***Problem:***

How can the safety of the astronaut be guaranteed?

***Solution:***

To avoid any burning hazards to the astronaut, the thruster will have a safety mechanism that will only allow it to be at a certain minimum angle away from the pilot. If there is a failure in the electronics and the thrusters go out of control, the thrusters will not be able to move too close the pilot and potentially harm him.

The oxygen and hydrogen will only come in contact with each other in the thruster as they will travel through separate pipes. This means that combustion only occurs in the thruster and not in other parts of the soot.