spirent™
Federal Systems

2023 Spirent Federal Training Seminars

East Seminar
Huntsville, AL
Wed - Thu, March 8-9

West Seminar
Los Angeles, CA
Tue - Wed, March 14-15

Planned Agenda – Subject to Change

denotes a hands-on workshop where attendees will use a software license
download to build their own scenarios on their laptops while the Spirent engineer demonstrates

Day 1:

Time	Sessions
7:30	**Registration & Continental Breakfast**
8:00	**Welcome and Orientation**
8:10	**GNSS Program Updates**
9:00	**Portfolio Overview**
9:50	**Break**
10:00	**Scenario Generation 1: GNSS Simulation Fundamentals** • Basic set-up and connecting to a simulator • An introduction to simulation techniques • An introduction to creating GNSS simulation scenarios • Scenario data and time, satellite constellation, and vehicle motion
10:55	**Scenario Generation 2: Building a Realistic Test Environment** • Creating realistic values for simulation parameters, including: satellite antenna patterns, vehicle antenna offset & patterns, multipath, & terrain obscuration • Flex power & visualization tools
11:50	**Lunch**
12:50	**Scenario Generation 3: Interference Simulation** • GTx embedded interferers and signal sources • Adding jamming and custom waveforms • SimIQ custom waveforms for GTx & flex license option
1:45	**Scenario Generation 4: Simulating Spoofing Threats** • Scenarios with duplicate PRNs • Spoofing scenarios using multiple RF outputs • New SimGEN spoofing tool
2:40	**Break**
2:50 – 3:45	**Scenario Generation 5: Utilizing Remote Control and Motion** • Remote operation & user motion files • Using data streaming for remotely monitoring truth data • Timing requirements for remote motion • New remote control and integration tool employing NI LabVIEW
All day, 8-5	**Open Lab in the Break-out Room – Engineers Available All Day** • Calibration information • Ask your question to our engineers for individualized assistance on Spirent solutions

DAY 2:

Time	Sessions
7:30	**Continental Breakfast**

8:00	**Field Testing**
	• **RF Record & Playback**
	    ◦ Why & when to use a record & playback system
	    ◦ Multi-sensor capability
	    ◦ Data collection with a GSS6450
	    ◦ Recreating the environment back in the lab on a GSS9000
	• **Field Simulation**
	    ◦ Product concept & use cases
	    ◦ In-the-field spoofing
	    ◦ Case study & results

9:15	**Testing a CRPA System** • Simulating & setting up multiple elements • Interference/jamming • Spoofers • New CRPA configuration tools • Working with IQ data in wavefront system
10:30	**Break**
10:40	**Anechoic Chamber Testing** • Traditional chamber testing • Zoned chamber testing
11:50	**Lunch**
12:50	**High Dynamics Simulation Testing for FRPA & CRPA Systems** • Examples of high dynamic test applications • 6DOF trajectory generation, translation, & employing the check motion utility • Understanding latency and the introduction of a 2 kHz SIR • Simulating spinning vehicles • RF performance and signal fidelity
1:50	**Augmenting GPS** • Inertial systems - EGI & IMU Testing • Testing LEO navigation systems & the new SimORBIT • SBAS, GEO+
3:00	**CUI Session opens – must be US citizen and show government-issued photo ID to enter.** Electronic devices must be turned off and put away at all times—no recording or photography allowed.
3:15 – 4:30	**GPS Resiliency – CUI*** • Y-code & SAASM • M-code ◦ Including updates for RMP and ISC support
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* U.S. Citizens Only. Visit request required.