

Status Report: February 2019

21st Annual Systems & Mission Engineering Conference

October 22-25, 2018

**Grand Hyatt Tampa Bay
Tampa FL**

Sponsored by

NDIA Systems Engineering Division

in partnership with

NDIA Integrated Program Management Division

In Conjunction With

Deputy Assistant Secretary of Defense, Systems Engineering

With participation by

IEEE Systems Council and IEEE Aerospace & Electronic Systems Society







LOST

CONFUSED

UNSURE

UNCLEAR

PERPLEXED

DISORIENTED

BEWILDERED

Committee & Tracks

Agile in Systems Engineering
Architecture
Development Test & Evaluation
Educational & Training
Engineered Resilient Systems
Enterprise Health Management
Environmental Safety & Occupational Health
Human Systems Integration
Mission Engineering
Modeling & Simulation
Net Centric Operations/Interoperability
Program Management
Software Engineering
Systems Engineering Effectiveness
Systems Security Engineering
System-of-Systems
MBSE Tools Demo Track

John Norton/Linda Maness
Bob Scheuer/Ed Moshinsky
Joe Manas
Don Gelosh
Lois Hollan
Chris Reisig
Sherman Forbes/Dave Schulte/Lucy Rodriguez
Matt Risser/Tom Hagale
Judith Dahmann
David Allsop, Chris Schreiber
Jack Zavin/John Daly
Lisa Manning/Vaugh Schlegel
Ken Nidifer
Tim White/Joe Elm
Holly Dunlap
Judith Dahmann/Rick Poel/Jennie Horn
Phil Zimmerman

Conference success is due to these hard-working folks! Many thanks!!

Final Track Determinations

- We did not announce track names in Call for Papers, merely topics
- We needed notional tracks since these match up with our committee structure fairly closely, with chairs.
- The July abstract review found that papers submitted matched our notional tracks perfectly.
- The Digital Engineering/Digital Thread/MBSE split from M&S in 2017 wasn't the best approach-
 - No plan for such separation in 2018, but combining all M&S/Digital Engineering/MBSE into single track may be unworkable if we have too much viable content
 - Which is exactly what happened. So part of M&S topics will be in parallel with others. See tabulation for severity impact.
- We had capacity for 9 breakouts for 2018 vs 6 for 2017

Abstracts

- **215 abstracts submitted.**
 - All were of high quality (as usual)
 - So 215 abstracts were selected
 - Only 1 tutorial (Thanks, Jim “Cooohan”)
- **Only 176 papers presented after cancellations.**
- **We can present 14 to 15 papers per day in each room**
- **9 rooms x 2 days x 15 papers = 270 total**
 - 1 room for 1 day occupied by Phil Zimmermann’s Tool Demo
- **We did have 9 breakout rooms but 3 were added at “the last minute” since NDIA conference staff used space from 2017 as guide as opposed to the requested 9 breakout rooms.**
 - But facility was marginal – per later slide

Abstracts Selected

- Agile 6 7
- *Architecture (none submitted 2016)* 10 14
- Better Buying Power/Affordability 0 0
- Computational Research & Engineering Acquisition Tools and Environments (CREATE) (added for 2017) 19 1 (put in M&S)
- *Developmental Test & Evaluation (DT&E) none submitted 2016* 4 6
- Digital Engineering/Model-based Systems Engineering (added for 2017) 17 0
- Education & Training 13 11
- Engineered Resilient Systems (ERS) 14 18
- Enterprise Health Management 2 3
- Environment, Safety, and Occupational Health (ESOH) 22 18
- Human Systems Integration (HSI) 6 9
- Mission Engineering 4 8
- Modeling & Simulation 4 57
- Net-Centric Operations (NCO) / Interoperability 6 4
- Program Management 9 16
- Systems Security Engineering (SSE) 30 31
- Systems of Systems Engineering 7 7
- Systems Engineering Effectiveness 12 9
- *Software Engineering (none submitted 2016)* 4 0

2017: black
2018: red

Something New

- **DASD/SE conducted a Digital Engineering Summit on Monday afternoon from 1 to 5**
 - DoD only, by invitation
 - Very well attended!
- **DASD/SE (Phil Zimmerman) coordinated a digital engineering/MBSE tools track at the conference as one of the breakout tracks**
 - Tool vendors afforded opportunity to present/discuss their toolset, one at a time
 - Over 16 responses initially received

Major issue

- Prime defense contractors are only reimbursed for travel per the JTR (per DCAA rules)
 - Some companies allow this although the overage goes to “unallowable”, or a direct subtraction from profit
- Despite alert of this fact last summer to the NDIA principal working the contract, with a request that we have adequate per-diem rooms for defense contractors,
 - **We don't.**
- Britt Sullivan & Dave Chesebrough found an alternate hotel, 3 miles away.
 - Shuttle bus arranged with that hotel to go back and forth.

Another major issue

- **Facility was marginal.**
 - Main breakouts on 1st floor were in partitioned rooms (airwalls)
 - Doors were airwall doors; didn't close well
 - Sound carried between rooms
 - Room sizes were somewhat exaggerated
 - Only 6 breakouts initially planned by NDIA conference group, based on 2017 in Springfield, despite Dave and my request for 9 breakouts- fortunately we were able to add 3 more but they were scattered

Attendance Summary

	<u>Survey</u>	<u>Actual</u>
• Academia	6%	2%
• Government	39%	25% + 3% Int'l
• Industry	34%	28%
• Speaker*	21%	37%
• * Speakers were a mix of government, academia & industry		
• 1 st -time attendee:	58%	
• 2-5 years	25%	
• 6-10 years	10%	
• 11-15 years	6%	

– Based on 67 of 475 responses or 14%

Other attendance feedback

- 4-day conference length: 88% said excellent/good
- Tampa location: Excellent; 43%; Good, 28%; Avg, 2%
- Attend next year: Yes, 66%; Not Sure, 34%; No; 0%
- Opportunity to network with government:
 - Excellent, 53%; Good, 36%; Average, 8%; Fair, 3%
- Hotel used:
 - Hyatt, 50%; Crown Plaza, 10%; Other, 37%
- Track Ratings: (out of 10)
 - EHM, 5.6; IO/NCO, 5.3; SW, PM, ESOH, and DT&E, 5.0; E&T, 4.8; ERS, 4.7;
 - Lowest rated were M&S 1 & 2 (2.5 & 2.6 resp)
- Breakouts: too many, 50%; just right, 40%
- Expectations fulfilled: Yes: 97%; no, 3%

Suggestions

- **More anti-tamper**
- **More specific topics in Call for Papers**
- **MBSE as separate topic apart from M&S**
- **More examples of MBSE in use**
- **More Mission Engineering**
- **More Digital Engineering focus, including standards, artifacts, etc**
- **Less panel discussions – more real “meat”**
- **5-minute breaks between sessions (?)**
- **Fewer plenary sessions**
- **Tour of local facility**
- **More on research**
- **45-minute papers**

Attendance Snapshot

	M&S 1	M&S 2	SSE	SEE	SW	ME	ERS	PM	IO/NCO	Total
Wed AM 2	60	50	40	10	35		47		20	
Wed PM 3	40	50	29	14	15	44	32	11	27	262
				ESOH	Tools	Arch		DT&E	SoS	
Thurs AM 1	14	42	21	17	24	34	11	21	12	196
Thurs AM 2	21	32	22	19	49	43	30	9	16	241
Total paid attendance as of Thursday AM: 496 reported.										
Final paid attendance reported 475										

INCOSE CSEP Exam

- The INCOSE Certified Systems Engineering Professional (CSEP) exam was given as part of the 2017 conference and will be conducted in 2018 as well.
- Monday October 22, morning
- Conducted at the hotel

Status Report: December 2018

22nd Annual Systems & Mission Engineering Conference

October 21-24, 2019

***Hilton Downtown Tampa
Tampa FL***

Sponsored by

NDIA Systems Engineering Division

in partnership with

NDIA Integrated Program Management Division

In Conjunction With

Deputy Assistant Secretary of Defense, Systems Engineering (new titles?)

With participation by

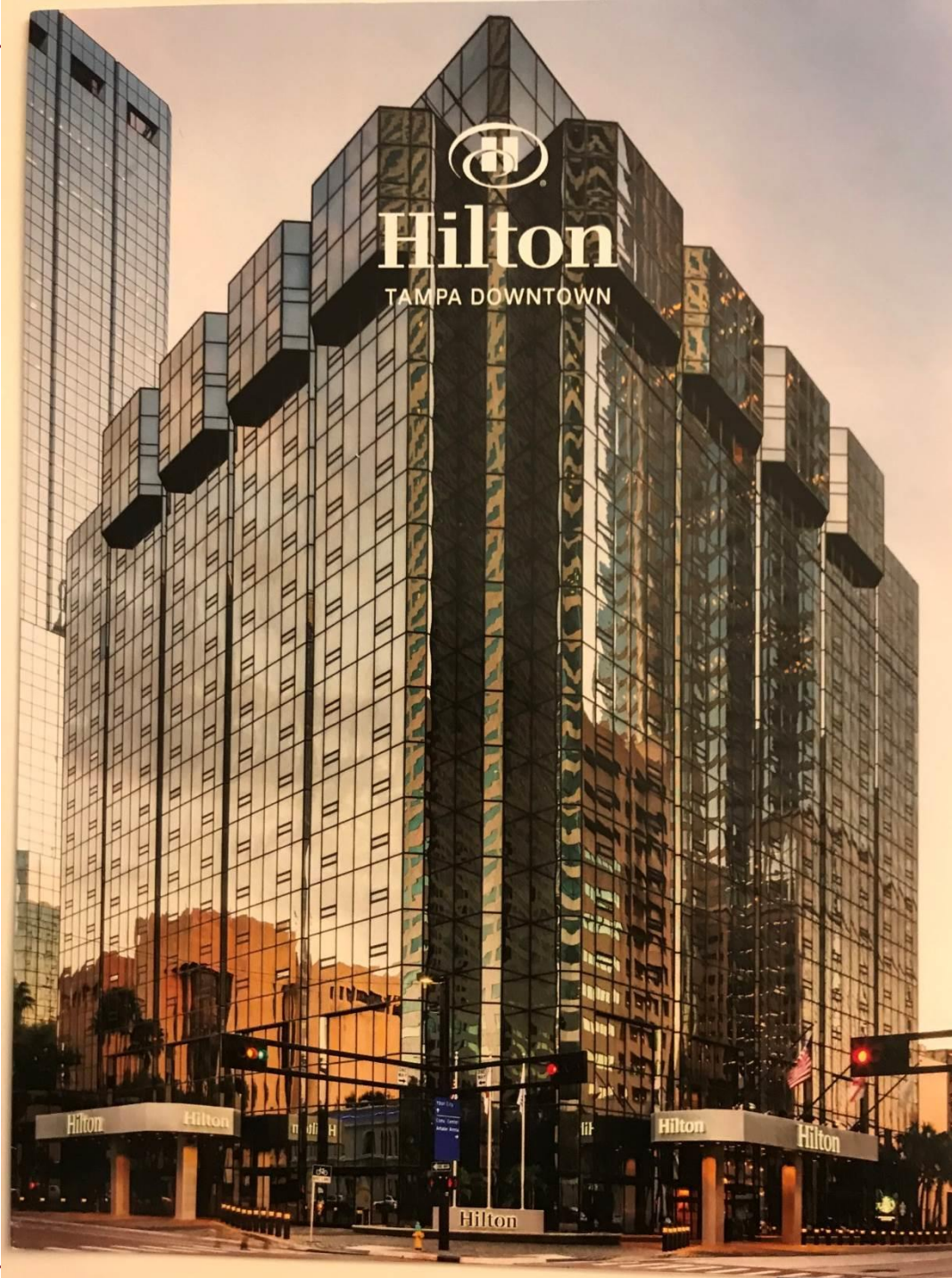
IEEE Systems Council and IEEE Aerospace & Electronic Systems Society

Where after 2018?

- Conference started in San Diego, 1998
 - Hilton, I-8 Hotel Circle
 - Stayed there 2 years
- Dallas TX (3x)
- Back to San Diego (Hyatt Regency Islandia)
- Tampa FL (Tampa Marriott Waterside)
- Back to Hyatt Mission Bay in 2004
 - Stayed there until 2012 when bottom fell out
 - Attendance in 2011 was 575; in 2012 it was 225
- Moved to Hyatt Crystal City in 2014 (175 attendees)
- Moved to Waterford, Springfield VA in 2015
- Moved to Tampa in 2018
 - And we plan to stay there for the next 2-3 years
 - 2019 is at the Hilton Tampa Downtown
 - WITH adequate per-diem rooms for defense contractors AND 9 breakout rooms (requested)

NDIA

National Defense Industrial Association



Call for Papers

- **Call for Papers at 99.9%**
- **Very few committee offered any suggestions on topics list, but we did clarify topics especially M&S**
- **Will go with 3 M&S focused tracks for 2019**
 - **Digital Engineering Implementation and Infrastructure**
 - **Model-based Systems Engineering – Applications & Project Experience**
 - **Modeling & Simulation – Design & Methodology**
- **Will send to NDIA tomorrow to release.**

Potential Issues

- We do have 9 breakouts
- Many of the conference rooms are also airwalled from a larger ballroom, some with airwall doors only
- Working with Dave C to resolve.
- I am informed that we have adequate government-rate rooms; I hope to know this definitively very soon.