

Abstract

The Space Bike is an idea that was inspired by interest in spacecraft design. In this report I will be covering the basic propulsion mechanism required to build the vehicle, because designing a Space vehicle is a vast topic to cover and requires more time in order to design and come up with electrical systems for the Bike. Therefore, in this report you would see the mechanical aspects required in order to design a manned Orbital Maneuvering System (OMV) like a Space Bike. I will be focusing on bipropellant propulsion mechanism, the key components of a OMV and their functions as well orbital maneuvering of space shuttle from one orbit to another. The chapters in this report will guide u into understanding the design of my Space vehicle and whether or not it is feasible.

