

U.S. Department of Transportation Bureau of Transportation Statistics

SafeMTS (Near Miss/Close Calls)

BTS – NOAA April 26, 2023

Agenda

- 1. SafeMTS Origins and Status
- 2. Working with BTS
- 3. Working **WITH** industry
- 4. Next steps



A Partnership Between MARAD and BTS

Who is the Bureau of Transportation Statistics?

- BTS is DOT's Principal Statistical Agency
 - Authority to protect confidential data
 - Infrastructure to support data collection programs and protect confidential data
 - Expertise in statistics, data analysis, and IT systems
 - Experience in safety data collections for transportation and energy sectors
 - Design, develop, and operate CIPSEA precursor safety data programs:
 - C³RS / Freight Rail (2006-2012)
 - WMATA Close Call (2012-present)
 - SafeOCS, a partnership with DOI/BSEE (2013-present)

BTS Legal Authority: CIPSEA

Confidential Information Protection and Statistical Efficiency Act

Title III of Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. 115-435 (reauthorizing 2002 E-Gov Act)

Sets up framework wherein adverse actions cannot legally be taken against data submitters, nor can raw data be used for regulatory purposes

What is confidential?

- The original reports (microdata) reported to BTS through SafeMTS
- Any BTS working documents
- Any working documents developed by the SMEs

What is not confidential?

• Documents developed for public dissemination using confidential information in aggregate format



A Collaboration Between Industry and Government



Who Defines the Value?

- Strong input from the industry is essential
- The MARAD and BTS value the input of the companies
- Safety-Safety-Safety, Environment-Environment-Environment: Industry shares learnings, identifies gaps, and maintains safety of facilities, safety of personnel, safety of environment, and safety of operations.

Overarching Objective:

To provide a comprehensive source of near miss / close call reports and explore the potential for prevention of adverse events

SafeMTS at a Glance

- SafeMTS: A voluntary, confidential, non-punitive program aimed at collecting, analyzing, and benchmarking near miss data from the maritime industry to advance safety and environmental stewardship.
- Objectives:
 - Collect near miss data from industry partners that can be analyzed to identify safetyrelated trends to prevent incidents or identify otherwise non-correlated events.
 - Share results with industry stakeholders to support continuous safety improvement efforts
 - Align ASTM standard to data collection and reporting requirements for SafeMTS

Stated in a Simpler Way, the Data Triangle





SafeMTS Learning from SafeOCS and Other BTS Precursor Safety Data Programs



SafeOCS

- WHY: Calls from domestic and international organizations and companies for increased industry-wide data sharing following Deepwater Horizon
- WHAT: Began as **pilot effort** to establish centralized industry safety database
 - Government and industry collaboration
 - Records for ~10,000 domestic events submitted by 9 early implementer companies, with all records protected under CIPSEA
 - Significant participant engagement: Participants came together to agree on scope and baseline data
 - Companies submitted data in native formats and BTS mapped the data to a common structure
 - Outcome: Proved feasibility of concept; released report on aggregated data.



"The opportunity for the next step change in safety performance appears to be in a substantial increase in the sharing of data across industry. Leading practices in other industries (i.e. transportation) may be adopted in the oil and gas industry to similar effect..." INTERNATIONAL REGULATOR'S FORUM, JUNE 2018

SafeOCS (cont'd)

- Transition to **full program** in mid-2018, with all energy exploration/production and service provider companies working on the Outer Continental Shelf invited to participate.
- Participants now represent over 92% of Gulf of Mexico oil and gas production
- About 94,000 records collected since end of pilot, with capability to handle much more
- LESSONS LEARNED:
 - Company legal and confidentiality concerns satisfied by protections afforded under BTS authorities and MOA between BTS and each company
 - Successful process developed to map disparate data from individual companies to a single database
 - Data fields identified during pilot were used to generate meaningful insights and information for decision-making by stakeholders

Participants	Phase I	Full Program
Operators	6	13
Service Companies	1	3
Drilling Contractors	2	2
Total Companies	9	18





SafeMTS Pilot Overview

SafeMTS Pilot: Timeline

- Target to complete pilot: October 2023
- Selected milestones (CY)
 - 2022 Q3- 2023 Q1: Onboard participating companies; collect data
 - 2023 Q2: Meeting with initial data contributors to collect input and feedback regarding initial program development
 - 2023 Q2: Stakeholder meetings to review interim results
 - 2023 Q3: Publish aggregated results and lessons learned from pilot process
- Following pilot, adjust program characteristics based on lessons learned and expand program to additional companies

SafeMTS Sample Data (cont'd)

What?	Near Miss Attributes	Preventive/Corrective Action	
Incident Title (free text)	Near Miss Classification	Preventive Action Suggested	
Incident Description (free text)	Near Miss Location	Preventive Action Accepted	
Incident Remarks (free text)	Near Miss Potential Consequence	Initial Action Taken	
Incident Type (near miss/hazard recog.)	Near Miss Activity Performed	Corrective Action Taken	
Incident Category	Near Miss System/Equipment Involved	\downarrow	
	Near Miss Criticality Level	Free text data fields	

↓ Categorical data fields (categories on next slide)

Next Steps for Data Fields

- BTS & MARAD has create an excel sheet of proposed data fields and values
- Circulated the excel sheet to WTG and SOCP work group members
- Start drafting codebook that provides definitions for each data field and categorical value

Next Steps: SafeMTS Program / Phase II

- Focus on steps to improve data analytics to increase application of predictive analytics
- Incorporate learnings from Phase I; Identify effective leading indicators; Promote dialogue
- Outcomes:
 - Review data trends and share learnings
 - Address risk considerations

Questions for Discussion

• Questions?

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