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INNOVATION

CATEGORY

SMART EMERGENCY DRONE FOR MANAGEMENT OF DISASTER

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Disaster is a disadvantage incident that caused by natural factors or human factors. Indonesia is a country which in encounter of three plates are Indo-Australia plate, Eurasia plate, and Pasific plate. This condition potentially causing earthquakes when the plates collide. Other that, Indonesia also have 127 volcanoes and other disasters are tsunami, storm, avalanche, and flood. Almost all provinces in Indonesia potentially undergo disaster. Therefore we make unmanned aircraft for emergency condition (Smart Emergency Drone) to prevent additional casualties when before, during, and after a disaster. Smart Emergency Drone has many advantages for emergency condition before or after disaster such as predict disaster-prone environment, accelerate evacuation of victims, help SAR team and volunteer easier to find the victims, to find victims who still alive, and facilitate coordination between SAR team and volunteers. Smart Emergency Dronedesign use photoshop and print use 3D printing, then this drone have some features like siren, talkie, night vision, thermal camera, mission tracking, and lidar censor. This drone is also designed to fly along 50 km and absolutely have a safety to prevent accident on this drone. This drone can fly until 20 minutes and only landed in the land. Using this drone, evacuate victims after disaster occur more effective and low cost, so government can save budget and allocate to other like revitalization infrastructure.

Keywords : Disaster, Emergency, SAR Team, Smart Emergency Drone, Victim



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