1.4.3 Unmanned Aerial Vehicles (UAV) for Disaster Response and Recovery

Presenter
Jarlath O'Neil-Dunne
Director of the University of Vermont Spatial Analysis Laboratory
University of Vermont
joneildu@uvm.edu

Co-Presenter
Adam Zylka
Student
University of Vermont
azylka@uvm.edu

Natural disasters can severely impact transportation networks. In the hours and days following a major flooding event, knowing the location and extent of the damage is crucial for incident managers. Overhead imagery is an invaluable resource in that facilitates damage mapping, but acquiring such imagery can be costly and cumbersome. In this presentation we will describe a decision support system centered on lightweight, easily-deployable Unmanned Aerial Vehicles (UAV) capable of capturing mapping-grade 2D imagery and producing 3D models suitable for a range of post-event analyses from identifying damage to computing the amount of fill needed to repair a road.