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Appendix 2 Survey Results

General Needs

	Strongly Agree	Partially Agree	Neither Agree or Disagree	Partially Disagree	Strongly Disagree	N/A	Response Average
1 1 SE is greatly needed by my company	9	3	1	0	0	0	1.38
1 2 System Engineering can be taught	6	7	0	0	0	0	1.54
1 3 All engineers should have some SE training.	8	5	0	0	0	0	1.38
5 4 System Engineers should be certified (tested).....	2	3	4	4	0	0	2.77
Total Respondents	13						
(skipped this question)	0						

General Competencies and Background

	Strongly Agree	Partially Agree	Neither Agree or Disagree	Partially Disagree	Strongly Disagree	N/A	Response Average
1 5 Systems Thinking (i.e. a mind-set) is a key elemen	9	4	0	0	0	0	1.31
2 10 System Engineers need to be knowledgeable in t	8	3	1	1	0	0	1.62
2 7 System Engineers need to be knowledgeable in p	8	3	1	1	0	0	1.62
3 9 System Engineers need to be knowledgeable in s	5	8	0	0	0	0	1.62
4 8 System Engineers need to be knowledgeable in b	3	6	2	2	0	0	2.23
11 System Engineers can come from any engineerin	7	4	0	2	0	0	1.77
6 Practical SE experience is needed to become a S	5	8	0	0	0	0	1.62



Specific Knowledge and Capabilities Needed by System Engineers

	Strongly Agree	Partially Agree	Neither Agree or Disagree	Partially Disagree	Strongly Disagree	N/A	Response Average
1 14 Requirements/specification Management	7	4	1	0	0	0	1.5
1 15 Risk Management	9	2	1	0	0	0	1.33
1 16 Influence Management	6	2	4	0	0	0	1.83
1 20 Interface Management	9	2	1	0	0	0	1.33
1 24 Teamwork and Team Leadership	7	5	0	0	0	0	1.42
1 41 Presentation Skills	7	5	0	0	0	0	1.42
1 42 Writing Skills	8	4	0	0	0	0	1.33
1 58 Critical Thinking	6	5	1	0	0	0	1.58
2 12 Technical Management	6	5	1	0	0	0	1.58
2 21 Configuration Management	5	5	2	0	0	0	1.75
2 26 Quality Tools and Methodologies	2	8	2	0	0	0	2
2 31 Reliability/Maintainability/Availability	2	10	0	0	0	0	1.83
2 34 Survivability	2	8	2	0	0	0	2
2 43 Probability & Statistics	3	5	4	0	0	0	2.08
2 48 Technical Performance Measurement	4	8	0	0	0	0	1.67
2 49 Test Measurement & Evaluation	4	7	0	0	0	0	1.64
2 50 Modeling Simulation & Analysis	4	6	2	0	0	0	1.83
2 51 Design and Synthesis	4	7	1	0	0	0	1.75
2 52 System Architecture	8	4	0	0	0	0	1.33
2 53 Verification and Validation	4	8	0	0	0	0	1.67
3 13 Program Management	5	5	1	1	0	0	1.83
3 18 Cost Management	4	6	0	2	0	0	2
3 19 Schedule Management	5	5	1	1	0	0	1.83
3 22 Data Management	1	9	2	0	0	0	2.08
3 25 Manufacturing processes	3	3	4	2	0	0	2.42
3 27 Cost Estimating	3	6	1	1	0	0	2
3 28 Organizational Structures Environments & Psych	3	6	3	0	0	0	2
3 33 Human Factors	3	4	3	2	0	0	2.33
3 37 Producibility	2	6	3	1	0	0	2.25
3 38 Safety & Health Hazards	3	5	3	1	0	0	2.17
3 39 Security	1	7	3	1	0	0	2.33
3 40 Life Cycle Issues	5	5	1	1	0	0	1.83
3 44 Statistic Process Control	2	7	1	2	0	0	2.25
3 45 Total Quality Management / Six Sigma	2	5	3	2	0	0	2.42
3 54 Software Engineering	3	5	3	1	0	0	2.17
3 55 Drawings and Computer Aided Design	1	6	4	1	0	0	2.42
3 57 Operations Research	1	3	6	2	0	0	2.75
3 59 Intellectual Property Protection	3	2	5	2	0	0	2.5
3 60 Software Architecture.....	3	6	2	1	0	0	2.08
4 23 Government Policy and Regulations	2	4	5	0	1	0	2.5
4 30 Economics	3	2	4	2	1	0	2.67
4 32 Logistics	1	4	5	2	0	0	2.67
4 35 Training	1	5	4	1	1	0	2.67
5 17 Contract and Sub-contract Management	2	2	4	4	0	0	2.83
5 29 Marketing	0	6	3	2	1	0	2.83
5 36 Procurement	0	4	5	2	1	0	3
5 46 Automation	0	5	5	2	0	0	2.75
5 47 Environmental Issues & Impacts	0	6	4	2	0	0	2.67
5 56 Utility Theory	0	4	6	2	0	0	2.83

