***Problem:***

How can you charge the electrics, no matter how few, needed to operate H.O.P.S.?

***Solution:***

The battery that powers the electrics of H.O.P.S. can be charged while the H.O.P.S. is in use. A piezoelectric material will coat the pilot's gloves. The pilot can produce current by rubbing his gloves together or moving his hands. This electricity will be fed to the battery. A carbon nanotube spring can be used in the bionic boots. A stationary magnet within the spring will mean that whenever the spring is compressed and relaxed there will be a current produced in the spring (due to electromagnetic induction) that will charge the battery (carbon nanotubes are very good conductors and also have a release energy to elastic potential energy ratio that is 2500 times that of a hardened steel spring). The same device that is used to melt water ice can be used sublimate dry ice (which normally covers the water ice on Mars). Thankfully, the sublimation point of dry ice on Mars is quite close to its natural temperature. This means that not that much energy is required to produce the gaseous CO2. Two tubes that are at a lower pressure than the main concave container can be attached to the main container. The CO2 (produced by the sublimation process ) will move through these tubes, spinning small turbines that will generate current. This current can also be used to charge the battery.