

PROJECT: KSP MISSION

Every real space mission is intricately planned, every ounce of fuel spent, every burn, every activity is planned out, exactly the right amount of resources, supplies, and fuel and brought, and the overall route is optimized for efficiency. In this project, the goal is to plan and execute a detailed mission in KSP. The objective of the mission is up to you to decide, the only requirement is that you visit a celestial body besides Kerbin, the Mun, and Minmus in a meaningful way.

The components for this project:

- (1) Clear Mission Objective
- (2) Detailed, written up plans for each part of the mission. Design your rocket optimally around the needs of the mission, and explain the reasoning behind the design. You should know exactly how many resources you need and only bring that much with you.
- (3) A careful execution of your plan. Do not use quicksaving or quickloading, what happens happens. If it goes horribly, then you can retry from the beginning. You can obviously save and return between sessions.
- (4) Document your mission with screenshots and take data with the MechJeb2 mod. Also take qualitative notes updating as the mission progresses.
- (5) Detailed mission report using your screenshots, data, and logs and modeled off of actual NASA mission reports. See the [Apollo 11 Mission Report](#) for an example.
- (6) Find a way to present your mission within the confines of the Virtual Showcase. Perhaps a mock press conference about the mission - see [NASA's New Horizon Press Conference](#) for an example.

Some important planning tools are

- (1) [Kerbol System Delta-V Map](#)
- (2) [Delta-V Planner](#)
- (3) [Launch Window Planner](#)
- (4) [Transfer Orbit Planner](#)
- (5) [MechJeb2](#)