# 2023 BOOM SCHOOL

October 23-26, 2023
Port of Muskogee

Three Forks Harbor 5201 Three Forks Road Fort Gibson, OK 74434 PRESENTED BY



AND



PIONEERING TECHNOLOGY FOR ENVIRONMENTAL LEADERSHIP

#### **ADVANTAGES**

#### **Hands-On Training**

Daily classroom and field exercises to expand on tactics by giving real-world booming experience. Three different boom sites will be utilized to provide deployment experience across various conditions.

#### **New Technology & Drone Mapping**

Infield data collection, remote sensing, mobile laser scanning, automated reports and response plans, and 3D drone mapping are just some of the unique advantages of RRapidmapS that you will learn and utilize.

#### **Satisfy Training Requirements**

The course is designed to satisfy your boom deployment training as well as cover your 8-Hour HAZWOPER refresher.

#### **Government & Military Discounts**

Government regulations and active military members will receive a discounted rate for this course at \$999.

# **REGISTRATION FEE:** \$1,399

\*Registration fee will grant access to one individual for all four days. This includes lunches and any equipment costs associated. For every two company representatives enrolled, a single-day admission will be provided to a supervisor for the classroom, field exercises, and technology/drone demonstrations and mapping. **Ask about our SCAA member company discount!** 

#### **DETAILS**

ACME Environmental and Rapid Response Systems are hosting a four day boom school at the **Port of Muskogee**. This hybrid course will incorporate both classroom and field training utilizing successfully proven deployment and response tactics and strategies. Students will learn the best practices for utilizing the latest solutions using mixed technologies to produce better incident action plans in an event, improve communication and strengthen their ability to execute their current preplanned response strategies.





### Introduction-Corey Mecham- John Bradley

- "Why Do We Train?"
  - OPA 90
  - PREP Exercises
  - Good Citizens and Community
- Technology and Tactical Booming Overview
- Digital Mapping Introduction-RRapidmapS
- Differences between spill sources
  - Facility Response Plan
  - Geographical Response Plan
  - Pipeline-DOT-PHEMSA
  - Transportation
- Reading Rivers
  - Predicting where the oil will be in the river
  - Sand Bars- River Operations
  - o River Speed
    - How to Measure
      - Physical
    - Digital Sources
    - NOAA
    - USGS

#### **Containment Site Selection**

- Boom Strategies
  - Containment
  - Diversion
  - Exclusion
- Boat Selection
  - Jet
    - Algae/Sand Stomp gates
    - Advantages/Disadvantages
  - Prop
    - Advantages/<u>Disadvantages</u>
  - Landing Craft

### **Tactics**

- Boom Tactics
- Alternatives for Boom
  - Watergate/Underflow Dams
  - Diking-Sewer-Strom Drains
  - Plugging-Sewer-Strom Drains
  - Trenching
- Skimmers
  - Drum
  - Other Types
- Safety
  - Rigging and Knots
  - Boating
  - Sour Oils H2S
- Knot & Riverbed Anchor Basics
  - Munter Hitch
  - Centerline Anchors
    - Rigging and Setting the Anchor
  - Land Based
     Anchors/Constructing an
     Anchor Site

### Introducing RRapidmapS for Arkansas River- Muskogee Training Site- Corey Mecham

- Overview of Arkansas Plan RRS (Rapid Response Systems)
   Developed
- Digital FRP (Facility Response Plan), GRP (Geographic Response Plans), SPCC (Spill Prevention Countermeasures and Control) Possibilities
- Muskogee Boom Site Specifics
- UAS (Unmanned Aircraft Systems) and Mapping Software Overview
  - Purpose
  - Displaying Time in Layers

# <u>Field Exercise at River Site - 12:00 p.m. - 4:00 p.m.</u>

### **Mobilize to Training Site**

**Deployment Tactics** 

• Onshore rigging, anchor points on shore, bridge change of angles, midstream anchors

Drone Mapping and UAS Introduction Field Exercise

• Drones in Action during Booming Exercise









## DAY 2 - TUESDAY, MAY 23, 2023 - 8:00 A.M. - 4:00P.M.

Mobile Classroom at River Training Site: 8:00 a.m. - 11:00 a.m.

#### **Classroom- John Bradley**

Advanced Knots, Strategy and Tactics Review

#### **Technology - Corey Mecham**

- Digital Response Plans
- Mobile Forms
  - Survey 123 for SCAT
  - Fulcrum for SCAT
- Transmission of Data from Remote Sites
  - Starlink
- UAS Operations
  - Remote Sensing Selection
  - Remote Sensors



- Geo-Slam
- Integrating GIS (Geographic Information System) and Remote Sensing
- Collaborative Mapping



Field Exercise at River Boom Site - 12:00 p.m. - 4:00 p.m.

#### **Mobilize to Boom Site**

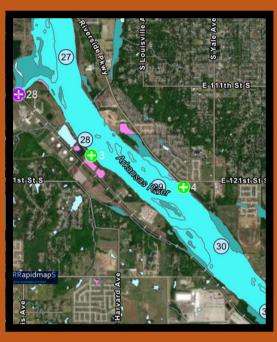
**Deployment Tactics** 

• Onshore rigging, anchor points on shore, bridge change of angles, midstream anchors

Drone Mapping in the Field

Mobile Shoreline Cleanup and Assessment Techniques (SCAT)





### DAY 3 - WEDNESDAY, MAY 24, 2023 - 8:00 A.M. - 4:00P.M.

Classroom at ACME Facility: 8:00 a.m. - 9:00 a.m.

#### **Classroom-Table Top Drill**

Review and Strategize Response Plan
The morning of Day 3, class attendees will have their knowledge put to the test in a real world scenario. We will run a full table top drill that covers a spill response from the time of release to the action of deployment. The field exercise this afternoon will be the implementation of these response plans into action!

#### This drill will have attendees:

- Assign duties for spill site
- Review maps and select deployment area
- Determine which strategy best fits this scenario from the previous lessons
- Run through this drill like a real spill



# Field Exercise at Creek Training Site - 12:00 p.m. - 4:00 p.m.

#### **Mobilize to Boom Site**

Deployment Tactics

• Onshore rigging, anchor points on shore, bridge change of angles, midstream anchors

#### **Recon Boom Site**

• Drone Mapping and Mobile SCAT Forms





# <u>Please note that EVERYONE participating in the 8-Hour</u> <u>HAZWOPER refresher must bring their respirator</u>

DAY 4 - THURSDAY, MAY 25, 2023 - 8:00 A.M. - 4:00P.M.

Classroom at Muskogee Training Site: 8:00 a.m. - 11:00 a.m.

**Classroom- Review Boom Sites from Previous Day** 

### **HAZWOPER Training Topics:**

- Hazard Recognition
- Hazard Class
- H2S Awareness
- Toxicology

- PPE Selection
- Respirators
- Confined Spaces
- Safety Data Sheets

LUNCH - 11:00 a.m. - 12:00 p.m.

Field Exercise at Muskogee Training Site - 12:00 p.m. - 4:00 p.m.

#### **Afternoon Field Exercise**

• Boom Deployment

#### **HAZWOPER Dress Out**

 Set Up and Perform Decontamination Field Exercise

**Issue Training Certifications** 



# REGISTER BY: TO REGISTER, CONTACT:

October 18, 2023, 4:00 p.m. CST info@ACMEboom.com

Deployment equipment will be provided by ACME Environmental and Rapid Response Systems for this training. This includes boats, containment boom, and drone hardware/software for deployments. Classroom materials will be provided.

Attendees are responsible for bringing their own PPE, including: Hard hats, safety glasses, gloves, and personal flotation device (PFD). Steel-toed boots are recommended for safety. If you cannot bring any of these items please contact us and ACME Environmental and RRS will provide some items on a first-come-first-serve basis.



