2019 Enchantment Chapter Survey Results

1. What is most valuable to you about your attendance at Enchantment Chapter meetings?

ANSWER CHOICES	RESPONSES	•
	33.33%	9
▼ Relevance of presentations to my work	33.33%	9
▼ Personal development	0.00%	0
▼ Professional development	22.22%	6
▼ Ability to obtain PDUs to maintain a license or credential	0.00%	0
▼ Networking with other SE professionals	3.70%	1
▼ Other (please specify) Responses	7.41%	2
TOTAL		27

Other: Seeing how other professionals deal with the challenges of implementing SE best practices Other: I've yet to attend.

2. Do you read our quarterly newsletter?

ANSWER CHOICES	•	RESPONSES	•
▼ Yes		67.86%	19
▼ Sometimes		25.00%	7
▼ No		7.14%	2
▼ I usually attend		0.00%	0
▼ Other (please specify)	Responses	0.00%	0
TOTAL			28

3. Are you currently a member of INCOSE?

ANSWER CHOICES	▼ RESPONSES	•
▼ Yes	92.86%	26
▼ No	7.14%	2
TOTAL		28

4. How many years have you been practicing Systems Engineering?

ANSWER CHOICES	▼ RESPONSES	•
▼ Less than 2 years	11.11%	3
▼ 2-5 years	11.11%	3
▼ 5-10 years	22.22%	6
→ More than 10 years	55.56%	15
TOTAL		27

5. If we think of systems engineering as transdisciplinary, what related areas do you have expertise in? [check all that apply]

ANSWER CHOICES	-	RESPONSES	•
▼ Risk Management		53.85%	14
▼ Requirements		92.31%	24
▼ Human Factors		42.31%	11
▼ Software Design and Development		50.00%	13
▼ Project Leadership		76.92%	20
▼ Integration		65.38%	17
▼ Verification and Validation		61.54%	16
▼ Hardware Design and Development		38.46%	10
▼ Other (please specify)	Responses	19.23%	5
Total Respondents: 26			

- ° Other: Telecom transport infrastructure and circuit inventory and assignment systems
- ° Other: Test and Evaluation
- Other: modeling (SE, SWE, CAD, cyber), Cyber, IT, SoS, Complex Sys, small sys, gov sys, commercial sys, teleco sys, research
- ° Other: Safety
- ° Other: Concept development, architecture development, operational concepts

6. What areas would you like to learn more about applying the principles of systems engineering? [check all that apply]

ANSWER CHOICES	-	RESPONSES	•
▼ Risk Management		46.15%	12
▼ Requirements		50.00%	13
▼ Human Factors		50.00%	13
▼ Software Design and Development		30.77%	8
▼ Project Leadership		34.62%	9
▼ Integration		50.00%	13
▼ Verification and Validation		57.69%	15
▼ Hardware Design and Development		23.08%	6
▼ Other (please specify)	Responses	23.08%	6
Total Respondents: 26			

- ° Other: Model Based system engineering
- ° Other: Project Management
- ° Other: SoS, digital engineering-related topics (e.g., security model), FuSE
- Other: Decision Analysis
- Other: Not interested in "learning" about. I'm interested in seeing forward momentum in the spread of SE practice, recognition that the soul of SE is architecture (not requirements), and that some indication that SE in general is being successfully implemented to improve the way we build systems. That does not mean that by just "doing" SE, we are improving anything. I mean that SE needs to get better (make improvements that are read), faster (adopt agile to complex systems, sw/hw systems, and SoS), and cheaper (recognize that it is part of the SE job to ensure that the systems built are built optimally for whatever environment intended).
- ° Other: MBSE as applied to performing SE tasks

7. Please tell us about your primary school/work or home location:

ANSWER CHOICES	▼ RESPONSES	•
▼ Albuquerque Metro Area	81.48%	22
▼ Northern New Mexico	11.11%	3
▼ Southern New Mexico	0.00%	0
▼ El Paso Metro Area	0.00%	0
▼ Other (please specify)	Responses 7.41%	2
TOTAL		27

° Other: Albuquerque Metro & Seattle Metro

Other: Phoenix, AZ

8. Please tell us about your employment status: [check all that apply]

ANSWER CHOICES	•	RESPONSES	•
→ Student		0.00%	0
▼ Private industry		3.70%	1
▼ National laboratory		70.37%	19
▼ Defense agency		7.41%	2
▼ University		7.41%	2
▼ Independent / Self-employed		14.81%	4
▼ Retired		11.11%	3
▼ Not currently employed		0.00%	0
▼ Other (please specify)	Responses	3.70%	1
Total Respondents: 27			

° Other: Contractor to USAF

9. Would you be interested in collaborating with fellow chapter members on a service project that benefits the public through utilization of best practices from systems engineering?

ANSWER CHOICES •	RESPONSES	•
▼ Yes	84.00%	21
▼ No	16.00%	4
TOTAL		25

10. If you answered YES to question 9, please select the areas you would consider volunteering your time to support. [check all that apply]

ANSWER CHOICES	RESPONSES	•
▼ Public School System such as Albuquerque Public Schools	66.67%	14
▼ New Mexico State Emergency Operations Center	42.86%	9
▼ National Museum of Nuclear Science	23.81%	5
▼ Improving Family Services to those in need such as working with the United Way	57.14%	12
▼ Food Distribution to the poor such as the Roadrunner Food Bank	57.14%	12
Total Respondents: 21		

11. The Enchantment Chapter occasionally offers tutorials for its members. What tutorial topic(s) would be of interest to you?

- ° (2) SysML
- ° (2) V&V

MBSE

- Model Based System engineering
- Using MBSE in the real world on small projects; what "systems engineering" looks like at various organizations

Requirements

- Requirements definition and management, SE/PM integration
- Requirements integration

<u>Other</u>

- INCOSE standards and ISO 15288
- xSystems Engineering Management
- ° Ontologies/NLP, SysML 2.0, data standards
- Preparing for the Systems engineering certification
- Whatever the Enchantment Chapter members can benefit from
- Mobus/Kalton System Language, Archimate/SysML Integration
- ° Practical applications of Systems Engineering

12. I would be interested in becoming involved in the following Chapter/SE Professional Development activities [check all that apply]:

ANSWER CHOICES	•	RESPONSES	•
 Attend Chapter meetings (in person or via GlobalMeet) 		82.35%	14
▼ Speak at a meeting or arrange a speaker or tour		35.29%	6
▼ Join the Chapter Board of Directors in a leadership position		11.76%	2
 Obtain SE certification (i.e., Certified Systems Engineering Professional) 		29.41%	5
▼ Other (please specify) Respons	es	17.65%	3
Total Respondents: 17			

- Other: My CSEP application is queued for review. I was elected 202 Director at Large of Enchantment Chapter
- ° Other: already on BoD, PDCom
- ° Other: May be able to speak at a meeting, but would need an OUO venue.

13. If you indicated you were interested in an SE collaborative project, speaking at a meeting, arranging a tour, or taking on a board position, please let us know how to contact you:

Name	Email	Phone	Speaker Topic
James Larkin	jelarkin3@gmail.com	518.225.3401	
Thomas Whittington	twhitti@sandia.gov	505-859-0410	
Ann Hodges	alhodge@sandia.gov	505-844-6284	
PJ McGoey	pjmcgoey@comcast.net	206-200-0022	G. Mobus, System Language
			Would be performing qualification, via a MBSE
Raymond Wolfgang	rwolfga@sandia.gov	5052842486	tool. This one is not yet VERY developed
Mary Compton	mlcompt@sandia.gov	5058459268	
Rick Dove	dove@parshift.com	5757707101	Agile SE, FuSE Security
Phil Bennett	pcbenne@sandia.gov	505-845-8777	

			Mission assurance, Space Shuttle ground
Tim Riley	tgriley@sandia.gov	505-284-4532	operations, wind energy research
Cheryl Bolstad	cbolsta@sandia.gov	505-844-3775	