

Astroverse, Crew Member Rescue - A Contingency Scenario

Storyboard Title, Sequence, & Description

The storyboard here describes a VR simulation that allows users to experience rescuing a fellow astronaut who may find themselves injured or fatigued whilst exploring outside the base camp, especially succeeding disasters such as powerful dust storms and mars quakes. An assessment of the astronaut's health and mission risk is carried out before sending out a dispatch team. The team uses rescue hardware to extract the astronaut, and administer first aid if in immediate need of medical attention. The astronaut is then transported back to the base camp for further recovery and rehabilitation.

Assets Available in this Storyboard

- Astronauts
- Exploration vehicles
- Base camp
- Rescue hardware - ropes and pulleys
- First aid - oxygen supply, bandages, syringes, tablets
- Communication devices in vehicle - radios



Actions Executable in this Storyboard

1. Nearby rovers redirected towards incapacitated crew member
2. Dispatch team sent for rescue - live monitoring of crew member's vitals in transit
3. Rescue hardware set up for extraction - adjusting angle, height lowered, length of rope, force required
4. First aid administered - supplying astronaut with external oxygen supply, use of bandages, syringes and forceps
5. Astronaut transported back to base camp for further recovery

Frame Descriptions

1. Astronaut stuck in crater/ditch, injured or fatigued, post mars quake/dust storm
2. Nearby rescue rover travelling to the location of the incapacitated astronaut
3. Rescue team navigating a pulley system to extract astronaut from a gorge
4. Astronaut connected to life support - oxygen supply/ventilator as required
5. Astronaut being transported back to the base camp for further recovery and rehabilitation

