

ISCO NEWSLETTER

The Newsletter of the International Spill Response Community Issue 573 20 February 2017

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http://www.spillcontrol.org



ISCO & THE ISCO NEWSLETTER

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO has Consultative Status at IMO, Observer Status at IOPC Funds and is dedicated to raising worldwide preparedness and co-operation in response to oil and chemical spills, promoting technical development and professional competency, and to providing a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisation.

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In the picture: LEFT - Conference Chairman Richard Johnson, Technical Director, ITOPF, CENTRE: Keynote Speaker Timothy Long, Managing Director, International Marine Transportation Singapore, Pte Ltd. Refining & Supply, ExxonMobil and RIGHT Keynote Speaker Brian Sullivan, Executive Director, IPIECA

Organised by the Maritime and Port Authority of Singapore (MPA), the biennial International Chemical and Oil Pollution Conference and Exhibition (ICOPCE) returns for its 10th edition as Asia's leading thought-leadership platform focusing on the preparedness and response strategies for oil and chemical spills.

Whilst there is significant improvement in industry track records and a decline in marine pollution incidents, ensuring that preparedness levels are adequate and deployable remain highly critical. How can we certify that investment in safety does not bend to commercial pressures?

In light of these emerging challenges, ICOPCE 2017 will address new trends, advancement in technologies and response vessels, collaboration initiatives with stakeholders and also takes a fresh look at innovations in HSE management. More info Conference agenda

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Incident reports

AUSTRIA: BUNKER TANKER RUNS AGROUND IN DANUBE NEAR VIENNA

February 8 - Stavo, a bunker tanker, has run aground in Danube River at Langenzersdorf off Austria's Port of Vienna, Maritime Herald reports.

The vessel is said to have been carrying 289 tonnes of fuel when it struck a stone dam and sustained underwater breaches in its hull.

In order to prevent pollution, local authorities and fire rescue teams surrounded the tanker with oil booms and removed the 289 tonnes fuel to another ship. Ship & Bunker Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

NORWAY: ABANDONED BITUMEN TANKER IOLI SINKING AT DRAMMEN, SW OF OSLO

February 10 - The bitumen tanker loli started getting water ingress in engine room at the dock of Drammen southwest of Oslo, Norway. The vessel was abandoned since October 2016 without maintenance and crew on board. The water started flooding the engine compartment and increase tanker's draft, but also cause leak of sludge and lub oils into the water area of the dock.

The local authorities took immediate actions to prevent sinking of the abandoned cargo ship. At the scene were sent local fire teams, which started pumping out the water from the flooded compartment. It was understood that situation is under control, but the there was some leak and water pollution. *Maritime Herald* Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

Incident reports (continued)

INDIA: AS CLEAN-UP CONTINUES, OIL SPILL REACHES MAMALLAPURAM

February 13 - Ennore's oil spill has reached the world-renowned heritage town Mamallapuram, about 60 km south of the city. Residents are worried about the likelihood of the impact of the oil on the heritage structures in the town. *The Hindu* Read more

DENMARK: COLD WATER PREVENTS SERIOUS BUNKER SPILL

February 14 - The container ship Victoria went aground northeast of Fyns Hoved, Jutland on Friday, putting an eight inch wide by 150 foot long gash in her hull. The damage included penetration of a fuel tank containing roughly 25,000 gallons of HFO, which would typically be expected to result in a serious spill. However, the Victoria and her crew were in luck, at least in one respect: the cold winter waters of the Baltic Sea quickly solidified her bunker fuel, putting a stop to the leak. The Maritime Executive Read more

USA: ALASKA - TUG 'SAMSON MARINER' SUSTAINS MINOR HULL BREACH AFTER GROUNDING IN ALASKA'S INSIDE PASSAGE

February 16 - A U.S. Coast Guard pollution team in Ketchikan responded to a tug ran aground while towing a barge in the vicinity of north Tongass Narrows in Rosa Reef, Alaska, on Wednesday evening. The Coast Guard Coast says it received notification via VHF-FM radio from the captain of the tugboat Samson Mariner that his vessel ran aground and had a minor breach in the hull.

Coast Guard Station Ketchikan and pollution responders were immediately launched and arrived on scene to place a boom around the tug. They also verified that crew of the Samson Mariner had plugged the breached hull.

The Samson Mariner is reported to have 30,000 gallons of fuel on board and the barge has 40,000 gallons of diesel. *gCaptain* Read more

News reports from around the world (countries listed in alphabetical order)

CANADA: BRITISH COLUMBIA - OIL SPILL FUND SHRINKS AS TANKER TRAFFIC GROWS

February 14 - State oil spill responders have a shrinking budget to deal with a growing problem. A newly approved British Columbia pipeline project is expected to greatly increase oil tanker and barge traffic in the Strait of Juan de Fuca and the north edge of Puget Sound. Yet the state Department of Ecology oil spill response program is facing a \$4 million shortfall over the next two years.

Bills in the Legislature aim to fill the funding gap with a tax increase on oil shipments and an expansion of the tax to include oil transported through pipelines. The bills were proposed by Sen. Reuven Carlyle, D-Seattle, and cosponsored by Sen. Christine Rolfes, D-Bainbridge Island. Rep. Sherry Appleton, D-Poulsbo, is backing companion bills in the House.

"In Kitsap County, we have 228 miles of shoreline, and we care about Puget Sound," Rolfes said. "Everything we're working on — restoring habitat, bringing the salmon back, protecting wildlife — all of that would be trashed if we had one massive oil spill."

Senate Bill 5425 would increase the state oil spill administration tax from 4 cents per barrel to 6.5 cents. At the fuel pump, that would mean a tenth of a cent increase for a gallon of gas, according to Ecology. Not increasing the tax could lead to a 30 percent reduction in the state's oil preparation and prevention efforts. *Kitsap Sun* Read more

CHINA: SINOPEC BALING BRANCH CONDUCTED SHIP FIRE AND OIL SPILL EXERCISE AT PORT IN YANGTZE RIVER



On 7th December, SENOPEC Baling Branch conducted emergency response exercise for ship fire and oil spill accident at sea in chemical terminal, located at Renji session of Yangtze River at Yunxi district in Yueyang, Hunan in collaboration with Yueyang MSA, Changhang Police Station and other companies.

This exercise produced a scenario of certain amount of naphtha being spilled into river due to men error causing gasket between mental hose and flange to be ruptured when loading operation performed between a barge and a naphtha carrier. Based on the imaginary accident conditions, SENOPEC Baling Branch activated emergency plan and worked with many other departments to conduct accident report,

search and rescue the injuries, carrying of traffic control, fire extinguishing, river clean-up and other exercises.

It is said that there are more than 36,000 vessels and ships going in and out Yueyang session of Yangtze River. Among them, there are more than 3100 vessels and ships carrying hazardous goods. During the transportation of hazardous goods, 80% ships carried 1000-3000 tons of goods on one-voyage basis. Once accident occurred, it is difficult to deal with it. [Thanks to ISCO Committee Member, Lee Guobin for sending this report]

CHINA: BASUO MSA CONDUCTED A SPECIAL PROGRAM TO ADDRESS SAFETY ISSUE IN THE TRANSPORTATION OF HAZARDOUS GOODS BY SHIP

To profoundly draw the lessons learned from "Feng Shengyou 8" ship explosion accident and to strengthen safety control over ships and vessels carrying hazardous goods, and based on what actually happened in Basuo, Basuo MSA actively conducted a special program to address safety issue in the transportation of hazardous goods by ship in according with requirements set up by Hainan MSA.

1. To enhance administration of approval and examination of declaration of hazardous goods transported by ship, conscientiously verify information against declarer involved and strictly handle procedures for declaration in accordance with relevant requirements. Hazardous goods should be checked by inspectors on site and see if they are in compliance with information when declared and hazardous goods, not in compliance with information and certificates when declared, must not be carried by ships.

News reports from around the world (continued)

- 2. To strengthen control and supervision over conditions of ships and vessels carrying hazardous goods. In combination with special program titled "safety in ship transportation" and other activities as well as routine law enforcement activities such as inspection of safety on ship/vessel, inspectors should carry out comprehensive inspection on chemical cargo ship when arrived by coordinating other departments and making best of law enforcement force available. Deficiencies found during inspection should be corrected and implemented.
- 3. To strengthen the sharing of information, efforts should be made to make sure that information relating to approval and examination of declaration of hazardous goods transported by ship. When deficiencies found in ship and safety risk affected safety during unloading operations, such information should be immediately reported to local port administration department or authority in port in operation.
- 4. To standardize procedures for recording inspection information on site. Inspectors should inform the ship of where should be improved when inspection is over and recorded information. Inspectors should see if the captain sign on information table. Relevant department should supervise this process and summarize inspection results to conduct periodic analysis. [Thanks to ISCO Committee Member, Lee Guobin for sending this report]

CHINA: ASEAN OIL SPILL RESPONSE SEMINAR HELD IN SHANGHAI



From 28th November to 2 December, China-ASEAN Oil Spill Response Seminar held in Shanghai. More than 20 representatives from China and 8 countries of Association of Southeast Asian Nations exchanged information on how to tackle ship-induced oil spill accident and experience of their MSA in maritime supervision, deepening and expanding friendship and mutual benefit and cooperation in maritime affairs between China and countries of Association of Southeast Asian Nations.

This event was hosted by International Maritime Organization (IMO) and Ministry of Transport of People's Republic of China and was organized by Shanghai MSA. Many experts had been invited to lecture on International Convention for the Prevention of Pollution from Ship, regional cooperation in oil spill response, oil spill response technology, table exercise in this event and paid a visit to oil spill response resources at seaport. Participants also visited oil spill response stockpile in session of Yangtze River in Pudong, Shanghai and listened to relevant information relating to it.

It is introduced that China-ASEAN exchange program aims to promote cooperation in maritime oil spill response among countries, conduct multilateral exchange and discussion on significantly increasing oil spill risk at sea, promote mutual sharing of the latest information relating to accomplishments in terms of oil spill response, and explore a new way to establish regional oil spill response network, with a view to advancing regional cooperation in oil spill response between ASEAN countries and neighbouring countries.

[Thanks to ISCO Committee Member, Lee Guobin for sending this report]

News reports from around the world (continued)

INDIA: CLEAN-UP ENTERS FINAL LAP, BUT ECOLOGICAL CONCERNS LOOM

February 8 - It has been 10 days since the oil spill played havoc in the bay. The Coast Guard on Tuesday claimed that the clean-up has entered the final lap and Dornier aircraft were deployed to ensure there are no traces of oil in the sea.

However, ecological concerns still loom large. Experts say the damage done is irreversible and the high dose of chemical dispersants sprayed only adds to the problem. The Coast Guard has sprayed about 2,700 litres of oil spill dispersants that are non-degradable.

Coast guard officials said Dornier aircraft were deployed on Tuesday and no trace of oil was found 40 miles into the sea along the coast. "We are mapping the entire coast to ensure there are no chances of oil spill escaping into the deep sea and left unattended," an official said.

Meanwhile, DIG Warsi said the clean-up was now being monitored by the district administration and Kamarajar Port. "We have mobilised the resources and cleaned-up most of the beached oil deposits. The work is progressing in RK Kuppam where the pollution is restricted to 20-30 metres area. Steam wash is being given to the rocks," he said.

Officials are also likely to use skimmers to pump out oil into buckets rather than manually mopping the coast. The skimmer technology was provided by AlphaMERS, Bangalore. "We are using a funnel shaped skimmer which is connected to a pump and a generator.

The skimmer will suck the oil and it will be pumped out into the drums, said an official of the company, which is specialised in clearing spills. New Indian Express Read more

INDIA: WILL BE MONTHS BEFORE SITUATION GETS NORMAL: SCIENTISTS ON OIL SPILL

February 11 - A scientist, talking about the immediate action after the spill on January 28, said, "The first respondent was Indian Coast Guard, which deployed its contingent for cleaning, containment and recovery. Simultaneously, INCOIS, Hyderabad (Ministry of Earth Sciences), came forward for trajectory modelling, and disseminated the information to user agencies."

Dr MV Ramana Murthy, scientific head and director of ICMAM, said, "The phytoplankton (or microalgae) and zooplanktons (microscopic animals) are at greater risk than the other biotic components of the marine ecosystem due to the proximity to hydrocarbon compounds floating on the sea surface, and their general sensitivity to the toxic components in the hydrocarbons. These planktons play a major role in the marine food chain, and were found to be stressed during this event."

"The hydrocarbon compounds adversely affected phytoplankton populations, their patchy distributions. No mass mortality of fish was reported during the investigation; however, a few incidences of olive ridley turtle mortality were reported," he added. *Mid-day.com* Read more

INDIA: CHENNAI PORT TRUST TO PROCURE RESPONSE VESSEL AFTER KAMARAJAR PORT OIL SPILL

February 16 - Chennai Port Trust is now taking steps to augment its capacity to contain oil spills by planning to have an oil spill response vessel. This comes after Chennai's coast witnessed an oil spill when two cargo vessels collided at Kamarajar Port last month.

A Chennai Port official told Express that tenders had been floated for an oil spill response vessel and other equipment worth `14 crore. The new vessel will augment the existing oil spill response vessel 'Prestige'. *The New Indian Express* Read more

USA: TRANSCANADA FILES KEYSTONE XL ROUTE APPLICATION IN NEBRASKA

February 16 - TransCanada Corp filed an application with Nebraska authorities on Thursday to route its Keystone XL pipeline through the state, saying it expected a decision this year for this crucial leg of the \$8 billion project that had been stymied by environmental groups and other opponents.

U.S. President Donald Trump cleared the way for the project at the federal level last month, reversing an earlier decision by former President Barack Obama, who had blocked it over environmental concerns.

Obama's veto in November 2015 led Canada's No. 2 pipeline company to withdraw its original route application to the Nebraska Public Service Commission. The 1,179-mile (1,900-km) Keystone XL pipeline is meant to ship 830,000 barrels per day of mainly oil sands crude from the Canadian province of Alberta to Nebraska, before heading on to the world's largest refining market for heavy crude on the U.S. Gulf Coast. Reuters Read more

RISING TO THE CHALLENGE: THE OUTCOMES OF THE IPIECA-IOGP OIL SPILL RESPONSE JOINT INDUSTRY PROJECT 2011 – 2016



About the author – Peter Taylor is the Principal Consultant at Petronia Consulting Limited. He has a degree in biological sciences and spent six years in environmental research and consultancy, prior to specializing in oil spill preparedness and response activities for the past 30 years.

He has been supporting IPIECA's promotion of effective oil spill contingency planning around the world since 1998. Through IPIECA, he manages the Oil Spill Preparedness Regional Initiative (Caspian Sea – Black Sea – Central Eurasia), known as OSPRI, on a part-time basis.

He undertook several activities under the OSR-JIP, including drafting and editing both the Training and Exercising Good Practice Guidance (GPGs).

Part 3 - Promoting Effective Training and Exercise Programmes

Having competent, practised and confident personnel within an organization's oil spill response and incident management teams is clearly a vital element of effective preparedness.

Two key OSR-JIP GPGs emphasise the importance of training and exercises. They also highlight the value of an integrated implementation programme, rooted in risk assessments and contingency planning.

It is recognised that most emergency response roles will be in additional to personnel's normal jobs. Successful spill prevention measures over the years are an achievement to celebrate but a corollary is reduced opportunity to gain experience through actual response.

Training courses, and the chance to challenge response teams through exercises, have consequently taken on additional importance.



The Training GPG strongly encourages a systematic approach to planning courses and thereby maximising their value. Setting learning objectives is key to ensuring fit-for-purpose courses. Standard courses may be suitable e.g. the IMO's Model OPRC Courses. However, specialized courses can be valuable in either developing specialized advisers or focussing on the needs of specific functions within an incident management team. Customizing courses by adapting them to a local setting and relevant contingency plans should be normal practice.

There is no doubt that learning objectives are most effectively achieved where varied training methods are utilized. The stereotypical 'death by PowerPoint' should be avoided and a course should include a mix of group discussions and challenges, site visits and practical equipment deployments, alongside presentations. It is truism that managers benefit greatly from participation in at least one practical deployment during their training. This encourages appreciation of the realities of field response. Instructors' backgrounds, experience and presentational skills are also critical to a credible and successful course. Evaluation of courses is important for continuous improvement. The Training GPG may be accessed at:

http://www.oilspillresponseproject.org/wp-content/uploads/2017/01/Oil spill training 2016.pdf.

Special feature (continued)

The Exercising GPG is an update of a former IMO/IPIECA Report Series publication. It addresses the activities to practise and check contingency plans' procedures, including incident assessment and notifications, decision-making, working together (within and between organizations) and the mobilization, deployment and escalation of response.

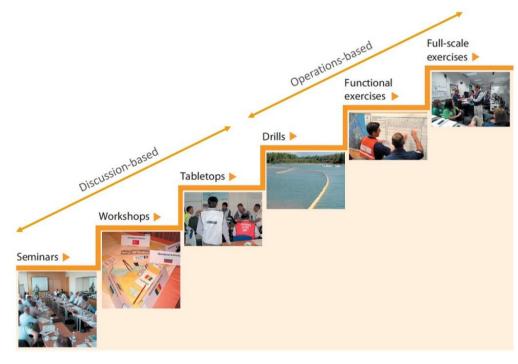
The Guiding Principles for successful exercising are retained from the earlier publication:

- ✓ Ensure that senior management support and endorse the exercise activity
- ✓ Set clear, realistic and measurable objectives for an exercise
- ✓ Recognize that the thrust of exercising is to improve not to impress
- √ Keep exercises simple and more frequent for faster improvements initially
- ✓ Do not tackle complex exercises until personnel are experienced and competent
- ✓ Do not overcomplicate an exercise with too many activities, locations and participants
- ✓ Ensure successful exercise evaluation
- ✓ Planning and conducting a successful exercise is a significant accomplishment

The GPG broadly follows the approach recommended in the International Organization for Standardization (ISO) Standard Societal on security—Guidelines exercises (ISO 22398:2013), with adaptations for the specifics of oil preparedness and response.

A variety of methods are likely to be encompassed within a programme, ranging from discussion-based seminars and tabletops to operations-based drills and full-scale exercises.

Detailed guidance on the planning of elements of a programme is included in the GPG, which may be accessed



at: http://www.oilspillresponseproject.org/wp-content/uploads/2017/01/Oil_spill_exercises_2016.pdf.

It is incontrovertible that investment in a structured and fit-for-purpose training and exercise programme will pay dividends by facilitating safe and effective response, should an incident occur. Such a programme should receive equal focus as the acquisition and maintenance of specialised pollution combating equipment and supporting logistics.

Many organizations are also recognising that the training and exercising of an incident management team can address all potential emergency situations and risks, not only oil spills, as the organization and procedures are readily adaptable.

To be continued

Contributed article

WHAT HAPPENS WHEN AN OIL TANKER AND A CHEMICAL TANKER COLLIDE IN SKAGERRAK?

In this article contributed by Marianne Henriksen you will find out more about the SCOPE 2017 exercise to be held in Norway and information about the Initial Planning Conference that took place last week

What is SCOPE 2017?

SCOPE 2017 is a joint project between Norwegian Coastal Administration as the coordinator and the Swedish Coast Guard, the Royal Danish Navy, the Environment Agency Island, South-East Police district Norway and Intermunicipal Emergency Response Organisation (IUA) in Telemark. In addition, we are expecting other participating organizations during the exercise including resources from EU.



The detailed planning of the largest emergency exercise ever held in Norway has started. Last week all the participating countries and organizations met in Horten, Norway, for an initial planning conference.

Skagerrak Chemical Oilspill Excercise (SCOPE) is an international exercise, led by the Norwegian Coastal Administration (NCA), which has increased competence and national and international interaction in conjunction with accidents at sea as the main objective.

In week six the NCA arranged an initial planning conference for Scope2017 at the NCA emergency centre in Horten. The aim for the conference was to present a more detailed plan for the project, both

for those who are determined as participants and for potential participants. Furthermore, the two days were used to outline at the individual participant's goals, the basic training and scenarios. The way forward was also outlined in terms of distribution of activities and responsibilities.

Extensive exercise goals

The participants were presented with a main scenario for the exercise, which will unfold in the Skagerrak. Two vessels, one chemical tanker and an oil tanker, collide, and the accident leads to a series of incidents. These incidents will be the objectives for the exercise, such as oil spill operation, combating chemical leakage, evacuation and place of refuge, as well as practicing national and international cooperation agreements.

- Crisis management and collaboration during a serious vessel accident is the headline for SCOPE2017. In addition to the main objectives, networking was an important part for this conference. It helps to create an even better basis for further cooperation, both during the planning and in the implementation of the exercise, says project manager for Scope 2017, Stig Wahlstrøm.
- The participants were an attentive audience for the speeches, they worked eagerly and intensely during the workshop, and the chat went on in a lively way during breaks and during dinner. Thus, it was a successful conference, where we achieved what we hoped, says Wahlstrøm.

Read more about Scope2017: "Collects Europe for historical contingency exercise in Skagerrak"

Many participants

Attending the conference were representatives from a number of industries, organizations and authorities in Norway, as well relating agencies and organizations in Sweden, Denmark, Germany, Britain, the Netherlands and Iceland. Since the EU funds SCOPE2017, representatives from the European Maritime Safety Agency (EMSA) and the European Commission also attended the conference.

The conference in Horten is the first in a series of three planning conferences that will lead towards the final exercise, which runs from September 25th to 29th this year.

See photos of the conference participants at https://www.flickr.com/photos/scope2017/sets/72157680039328286

Contributed article

OIL SLICKS AND EMULSIONS JOINT STUDY

An article contributed by Ohmsett describes a recent research project, the National Oceanic Atmospheric Administration (NOAA) and Bureau of Safety and Environmental Enforcement (BSEE)



Photo: A rotocraft equipped with a thermal infrared sensor captured images of emulsified oil to validate the sensor's capabilities during the NOAA and BSEE funded remote sensing test.

From the sky, the water, and from vessels, remote sensing has changed the way the spill response industry has taken on the challenge of detecting, monitoring and measuring oil slicks. In a recent research project, the National Oceanic Atmospheric Administration (NOAA) and Bureau of Safety and Environmental Enforcement (BSEE) experimented with different methodology and tools to assess oil spills. This included accurately monitoring and measuring thickness of surface oil slicks with various sensors and platforms.

"The purpose of this work is to support the ongoing lessons learned from past spills by providing validation studies for surface oiling characterization efforts pursued under the Natural Resource Damage Assessment," stated George Graettinger of NOAA's Office of Response and Restoration. "It also gives us the opportunity to enhance these techniques for future spill response and related damage assessments."

For two weeks in July, NOAA and BSEE conducted a study using multiple remote sensing systems deployed using different mobile platforms at Ohmsett. The study was to compare and determine how well each of the systems detects, monitors, and measures oil slicks and emulsions in the marine environment.

"This first study at Ohmsett was focused on the identification of oil emulsions from aerial and satellite

platforms with a variety of sensors while simultaneously collecting in situ physical thickness and oil chemistry measurements in a controlled test environment," said Graettinger.

For the study, the Ohmsett staff had to create a large scale emulsified oil slick under natural but controlled conditions, and maintain it throughout 10 days of evaluations. This was the largest emulsified oil volume and slick ever used at Ohmsett. With 400 gallons of HOOPS oil (Gulf of Mexico pipeline oil) released on the test tank surface, it was left for four days of weathering from saltwater, weather, UV exposure, and evaporation. On the fourth day, waves were started to create shear energy for the emulsification of the oil. Waves were continued throughout the monitoring period of the study and varied in order to maintain the emulsions for the sensor and in situ measurements to be performed during the week.

During the study, the emulsified oil in the tank was viewed from multiple angles and heights with remote sensor systems mounted to the main bridge, an unmanned aerial vehicle, fixed-winged aircraft, and a helicopter. In addition three satellites equipped with a variety of sensors were tasked to fly over the Ohmsett test tank to capture high resolution remote sensing data with the physical sampling in the evaluation of the emulsified oil slick.

According to Graettinger, this initial phase of the study allowed the BSEE/NOAA team to fine tune in situ sampling methods, and gain a better understanding of sensor resolution and the impact of sensor altitude while characterizing surface oil emulsions. "These results will be taken forward this fall for a second phase of experiments where the same techniques will be used in the open waters of the Gulf of Mexico. These studies will provide BSEE and NOAA useful information to judge the most efficient remote sensing technologies and platforms for real-world response and effective damage assessment investigations going forward."

Links for recent issues of other publications (in alphabetical order)

AMSA Aboard

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IMO News Magazine

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News and commentary on HSE issues from George Holliday

Sam Ignarski's Ezine on Marine & Transport Matters

News from Cedre in Brittany, France

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News from the Mediterranean Oil Industry Group News from the North West Pacific Action Plan

Newsletter from the International Tanker Owners Pollution Federation

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News from the World Maritime University

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December 1-15, 2016
December 2016 issue
February 1, 2017
Spring 2016 issue
December 2016 issue

Your editor depends on regular receipt of updated links for listed publications. If these are not received, relevant entries may be discontinued

Upcoming events summary

COUNTRY	2017	TITLE OF EVENT	LOCATION
For more information click on Title of Event			
UK	Jan 16 – July 7	IMO Exhibition – 50 Years Gov't & Industry Co-op'n	London
UK	March 7	UK Spill Annual Members' Meeting and Dinner	London
TUNISIA	March 14-15	Oil Spill Preparedness Workshop with OSRL	Tunis
USA	March 28-30	2017 SCAA Annual Meeting & Conference	Washington DC
CYPRUS	April 6-7	East Med Marine and Oil & Gas Exhibition	Limassol
UAE	April 10-12	RECSO EnviroSpill 2017	Abu Dhabi
UK	April 24-28	April 2017 IOPC Funds Meetings	London
SINGAPORE	April 25-28	10th Intl Chemical and Oil Pollution (ICOPCE)	Singapore
UK & IRELAND	April 26-27	ISAA Spill Response Training Days, N. Ireland	Enniskillen
UAE	May 9-10	Offshore Arabia Conference & Exhibition	Dubai
USA	May 15-18	International Oil Spill Conference	Long Beach CA
USA	May 16	ISCO AGM, ISCO-BIMCO Presentation & Reception	Long Beach CA
BELGIUM	June 7-8	European Environmental Ports Conference 2017	Antwerp
UK	June 20-21	Wreck Removal Contracts & Operations Seminar	London
USA	June 27-28	Clean Waterways	Louisville KY
UK	July 3-7	IMO Marine Environment Protection Committee	London
CHINA	July 14	6th NOWPAP DELTA Exercise	Weihai
UAE	Nov. 13-16	Abu Dhabi Int'l Petroleum Exhibition & Conference	Abu Dhabi
USA	Dec. 5-7	Clean Gulf Conference and Exhibition	Houston, TX
	2018		
UK	March 13-15	2018 INTERSPILL Conference and Exhibition	London
To request pos	sting of an event of	interest to the Spill Response Community please send d	etails to the Editor

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