U.S. Army Corps of Engineers
Winter Midwest Floods

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Design Flood for Lower Mississippi River
MICA - Flood Fight 2016
Automated Route Reconnaissance Kit (ARRK)

Simple-to-use GPS and inertial data collection system that enables a chronological picture replay of the route, a georeferenced display of major features, and automated determination of slopes and radius of curvatures for sharp curves along the route.
Unmanned Aerial System Operations

Small, fixed-wing aircraft that fly pre-programmed routes and collect high-resolution imagery

- Rapid assessment of levees and riverbanks
- Debris estimation
- Assessment of condition of hydraulic structures
- Assessment of flow fluctuations in channels and overbanks
AdH Models

Multi-dimensional modeling system for saturated and unsaturated groundwater, overland flow, three-dimensional Navier-Stokes flow, and two- or three-dimensional shallow water problems

- Estimated impact to neighboring levee from flood control structure
- Morganza Floodway model
- Lower Mississippi model to estimate effect of Bonnnet Carre Spillway