Disaster Ready GIS – Small Shop, Big Impact

PrepTech Talks

Powered by NAPSG Foundation

May 12, 2022
National Alliance for Public Safety GIS (NAPSG) Foundation
napsgfoundation.org | @napsgfoundation
Webinar Prep

Due to the large attendance, all participants are muted for the duration of the session to prevent background noise.

• Please use the Q&A functionality within Zoom for questions that are relevant to the whole group.
  • We will address these Q&A throughout the webinar!

A copy of the slides, associated links, and a recording of this webinar will be provided on the NAPSG Foundation website next week.
Participant Engagement

Tell us about GIS in your organization!

**Survey Closed**

menti.com
Code: 90184867
Agenda

01
Hurricane Ida
Rewind
Joanie Appell
Anne Arundel County, MD

02
Disaster Imagery
Richard Butgereit, GIC
John “Moose” Desmaris, Civil Air Patrol

03
Wrap-Up
Tari Martin, NAPSG Foundation
About NAPSG Foundation

• 501(c)(3) non-profit organization established in 2005
• +20,000 members: Public Safety Officials, Operators, and GIS Staff
  Mostly in the US, but spans the globe
• All training, tools, best practices and other resources provided at no cost
NAPSG Foundation Mission

Advance Geospatial technology and capabilities for and with the public safety community

Foster Adoption of geospatial tools, information, and best practices for planning, daily operations, and disasters

Bridge the Gaps across agencies and disciplines, to better protect the communities they serve
How Do We Do It

- Defining and promulgating consistent best practices
- Fostering regional collaboration through implementation
- Building capacity in using innovative technology
- Transferring knowledge and skills

National Guidelines and Standards

Exercises & Simulations

Education & Training

Tech Assistance
Local Focus – National Reach

- 20,000+ member network
- 12 primary national & international associations
- All disciplines
- All levels of government
- Private sector
Menti Results

Does your organization have access to a Statewide Emergency Management GIS Coordinator?

- Yes: 22
- No: 7
- Not Sure: 22
To what extent is GIS included in your organization's Emergency Response?

- 20: We have a dedicated GIS person or staff who is involved with activations, exercises, and planning.
- 22: We have access to a GIS analyst who can assist with special projects and activations.
- 6: We have access to a GIS analyst during activations.
- 3: GIS is not currently a part of our emergency management response.
- 3: Not sure
- 1: Other
Hurricane Ida Rewind
Joanie Appell, AICP, GISP
GIS Analyst, EOC Rep
fd009644@aacounty.org

Anne Arundel County Fire Department
Anne Arundel County Office of Emergency Management
Tropical Storm Ida

- Impacted our area Sept 1, 2021
- EOC was initially preparing for high winds and rainfall
- Tornado Watch issued by NWS that morning
- Partial activation began at noon
Tropical Storm Ida

Prepared for a standard remote activation
• WebEOC event was created
• Most EOC reps reported virtually
• Standard EOC Dashboard was shared out
• Everyone was ready for an easy wind event

Ida said, “Hold on to your hats” around 2pm:
• Increasing number of road closures
• Power outages from trees falling on wires
• Higher call volume to 911
• Tornado warning in Edgewater
02 Disaster Imagery
Civil Air Patrol
Resources & Capabilities

John “Moose” Desmarais
Director of Operations (DO)
National Headquarters

jdesmarais@capnhq.gov

Office: 334-953-9105
Congessional Charter

Emergency Services

SAR & Disaster Relief
Homeland Security
Drug Interdiction
AFROTC Flights
AFJROTC Flights

Cadet Programs

Leadership
Character Development
Aerospace Education
Physical Fitness

Aerospace Education

CAP Members
AE Members / Teachers
General Public
STEM Activities

Volunteers Serving America’s Communities, Saving Lives, and Shaping Futures.
Volunteers Serving America’s Communities, Saving Lives, and Shaping Futures.

Title 10, USC 9442 – Volunteer Civilian Auxiliary of the Air Force
Volunteer Civilian Auxiliary when the services of the Civil Air Patrol are used by any department or agency in any branch of the Federal Government.

The Civil Air Patrol shall be deemed to be an instrumentality of the United States with respect to any act or omission of the Civil Air Patrol, including any member of the Civil Air Patrol, in carrying out a mission assigned by the Secretary of the Air Force.

Title 36, USC 40301 – Federally Chartered Corporation
Serving our communities while not under federal response.
What does a normal year look like?

- Counterdrug: 40%
- Air Defense Intercept: 19%
- Low Level Route Surveys: 15%
- Disaster Relief: 9%
- Surrogate RPA: 4%
- Other: 2%
- RPA Escort: 2%
- Range Support: 2%
- Search And Rescue: 1%
- AFROTC: 1%
- AFJROTC: 1%
- Cadet Orientation: 1%
- Maintenance: 1%
- Training: 1%
- CAP-USAF: 0%
- Other: 0%
# 2022 Statistics

## Membership

<table>
<thead>
<tr>
<th>Membership</th>
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<tbody>
<tr>
<td>Adult Members</td>
<td>33,232</td>
</tr>
<tr>
<td>Cadets</td>
<td>23,723</td>
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<tr>
<td><strong>Total</strong></td>
<td>56,955</td>
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## Units

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</thead>
<tbody>
<tr>
<td>NHQ, Region, Wings, Units</td>
<td>1,399</td>
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## Equipment

<table>
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<th>Equipment</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Aircraft</td>
<td>525</td>
</tr>
<tr>
<td>Gliders</td>
<td>47</td>
</tr>
<tr>
<td>Hot Air Balloons</td>
<td>2</td>
</tr>
<tr>
<td>Vehicles</td>
<td>1,045</td>
</tr>
<tr>
<td>sUAS</td>
<td>2,350</td>
</tr>
<tr>
<td>VHF LMR Radios – Short/Mid Range</td>
<td>12,793</td>
</tr>
<tr>
<td>VHF Repeaters – Fixed &amp; Tactical</td>
<td>751</td>
</tr>
<tr>
<td>HF Radios – Long Range</td>
<td>2,067</td>
</tr>
</tbody>
</table>
Sensors

Wing Mounted Action Cameras like Go Pros

Handheld Cameras

Waldo XCAM Ultras

FLIR
Sensors

Surrogate Remote Piloted Aircraft with Wescam MX-15s

Waldo XCAM G

Small Unmanned Aerial Systems

Handheld Phone Applications

DJI Phantom 3 & 4 Pros

Skydio 2 Pro

Skydio X2D

Event 38 E384s & E386s

Quantix Recon

Volunteers Serving America’s Communities, Saving Lives, and Shaping Futures.
Sample Remote Damage Assessment Using Artificial Intelligence on Waldo Air Imagery from Arkansas Tornados
Puerto Rico Earthquake Ops
Ground Imagery Collection from Waldo XCAM-G
Requesting CAP Assistance

Search and Rescue

CONUS & PR: AFRCC
AK: 11AF AKRCC
HI: 613 AFPRCC

Other than Search and Rescue

AFNORTH-1AF (CAOC) / 11AF / PACAF
CAP (NOC) 888-211-1812
CAP Wing

DoD
Federal Agencies
State/local Agencies or NGOs

Volunteers Serving America’s Communities, Saving Lives, and Shaping Futures.
QUESTIONS?
Richard Butgereit
Director of Catastrophe Response
richard.butgereit@gic.org

Geospatial Insurance Consortium
Vexcel Data Program
5 YEARS OF GIC!
Not-for-profit.
Member-driven.
GIC responds to catastrophes with major property impact from tornados, hurricanes, wildfires, wind, flooding, and more ...

- Imagery available within 24 hours of collection
- Highest possible resolution
- Most frequently used by GIC members for safer, speedier claim processing, and fraud prevention
GIC responds to catastrophes with major property impact from tornados, hurricanes, wildfires, wind, flooding, and more ...

- Imagery available within 24 hours of collection
- Highest possible resolution
- Most frequently used by GIC members for safer, speedier claim processing, and fraud prevention
- GIC partners with emergency management and public safety
GRAY SKY CALENDAR
2020 Gray Sky Events

JANUARY
- New South Wales, AUS
  Houston, TX

FEBRUARY
- Spartanburg, SC

MARCH
- Nashville, TN
- Wilson County, TN
- Cookeville, TN
- Jonesboro, AR

APRIL
- Monroe, LA
- Chattanooga, TN
- Seneca, SC
- Cleveland, TN

MAY
- Midland, MI

JUNE

JULY

AUGUST
- Cedar Rapids, IA

SEPTEMBER
- Western Wildfires
  California
  Oregon
  Montana
  Washington
- Sally

OCTOBER
- California Wildfires
- Colorado Wildfires
- Delta Zeta
-Delta Zeta

NOVEMBER

DECEMBER

Geospatial Insurance Consortium ("GIC") proprietary and confidential information. Not for redistribution to any third party.
# Gray Sky Calendar
2021 Gray Sky Events

<table>
<thead>
<tr>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
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<tbody>
<tr>
<td>Fultondale, AL</td>
<td>Brunswick County, NC</td>
<td>Helena/Pelham, AL</td>
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<td></td>
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<td>Brent/Centreville, AL</td>
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<td></td>
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<td>Newnan/Peachtree City, GA</td>
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<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
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<tr>
<td></td>
<td></td>
<td>Beckwith Fire - California</td>
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<td>Bootleg Fire - Oregon</td>
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<td></td>
<td>PA/NJ Tornadoes</td>
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<td></td>
<td>Woodridge, IL</td>
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<td>Cador Fire - California</td>
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<th>SEPTEMBER</th>
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<tr>
<td>Cador Fire/South Lake Tahoe - California</td>
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<tr>
<td>MD/NJ Tornadoes</td>
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<td>KY/IL/MO Tornadoes</td>
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<td></td>
<td></td>
<td>Marshall Fire - Colorado</td>
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## GIC US - GRAY SKY CALENDAR

### 2022 Gray Sky Events

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<td>Marshall Fire - Colorado</td>
<td>New Orleans, LA – Tornado</td>
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<td>KY - Tornadoes</td>
<td>Springdale, AR – Tornado</td>
<td>McBride Fire – NM</td>
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Vexceldata.com
Meet Richard: Our Resident Gray Sky Guru

Insider’s Look at “A Week In Gray Sky Collection”

Erasing Post-Disaster Pain
Gray Sky Notifications

- Imagery provided by GIC
- Imagery available within 24 hours of collection

Get notified of when disaster imagery is available in your state. Sign up at:
gic.org/disaster-response
vexceldata.com/disaster-response
richard.butgereit@gic.org
03 | Wrap up!
Call to Action

• Review hazard-specific Geospatial Game-plans

• Build your network
  • Engage your state/local EM/Public Safety neighbors.
  • Join or start a regional or state geospatial group – like MSGIC!

• FEMA Blue Sky Geospatial Coordination Call – Sign up for future calls and meet your FEMA Regional Geospatial Coordinator!
Call to Action

• Learn about ways to contribute your skills & expertise
  • Short-term working groups
  • Remote aid during disaster response

• Add your jurisdiction to the Crisis Communication Catalog!
Save the Date for InSPIRE 2022!

October 25 & 26 at Oklahoma State University

Featuring:

• New and expanded hands-on training
• A dedicated executive leadership track
• Field simulations
• Many other sessions prior participants have found valuable!

A no-cost event for our public safety colleagues thanks to the generosity of our sponsors!
THANKS!

Do you have any questions?
 tmartin@publicsafetygis.org
 napsgfoundation.org/

@napsgfoundation