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Civil Applications Committee

2007

Activity Report

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Background

Overview

The Civil Applications Committee (CAC) is an interagency committee that coordinates and oversees the Federal civil use of classified collections. The CAC was officially chartered in 1975 by the Office of the President to provide Federal civil agencies access to National Systems data in support of mission responsibilities. In recent years, CAC activities have expanded beyond traditional mapping applications to a broad range of environmental and remote sensing applications central to Federal agency missions. Examples include monitoring volcanoes; [REDACTED]; coordinating emergency response to natural disasters, such as hurricanes, earthquakes, and floods; monitoring ecosystems; and mapping wetlands.

Membership

The CAC is made up of voting representatives from the Departments of Agriculture (USDA), Commerce (DOC), Health and Human Services (HHS), Homeland Security (DHS), the Interior (DOI), and Transportation (DOT), as well as the Environmental Protection Agency (EPA), Federal Emergency Management Agency (FEMA), National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), U.S. Coast Guard (USCG), and U.S. Army Corps of Engineers (USACE). Additional non-voting associate members of the CAC include representatives from the Departments of Energy (DOE) and State (DOS), Office of the Director of National Intelligence (ODNI), Defense Intelligence Agency (DIA), National Geospatial-Intelligence Agency (NGA), and National Reconnaissance Office (NRO).

Functions and Responsibilities

Functionally the CAC is composed of a technical and coordinating committee – chaired by the Director of the USGS – that meets monthly, an Executive Steering Group – chaired by the Deputy Secretary of the Interior – that meets as necessary, and the CAC Secretariat, which provides operational support to the CAC and is hosted by the USGS. The CAC sponsors the Global Fiducials Working Group (GFWG) as a standing interagency working group. In addition, the CAC sponsors the Emergency Response Working Group (ERWG), Imagery Derived Products Working Group (IDPWG), Requirements Working Group (RWG), Security Working Group (SWG), and Thermal Event Sensing Working Group (TESWG) on an ad-hoc basis.

Primary CAC responsibilities are: facilitating the relationship between the Civil Community, the Department of Defense (DOD), and the Intelligence Community (IC); providing oversight of all Civil Community source collection and management; supporting National disaster response; representing and advocating civil requirements and interests in various DOD and IC forums; providing an inter-community forum for technology and information exchange; coordinating training for CAC member agency personnel; providing oversight for the Global Fiducials Program; promoting civil use of IDPs; and ensuring Civil Community needs are considered and addressed in the design of future space architectures.

The CAC provides a forum through which Federal civil agencies coordinate data requirements, develop tasking strategies, certify proper use of data, and track and plan for the progress and evolution of National Systems. The CAC coordinates the use of imagery exploitation and application resources and supports remote sensing research and development activities at special

facilities, such as the USGS Advanced Systems Center (ASC). At these facilities, appropriate capabilities and exploitation tools are available for CAC members to use for end-to-end data processing and developing custom products. Through the CAC, arrangements can also be made for technical support from military and IC agencies.

Data Acquisition and Management

Through the National Civil Applications Program (NCAP), the staff at the ASC assists CAC member agencies by processing requests for the acquisition of National Systems data. The team provides expertise for acquiring, receiving, archiving, and disseminating data in support of a wide variety of scientific investigations and mapping projects with unique requirements. Government and contractor personnel work together with customers to analyze these requirements, plan and coordinate support for submitting data requests, and acquire approval from appropriate authorities. Archive searches are also performed to locate existing data sources to meet project needs in addition to initiating new data collections. Upon receipt of new or archived data, the USGS performs a quality assessment and then ensures that data that satisfies customer requirements is delivered to the customer and properly archived.

[REDACTED]. The presence of a USGS staff member representing the CAC at meetings in which imagery acquisitions are adjudicated provides opportunities to further explain and defend CAC agency collection needs. Regular participation in the Domestic Requirements Working Group is particularly important because most CAC requirements fall within the U.S. and its territories. Coordination with other members of the imagery community results in higher success rates for competing and obtaining source on a non-interference basis with other agency requirements.

The Global Fiducials Library (GFL) is managed at the ASC. Classified remotely sensed data is collected on a regular basis for sites selected for their significance in long-term studies on environmental processes and change. The ASC staff works with CAC sponsoring agencies to define new site information and determine collection requirements. Tasking and acquisition of data, archiving, and dissemination services are provided for library users. The imagery and associated imagery derived products (IDPs) are used to support current agency programs while also being stored for future use by the scientific community. Program issues are worked in coordination with the GFWG as a means for communicating with the GFL user community.

Highlights

CAC Executive Steering Group

A CAC Executive Steering Group (ESG) meeting was held on March 8, 2007, to brief ESG members on the proposed implementation of the National Applications Office (NAO). Dr. Pat Leahy, formerly the Acting Director, U.S. Geological Survey, and Ms. Mary Margaret Graham, Deputy Director of National Intelligence for Collection, who co-chaired the Blue Ribbon Study (BRS) Senior Steering Group, briefly revisited the findings from the BRS conducted in 2005. Mr. Charles Allen, Assistant Secretary for Intelligence and Analysis, DHS, led a discussion focused on proposed plans for implementing the NAO. Ms. Lynn Scarlett, Deputy Secretary,

DOI and ESG Chair, led a discussion on the proposed transition of the roles and responsibilities of the CAC.

NAO Status

During the first half of 2007, members of the CAC and representatives from the DHS and ODNI met to discuss the NAO Concept of Operations (CONOPS). In June of 2007, a final version of the NAO CONOPS was established with the concurrence of the CAC.

On August 15, 2007, the DHS released a factsheet on the NAO. On the same date, the Wall Street Journal published an article about the establishment of the NAO. The article included excerpts from interviews with Mr. Charles Allen and Mr. Jim Devine of the USGS. The article attempted to describe how the NAO will improve the current capabilities of the Homeland Security and Law Enforcement communities, but it also raised concerns about civil liberties. Many other similar articles surfaced during the remainder of August and September 2007.

On September 6, 2007, the U.S. House of Representatives Committee on Homeland Security held a hearing themed "Turning Spy Satellites on the Homeland." The result of the hearing was a moratorium on the establishment of the NAO until specific Constitutional, legal, and organizational questions are answered. Consequently, the implementation of the NAO, previously planned to take place on October 1, 2007, was delayed.

CAC Participation in External Forums

During 2007, the CAC participated in the following external forums to represent civil interests and advocate for civil requirements:

- Domestic Requirements Working Group (DRWG)
- Future Needs Working Group (FNWG)
- Geospatial Intelligence Board (GIB)
- Imagery Policy and Security Committee (IPSCOM)
- Mission Requirements Board (MRB)
- Operations Committee (OPSCOM)

CAC Imagery Derived Products

[REDACTED]:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

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CAC Monthly Meeting Recap

Jan	Palanterra Update	Mark Riccio
	Global Fiducials	Lawrence Friedl
Feb	Open Skies	Don Spence
	National Signatures Program Update	Ron Fleming
Mar	Committee on Earth Observation Satellites (CEOS)	Barbara Ryan
	Future Capabilities Discussion	CAC Membership
Apr	Report on National Technical Means (NTM) for Civil Applications Training (Feb 27 – Mar 1)	Ben Ramey and Allison Skipper
	Proper Use Memorandum (PUM) Requirements for Commercial Data Use	Peter Paquette
	Classified Document Marking	Patrick Hermance
	Vitus Lake Development	Bruce Molnia
May	Interagency Remote Sensing Coordination Cell (IRSCC) Update	Michael Clements
	National Applications Office (NAO) Implementation -- Part 1: Open Discussion with Presentations by Justin Abold and Bruce Molnia and Participation of NAO Implementation Planning Team Members	CAC Membership
	NAO Implementation – Part 2: Closed Discussion	CAC Membership
Jun	Space Radar Update	Linda Wolters
	Wide Area Search	Dan Staggenborg
Jul	No Meeting	
Aug	Rampant Lion	Vic Labson
	Vitus Lake	Bruce Molnia
Sep	Special Offsite Session	
	Systems Operations Overview	
	Source Overview	
	Operations Floor	
	Digital Processing	
	Joint Processing Center	
	Warning Center	
Oct	P Update	Ron Stocks
	Google Earth Demo	Rick Gardiner
	GFL: Climate Change Produced Landslides?	Bruce Molnia

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Nov	Special Offsite Session in Hawaii	
	Pacific Tsunami Warning Center Tour	Oahu
	USCG Integrated Support Command Tour	Oahu
	US Pacific Command Overview	Oahu
	University of Hawaii at Manoa – NOAA Presentations	Oahu
	Pacific Disaster Center Overview	Maui
	Haleakala National Park Tour	Maui
	Hawaii Volcano Observatory – USGS Presentations	Hawaii (Big Island)
	Pacific Island Ecosystem Research Center Field Station	Hawaii (Big Island)
	Hawaii Volcanoes National Park Field Trip	Hawaii (Big Island)

Dec	2007 [REDACTED] Season	Tom Harbour
	[REDACTED]	Chuck Dull
	NGA Support to Disaster Response and Recovery: [REDACTED]	Ben Waugaman
	CAC Hawaii Offsite Recap	Kerry Robarge and Rose Herrera

Data Was Requested by CAC Members in Response to the Following Events:

Date	Name & Location	Event
May	[REDACTED]	[REDACTED]
May	[REDACTED]	[REDACTED]
Aug	[REDACTED]	[REDACTED]
Aug	[REDACTED]	[REDACTED]
Sep	[REDACTED]	[REDACTED]
Sep	[REDACTED] – Deschutes National Forest, OR	[REDACTED]
Nov	Pine Island Glacier Aircraft Landing Site – Antarctica	Data was used to help search for crevasses near proposed rescue aircraft landing site

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Data Was Requested by CAC Members to Monitor the Following Volcanoes:

Volcano Name & Location	Outcome
Anatahan, Commonwealth of Northern Mariana Islands	Erupted
Atka (Kliuchef), Alaska	Did Not Erupt
Atka (Korovin), Alaska	Did Not Erupt
Augustine, Alaska	Did Not Erupt
[REDACTED]	Did Not Erupt
[REDACTED]	Erupted
[REDACTED]	Erupted
Chiginagak, Alaska	Did Not Erupt
Cleveland, Alaska	Erupted
[REDACTED]	Erupted
[REDACTED]	Did Not Erupt
Fourpeaked Mt, Alaska	Did Not Erupt
[REDACTED]	Erupted
[REDACTED]	Did Not Erupt
[REDACTED]	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
Kilauea, Hawaii	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
[REDACTED]	Did Not Erupt
[REDACTED]	Did Not Erupt
[REDACTED]	Erupted
Mount Spurr, Alaska	Did Not Erupt
Mount St. Helens, Washington	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
Pagan, Commonwealth of Northern Mariana Islands	Did Not Erupt
[REDACTED]	Erupted
[REDACTED]	Did Not Erupt
[REDACTED]	Erupted

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[REDACTED]	Did Not Erupt
Redoubt, Alaska	Did Not Erupt
Shishaldin, Alaska	Erupted
[REDACTED]	Erupted
[REDACTED]	Erupted
[REDACTED]	Did Not Erupt
Veniaminof, Alaska	Erupted

CAC Member Agency Projects

CAC Member	Request Type	Project Description	Approval Date
USACE	Renewal	Global Fiducials Program	August 2007
USACE	Renewal	Data covering natural disaster areas will be used to characterize damage zones created by hurricanes, tropical storms, tornadoes, flooding, etc.	October 2007
DOI Bureau of Land Management	Renewal	Data will be used to monitor the long-term effects of modern oil and gas development techniques on the arctic environment surrounding the National Petroleum Reserve Area.	June 2007
DOI Bureau of Land Management	Renewal	Global Fiducials Program	August 2007
DOI Bureau of Land Management	Renewal	Data will be used to help monitor the scope and impact of wildland fires in very remote areas of Alaska.	October 2007
EPA	New Request	Data will be used to remotely assess Cesium Chloride dispersal and deposition characteristics resulting from a simulation.	June 2007
EPA	New Request	Data will be used for mapping and analysis of aquatic and terrestrial hazards created by materials released as a result of natural or man-made damage to infrastructure.	August 2007
EPA	Renewal	Global Fiducials Program	August 2007
USDA Forest Service	Renewal	Forest Inventory Analysis	August 2007

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USDA Forest Service	Renewal	Data will be used for planning, emergency response, recovery, and the study of environmental impacts of fires and other natural disasters on forests.	October 2007
DOC National Oceanic and Atmospheric Administration	Renewal	NOAA is assessing the extent to which Gulf Coast fishing has resumed since being disrupted by Hurricanes Katrina and Rita.	June 2007
DOC National Oceanic and Atmospheric Administration	Renewal	Data will be used to map the accretion and erosion of shoreline and vegetative cover to assess Louisiana wetlands restoration efforts.	June 2007
DOC National Oceanic and Atmospheric Administration	Renewal	Global Fiducials Program	June 2007
DOC National Oceanic and Atmospheric Administration	New Request	Data will be used to more effectively meet NOAA aeronautical mapping timetables in remote areas of Alaska.	June 2007
DOC National Oceanic and Atmospheric Administration	Renewal	Data will be used to monitor fish populations, benthic invertebrates, oceanographic conditions, sediment transport, benthic habitat, and visitor use at National Marine Sanctuaries.	August 2007
DOI National Park Service	Renewal	Global Fiducials Program	August 2007
DOI National Park Service / U.S. Geological Survey	New Request	The USGS is working with NPS to map vegetation species in National Parks in the Rocky Mountains.	April 2007
National Science Foundation	Renewal	Global Fiducials Program	April 2007
National Science Foundation	Renewal	Data will be used to conduct long-term monitoring of Arctic melt pond development and climate modeling.	October 2007
National Science Foundation	Renewal	Data will be used for long-term monitoring of environmental change, polar mapping, landing site assessment and search and rescue operations support in Antarctica.	December 2007
DOI U.S. Geological Survey	Renewal	Archived data will be used to test / verify new geospatial, exploitation, data archive and receipt application requirements.	March 2007

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DOI U.S. Geological Survey	Renewal	Volcano Monitoring	March 2007
DOI U.S. Geological Survey	Renewal	The data will be used to study the physical characteristics of landslides around the world, and to improve post-event damage assessment and disaster recovery efforts.	April 2007
DOI U.S. Geological Survey	Renewal	Global Fiducials Program	April 2007
DOI U.S. Geological Survey	New Request	Post-hurricane data will be used to analyze timber salvage operations, changes in vegetation and fire fuels potential.	April 2007
DOI U.S. Geological Survey	Renewal	Data will be used to help map and assess Afghanistan's natural resources and to create a seismo-tectonic map of Afghanistan.	April 2007
DOI U.S. Geological Survey	Renewal	Data will be used to monitor Louisiana coast line changes and to map the accretion or erosion of shoreline and vegetation extent over time.	April 2007
DOI U.S. Geological Survey	Renewal	Data will be used to detect and monitor changes in glacier extent and ice volume in order to quantify the amount of glacial retreat or growth.	June 2007
DOI U.S. Geological Survey	New Request	Data from 1990-95 and 1999-2003 will be used to map and evaluate riparian buffers for select Chesapeake Bay watersheds.	June 2007
DOI U.S. Geological Survey	Renewal	Data will be used to analyze and map the impacts of flooding following tropical storms or hurricanes.	June 2007
DOI U.S. Geological Survey	New Request	Data will be used to verify land cover classes, impervious surfaces and tree canopy densities over select test sites to assess the quality and accuracy of the National Land Cover Database.	August 2007
DOI U.S. Geological Survey	Renewal	Data will be used to monitor the impacts of Brown Marsh Syndrome on Louisiana coastal wetlands.	August 2007
DOI U.S. Geological Survey	Renewal	Data will be used to study global earthquake events to improve post-earthquake damage assessment and recovery.	December 2007

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