

Fact Sheet Civil Air Patrol SDIS



SDIS: Satellite-transmitted Digital Imaging System

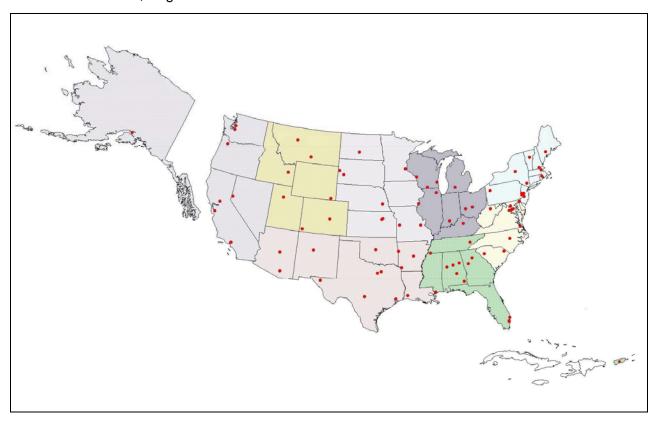
- SDIS is a technology Civil Air Patrol (CAP) developed using off the shelf hardware with customized software to take high-resolution aerial images of targets on land or at sea. The images are sent back in-flight by satellite communications to internet-capable computers and devices on the ground.
- After taking a digital image at the highest camera resolution, images are then cropped to provide the best resolution in a smaller file size, which allows for the shortest transmission time. Delivery time depends on the size of the image, but averages less than two minutes for cropped, higher resolution images of 200K in size.



This is how SDIS works to provide near real-time imagery to customers from aboard CAP aircraft.

- SDIS has real-world applications for search and rescue, disaster impact assessment, homeland security, and military support to civil law enforcement agencies.
- Images transmitted from SDIS are posted automatically to a secure web site in the CAP Web Mission Information Reporting System (WMIRS). High resolution images not sent in flight can also be carried back and loaded into WMIRS for viewing at a later time; they are not lost once sent.
- Images can also be transmitted via e-mail from the aircraft to emergency operations centers or internet capable devices at the customer's request.

- Access to view or download imagery in WMIRS can be restricted at the customer's request.
- Customers can be given group or individual access to WMIRS by the CAP National Operations Center duty officers.
- SDIS can be used in conjunction with CAP's existing hyperspectral imaging system (ARCHER) to send target images from the aircraft to the ground.
- SDIS was researched and developed under the direction of CAP's all-volunteer Advanced Technologies Group, headed up by Col. Drew Alexa, CAP, of Colorado Springs, Colorado, with assistance from the Civil Air Patrol National Headquarters Operations Directorate at Maxwell Air Force Base, Alabama, and the Civil Air Patrol National Technology Center at the Defense Supply Center in Richmond, Virginia.



The above map shows where current CAP SDIS resources have been based.

• CAP has strategically placed approximately 100 SDIS in key locations all around the country, and more than 20 additional SDIS have also been provided to CAP using state and local funding.

For more information on the Civil Air Patrol SDIS:

Contact the CAP National Operations Center at 888-211-1812, ext.300 in an emergency, or email opscenter@capnhq.gov for routine requests for support or information.

For more information about Civil Air Patrol:

Visit <u>www.cap.gov</u> or contact Mr. Jim Tynan, CAP Public Affairs Manager, at 334-953-9949 or http://www.maxwell.af.mil/mailer/index.asp?CAP-USAF

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