

## US NAVY – SPAWAR - WISE Technology case study

January 2005

### BACKGROUND

Santa Ana, CA – WinSoft Corporation, a global provider for Test and Measurement obsolescence solutions, has responded to an increasing problem of T&M Automatic Tester by successfully installing more than 25 units of the WISE Technology at SPAWAR Systems Center Dan Diego. The WISE, WinSoft Instrument System Emulator, presents a form, fit, and function replacement for legacy systems (i.e. CASS, Grumman) for obsolete test instruments. The WISE is located between the computer/CPU and the new instrument(s). No changes to the software (TPSs) are required. In addition, 4 legacy HP1000 computers were replaced with WinSoft's COBRA 1000, again, without any software changes.

The WISE™ module can translate/emulate different instruments (i.e. Signal Generator, DMM, Spectrum Analyzer) therefore, it is the only **interchangeable** generic solution in the market for **ANY** instrument (including **synthetic instruments**), **ANY** programming language and **ANY** communication protocol. A Built-in Web server enables remote upgrades, instrument swap and worldwide support.

During phase-one of this replacement-process, WinSoft upgraded 2 Testers. In each Tester the following instruments have been replaced: (a) HP6942 Multi-Programmer including the HP59500A (b) HP3495A Scanner (c) Mantech International Interface Device. The replacement made use of the WISE as an Emulator and utilized a variety of PXI modules (see picture below):

Before



After



During the second phase, the following instruments were replaced:

Old Instrument	New Instrument
Racal DMM 6000S4599	Agilent 3458A
HP 8160 Pulse Generator	Agilent 81104A
Racal Counter 9035-11A	Agilent 53132A with 3GHz Channel (Option 030)
HP 8663 Signal Generator	Agilent 8648C with the following Options: - Hi-Output Power Option - Modulation Generator Option - High-Stability Option - Pulse modulation Option
HP 8568 Spectrum Analyzer	Agilent E4402
HP1000 Computer	WinSoft - COBRA 1000 System

## SCHEDULE

Phase-I lasted for 4-5 months (including replacement of all the testers cables and RF switches), while phase II took 4 months.

## PRICE

SPAWAR Systems Center Dan Diego, Systems Support Engineering Division, calculated a saving of \$2,200,000 during phase I and saving of more than \$6,000,000 during phase II. This calculation is based on the DoD cost should there be a need for re-writing and re-validation of more than 100 TPSs. In addition, future savings can be achieved by simple duplication of the WISE units. Moreover, the down time of the station that utilizes the WISE technology went from 50% to less than 2%.

COBRA 1000



WISE units



For more details please call 949-428-4844 x 202

[www.winsoft.com](http://www.winsoft.com)

<http://www.winsoft.com/html/wise.html>