

DROVER

Post Disaster Search and rescue is an important aspect of disaster management. An effective search and rescue mechanism is imperative to contain the toll on human lives. Rovers and Drones have been in use in such situations for some time now. But they both suffer from some limitations that can greatly affect the effectiveness of their functions. Drones suffer from some limitations that can greatly affect the effectiveness of their functions. Drones suffer from fast depletion of battery and decreased mobility indoors like collapsed hallways. Rovers on the other hand find it difficult to overcome obstacles like fallen boulders and debris and the on board camera offers only one perspective from the ground level.

Combining both Drone and Rover into a single standalone unit can really improve the effectiveness of the search and rescue operations as it offers increased mobility and flexibility. Equipped with an on-board camera and an image processing system coupled with wireless transmission capabilities a drover or the combined drone rover platform can become a powerful tool in Post Disaster Search and rescue operations.

A Drover will be able to fly over obstacles and hover over certain areas to offer more camera angles to properly assess the situation. And when working as a rover, the Drover will use only less power without compromising its ability to move. An infrared camera and a suitable image processing system could further enhance the performance of such a versatile platform. In the end it's the performance of the platform that matters. Or in other words, its ability to detect the presence of human life in the quickest time possible. And a Drover would certainly be able to speed up the search and rescue process further.