

Systems Engineering for the Virgin Hyperloop One Transportation System

Project managed systems engineering activities to retrofit an experimental test track from uncrewed to crewed testing of a new magnetic propulsion and levitation vehicle. Enabled the first passenger test flight (<https://virginhyperloop.com/Pegasus>).

Project Outcomes

Streamlined the project from 5 Concept of Operations (CONOPS) documents to 1, simplifying use case creation, requirements capture, and the design process to improve productivity.

Eliminated project delays, updated 150 technical requirements, and authored core use cases.

Documented key use cases related to system safety, command and control, and passenger experience for the core production product

Saved \$250,000 and eliminated 3 months of development time by enabling testing of the Life Support System directly on the experimental dynamic test vehicle rather than on a stationary vessel.

