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Technologies for Synthetic Environments: Hardware-in-the-Loop Testing XIV

James A. Buford, Jr. Robert Lee Murrer, Jr. Editors

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Contents

vii ix	Conference Committee Introduction			
SESSION 1	FLIGHT MOTION SIMULATORS			
7301 02	Gimbal stability requirements for target image enhancement [7301-01] R. W. Mitchell, Ideal Aerosmith, Inc. (United States)			
7301 03	Making flight motion tables invisible [7301-02] L. A. DeMore, Point Park Univ. (United States); P. Hollinger, G. Hirsh, Acutronic USA, Inc. (United States)			
7301 04	General characteristics of motion simulators used in the performance tests of infrared camera systems [7301-03] B. Özkan, A. Akmeşe, TÜBITAK Sage (Turkey)			
SESSION 2	HWIL FACILITIES AND TEST			
7301 05	Support technologies involved in the development and implementation of radiometric systems for sensor calibration, characterization, and HWIL testing at AEDC [7301-04] H. S. Lowry, M. F. Breeden, D. H. Crider, S. L. Steely, R. A. Nicholson, J. M. Labello, Arnold Air Force Base (United States)			
7301 06	Digital video timing analyzer for the evaluation of PC-based real-time simulation systems [7301-05] S. R. Jones, J. L. Crosby, Optical Sciences Corp. (United States); J. E. Terry, Jr., U.S. Army Aviation and Missile Research (United States)			
7301 07	Common hardware-in-the-loop development [7301-06] H. J. Kim, U.S. Army RDECOM (United States); S. G. Moss, AEgis Technologies Group, Inc. (United States)			
7301 08	The infrared and semi-active laser simulation capabilities at the AMSTAR production bay HWIL Facility [7301-07] C. L. Talbot, D. Saylor, S. Wilkerson, Optical Sciences Corp. (United States); W. Lowry, U.S. Army Redstone Technical Test Ctr. (United States); J. Morris, U.S. Army AMRDEC (United States)			
SESSION 3	REAL-TIME SCENE GENERATION I			
7301 09	Comparison of GPU and FPGA hardware for HWIL scene generation and image processing [7301-08] C. R. Eales, L. Świerkowski, Defence Science and Technology Organisation (Australia)			

7301 OA	Boat, wake, and wave real-time simulation [7301-09] L. Świerkowski, E. Gouthas, C. L. Christie, O. M. Williams, Defence Science and Technology Organisation (Australia)
7301 OB	Real-time volumetric rendering and compositing techniques for high-altitude wake scene
	generation [7301-10] D. H. Bunfield, D. E. Trimble, Davidson Technologies Inc. (United States); G. H. Ballard, U.S. Army Aviation and Missile Research (United States)
SESSION 4	REAL-TIME SCENE GENERATION II
7301 OC	Using GPU convolutions to correct optical distortion in closed-loop real-time missile simulations [7301-11] T. Fronckowiak, Jr., Torch Technologies (United States) and U.S. Army Aviation and Missile Research (United States)
7301 0D	Digital tapped delay lines for HWIL testing of matched filter radar receivers [7301-12] R. F. Olson, U.S. Army Aviation and Missile Research (United States); W. J. Braselton, Boeing Service Company (United States); R. D. Mohlere, Simulation Technologies, Inc. (United States)
SESSION 5	IR PROJECTORS
7301 OE	Two-band DMD-based infrared scene simulator [7301-13] J. R. Dupuis, D. J. Mansur, R. Vaillancourt, T. Evans, D. Carlson, E. Schundler, OPTRA, Inc. (United States)
7301 OF	MIRAGE WF infrared scene projector system, with 1536 x 768 wide format resistive array, performance data [7301-14] K. Sparkman, J. LaVeigne, J. Oleson, G. Franks, S. McHugh, Santa Barbara Infrared, Inc. (United States); J. Lannon, RTI International (United States); B. Woode, D. Greer, NAWCAD (United States); N. Bui, US Army (United States)
7301 OH	Liquid crystal on silicon spatial light modulator for infrared scene generation [7301-16] J. Stockley, K. Bauchert, A. Linnenberger, S. Serati, Boulder Nonlinear Systems, Inc. (United States); C. Vuong, U.S. Army PEO STRI (United States)
7301 01	Effects of indium mole fraction on LWIR light-emitting device performance [7301-17] N. C. Das, Army Research Lab. (United States); F. Towner, R. P. Leavitt, Maxion Technologies, Inc. (United States)
7301 OJ	VLSI-Membrane-Mirror-Light-Modulator scene projection technology [7301-18] T. Simpkins, J. Hui, M. Whitson, C. Warde, Optron Systems, Inc. (United States)
SESSION 6	PROJECTOR CALIBRATION
7301 OK	Spectral calibration of a visible projector [7301-19] M. H. Bowden, D. B. Beasley, Optical Sciences Corp. (United States); D. S. Cosby, U.S. Army AMRDEC (United States)

- 7301 OL Rise-time enhancement techniques for resistive array infrared scene projectors [7301-20] G. Franks, J. LaVeigne, K. Sparkman, J. Oleson, Santa Barbara Infrared, Inc. (United States)
- 7301 0M Resistor array infrared projector nonuniformity correction: search for performance improvement IV [7301-21]

L. Świerkowski, R. A. Joyce, O. M. Williams, Defence Science and Technology Organisation (Australia)

Author Index

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3 Real-Time Scene Generation I

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Robert M. Patchan, The Johns Hopkins University, Applied Physics Laboratory (United States)

4 Real-Time Scene Generation II

John M. Lannon, RTI International (United States)
W. Larry Herald, MacAulay Brown Inc. (United States)
Dennis H. Bunfield, Davidson Technologies Inc. (United States)

5 IR Projectors

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Ronald J. Rapp, Air Force Research Laboratory (United States) **Robert W. Mitchell**, Ideal Aerosmith, Inc. (United States)

6 Projector Calibration

Owen M. Williams, Defence Science and Technology Organisation (Australia)

Naresh C. Das, Army Research Laboratory (United States)
Heard S. Lowry, Aerospace Testing Alliance (United States)

Introduction

Beyond this page you will find the proceedings of the 14th conference of Technologies for Synthetic Environments: Hardware-in-the-Loop Testing. After thirteen years, I have handed over Chair duties to Jim Buford and I will continue on as his co-chair. Given the continued strong interest (in the form of papers and attendance) in this conference, we will assume we have a winning formula and so the fundamental theme and format will remain unchanged.

In these proceedings, you will find a refreshing variety of papers from flight motion simulators, to test facility integration, to innovations in scene generation, to infrared projector technology and characterization. We have achieved the standard in infrared projection with the maturation of the Santa Barbara Infrared resistor arrays but much work remains. Many have achieved remarkable success in non-uniformity correction performance but there remain nagging unknowns with respect to annealing characteristics of the emitter materials. Emitter overdrive has re-emerged as a discussion topic to significantly improve rise time. PC-scene generators have become the standard and innovative techniques have resulted in previously impossible real-time dynamic modeling of the interaction of a target with its environment (i.e. boat wakes, aero-wakes, and plumes).

We are eternally thankful to the authors and presenters who face competing interests for their time while navigating the creep of scrutiny on release authority. Many thanks also to Kathryn Stevens who was the motor behind the pleadings and urgings as deadlines came and went; without her support, this conference would not have been possible.

James A. Buford, Jr. Robert Lee Murrer, Jr.