ERU\_01

* The vehicle shall have some way to deaccelerate as it lands (parachute, thrusters, balloons)
* The vehicle shall have some way to dampen the shock from landing (hydralics, springs, saftey net)

ERU\_02 (30 degree slope)

* The vehicle must be able to provide enough power to the motors
* The vehicle must have a power train to go up a X-grade hill
* The vehicle shall have the abliity to travel up the hill with X-lbs weight (fully loaded)
* The vehicle must be able to operate in weather conditions (rain, wind)

ERU\_03

* The vehcicle must be able to be controlled and operated in different conditions (fog, smoke)
  + Thermal imaging, Applying filters/contrast to the video feed

ERU\_04

* The vehicle must have a autonomous algorithm or AI interface that decides its navigation path to a specified GPS location
* The vehicle must be able to make decisions if obstalces/disturbances occur on its own
* The vehicle must be able to deviate from its specified path for X-time without loss of function

ERU\_05

* The vehicle must have sensors to account for deviation from paths
  + Ultrasonic sensors, Lidar, Apply motion detection to video feed
* The vehicle must have a way to detect its current orientation
  + Longitute, Latitude
  + Altimeter, Gyroscope
* The vehicle must be utilize a gradient map to predetermine a obstacle-less path

ERU\_06

* The vehicle must have a mechanism for loading the patient
  + Stretchers, Forklift, Ramp
* The vehicle must have a way to secure the patient
* The vehcile must have alternative system for loading/assiting the patient into the recovery mechansim
  + Robot arm, Claw

ERU\_07

* The vehicle must have a long-distance communications system of up to 1500fft
* The vehicle must broadcast its location to GCS after retrieval
* The vehicle must have some power system that can handle X-amount of time of operation with a backup system
* The vehicle must have a system to monitor the patient's condition in order to determine if recovery will continue or emergency services are requested
* The vehicle must be able to transport the hiker at high speeds without interference to his condition
* The vehicle has an interference for outside obsructions