HyRo
Team 28

Jason Klindtworth | Josh Asher | Layne Nolli

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Technology Review

Abstract

High Altitude rockets have a distinct advantage in using Hybrid propulsion systems. These systems are complex and present challenges in remote telemetry including launch initialization and controlling remote fuel filling/disconnect. High altitude rockets also contain an array of sensors that collect data which needs to be visualized in a human friendly format. The goal of HyRo is to provide mechanisms for remotely launching and controlling the fuel systems on a hybrid propulsion system through onboard embedded circuitry/software that communicates to launch team via radio waves. This circuitry/software will also communicate sensor data to the ground. Sensor data is displayed in our visualization software in an appealing, human readable way.

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I. Introduction

II. Technology Reviews

A. Technology 1

1) Options:
2) Goals:
3) Criteria:
4) Comparison Table:
5) Discussion:
6) Selected Option:

B. Technology 2

C. Technology 1

1) Options:
2) Goals:
3) Criteria:
4) Comparison Table:
5) Discussion:
6) Selected Option:

D. Technology 3

E. Technology 1

1) Options:

2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

F. Technology 4

G. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

H. Technology 5

I. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

J. Technology 6

K. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

L. Technology 7

M. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

N. Technology 8

O. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

P. Technology 9

Q. Technology 1

1) *Options:*

2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

R. Technology 10

S. Technology 1

1) *Options:*
2) *Goals:*
3) *Criteria:*
4) *Comparison Table:*
5) *Discussion:*
6) *Selected Option:*

T. Traditional Computer Software

III. Conclusion

IV. Bibliography