



The cyber/electromagnetic space can be as dangerous as the conventional ground, air, and sea battlespaces. That's why military and defense organizations task companies such as Textron Systems and Daqscribe to build the most advanced Electro-magnetic (RF) threat simulation solutions.

Textron Systems now delivers its Radio Frequency Scoring Tool (RFST) with Daqscribe's Ethernet recording technology built in. During RF environment simulation, Textron Systems' RFST provides persistent signal performance scoring of a co-located RF simulator, including Textron Systems' A2PATS products.

RFST digitizes the simulated RF environment which produces massive amounts of streaming digital radio information (i.e., I-Q data). I-Q data packets are reliably recorded and processed on Daqscribe's high-speed Ethernet recording technology for post-scenario signals analysis.

Below are details about both Daqscribe's Smart Digital Radio Recording solutions and Textron Systems' RFST product lines.

RF SCORING TOOL (RFST) FOR VALIDATING RF SIMULATOR SIGNAL OUTPUT

RFST software highlighted benefits	✓ Immediate feedback of how accurately RF outputs match commanded Pulse Descriptor Words (PDWs)
	✓ Records hours of high-fidelity, I-Q data for post-analysis
	✓ Multiple users can post-process RF data simultaneously
	✓ RF signal can be recorded while the previous run is being offloaded and analyzed
real-time comparison features	✓ Collects and digests data and displays in a user-friendly format
	✓ Continuous comparison of command vs. output
	✓ Performance metrics can be filtered based on the target metric (frequency, PRI, etc.)
	✓ Shows persistent, instantaneous output from each individual source



RFST operators' GUI (SCEPTRE by 3dB Labs)



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Textron RFST hardware station with Daqscribe recorder built-in

<p>Daqscribe recorder highlighted benefits</p>	<p>✓ Sustained 100% packet capture and recording</p>
	<p>✓ Optimal SWaP-C hardware configurations</p>
	<p>✓ Any digital radio format over Ethernet, including VITA49</p>
	<p>✓ Single platform, multiple operators</p>
<p>features</p>	<p>✓ Advanced encryption storage options (i.e., AES256)</p>
	<p>✓ STIGs configurable options (Security Technical Implementation Guides)</p>
	<p>✓ Swappable SSD storage pack options</p>
	<p>✓ CPU, GPU and FPGA resource options for on-board High Performance Computing</p>



Standard 100GbE capture & record system
DDR7000-R-100G



Desktop 100GbE capture & record system
DDR7000-D



Standard 8x10GbE capture & record
DDR7000-R-10G-8



Standard 4x25GbE capture & record
DDR7000-R-25G-4



Standard 2 x40GbE capture & record
DDR7000-R-40G-2



Petabyte storage 100GbE capture & record
DDR7000-R-PB