

BOAT-O-BED: A smart bed for senior citizens to aide rescue efforts during floods

In the Kerala floods of 2018, several senior citizens with restricted movements or who were bedridden were isolated and had to be rescued with extreme difficulty. Two major problems of rescue efforts were that the exact coordinates of stranded people could not be found. Stranded people did not have access to basic survival necessities till help arrived. The BOAT-O-BED will be a smart bed for senior citizens and bedridden people which will help them survive in the event of a natural disaster such as floods.

Features: The bed will have retractable legs with water sensors attached to it. When the water level rises, the legs of the bed will retract. There will be straps provided which can be used to secure the person to the bed. Simultaneously, a huge balloon at the base of the bed will inflate and thus the bed will float. The bed can then be easily pushed out of the house. It will then remain afloat till help arrives. The bed will also have a rain cover which will be activated by the sensor or can be manually operated. There will be a GPS tracker in the bed and as soon as the bed starts floating a text message will be send to a pre-configured number of a relative, as well as to the police. The GPS coordinates will also be transmitted every 6 hours. The rescue efforts can then be organized based on the GPS coordinates. There will also be provision to keep adequate food reserves, emergency medicines and to collect rain water for drinking in case of emergency. The bed will also be equipped with a toilet which can be operated with the help of a press button. This smart bed will help senior citizens survive till help arrives, in the event of a flood, and will also let rescue workers know where exactly the senior citizen is stranded, thereby making rescue efforts easier and faster.

Future modifications of the bed can include two way cameras for communicating with the stranded person by rescue workers and doctors as well as an automatic navigation system using solar power which will steer the BOAT-O-BED safely through flood waters.