



Release Lanyard Project

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Styson Koide

Overview

- Problem Statement
- Current Design
- Design Concepts
- Design Selection
- Gantt Chart
- Conclusion
- References

Problem Statement

- Issues with freezing temperatures and debris
- Issues not activating weapons system
- Issues with poor installation

Current Lanyard Design

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Slider Assembly Design

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Design Matrix

	Scale		Activation Arms										
1 2	Terrible	Criteria	Weight	Switch Slider	Extended Arm	Spring Loaded Arm							
3		Cost	0.1	2	3	2							
4 5	Moderate	Contamination	0.4	6	5	3							
6		Temperature Range	0.2	5	5	4							
7		Installation Time	0.1	5	5	4							
<u>8</u> 9		Ease of Installation	0.1	4	5	3							
9 10	Excellent	Dimensions	0.1	8	3	7							
L	· · · · · · · · · · · · · · · · · · ·			5.3	4.6	3.6							

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Cap to Guide Pipe



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Carly Siewerth

Array Guide Pipe



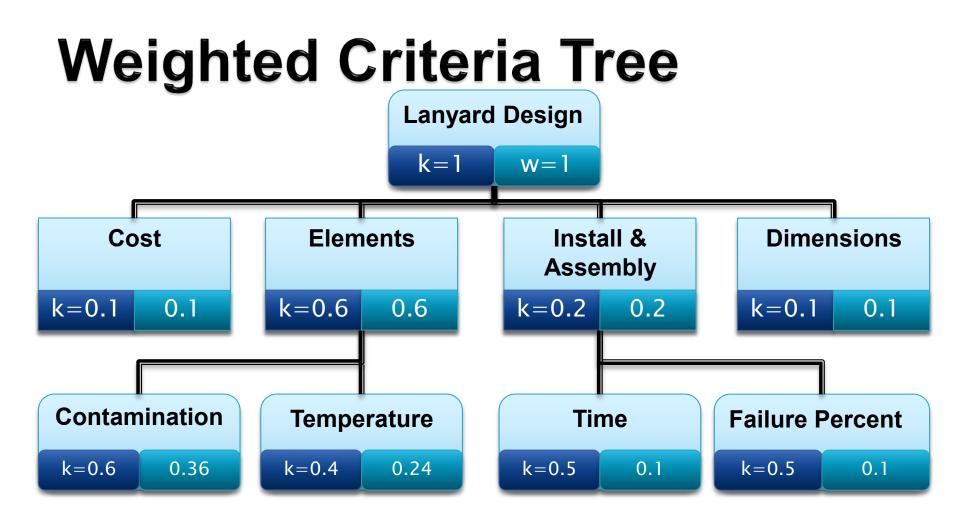


Design Matrix

Cable Guides Components										
Criteria	Weight	Array	Radius Edges	Сар	Lubrication					
Cost	0.1	4	4	3	3					
Contamination	0.4	7	5	8	4					
Temperature Range	0.2	5	5	5	7					
Installation Time	0.1	4	5	5	3					
Ease of Installation	0.1	4	5	5	3					
Dimensions	0.1	5	5	5	5					
		5.5	4.9	6	4.4					

Design Matrix

Cable Options											
Criteria	Weight	Cable Coating	Electrical Wires	Ridged Rod							
Cost	0.1	3	2	4							
Contamination	0.4	8	6	6							
Temperature Range	0.2	5	5	5							
Installation Time	0.1	3	4	6							
Ease of Installation	0.1	4	4	6							
Dimensions	0.1	5	8	2							
		5.7	5.2	5.2							



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Gantt Chart

		Oct						Nov					Dec			
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										Des	sign of La	inyard				
											♦ Mi	lestone Pre	esentation			
					6						4	Milestone	Report			

Conclusion

- Problem Statement
- Design Concepts
- Design Selection
- Gantt Chart

References

- Stephen Larimore
 - Raytheon Department Manager
- Kelly Convington
 - Raytheon Mechanical Engineer

Questions?

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Chris Temme