

Hurricane Katrina Disaster Recovery

ike's damage assessment capabilities were showcased by its use during the aftermath of Hurricane Katrina and Hurricane Rita, which hit the United States during September 2005. The hurricanes hit within very close proximity and caused wide-scale damage to the three Southern states of Alabama, Mississippi and Louisiana - necessitating a large-scale disaster relief and recovery effort by US forces. The Army Corps of Engineers were called upon to assist in the subsequent disaster response efforts.

Surveylab have been working closely with the Corps of Engineers on streamlining and integrating ike into existing asset management solutions. Based on the successes of previous trials and backed by extensive field work and training, ike was an obvious choice for the large scale damage assessment that followed the hurricanes.



In the immediate aftermath, it was vital to know the precise location of particular features deep within the disaster zones and their geospatial relationship to each other. The enormity of the damage meant that many features of importance had been altered or obstructed, and existing documentation was not significant to guarantee recovery workers safe access to the worst-hit disaster areas. This required comprehensive documentation and detailed data collection so that regions requiring subsequent relief efforts could be visually represented before relief teams were deployed. It was recognized that a comprehensive assessment of these regions would allow relief efforts to be planned and carried-out more effectively, and help to eliminate unexpected obstacles.

Faced with numerous access problems and a large number of potential bio-hazards, ike was deployed to survey such areas and capture crucial data for the recovery planning process. ike's ability to capture detailed geographic data from a distance meant that important sites could be identified and recorded from afar, keeping the operators safe during this high-risk period. Following damage assessments of critical infrastructure, site assessments and further collection of infrastructure data were carried out in downtown New Orleans, along with surveys of damaged canals and levees on the Mississippi river.

A key attribute of ike that allowed its effective deployment was its ability to integrate with existing software and systems. Based on an application developed by the US Engineering Infrastructure Intelligence Reachback Centre (EI²RC), data collected by ike was transferred directly to EI²RC's centralized geo-database and was then able to be represented visually. This meant that collected field data was quickly processed and then posted online to assist in the coordination of the relief effort.

The use of ike in such a large scale recovery effort highlights the quality and reliability of ike as a data capture and mapping tool. Its simplicity makes it ideal for situations where time is of the essence, whilst its flexibility allows operators to quickly adapt the device for the task at hand.