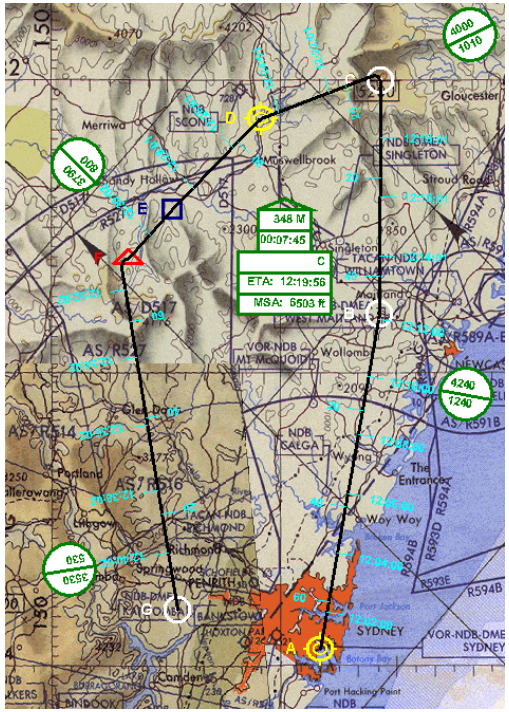
SAIC Aircraft Mission Planning, Rehearsal and Debrief Systems

Our vision, values and exceptional people contribute to our success

SAIC®

SAIC Mission Planning Systems



- SAIC provides state-of-the-art aircraft Mission Planning Systems (MPS) to many domestic and international customers
- Using SAIC's reliable Core MPS capabilities, aircraft-specific systems are tailored to meet each customer's unique mission requirements
- The MPS utilizes customized aircraft performance and load models
- MPS users can import and export data from standard interfaces
- SAIC has over 20 years of experience delivering advanced Mission Planning Systems to domestic and international customers operating a wide array of rotary- and fixed-wing aircraft
- SAIC's proven MPS technology provides a cost-effective, low-risk mission planning solution

MPS is developed and maintained by an organization within SAIC that is Capability Maturity Model® Integration (CMMI®) Level 5 certified and International Organization for Standardization ISO 9001:2000 registered.

CMMI is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

SAIC Mission Planning System Data Flow

Command & Control Systems

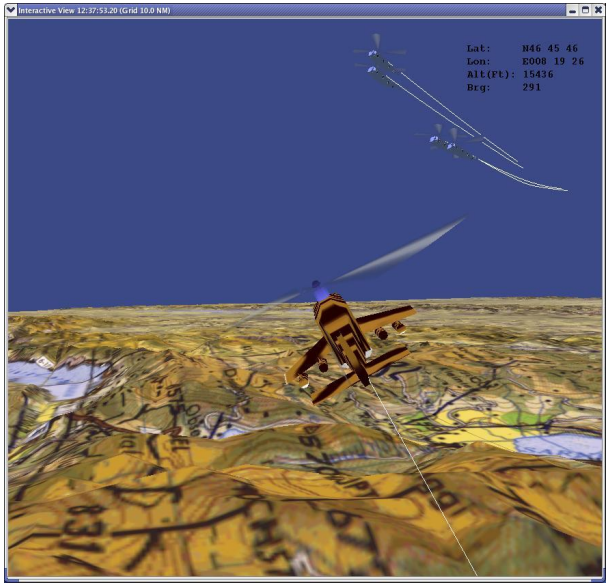
Air Tasking Orders and Plans

Mission Planning System

- Multiple Aircraft
- Aircraft Weight & Balance
- Route Plans
  - ✓ Time, Distance, Fuel, Aircraft Performance
- Assessment
  - ✓ De-confliction
  - ✓ 3-D Rehearsal
  - ✓ Radar and Sensor Terrain Masking
- Order of Battle and COMM Plans
- Write Data Transfer Card (DTC)

DTC: Mission Plans and Data

DTC: Recorded Mission Data

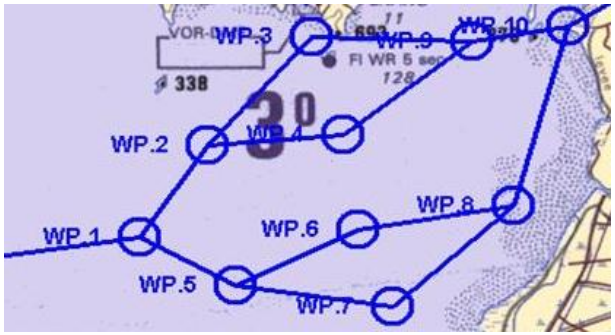


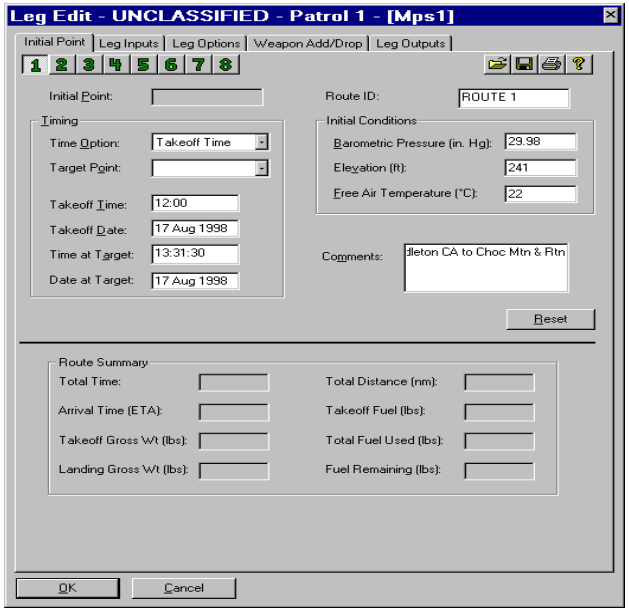
Mission Planning System

- Read Data Transfer Card
- Aircraft Maintenance Data
- Aircraft Flight History
- Updated Mission Data
- Mission Debrief

SAIC Mission Planning Systems on Commercial Off-the-Shelf Hardware

- Microsoft® Windows®-based MPS Solutions
  - Low-cost hardware
    - Initial procurement
    - Maintenance/Enhancement
  - Flexible hardware configurations
    - Laptop/Notebook
    - Personnel Workstation
  - Familiar Microsoft Windows environment
    - Intuitive interface
    - Network management utilizing existing assets
  - Compatible with other Windows environment tools
    - Data analysis
    - Data presentation
  - Graphical User Interface (GUI)
    - Microsoft look-and-feel GUI
    - Extensive use of toolbars
    - Convenient tabbed dialogue boxes
  - Framework
    - SAIC's proven Core MPS and Mission Support Library
    - Supports standard map data sources and imagery formats





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SAIC MPS Sample Menu Layout

Image
- Display Map...
- Annotate Map...
- Zoom In +
- Zoom Out -
- Scroll Map
- Print Map F2
- Strip Chart Preferences...
- Select Strip Chart
- Rotate Strip Chart
- Capture Strip Chart F3
- Print Strip Chart Ctrl+F2
- 3-D View...
- 3-D Preferences...

Order of Battle
- Engagement Areas...
- Boundaries & Phase Lines...
- Threat Char/OOB...
- Radar Terrain Masking...

Mission Definition
- ✔ Patrol 1
- Patrol 2
- Patrol 3
- Patrol 4
- Aircraft Configuration...
- Aircraft Load...
- Laser Codes...
- Weapon Programming...

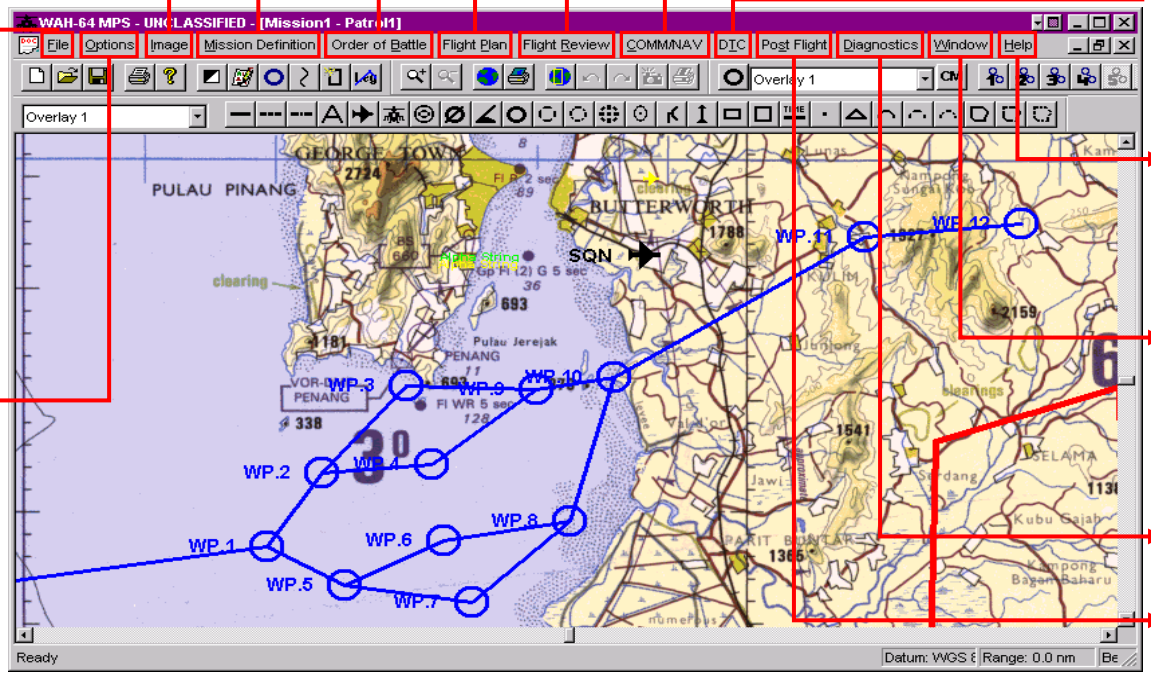
Flight Plan
- Waypoints and Control Measures...
- Connect...
- Leg Edit...
- Route Summary...
- Options...
- Point Performance...
- Kneeboard
- 2-D Elevation View...

Flight Review
- Assessment...
- Deconfliction...
- Sun/Moon...

Comm/Nav
- Comm Day 1...
- Comm Day 2...
- ADF...
- XPNDR/NAV/Radio...
- IDM Settings...
- Multiple Word of Day...
- CEOI...

DTC
- Mission 1 Data...
- Mission 2 Data...
- FCR...
- Write...
- Read...
- Zeroize...

File
- New Ctrl+N
- Open... Ctrl+O
- Close
- Save Ctrl+S
- Save As...
- Print... Ctrl+P
- Print Setup...
- 1 Lesson9.MSN
- 2 Lesson5.MSN
- 3 Lesson4.MSN
- 4 Lesson3.MSN
- Exit



Help
- Index
- Using Help
- Tutorial
- About MPS

Options
- ✔ Main Toolbar
- ✔ Status Bar
- Image Toolbar
- Flight Plan Toolbar
- Annotate Toolbar
- Order of Battle Toolbar
- DTC Toolbar
- Error/Warning Display
- Classification...
- Preferences...

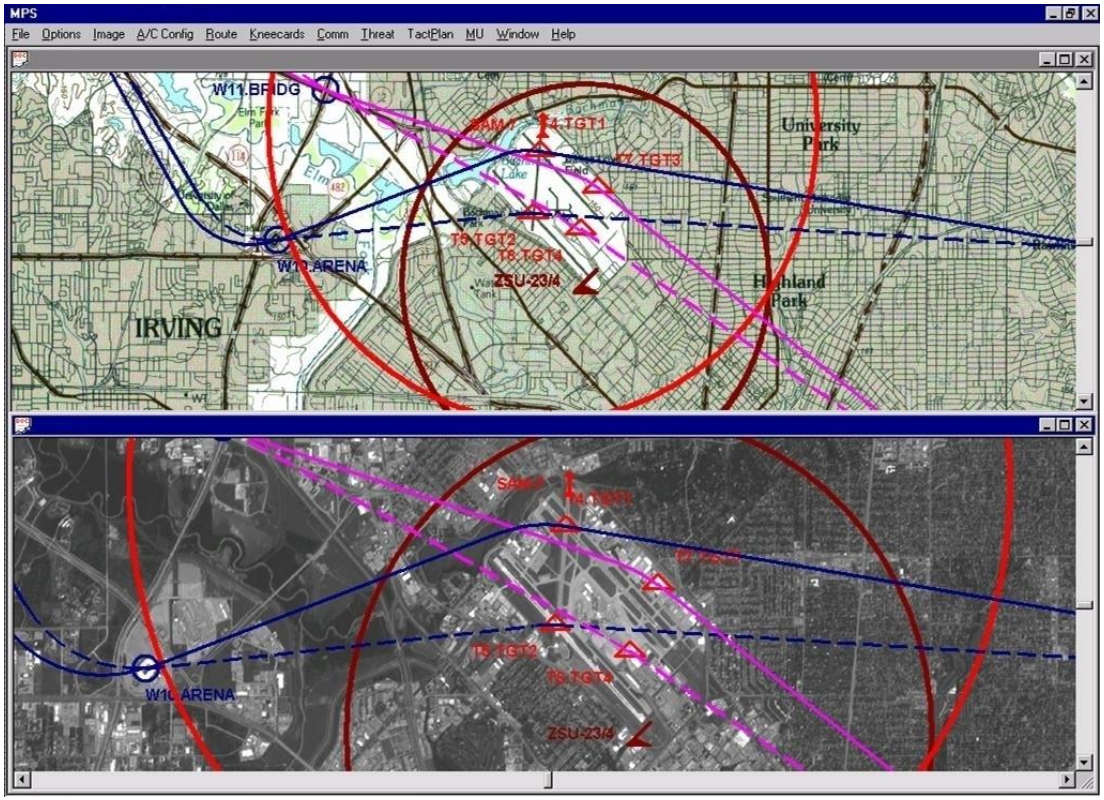
Window
- New Window
- Cascade
- Tile
- Arrange Icons
- ✔ 1 Mission1 - Patrol1

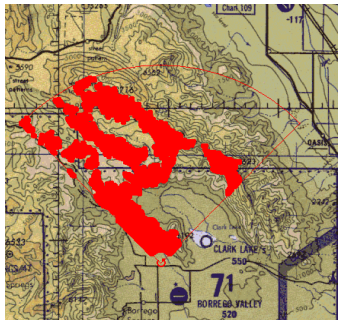
Diagnostics
- System Check...

Post Flight
- Post Flight Data...

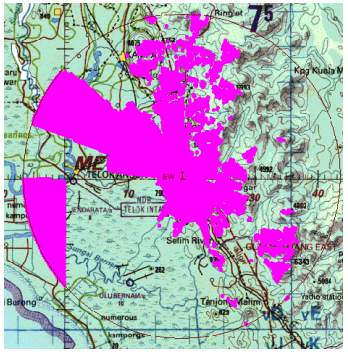
SAIC MPS Map Display

- Supports multiple aircraft (up to 32) in a single mission
- Flexible overlay symbology
- User-defined displays allow customization to individual preferences
- Support for multiple map scales (1:4M to 1:8K) and imagery data
- Display sensor coverage assessment and radar terrain masking





Sensor Coverage

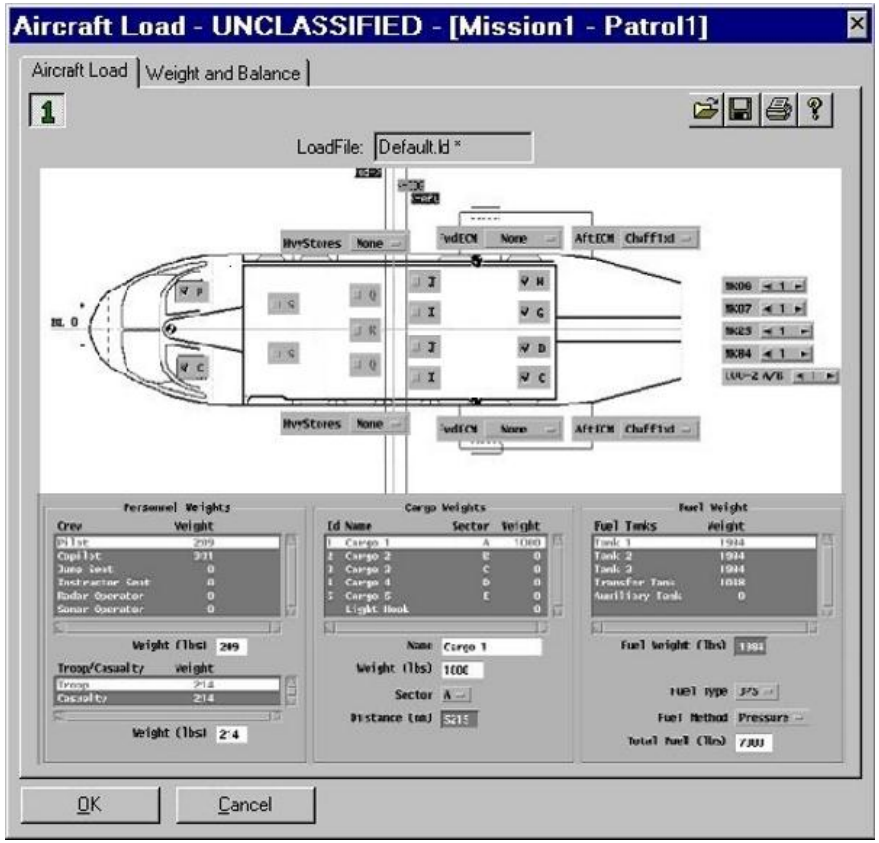


Radar Terrain Masking

Pilots plan over familiar maps

Multiple map windows / scales displayed with concurrent data

SAIC MPS Aircraft Load Capability

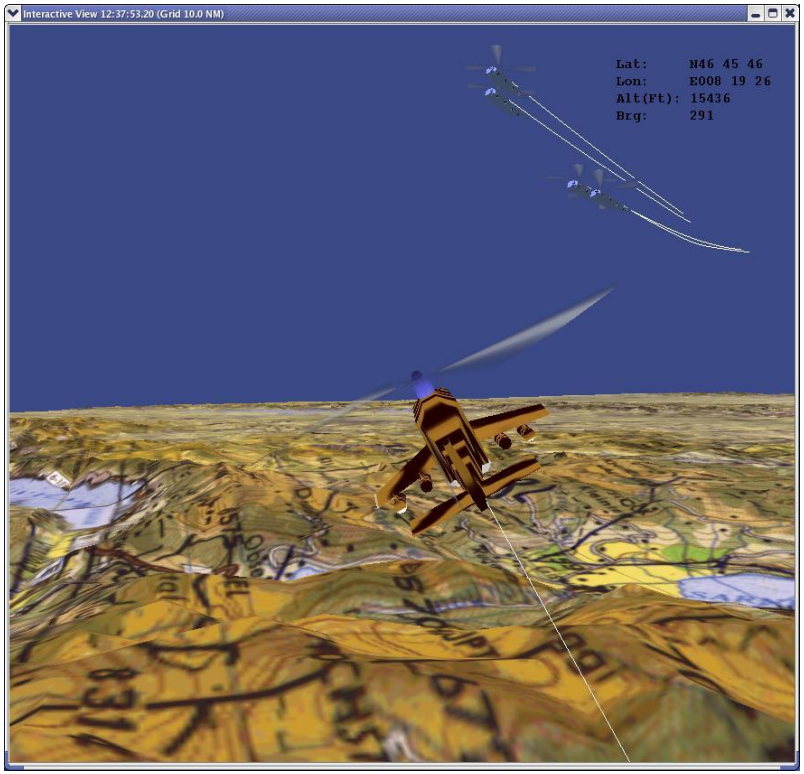


- Load module includes complete loading rules and limits
- Automatically computes weight and center of gravity
- Library capability allows users to save and recall common aircraft load plans
- Supports standard aircraft configurations
- End user has the ability to customize aircraft load data

Load module allows pilots to quickly and accurately calculate the weight and center of gravity of planned loads

SAIC MPS 2-D / 3-D Rehearsal and Debrief

- Preflight mission rehearsal capability
- Post-flight debrief with weapons simulation
- Familiarize the pilot with terrain layout
- Practice target, threat and other mission acquisition, recognition and de-confliction
- View the route/mission over 2-D and 3-D terrain with maps or photo-realistic imagery
- Mission debrief synchronized with cockpit video



Preview the mission over 2-D maps and 3-D terrain

Allows the planner to assess the feasibility of a planned route and supports a detailed debrief of the actual mission

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