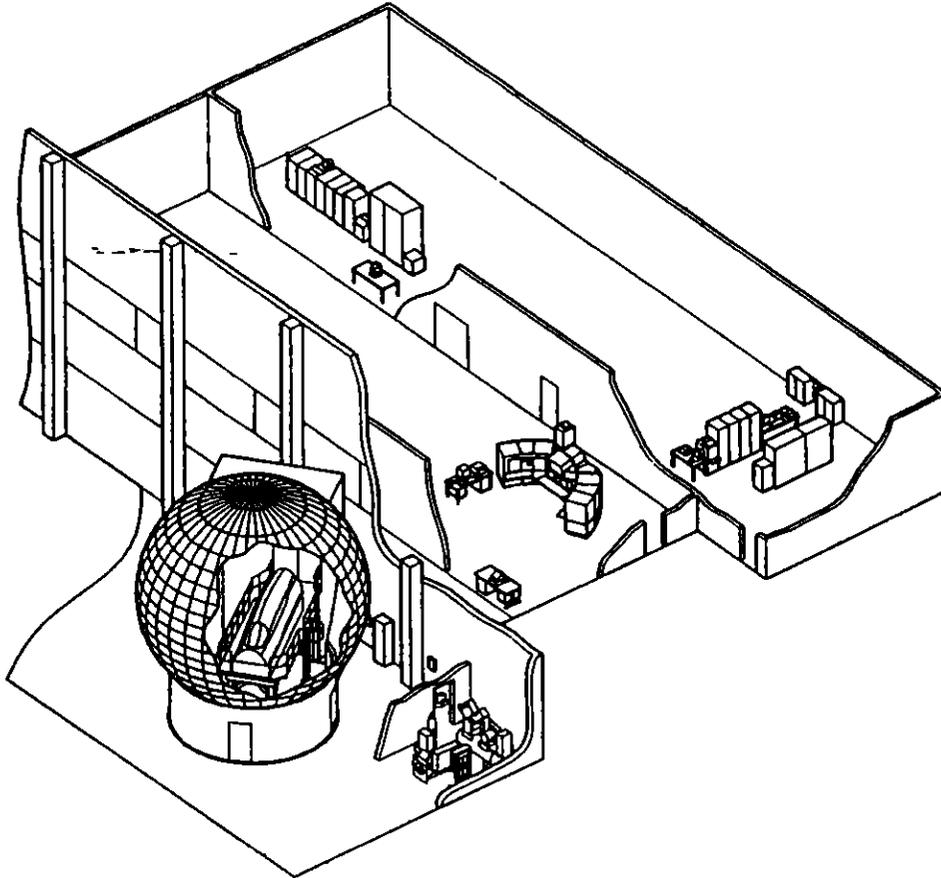


SUMMARY OF
F-14D MISSION FLIGHT TRAINER (MFT)

SEPTEMBER 1992
NAVAL TRAINING SYSTEMS CENTER

DEVICE 2F153
ORLANDO, FLORIDA



TRAINING CATEGORY:

Aviation

ORIGINATING AGENCY:

DCNO/AIR

SECURITY CLASSIFICATION OF DEVICE:

Device 2F153 is unclassified.

Operational software is classified
Secret.

PURPOSE OF DEVICE:

Provide flight operations training
for the Pilot and Radar Intercept
Officer (RIO) of F-14D aircraft.

INTENDED USE:

The MFT is used to train and enhance
the skills of the aircrew in all modes
of aircraft operation from preflight to

shutdown. These operations include:
takeoff and landing techniques from
carrier and shorebase fields, normal and
emergency flight operations, instrument
flight procedures, all-weather
operations, and other NATOPS procedures.
The MFT provides independent training
missions and also provides integrated
tactical training in a common
environment through a Tactical
Environment System.

FUNCTIONAL DESCRIPTION:

Device 2F153 includes: a trainee
station that simulates the front and
rear cockpits of an F-14D aircraft, an
instructor operator station (IOS) that
controls and monitors all aspects of
mission training, a computer room to
house general purpose computers and
support electronics, and a utility room
for the hydraulic and pneumatic power
units.

The IOS provides the capability to
select, initiate, and record the

training mission and to monitor and evaluate trainee performance. Instructors may select from a list of predefined mission scenarios, which may be modified if desired, or design a unique training mission to fulfill specific training requirements.

Training is provided through real-time interaction with simulated aircraft systems including: flight controls, cockpit instrumentation, avionics, and sensors. ATIS, GCA, and CCA simulation are also provided.

Computer image generation and visual systems provide dynamic visual scenes throughout a 22,500 nautical mile gaming area. Specific visual scenes are computer enhanced to provide realistic resolution. Realistic sensory cues are also provided which include control stick loading, buffet, g cuing, and aural cuing.

PHYSICAL INFORMATION:

Device Weight - Estimated: 20,000 lbs.

Trainer Room - 37 feet high x 40 feet wide x 40 feet long.

Instructor Station Room - 10 feet high x 30 feet wide x 30 feet long.

Computer Room - 10 feet high x 30 feet wide x 35 feet long.

Utility Room - 10 feet high x 12 feet x wide x 12 feet long.

EQUIPMENT REQUIRED (NOT SUPPLIED):

None

POWER REQUIREMENTS:

480VAC, 3 PH, 4-Wire, 60 HZ, 185 KVA

INSTALLATION REQUIREMENTS:

Floor Loading - No special footing or foundation required.

Air Conditioning - Estimated: 500 KBTU/hr.

Environmental Characteristics - 70°F ± 10°F, 50% ± 10% humidity.

PUBLICATIONS FURNISHED:

Operation and Maintenance Instructions, NAS Miramar F-14D, NTSC P-6650 (U)

Sequence Control Chart, NAS Miramar F-14D, NTSC P-6651-1 (U)

Maintenance Requirement Cards, NAS Miramar F-14D, NTSC P-6651-2 (U)

Operation and Maintenance Instructions, F-14D MFT, Device 2F153, NTSC P-6660 (U), 41 Volumes

Off-Equipment Manuals, F-14D MFT, Device 2F153, NTSC P-6660 (U), 92 Volumes

Sequence Control Chart, F-14D MFT, Device 2F153, NTSC P-6661-1 (U)

Maintenance Requirement Cards, F-14D MFT, Device 2F153, NTSC P-6661-2 (U)

Commercial Data Package, F-14D MFT, Device 2F153, NTSC P-6658 (U), 398 Volumes

Instructors Utilization Handbook, F-14D MFT, Device 2F153, NTSC P-6662 (U)

Pocket Checklist, F-14D MFT, Device 2F153, NTSC P-6663 (U)

PERSONNEL:

Instructors: One F-14D Pilot and one F-14D RIO qualified as Device 2F153 Instructor/Operators.

Trainees: One F-14 pilot and one F-14 RIO.

Maintenance: Staffed with Contractor Operation and Maintenance Support (COMS) Personnel.

CONTRACT IDENTIFICATION:

Manufactured by McDonnell Douglas Training Systems, St. Louis, MO. by subcontract to Grumman under NAVTRASYS GEN Contract No. N61339-86-C-0164

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