

Civil Air Patrol



DAART

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San Antonio, TX**

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Welcome

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NESA DAART Curriculum Director



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DAART Introduction

DOMOPS Awareness and Assessment Tool

“Providing Imagery, Video, Geospatial, C2, and Collaboration Capabilities to and from the Incident Awareness & Assessment (IAA) Community”

Developed by the US Army Space and Missile Defense Command

Fully funded and made available to qualified agencies at no ongoing cost

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DAART Introduction

- Capture, near-real time transmission, and presentation of:
 - Geocoded full-motion video
 - Geocoded high resolution still photos
- Map-based presentation of operator locations, track history and many external data sources
- Collaboration tools enabling real-time interaction between mission base staff, aircrews, ground teams and our customers
- For use with non-classified information only
- Integration with FEMA Uploader is in development



DAART Components

- Panasonic Toughbook with integrated GPS
- Video camera with USB interface
- Incorporates Nikon SLR cameras currently issued to each wing
- Windows-based Client application
 - Capture and geocoding of full-motion video
 - Captured video is streamed in near-real time and also stored on PC hard drive
 - Near real-time user position reporting
 - User chat function

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DAART Components

- Android and iPhone® Client application
 - Stream previously captured full-motion video
 - Capture and upload still photographs
 - Real-time position reporting
 - User chat function
 - Note that this is a subset of the PC client capabilities. Video and images are not geocoded for example.

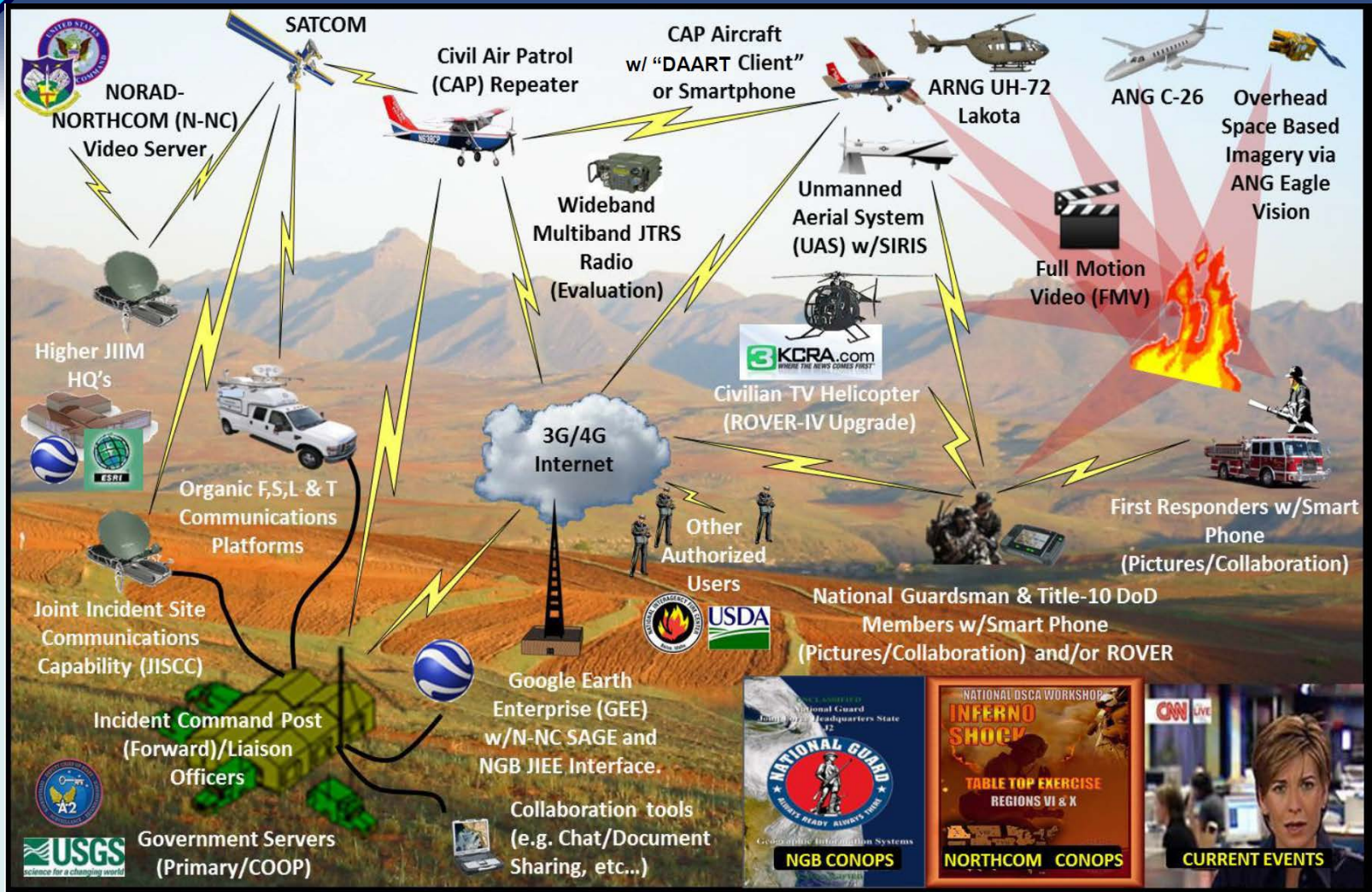


DAART Components

- Web-based collaboration application
 - View live and previously captured video
 - Share geocoded still photos and other documents
 - Operator position tracking
 - Import and overlay information from multiple sources
on various map types
 - User chat function
 - Export to other tools such as Google Earth



DAART Capabilities



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DAART Components

- Communication options
 - Airborne:
 - Sprint 3G PCS and Verizon 4G PCS
 - Harris PRC-117/G wideband data radios (currently provided by National Guard)
 - Ground mobile: any cellular provider or Harris
 - Mission base: Ethernet or WiFi
 - Globalstar (limited to chat and position reporting)



DAART Users



Users from any authorized agency have the option to collaborate with other agencies when appropriate. The originator of the mission controls who has access.

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DAART Approved Agencies

Potential customers / partners

JFHQ-State
State Emergency Operation Center (EOC)
U.S. Geological Survey
State Police
State Fire Department
State Engineers
Department of Transportation and Development (State)
Department of Health and Hospitals (State)
Emergency Preparedness Liaison Officers (EPLOs)
Federal Aviation Administration (FAA)

Defense Coordinating Officer/Element (DCO/E)
U.S. Army North (ARNORTH)
Department of Energy (DOE)
Department of Agriculture and Forestry
National Geospatial-Intelligence Agency (NGA)
Department of Social Services (State)
Department of Corrections (State)
Department of Justice (State)
Department of Natural Resources (State)
State Universities [Health, Sciences & GIS]
Other Local and Tribal Agencies

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DAART PC Client

GPS Status
Current Position

Current Mission
Name and type

Video Controls

Video Name

Recording start/stop

Snap

Mark

Annotate

Current Event

GIIEP Client - robert.becker

File Edit View Help

GPS Hampshire, IL

Lat 42.097803


Lon -88.530364

Mission

10-18-2015

Ground Start

Video



Record

Snap Mark Annotate

Event

Mission

robert.becker

9:51 AM robert.becker: Good morning everyone!

Send

NESA 2015

00:01:25

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DAART web interface

Secure https://daart.us

Apps AT&T Business Center Imported From Edge CAP Donnelley Messaging Toolkit News Office 365 Travel Weather Inside RRD

DAART DOMOPS Awareness and Assessment Response Tool

Event Security: All type to filter events Advanced Search robert.becker

Event/Incident Add Event

<p>0 0 1 0 0</p> <p>Michigan CD Training</p>	<p>0 0 22 0 0</p> <p>BSA Jamboree 2017</p>	<p>0 0 5 0 0</p> <p>Iowa Flooding</p>
<p>0 0 1 0 0</p> <p>VTNG AUG CPX</p>	<p>0 0 3 0 0</p> <p>Mighty Mac Bridge</p>	<p>0 0 1 0 0</p> <p>17-T-5449</p>
<p>0 0 58 0 0</p> <p>PATRIOT North 17</p>	<p>0 0 7 0 0</p> <p>SAREX 2016</p>	<p>0 0 1 0 0</p> <p>HAWAII DISASTER WATCH</p>
<p>0 0 9 0 0</p> <p>OPSEC</p>	<p>0 0 15 0 0</p> <p>DAART SW 1.0.2 Test</p>	<p>0 0 39 0 0</p> <p>Hurricane Matthew</p>
<p>0 0 52 0 0</p> <p>DAART Training/Demo</p>	<p>0 0 17 0 0</p> <p>VG 17-04</p>	<p>0 0 6 0 0</p> <p>ANG CEX MEOC Trng</p>



DAART web interface

Secure | <https://daart.us/Event/Details/561>

Apps AT&T Business Center Imported From Edge CAP Donnelley Messaging Toolkit News Office 365 Travel Weather Inside RRD

Event BSA Jamboree 2017 1 0 22 0 Local 20:50:49 Zulu 01:50:49 robert.becker

Chat

Event Chat

robert.becker CAP DAART Admin less than a minute ago
Good evening

Type your message here... Send

Event Map

Show Labels Open Street Map

Videos

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DAART web interface

Event

BSA Jamboree 2017

10220

Local 20:57:42 Zulu 01:57:42 robert.becker

Chat


Event Chat

robert.becker CAP DAART Admin 8 minutes ago
Good evening

Type your message here... Send

Video: 07_33_34_recMission: 7-19-2017_rec

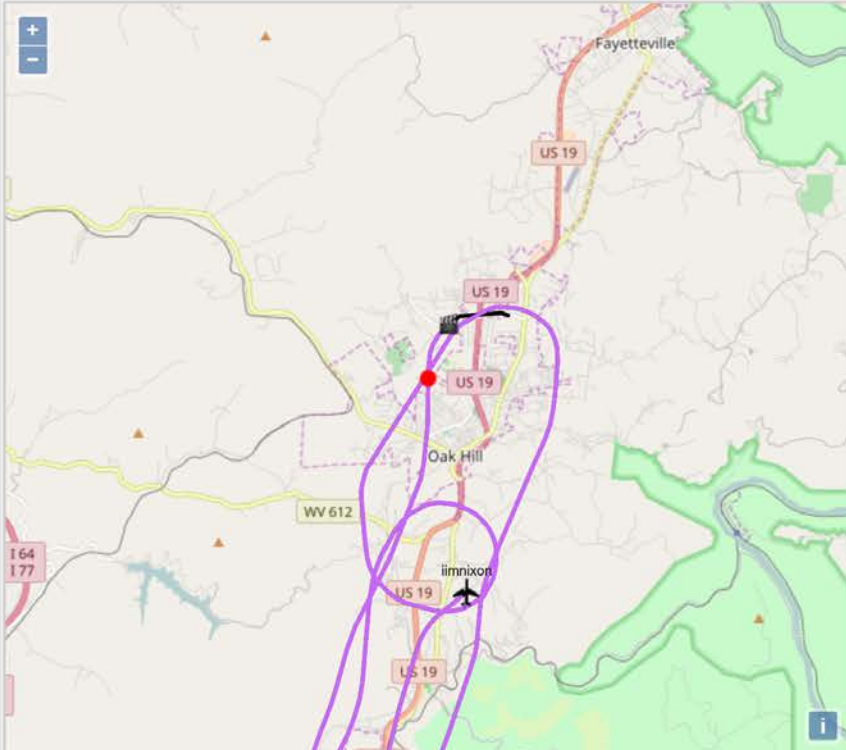
Annotations



Add

☒ Show Current Location ☒ Center Map

Event Map



DD 37.98689 -81.24931 ☒ Show Labels Open Street Map

Videos

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DAART web interface

Event BSA Jamboree 2017 1 0 22 0 0 Local 21:04:30 Zulu 02:04:30 robert.becker

GIS Layers

Manage Layers

- FEMA Photos
- Weather
 - NOAA NWS Watches, Warnings, Advisories, and Statements for Long-Duration Hazards (Time Enabled)
 - NOAA NESDIS GOES EAST-WEST Composite Imagery (Time Enabled)
 - NOAA NWS NDFD Gridded Forecasts of 6-Hr Quantitative Precipitation Amount (inches) (Time Enabled)
 - ☒ NOAA NWS NEXRAD MRMS Weather Radar Imagery (Time Enabled)
 - NOAA NWS Watches for Short-Duration Hazards for Inland, Coastal, and Maritime Areas (Time Enabled)
 - NOAA NWS Weather Warnings for Short-Duration Hazards in Inland, Coastal, and Maritime Areas (Time Enabled)
 - NOAA Quantitative Precipitation Estimates (Time Enabled)
 - NOAA Tropical Cyclone Track and Intensity Forecasts (Time Enabled)
 - Surface Weather and Ocean Observations (Time Enabled)
- Static Geospatial
 - Aviation Charts
 - enra
 - enrh
 - enrl
 - ☒ sec
 - tac
 - wac
 - HSIP
 - NAIP

NOAA NWS NEXRAD... ×

Transparency:

Event Map

Event Objects

DD 34.91670 -103.32873 ☒ Show Labels USGS Topo

Videos

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DAART web interface

Event BSA Jamboree 2017 1 0 22 0 Local 21:13:24 Zulu 02:13:24 robert.becker

GIS Layers

Manage Layers

- Media
- Non-Static Geospatial
- Static Geospatial
 - Aviation Charts
 - HSIP
 - NAIP
 - (Alabama_2015_1m)
 - (Arizona_2015_1m)
 - (Arkansas_2015_1m)
 - (California_2016_60cm)
 - (Colorado_2015_1m)
 - (Connecticut_2016_60cm)
 - (Delaware_2015_1m)
 - (Florida_2015_1m)
 - (Georgia_2015_1m)
 - (Idaho_2015_1m)
 - (Illinois_2015_1m)
 - (Indiana_2016_60cm)
 - (Iowa_2015_1m)
 - (Kansas_2015_1m)
 - (Kentucky_2016_60cm)

Event Map

(Illinois_2015_1m)

Transparency:

42.10633 271.49134

Show Labels Open Street Map

Videos

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DAART web interface

Event

BSA Jamboree 2017

1

0

22

0

Local 21:27:05

Zulu 02:27:05

robert.becker

GIS Layers

Event Map

+

-

DD

37.91129

-81.12059

☒ Show Labels

Open Street Map

Event Objects

Map Layers

Users

Pictures

Graphics

Add Placemark

Add Spot Report

Upload Kml

Placemark Details

Title

JOC

Text

Latitude

37.9294644090239

Longitude

-81.1454375749864

Save

Cancel

Documents

Missions

Videos

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DAART web interface



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GIIEP to DAART Transition

- GIIEP was decommissioned in January of 2017
- GIIEP was a fairly static and challenging product
- DAART is the successor, and is a total rewrite of the application with ongoing scheduled enhancements
- Much more intuitive interface, with typical Windows application behaviors
- Most functions moved to a web-based application
- Legacy GIIEP hardware is still used to capture video and position information



GIIEP to DAART Transition

- GIIEP Operators will need to re-qualify for DAART
- Training and exercises take about two days and is intended for use by qualified MS/MO and GTM/UDF users.
- There are three pre-requisite courses needed for DAART Operators:
 - DAART Intelligence Oversight Training
 - DAART Security Awareness
 - Unclassified Controlled Cryptographic Item Access Awareness (in LMS)



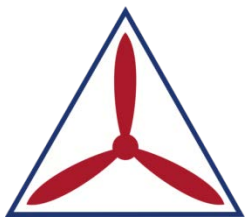
GIIEP to DAART Transition

- There is also an Ops Qual for mission base staff called DAART User
- Prerequisites: GTM –or– UDF –or– MSA –or– MRO
- Training can be completed in about 3 hours and can be done via classroom, webinar and in the future via Learning Management System.
- This is a subset of the DAART Operator training so Users can upgrade to Operators later if desired.



Formal Training

- DAART Operator
 - NESAs
 - On-site (as training funding allows)
- DAART User
 - Via webinar
 - In LMS (late 2017)
 - On-site (in conjunction with DAART Operator)
- SET for DAART in Ops Quals later in 2017



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Q&A

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