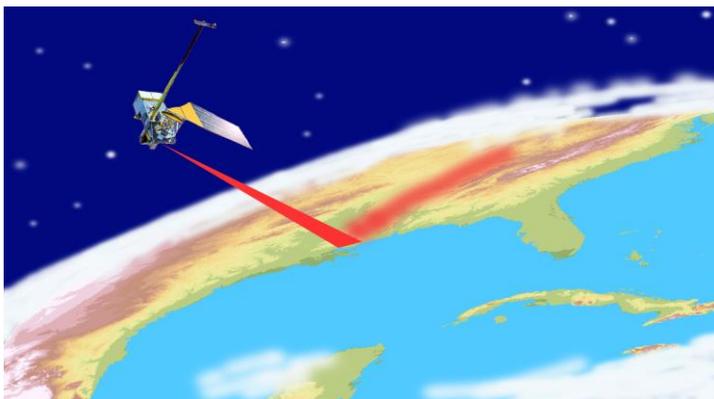


# DHS Science and Technology Directorate

## Overhead Imagery

### What is the Overhead Imagery program?

The Overhead Imagery Data Product is a set of projects within the Resilient Systems Division that provide critical information to speed the delivery of disaster relief. Decisions made about the use of resources for life saving, financial assistance or logistics depend on accurate, timely information. Remote sensing imagery acquired by aircraft or satellite provides a current view of the disaster landscape giving first responders a comprehensive view of the situation so that priorities can be established and response plans executed efficiently. The projects within Overhead Imagery address high priority requirements from the Federal Emergency Management Agency (FEMA), National Protection and Programs Directorate /Office of Infrastructure Protection as well as agencies and organizations that support them in the execution of their



mission responsibilities.

### What is the objective of the Overhead Imagery Data Product program?

The primary objective of Overhead Imagery is to speed the delivery of disaster assistance by providing rapid access to accurate information on which to base decisions. This will be accomplished through a set of projects that develop tools that optimize the use of airborne and space-borne sensor systems.

### What is the operational impact of this program?

Overhead Imagery will save lives by providing Urban Search and Rescue teams with critical information through images and analytical products needed to prioritize search procedures. It will also expedite the delivery of financial assistance to disaster victims by providing rapid access to the necessary information for program qualification. Lastly, the program will provide advanced monitoring techniques that give decision makers an early understanding of changing conditions so that mitigation measures can be used to obtain a better understanding

of critical infrastructure.

### The contributions and deliverables of this program

Overhead Imagery leverages a constellation of advanced satellites and airborne sensor systems to deliver high resolution, map-ready imagery for analysis. Automated image analysis techniques will produce mission specific, standardized, replicable damage assessment products that reduce the time to qualify disaster victims for relief programs and deliver improved situational awareness to first responders.

### The customers, users, partners and stakeholders of this program

Overhead Imagery is currently working with FEMA and the agencies that support FEMA. Among these are Civil Air Patrol and the Department of Homeland Security/Intelligence & Analysis, which are working with the Science and Technology Directorate (S&T) to develop a new tool for asset tasking requests. Civil Air Patrol is also working to incorporate a real-time camera system to speed the delivery of their imagery to response teams. State and local governments such as Louisiana and Hancock County, Mississippi are working with S&T to develop low cost access to image acquisition systems and analysis tools. Overhead Imagery is leveraging a 4-year basic science investment by NASA to develop advanced levee monitoring techniques and is working with the state of California and Sacramento County to implement that capability.

### The transition strategy for this program

Transition of Overhead Imagery will be accomplished through the use of acquisition programs and delivery of knowledge products implemented in the form of modifications to concept of operations and standard operating procedures within the emergency response agency.



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To learn more about Overhead Imagery Data Product, contact [SandT.rsd@hq.dhs.gov](mailto:SandT.rsd@hq.dhs.gov)