

UC Irvine

SSOE Research Symposium Dean's Awards

Title

HyperXite III

Permalink

<https://escholarship.org/uc/item/3qz6m0kc>

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Publication Date

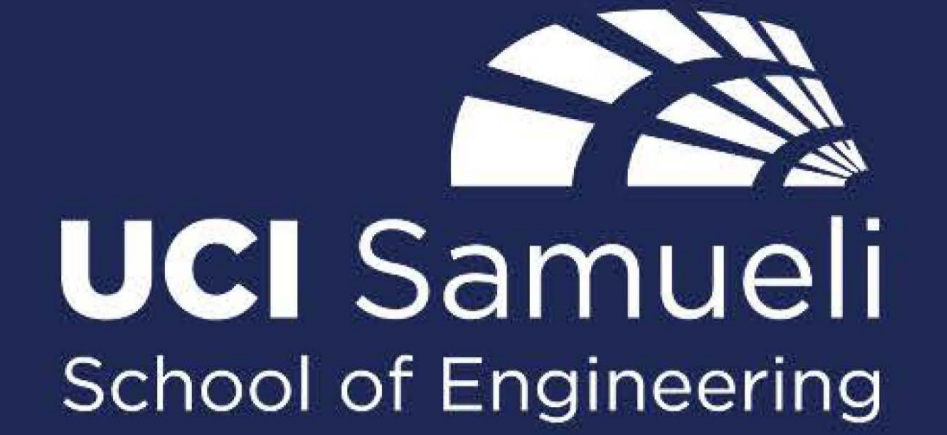
2018-03-15

Peer reviewed

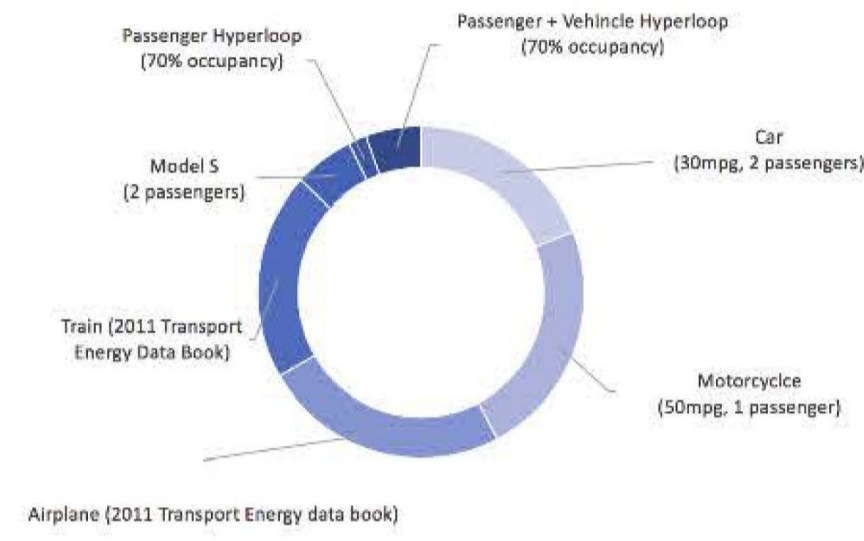


HYPERXITE

Future of Affordable and Sustainable Transportation



BACKGROUND



Source: Hyperloop Alpha by Elon Musk

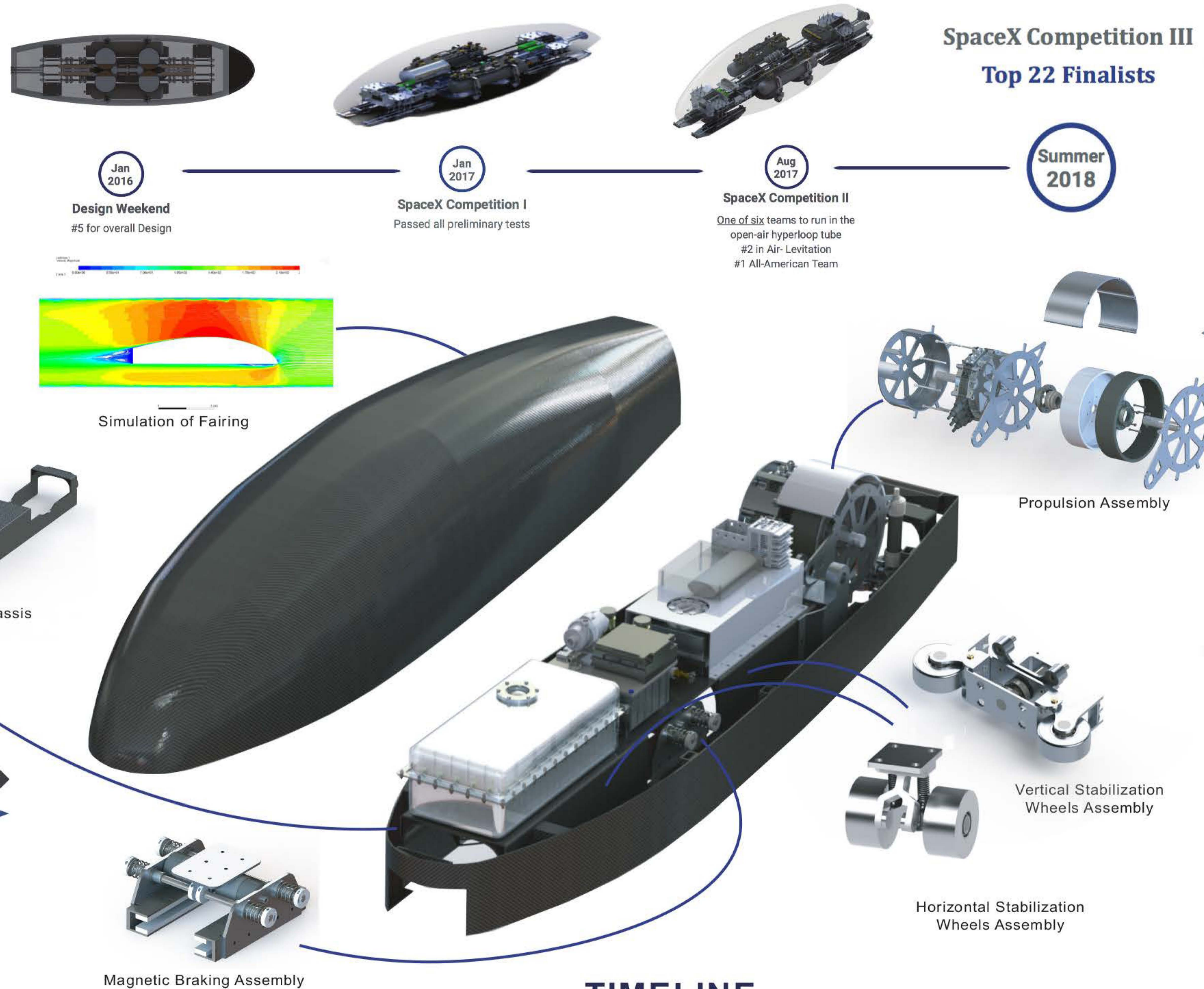
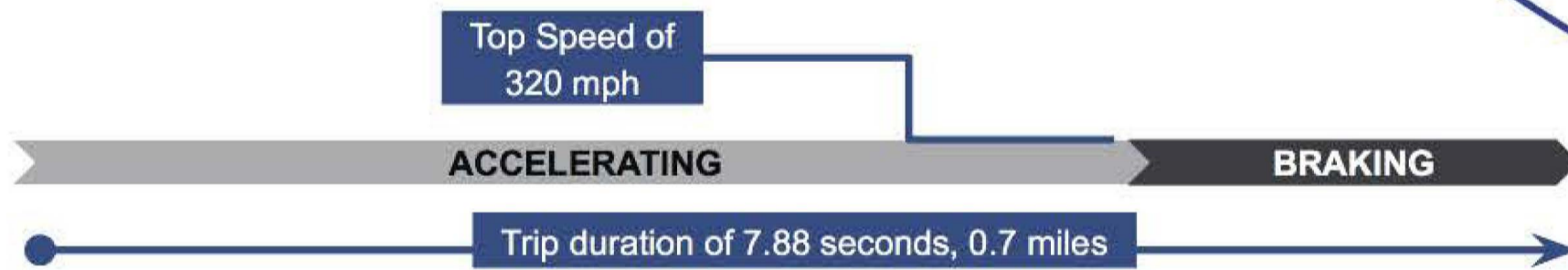
The Hyperloop is a new idea proposed in 2013 by Elon Musk. A Hyperloop system would consist of a long tube that would connect one city to another. This tube is held at a low pressure, allowing pods to travel through the tube at high speed with very low friction. A Hyperloop could be used to transport people or freight more economically than any other transportation system. A trip from Los Angeles to San Francisco would take about 35 minutes and pods would reach top speeds of 760 mph.

GOALS

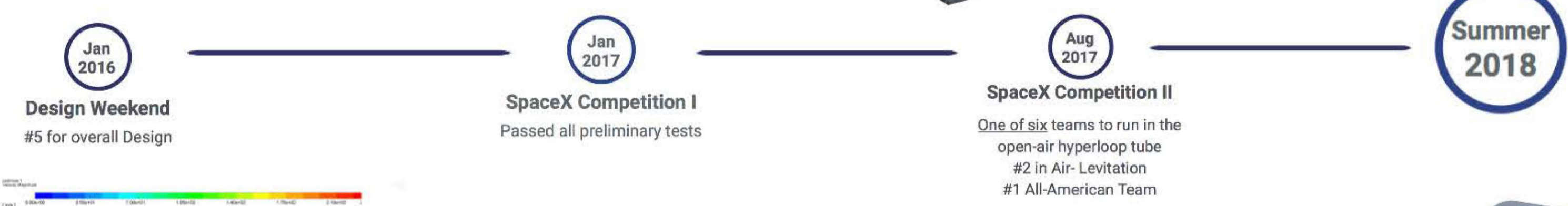
Build a high speed, self-propelled Hyperloop pod and complete a successful vacuum run during the SpaceX Hyperloop Competition III on July 15th.

OBJECTIVES

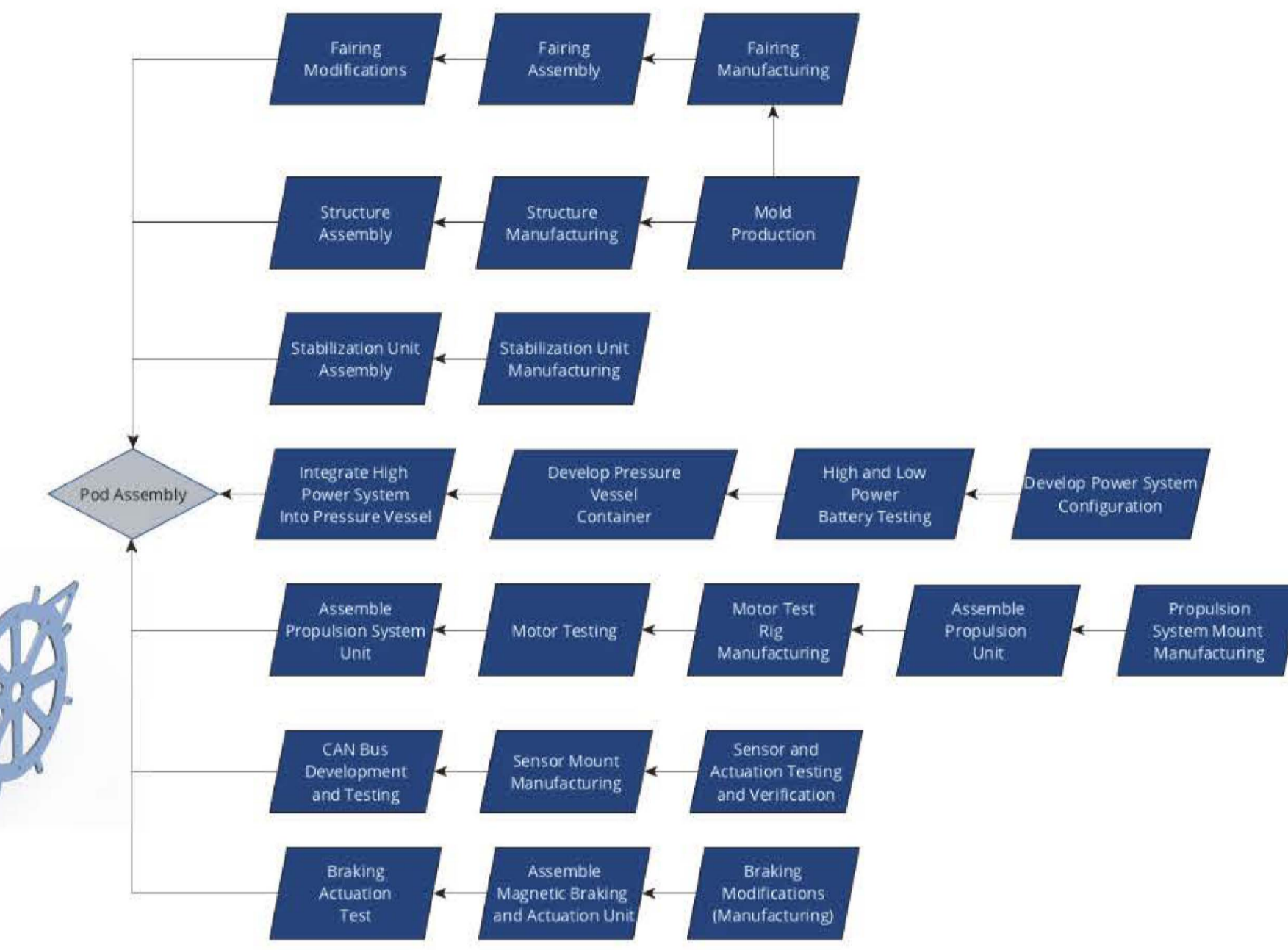
- Top speed: 320 mph
- Vacuum safe
- Real-time pod behavior monitoring
- Stop the pod 100 ft before the end of tube
- White papers for every subsystem



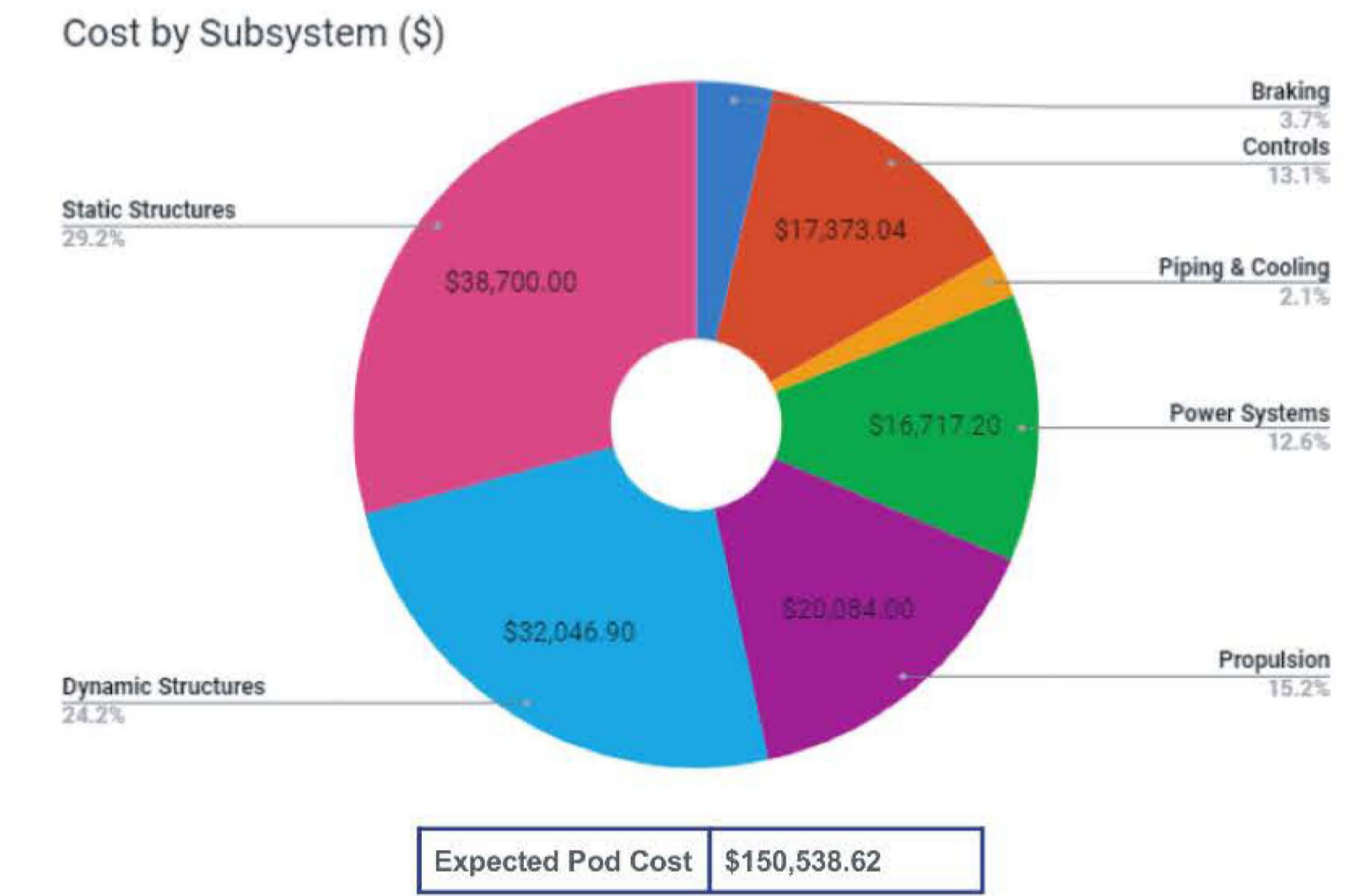
SpaceX Competition III Top 22 Finalists



MANUFACTURING PLAN



TOTAL POD COST

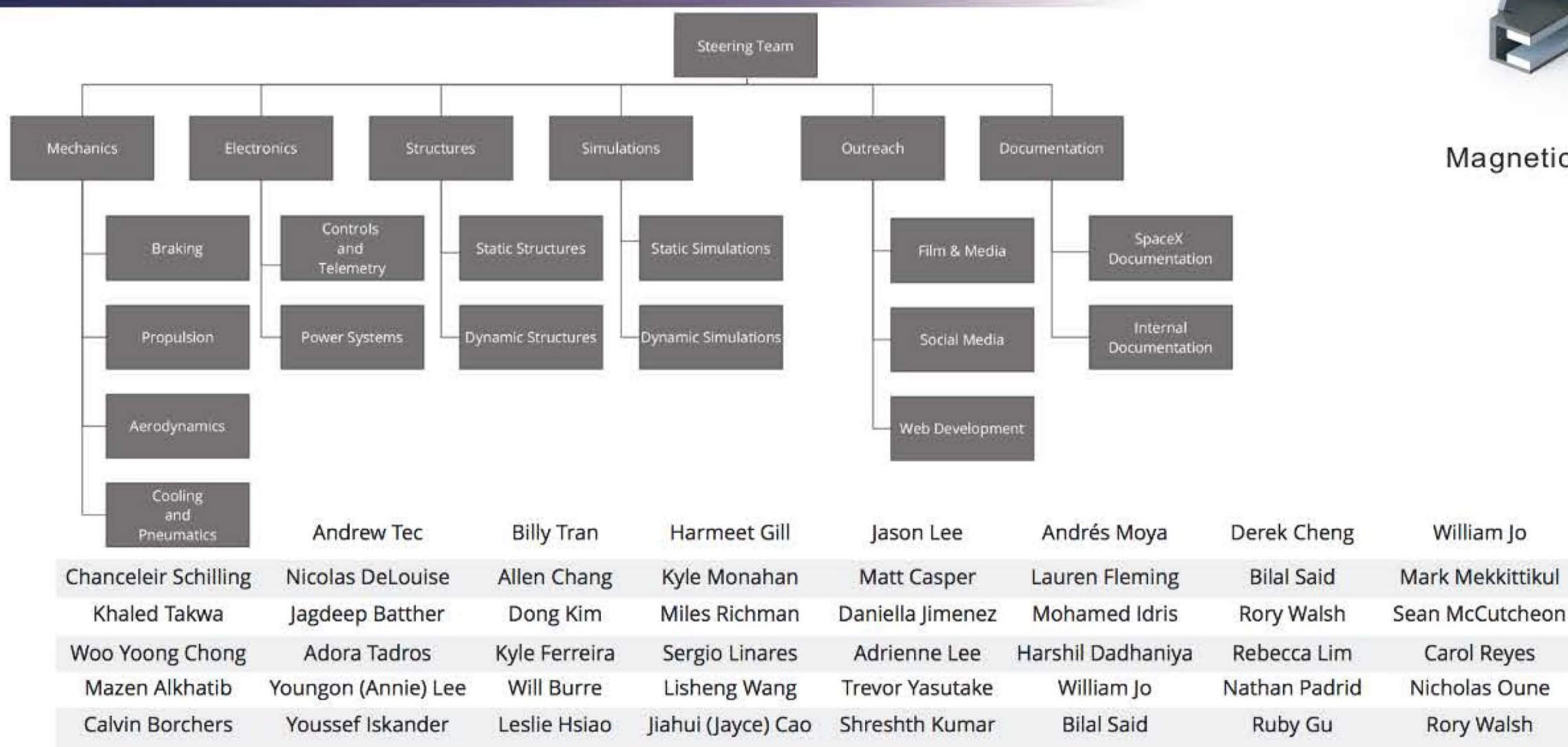


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TEAM ORGANIZATION



TIMELINE

