

# EW Pro<sup>TM</sup>

NEXT GENERATION ELECTRONIC WARFARE TRAINING

For  
Windows  
95 and NT



*EW Pro is the next generation in scenario authoring and control software.*

## OVERVIEW

RDSI's EW Pro has been capturing the attention of electronic warfare training personnel since its introduction. EW Pro utilizes leading-edge software technology to deliver the most productive electronic warfare training solution available today.

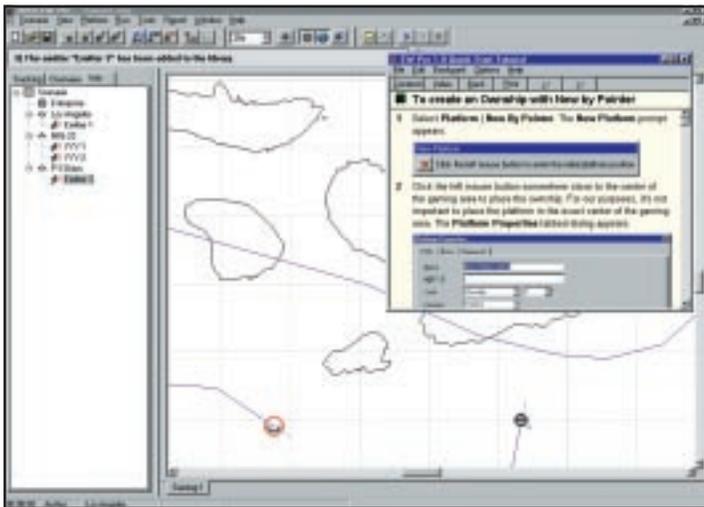
## KEY FEATURES

- Designed for Windows 95 and Windows NT – 32-bit architecture
- Designed as a single, easy to use, integrated application
- Group training capability over a network
- Import directly from the NERF and EPL
- Integrated equipment emulations
- Signal generation through either hardware or software

## Easy to Learn and Use

EW Pro is an IT-21 compliant, 32-bit application and is designed to run in Windows 95 and Windows NT. With the familiar Windows interface, new users will quickly learn the application while experienced users will appreciate the flexibility and control EW Pro offers. EW Pro was developed with the end user in mind - the enhanced interface integrates the latest advances in user interface design to provide smoother workflow, offering the most comprehensive set of capabilities available to create and deploy scenarios.

In order to enable operators to quickly and easily learn how to use the software, an on-line and hardcopy tutorial and reference manual are included. The tutorial gives the user an introduction into creating scenarios, and then walks the user through a step-by-step procedure to create scenarios.



The On-line tutorial walks you through the scenario creation process.

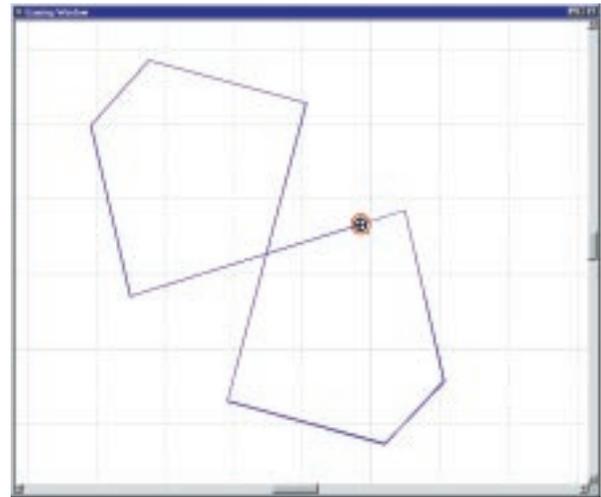
## Scenario Authoring Features

EW Pro includes powerful scenario authoring features to enable you to quickly and easily create both simple and complex scenarios.

*Map overlays:* Anchor your scenario to any location in the world by using EW Pro's map overlay capability. Maps are imported from the World Vector Shoreline database and overlaid on the gaming area. A latitude/longitude display tracks the position of the cursor within the window and helps you place your platforms.

*Build EW Pro libraries:* Custom platform and emitter configurations can be saved in libraries so they're ready for use in other scenarios.

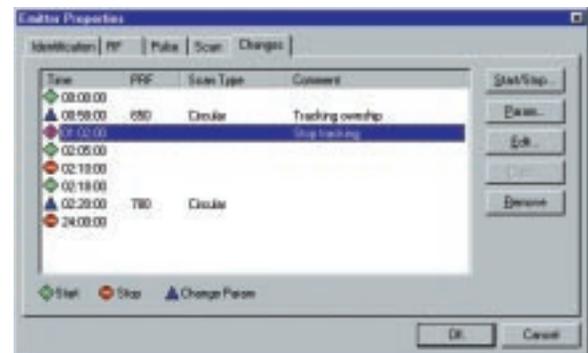
*Multiple gaming windows:* Open multiple windows on the scenario gaming area. Each window can be independently zoomed and scrolled to focus on different locations within the gaming area.



Easily create complicated repetitive maneuvers, such as a figure-8.

## Signal Generation and Control

Emitter creation and control is at the heart of any electronic warfare scenario generator and EW Pro's powerful importing and editing features give you full control over the emitters in your scenario. EW Pro supports every scan type defined in the de-facto standard Basic Scan Code listing. In addition, any emitter parameter can be modified, enabling the realistic definition of different variations among the same emitter type. An emitter's parameters can be changed any number of times during a scenario, and an emitter can also be turned on and turned off at any point in the scenario.



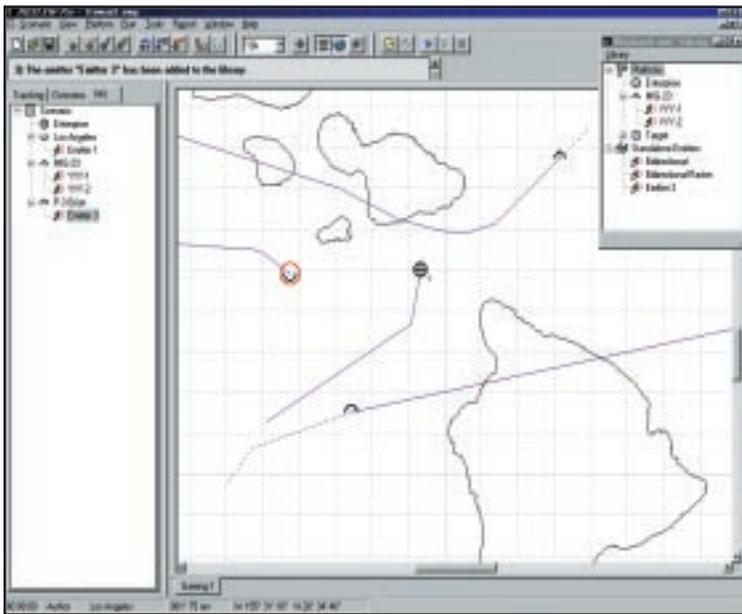
Emitters can be turned on and off and parameters can be changed at any time during the scenario.

There's no need to build emitters from scratch: EW Pro can import directly from EWOPFAC's NERF (Naval Emitter Reference File) database and NSA's EPL (ELINT Parameter List) database. You can browse and search with different criteria, such as scan type, frequency, etc. After importing, you can modify the full range of emitter parameters to create emitter variations.

During playback, EW Pro creates a realistic emitter environment by considering various factors such as emitter parameters, platform positions, over-the-horizon, and ducting in calculating emitter visibility and generating the appropriate audio and video.

### Scenario Editing During Playback

Whether you're in authoring mode or playback, EW Pro gives you full control over your scenario. Any edits that can be performed during authoring mode can be performed during playback. For example, platforms can be created and maneuvered, and emitters can be created, turned on and off, and emitter parameters can be modified.



### Modular Architecture for Future Additions

EW Pro is developed with a modular architecture and supports a wide range of devices. New devices and equipment can be supported with simple modular additions to the core software.

### AN/SLQ-32A Equipment Interface

EW Pro interfaces directly with the training port on the AN/SLQ-32A to give the AN/SLQ-32A operator a realistic at-sea training environment. An NTDS option to generate LAMPS emitters is available, and a PCDX option is available for data extraction.



### Integrated Equipment Emulations

For low-cost training environments, EW Pro offers integrated equipment emulations. With these emulations you can analyze your signal environment from within EW Pro. These emulations include an AN/SLQ-32, AN/ALQ-99, AN/ULQ-16, and digital oscilloscope.

### Debriefing Capability

By using the available PCDX data extraction option, keystrokes can be captured from the AN/SLQ-32 during a training session and then later displayed and analyzed in the integrated EW Pro debriefing application. Instructors can define measurement criteria, which is used by the debriefing application to assess the AN/SLQ-32 operator's performance. During debriefing, the integrated AN/SLQ-32 emulator and extracted keystrokes can be used to review the training session.

### Group Training Capability

EW Pro is network ready, enabling you to perform group training in a distributed master-slave environment over a TCP/IP network. Dynamic playback updates performed by the instructor on the master computer are immediately distributed to slave stations. Network training has been designed to run over low bandwidth connections, such as modems.



▲ Group training using equipment emulations at Naval Technical Training Center (NTTC), Corry Station

◀ Group training using AN/SLQ-32 equipment at NTTC Corry Station

## Options

**Data Extraction:** The PCDX option enables AN/SLQ-32 data extraction. PCDX data can either be output to a text file or analyzed using the integrated EW Pro debriefing application.

**LAMPS Data:** The NTDS option enables EW Pro to send LAMPS data to the AN/SLQ-32, further enhancing the AN/SLQ-32 operator's training environment.

**Audio Generation:** For training environments where real video is not required, EW Pro can use your PC's sound card to generate signal audio for multiple emitters. Each signal is created and updated independently from all others. The sound card audio is generated on the fly and is not in any way canned or pre-recorded. The sound updates due to signal position changes or signal parameter changes are implemented seamlessly, with no interruption or transitions in the audio.

**Audio/Video Generation:** RDSI's M/Pulse hardware is a standard ISA bus PC card and is used to generate real video for analysis equipment. The M/Pulse card can generate over six million pulses per second. Utilizing the M/Pulse card, EW Pro can generate up to eight simultaneous emitters. Additional M/Pulse cards can be combined to generate additional independent signals.



*The M/Pulse card provides a low cost method for simulating radar frequency emissions in an electronic warfare training environment.*



## EWPRO SYSTEM REQUIREMENTS

- Microsoft Windows 95® or Windows NT® version 3.51 or later
- 16 MB of RAM (24 MB of RAM for Windows NT®)
- 6 MB of hard disk space
- VGA graphics adapter
- Mouse or other compatible pointing device

## OPTIONAL REQUIREMENTS

- TCP/IP network protocol required for group training
- Windows 95® or Windows NT® version 4.0 or later required for sound card audio generation

## FOR MORE INFORMATION

- For more information call 703-893-9533 x1200 or email [ewpro@rdsi.com](mailto:ewpro@rdsi.com)

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