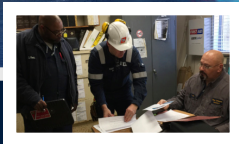
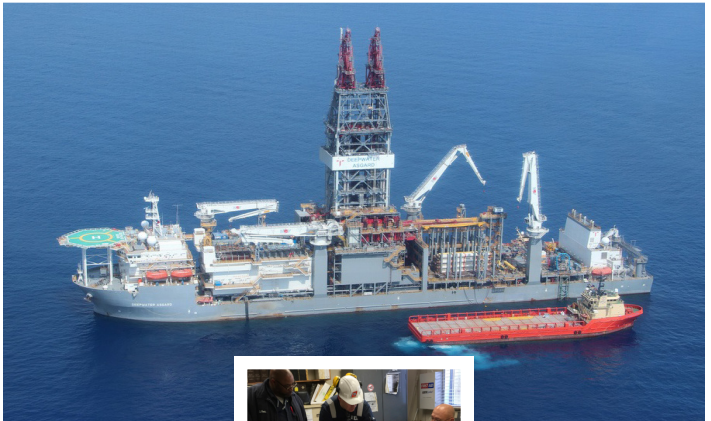


UNITED STATES COAST GUARD &  
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT



# Joint Activity Summary

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# A Note from the Principals

**T**HE Outer Continental Shelf Lands Act mandates safe, responsible exploration, development and production of offshore mineral resources, including energy resources such as oil and natural gas. The primary regulatory responsibilities under the act fall to various federal agencies, including the U.S. Coast Guard and the Bureau of Safety and Environmental Enforcement.



**REAR ADM. JOHN NADEAU,**  
USCG Asst. Commandant  
for Prevention Policy



**SCOTT A. ANGELLE,**  
Director, Bureau of Safety &  
Environmental Enforcement

A portion of the royalties and other revenues generated from such activities are provided to the U.S. Treasury. During 2017, these revenues exceeded \$2 billion and were the second largest contributor to the U.S. Treasury, behind taxes.

We are convinced that it is possible for America to have both robust energy production and safe operations, and that we can, in large measure, reach these goals through continuing our collaborations with industry to improve safety and facilitate commerce. Our primary goal is to provide a consistent approach toward promoting safety of all offshore operations. To achieve this goal, we continue to develop an adaptive workforce with specialized professional competencies needed to match the demands of the offshore energy industry and the rapid acceleration of offshore technology, which is a hallmark of that industry.

We are committed to do our part to make operations on the Outer Continental Shelf smarter and safer. To accomplish these goals, we conduct joint exercises, inspections, investigations, training and responses to incidents. Both BSEE and the Coast Guard are dedicated to reinforcing the offshore energy industry's efforts to build a lasting safety culture on the Outer Continental Shelf. As a testament of our joint efforts with the offshore oil and gas sectors, we are pleased to highlight some of our accomplishments from this past year in this report.

# Joint Activities

**I**N this section, we describe areas of collaboration that were identified as high priorities for both the Coast Guard and BSEE. Over the past few years, we have seen improvements in each of these areas, which are implemented at the field level. Our dedicated Coast Guard and BSEE staffs have encouraged collaboration by establishing working groups and revising several Memoranda of Agreement (MOA). Recent significant changes include:

- MOA-OCS-02 on Civil Penalties;

- MOA-OCS-03 on Oil Discharge Planning, Preparedness and Response;
- MOA-OCS-05 on Incident Notifications and Investigations;
- MOA OCS-07 on Safety and Environmental Management Systems (BSEE)/Safety Management Systems (Coast Guard).

## Information and Data Sharing

Sharing data and coordinating operations with BSEE improves how the Coast Guard measures and mitigates risk. BSEE and the Coast Guard worked together to form a joint inspection program, leveraging each agency's unique authorities. The

■ **BSEE-Coast Guard unannounced inspection of an oil skimmer in Prudhoe Bay during May 2017.**



## “The teams worked together in 2017, conducting 23 joint inspections”

Coast Guard and BSEE meet routinely to discuss facility and company performance factors, target areas of highest risk based on a history of deficiencies, and to develop inspections priorities. The teams worked together in 2017, conducting 23 joint inspections using risk-based targeting data and a shared scope of inspection. This effort provided a more complete assessment of offshore facility safety while increasing each inspector's proficiency across competencies. Additionally, in 2017 Coast Guard inspection teams discovered severe discrepancies on board four offshore facilities. These discrepancies were referred to BSEE's Office of Safety Management for follow-up inspections.

### Joint Outreach

Over the past year, the Coast Guard and BSEE coordinated several outreach efforts at the national, regional and local levels. In May of 2017, BSEE and

the Coast Guard spoke on multiple panels during the Offshore Technology Conference. The panels highlighted the importance of leveraging each agency's authorities and areas of expertise by increasing collaboration and information sharing. In October of 2017, Director Angelle and Admiral Nadeau spoke at the Center for Offshore Safety Forum, and again in February of 2018 at the Center's External Stakeholders meeting. Both leaders highlighted the value of information sharing to implement performance risk-based inspections. Additionally, the Coast Guard and BSEE both participate in the semi-annual (spring and fall) meetings of the National Offshore Safety Advisory Committee. At these meetings vital information is exchanged concerning offshore safety and regulation.



■ BSEE and Coast Guard at the 2017 Offshore Technology Conference.



■ **Recent Mexico-U.S. Joint Contingency Plan exercise.**

**MEXUS Gulf**

The Coast Guard and BSEE participate in numerous joint exercises including one recent major joint exercise in the Gulf of Mexico referred to as MEXUS Gulf. This exercise is conducted as an international subsea spill exercise with multiple additional participants including industry operators, oil spill removal organizations, source-control

companies, the National Agency for Safety, Energy and Environment of Mexico and the Mexican Navy. The exercise, conducted as part of the Mexico-U. S. Joint Contingency Plan, demonstrated good coordination between our two countries and provided vital “lessons learned” to use in the revision of the Gulf of Mexico annex to the Joint Contingency Plan.

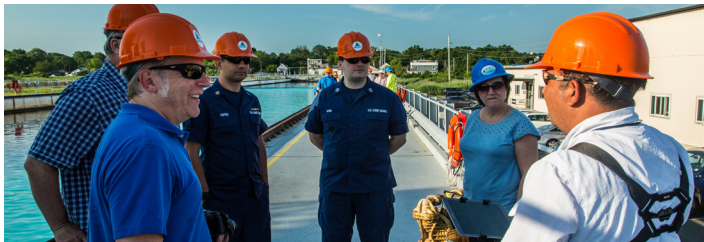
## Oil Spill Response Coordination

BSEE's Oil Spill Preparedness Division and the Coast Guard's Office of Marine Environmental Response Policy continued their ongoing coordination through quarterly Response Work Group meetings. This coordination extends from engagements held at the national level to joint field activities and discussions at the regional level. The cooperation between the Coast Guard and BSEE has improved preparedness actions. For example, the Coast Guard continues to provide input to BSEE's Oil Spill Response Plan reviews. The two agencies also initiated an effort to enhance inclusion of offshore facility plans into Area Contingency Plans. Both the Coast Guard and BSEE coordinated input to the revised Preparedness for Response Exercise

► **“The cooperation between the Coast Guard and BSEE has improved preparedness actions.”**

Program (PREP) guidelines.

Arctic oil spill issues were a significant focus of joint activities in 2017, as both agencies support the Arctic Council through the Emergency Prevention, Preparedness and Response (EPPR) Working Group. The work of the two agencies through EPPR is conducted to improve oil spill response in the Arctic. These efforts supported vital projects and teams including the Circumpolar Response Viability Analysis, the Pan-Arctic Equipment Database, the Marine Environmental Response Expert Group, and the Arctic Oil Spill Research and Technology Workshop. The two organizations also cooperated on outreach to further advance joint goals of improving spill response capabilities. During 2017, the Coast Guard and BSEE were significant supporters of the triennial International Oil Spill Conference – the world's largest conference dedicated to promoting advancements in oil spill preparedness, prevention, and response. During the conference, BSEE led the development of the Technology Demonstration, which showcased



■ Oil spill research collaborations remain an essential part of the USCG and BSEE partnership. Here, BSEE and Coast Guard staff members prepare for a research project at Ohmsett, a 667-foot long tank in New Jersey that is formally referred to as the National Oil Spill Response Research and Renewable Energy Test Facility.

different response technologies. Coast Guard personnel staffed some of the exhibits and provided guest tours. The Coast Guard also served as the Program Chair for the Conference and oversaw the planning and management of 252 papers and 120 poster submissions.

The Coast Guard and BSEE supported four informative meetings of the 15-agency Federal Interagency Coordinating Committee on Oil Pollution Research in 2017. During meetings of the Committee, key research initiatives are discussed, including innovations to improve in situ burning applications, remote sensing platforms, and spill

thickness estimations. Also, the U.S. Coast Guard Research and Development Center and BSEE's Oil Spill Preparedness Division conducted a research information exchange meeting to share latest ideas and project descriptions for oil spill research.

Finally, both agencies jointly supported projects and training at Ohmsett in Leonardo, New Jersey, which houses the nation's largest oil spill test tank and training facility. Additional research was conducted at the Joint Maritime Test Facility in Mobile, Alabama, a test tank for open-air in-situ burning projects.

## Joint Inspections and Investigations

The Coast Guard and BSEE have been working together to harmonize efforts through joint inspections of offshore production and drilling operations. BSEE's data revealed that over 175 crane incidents were reported between 2016-17. In its annual performance report, the Center for Offshore Safety has consistently highlighted mechanical lifting and lowering as a safety performance indicator (SPI) involving incidents with learning opportunities. In February 2018, BSEE released Safety Alert #329 on Potentially Catastrophic

### ■ Inspection team in offshore facility machinery space.



“In response to these incidents involving cranes and lifting appliances, the Coast Guard collaborated with BSEE to initiate a joint inspections campaign in March 2018 focusing on crane material condition...”

Crane and Lifting Incidents. In response to these incidents involving cranes and lifting appliances, the Coast Guard collaborated with BSEE to initiate a joint inspections campaign in March 2018, focusing on crane material condition, operations, maintenance, and safety management. The campaign involved interagency teams visiting multiple drilling and production units across the Gulf of Mexico. The teams used a focused inspections protocol to evaluate safety, and gather and provide data to BSEE's Office of Safety Management. After analyzing the data BSEE will report of its findings, including recommendations to industry.



## Hurricane Response

The 2017 hurricane season was very significant, with three major hurricanes. Hurricane Harvey, in particular, had an enormous impact on the Texas Coast, causing significant loss of life, property damage and disruption to shipping and energy production. A critical component of Hurricane Response involves the safe evacuation of Outer Continental Shelf facilities and drilling rigs prior to the hurricane arrival, and resumption of production and drilling after the storm. BSEE and the Coast Guard formed a joint Incident Command Post to monitor and ensure

### ■ Position and Path of Hurricane Harvey on August 24, 2017



▶ **“both agencies participated in Joint Inspection meetings that helped maximize the effectiveness of dual agency inspections...”**

that the evacuations proceeded without loss of life or serious impact to the environment.

## Joint Training

The Coast Guard and BSEE have steadily increased their joint training efforts. During 2017, Coast Guard and BSEE personnel participated in joint courses including Offshore Incident Investigations, BSEE Regulatory Principles, BSEE-USCG Fixed Facility Inspections and Potential Incidents of Non-Compliance (PINC) Review & Revisions. Additionally, both agencies participated in Joint Inspection meetings that helped maximize the effectiveness of dual agency inspections by ensuring that each agency understands the regulatory responsibilities of the other, thus reducing duplicate enforcement.

# Compliance Collaboration

**B**OTH BSEE and Coast Guard inspectors and investigators ensure compliance of offshore operators with the Outer Continental Shelf Lands Act and other Federal regulations. To minimize duplication of regulatory enforcement, both agencies are committed to coordinating their activities in the shared regulatory space that constitutes the Outer Continental Shelf. Inspections are often jointly attended by BSEE and Coast Guard personnel. During non-joint inspections, BSEE inspectors are authorized to inspect areas of Coast Guard jurisdiction with the understanding that notification of any serious deficiencies will be made to the Coast Guard and vice versa. This coordination improves the efficiency of inspection activities and creates less of a burden on the operator. Joint Coast Guard-BSEE training helps to ensure a mutual understanding of each other's regulations.



■ **Coast Guard and BSEE inspectors.**

When operators accept the responsibility of operating an offshore lease, they must be committed to safe operations and environmental stewardship. We strongly encourage industry to fulfill their roles and responsibilities to promote a robust safety culture and share lessons learned and best practices with the regulators. BSEE and the Coast Guard are working together to streamline compliance activities for operators. Such collaboration allows both agencies to focus more efficiently on higher risk operations.

Certain types of incidents must be reported to both BSEE and the Coast Guard because they share regulatory

responsibility for that area. When joint reports are received, the agencies coordinate their efforts so that investigations are conducted efficiently and accurately. Offshore operators gain clarity from knowing that the two agencies are carefully coordinating throughout the investigation. Ultimately the recom-

mendations for safety improvements that result from such investigations are shared via a joint Coast Guard-BSEE communication method.

The information in the tables below demonstrates the amount of effort BSEE and the Coast Guard put into inspections and investigations.

**TABLE 1** BSEE's total number of recordable incidents on the OCS from FY 2007 to 2017 provides some context with regard to issues observed on the OCS.

Incident Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fatalities	5	12	4	12	3	1	4	2	1	2	0
Injuries	322	263	260	253	221	280	276	285	206	151	150
Loss of Well Control	6	7	7	4	5	3	8	5	3	2	0
Fires/Explosions	145	141	148	134	113	132	116	135	105	86	73
Collisions	26	28	26	14	11	13	21	16	9	9	11
Spills (>50 bbls)	7	33	7	9	4	5	10	5	7	3	3
Lifting	180	185	243	118	110	167	197	210	161	155	126
Gas Releases	14	22	33	20	17	27	21	21	21	17	16
Evacuation	33	43	55	31	36	48	68	52	70	50	53
<b>Total</b>	<b>738</b>	<b>734</b>	<b>783</b>	<b>595</b>	<b>520</b>	<b>676</b>	<b>721</b>	<b>731</b>	<b>583</b>	<b>475</b>	<b>432</b>

**TABLE 2** During federal fiscal year 2017, BSEE conducted 4,287 OCS facility inspections, which resulted in the issuance of 103 facility shut-in Incidents of Noncompliance.

	PRODUCTION FACILITIES	WELL OPERATION FACILITIES	TOTAL
Number of FY 2017 Inspections	3108	1179	4287
Number of FY 2017 Facility Shut-In INCs	44	59	103
Percent of Inspections that Resulted in Shut-Ins	1.4%	5.0%	2.4%

**TABLE 3** The Coast Guard conducts a variety of marine inspections related to the offshore oil and gas industry. Below is a summary of Coast Guard inspection by vessel type.

	Platform (Complexes)	Floating Production Storage & System	Floating Production System	Liftboat	Mobile Offshore Drilling	Offshore Supply Vessel	Total
<b>Number of FY 2017 OCS Inspections</b>	63	7	158	40	109	1168	1545
<b>Number of FY 2017 Operational Controls</b>	3	0	5	1	5	1	15
<b>Percent of Inspection Controls</b>	4.7%	0.0%	3.2%	2.5%	4.9%	0.08%	0.45%

**TABLE 4** A Z-INC inspection is an inspection that is performed by a BSEE inspector on behalf of the Coast Guard. BSEE inspectors receive specific training before performing such inspections. Below is a summary of Z-INC inspections performed during 2017. Advantages of this approach include taxpayer savings because only one inspection team is sent to the platform (a BSEE team). Also, the operator saves effort because they only have to assign personnel for one day to accompany a single team.

Z-INC Inspection Data	
<b>Fixed Facilities Manned</b>	701
<b>Fixed Facilities Unmanned</b>	1384
<b>TOTAL</b>	2085
<b>Full Inspections</b>	136
<b>Partial Inspections</b>	1754
<b>TOTAL</b>	1890

Z-INC Inspection Data	
<b>Warning Z-INC</b>	86
<b>Component Shut-In Z-INC</b>	35
<b>Facility Shut-In Z-INC</b>	0
<b>TOTAL</b>	121
<b>Number of Facilities Issued a Z-INC</b>	73
<b>Z-INC Issue Rate</b>	3.5%
<b>Compliance Rate</b>	96.5%

The Coast Guard and BSEE continue to harmonize protocols to collect, share and evaluate compliance data in an effort to bolster joint compliance enforcement. The ability to share and analyze this type of data has expanded safety awareness for both agencies and has improved recognition of significant incident trends and safety-related vulnerabilities affecting commercial operations on the OCS.

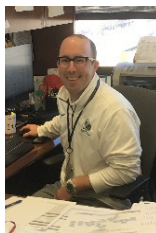
# Field Spotlights

## **SPOTLIGHT ON:**

### **Mr. Jason Mathews**

*BSEE Office of Safety Management,  
Gulf of Mexico Region*

**J**ASON MATHEWS is the Chief of the Office of Safety Management. He is responsible for the supervision of all activities related to the review and analysis of operator compliance and incident data, and coordination of the BSEE Gulf of Mexico Region's safety efforts. Mathews also directs the review and audit functions of OCS Operators' safety programs. He earned a Bachelor of Science Degree in Petroleum Engineering from Louisiana



State University in 2003. Mathews supervises a technical staff that carries out Safety and Environmental Management System duties,

and reviews and analyzes data and information gathered for all incident investigations and inspection compliance. Additionally, he plans, organizes, directs, and controls Annual Performance Reviews of select operators. Jason was the lead developer for the BSEE Performance Risk-Based Inspection program.



**SPOTLIGHT ON:**  
**LT Michael Groff**

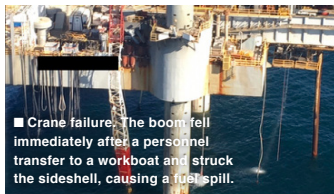
*Outer Continental Shelf Casualty Investigator, United States Coast Guard Marine Safety Unit, Morgan City, LA, Sector New Orleans, Eighth District.*

LT Michael Groff is the Senior Investigating Officer for USCG Marine Safety Unit Morgan City, LA. LT Groff graduated from the USCG Academy in '05 with BS in Management, and is currently working on a Masters in Occupational Safety and Health from the Columbia Southern University.



Previous units include the USCG Atlantic Area (LANTAREA) Command Center where he served as a Command Duty Officer, and the Marine Safety Detachment Fort Smith, AR which he supervised. At Morgan City, he has investigated several offshore casualties in conjunction with BSEE that resulted in significant recommendations for improving safety.

In 2017, during a post-casualty investigation following a crane failure



on a jack-up drilling rig, LT Michael Groff identified a potential SEMS non-conformity that was likely a primary contributor to the casualty. Working with the established interagency framework, LT Groff collected objective evidence and referred the case to BSEE to facilitate corrective actions aimed at preventing recurrences. His efforts contributed to civil penalty action for the pollution event and a concentrated inspection campaign by BSEE and the Coast Guard. Additionally, the Coast Guard and BSEE conducted a joint investigation into the causal analysis of an offshore worker fatality during drilling operations onboard a foreign flagged drillship. LT Groff flew offshore with BSEE's investigation team to conduct crew interviews and a post-casualty inspection of the drill floor. The Coast Guard and BSEE will conduct a Joint Panel Investigation.

# Glossary of Abbreviations

**BSEE** Bureau of Safety and Environmental Enforcement

**EPPR** Emergency Prevention Preparedness and Response

**LT** Lieutenant

**MOA** Memorandum of Agreement

**OCS** Outer Continental Shelf

**PINC** Potential Incident of Non-Compliance

**PREP** Preparedness for Response Exercise Program

**SEMS** Safety and Environmental Management System

**SMS** Safety Management System

**SPI** Safety Performance Indicator





## For Additional Information

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