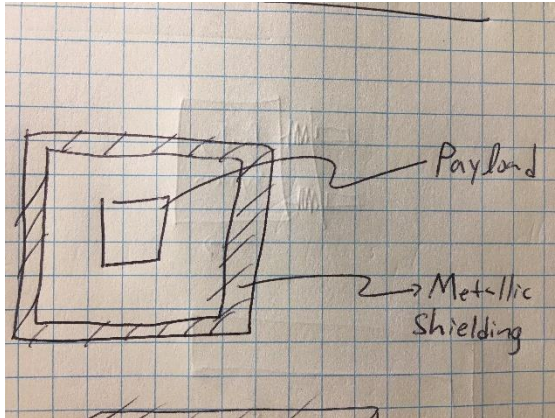


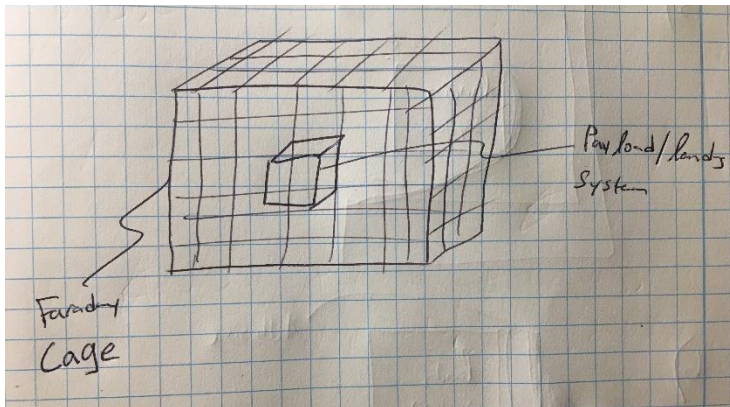
Samuel Shelmidine

Function: Protect Rover Payload

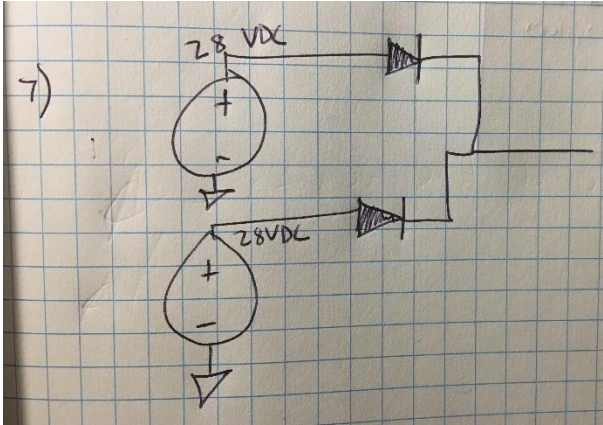
1. Metallic impact shielding



2. Faraday cage around payload for electricity/ESD protection



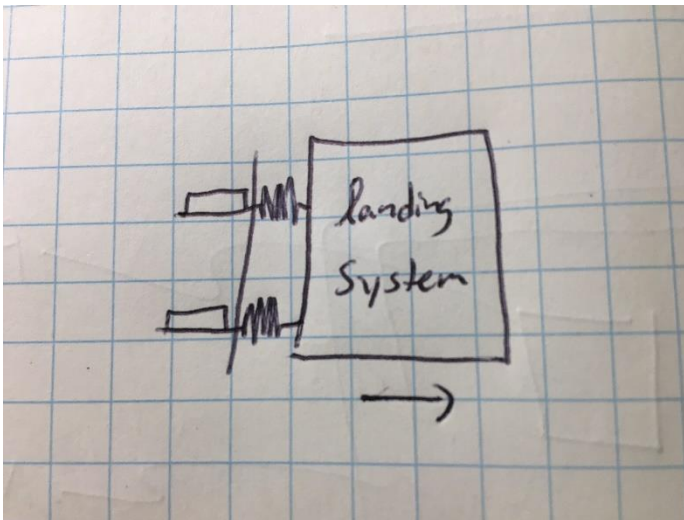
3. Magnetic protection field
4. Shielding using slurry/viscous liquid
5. Meteor/space debris detection system
6. Additional fuel/energy allotted for dodging debris
7. Redundant power system using OR-ing diodes



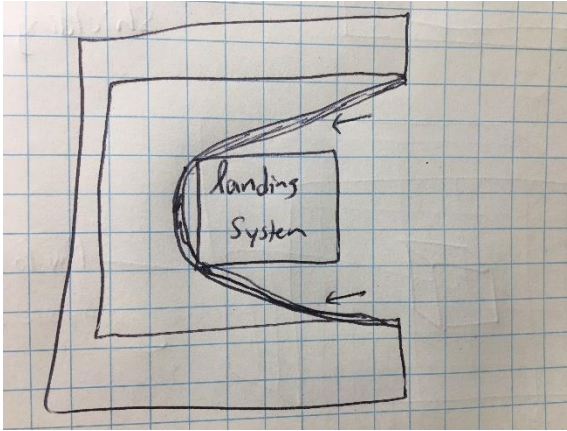
8. Rover suspension system to avoid vibrational shock on collisions or landing
9. Transport Rover while mostly disassembled and assemble modules on asteroid and transport spares on landing system. Potentially damaged modules can be swapped upon landing
10. Reposition with reaction wheel to ensure non-critical electronics are not damaged by debris.

Function: Detach from Spacecraft

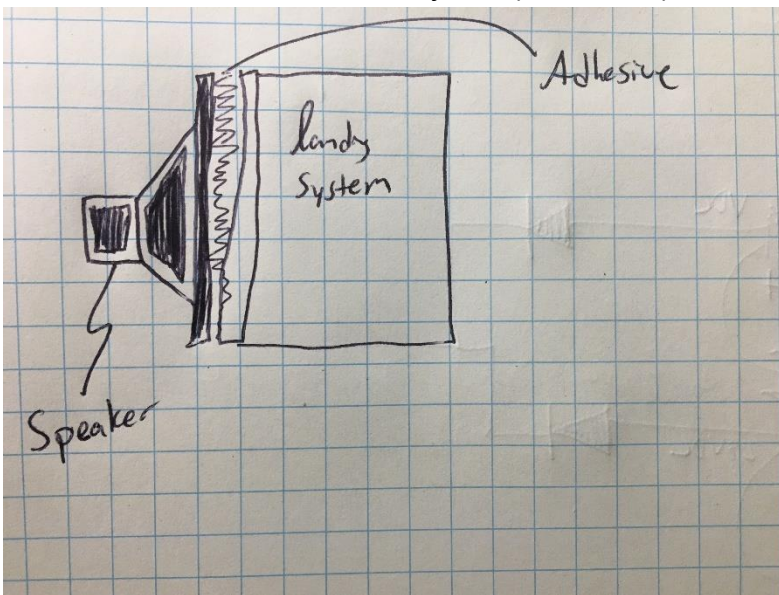
1. Explosive Charges
2. Mechanical springs



3. Electromagnetic detachment
4. Pin joint (like quick release snap shackle)
5. Giant Rubber Bands (slingshot)



6. Acoustic destruction of adhesive joints (vibrational)



7. UV light exposure to adhesive joints
8. Chemical compound applied to joints for deterioration
9. Applied Heat to joints
10. Cabin pressure drop from spacecraft to space rips out all electrical and mechanical joints and the landing system + payload is sucked into space.