

# Data Handling & Situational Awareness:

## An update on NOAA's SCAT Data Standard

Industry Technical Advisory Committee  
September 26-28, 2017

*Scott Lundgren – NOAA  
Chief, Emergency Response Division  
NOAA Office of Response & Restoration*

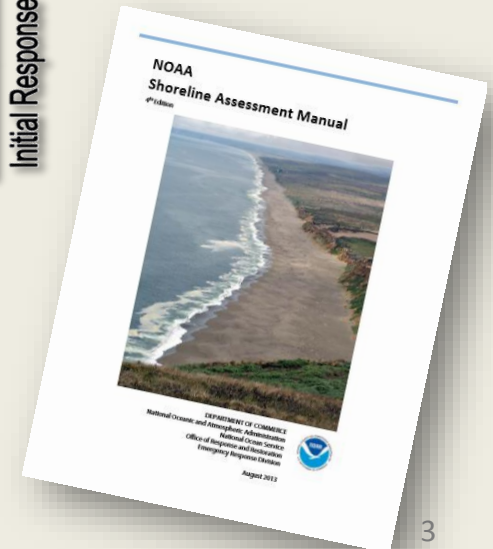
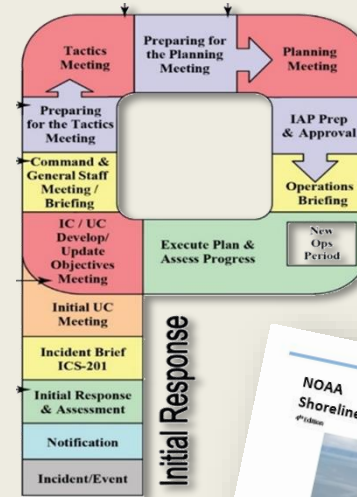


## What SCAT is....

- **Shoreline Cleanup Assessment Technique**
- **An internationally-accepted procedure** for the surveying, documentation and description of oiled shorelines based on standard terms and definitions.
- **Suitable for shorelines** in marine or freshwater; coasts, rivers, & lakes; tropics to the arctic; any habitat or geomorphology.
- **A cornerstone of support for Operations** through the decision and planning process from the initial shoreline oiling until the last segment is signed off.
- **The SCAT process has become an integral part of spill response and the incident command** in the U.S.; and world-wide it has become more formalized as part of many oil-spill response or contingency plans.

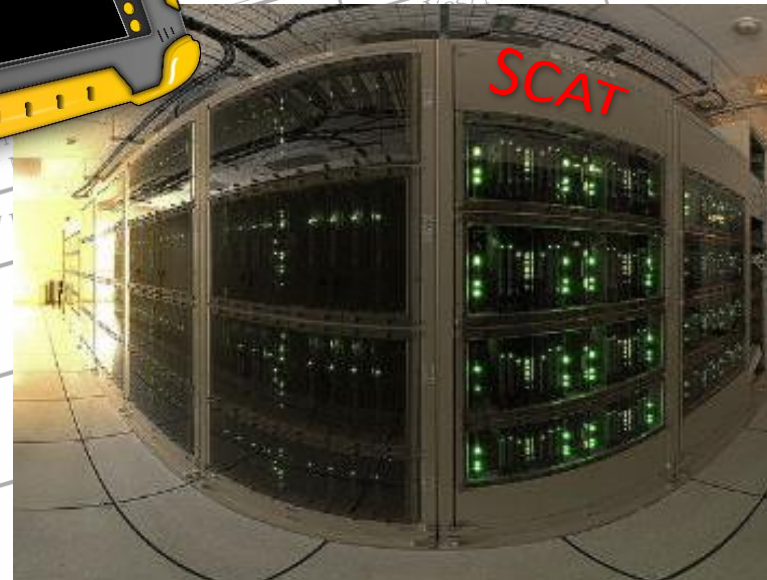
# SCAT Evolution... recently

- 2010 to 2015: Deepwater Horizon / Macondo
  - Common Operational Picture (COP) via internet becomes a reality
  - Demand for SCAT products & frequency continues to increase
  - SCAT Database continues to evolve
  - SCAT fully integrated into ICS
  - STR and SIR critical for Ops progress
  - SCAT-Ops Liaison employed
  - SCAT GIS tested to new limits with non-linear shorelines and segmentation





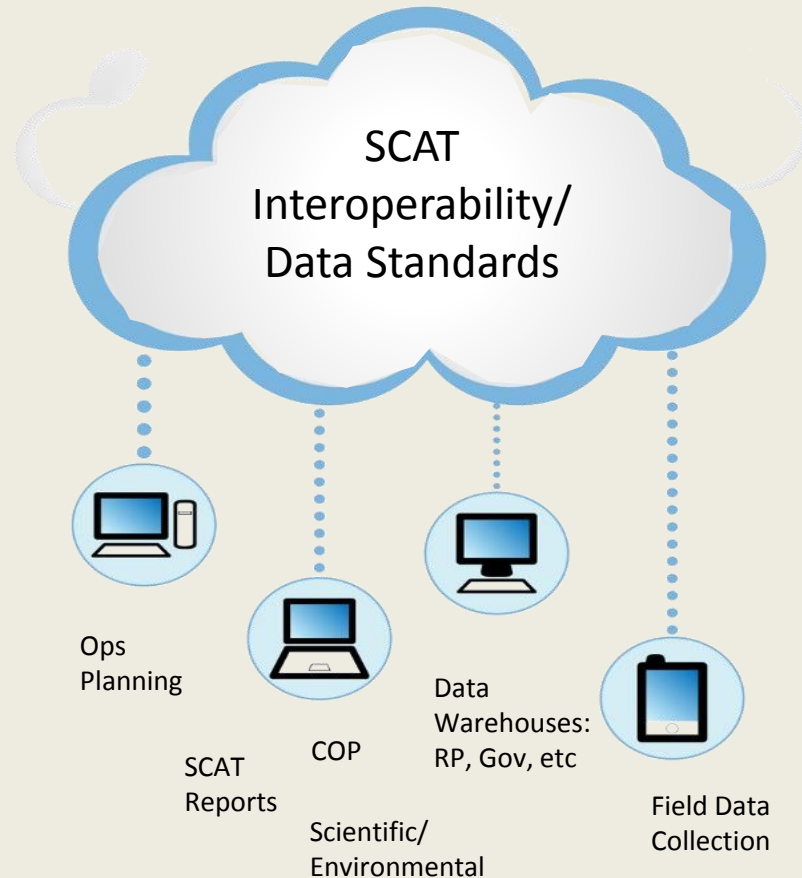
# SCAT Evolution... the future?



# SCAT for Tomorrow TODAY

- The key to successful SCAT in the future is electronic data management and interoperability.
- The response community will continue to innovate.
- In the U.S., SCAT will always involve multiple players.

***In order to conduct SCAT efficiently, effectively and produce products on demand, the methods and tools we use must be interoperable.***





# SCAT for Tomorrow Workshop

- January 2017 in Mobile, Alabama
- Attendees: 47 SCAT coordinators, data managers and stakeholders
  - International
    - Canada (EC + priv sec), England (ITOPF + priv sec), France (CEDRE), Finland (priv sec))
  - Federal and state agencies (NOAA, USCG, EPA invited; CA, WA, TX, FL)
  - Industry (Chevron, ExxonMobil, Shell, Conoco-Phillips, and later BP)
  - Private sector (CARDNO, CEDRE, Chaac Technologies, CTEH, ES2, IEC, ITOPF, Polaris, OCC, OSRL, RPI, SCATMAN, TRG, TRIOX)



# SCAT for Tomorrow Workshop

## *Objectives:*

1. Assess of current concerns regarding electronic data management for SCAT in oil spills;
2. Evaluate of future needs for SCAT to improve readiness and efficiency;
3. Define of key data standards and data exchange formats to allow better management and sharing of SCAT data for response and NRDA; and
4. Provide feedback from stakeholders on the draft NOAA SCAT Digital-Data Standard and for data sharing agreement strategies.

# SCAT for Tomorrow Workshop

## *Results:*

- Overall acceptance of NOAA SCAT Data Model
- Agreement on continued value of SCAT purpose
- Must remain scalable, adaptable, interoperable, and supportive of shoreline cleanup operations
- Best Practices for Data Standards, QA/QC, Data flow, Data handling, & Exercise development
- Agreed steps forward (next slide)
- Production of Workshop Report
  - [www.crrc.unh.edu/SCAT](http://www.crrc.unh.edu/SCAT)







# Next Steps

- Formation of 3 Working Groups –
  1. Technical Working Group
    - Encourage and support interoperability between SCAT data management systems
    - Continue refinement of the NOAA SCAT Data Standard
    - Develop “test data” and “truth” data to be used in drills and exercises.
    - Identify data management issues arising from the incorporation of new methods and technologies.
  2. Policy & Management Working Group
    - Draft standard SCAT text for inclusion in data sharing agreements.
    - Develop data exchange protocols and workflows for information products.
  3. SCAT and Drills (Practitioner Working Group)
    - Drill SCAT data management and operationally test SCAT data management systems.
    - Incorporate new methods and technologies in SCAT (drones, dogs, electronic field data collection. . . )



## Post-Workshop Steps

- Establish 3 year timetable
- Follow up meetings at IOOSC (May) & Clean Gulf (Dec)
- Future SCAT based events
  - Chevron exercise using drones (Santa Barbara, CA),  
Prince William Sound buried oil canine SCAT validation
- Open to additional partners

Contacts:

[john.tarpley@noaa.gov](mailto:john.tarpley@noaa.gov)

[carl.childs@noaa.gov](mailto:carl.childs@noaa.gov)

# Working together for Success

Collaboration

Different Perspectives

Teamwork



Planning

Uncertainty

Adaptive Management

Open Communication