

ISCO & THE ISCO NEWSLETTER

The International Spill Control Organization, a not-for profit organization 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 Intergovernmental, Governmental, NGO's and interested groups and individuals

ISCO holds consultative status at the International Maritime Organisation and observer Status at International Oil Pollution Compensation Funds

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INTERNATIONAL NEWS

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IMO ASSISTS EFFORTS TO PREVENT AN OIL SPILL FROM FSO SAFER



IMO is contributing to international efforts aimed at preventing an oil spill from the deteriorating floating storage and offloading unit *FSO Safer* moored off the coast of Yemen. The Organisation is also leading on the contingency planning efforts aimed at enhancing preparedness to mitigate the environmental impacts of a potential spill.

IMO has mobilised a technical expert to develop contingency plan based on a variety of risk scenarios, which would play a key role in improving the efficiency, effectiveness and management of emergency response operations in the event of a spill from the *FSO Safer*.

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INTERNATIONAL NEWS (CONTINUED)

The contingency plan will outline the roles and responsibilities of key players and assist in coordinating the response. It will also clarify equipment requirements and locations of stockpiles and identify priority areas. IMO will also provide training to the relevant actors. The expert is currently working remotely in close communication with all relevant stakeholders.

IMO is offering technical advice to support the joint international efforts, led by the wider UN family*, to assess the current condition of the *FSO Safer* and examine ways to secure the 150,000 MT of light crude oil currently on board.

Following recent reports of water entering the engine room, it is considered that the risk of an oil spill from the *FSO Safer* is increasing. The floating storage and offloading unit, moored off the coast of Yemen, has not been inspected or maintained since 2015, leading to serious concerns about its integrity.

"While IMO is proactively working on contingency planning, it is hoped that international efforts will succeed in paving the way to assessing the state of the FSO and taking necessary measures, in order to prevent an oil spill from occurring", said Patricia Charlebois, Deputy Director, Subdivision for Implementation at IMO.

"In the case of oil spills, prevention is always better than cure. However, should these efforts fail, we want to ensure adequate preparedness measures are in place", she added.

Ms. Charlebois highlighted that the situation is particularly complex due to the conflict in the region and the COVID-19 pandemic. <http://www.imo.org/en>

*The UN entities involved include: *OCHA, UN Environment, UNOPS* and the *Office of the UN Special Envoy to Yemen*.

MAURITIUS OIL SPILL HIGHLIGHTS IMPORTANCE OF GLOBAL MARITIME LAWS: UN TRADE BODY

The devastating oil spill off the east coast of Mauritius has highlighted the need for global adoption of international legislation that govern the seas and protect small island states and their vulnerable marine ecosystems against ship pollution, UN trade body UNCTAD has stated.



In an [article](#) published this week, UNCTAD outlined how the unfolding environmental crisis in Mauritius shows the importance of having an effective international legal regime for when such disasters occur.

INTERNATIONAL NEWS (CONTINUED)

This framework is especially critical for small island developing states (SIDS) which face “an existential and developmental threat” from oil spills in their waters.

UNCTAD is the UN agency that supports developing countries in gaining fair access to the globalized economy.

Like Mauritius, SIDS are often close to global shipping lanes. These nations also rely on the marine environment - and its biodiversity - for tourism, fishing and aquaculture.

Although several international conventions govern the seas and how they are used, some are not ratified by all countries while others have yet to enter into force.

Furthermore, different ships are subject to different international legal conventions, which UNCTAD said presents a challenge in the Mauritius case.

As the MV Wakashio spill falls under [the International Convention on Civil Liability for Bunker Oil Pollution Damage](#), compensation for economic losses and environmental damage would be less than if the vessel had been an oil tanker.

While the Bunker Convention would provide for maximum compensation of around \$65.17 million, the payout would be four times higher, or \$286 million, under the applicable [International Oil Pollution Compensation Funds](#) regime.

Given the potentially high costs and wide-ranging environmental and economic implications of ship-source pollution incidents, UNCTAD again underlined the need for all countries to adopt the latest international legal instruments for the global good.

UN News / [Read more](#) Editor – Recommended reading – To gain a more detailed understanding of the relevant international conventions and their effects on liability issues visit <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2451>

On August 18 ITOPF released an interesting article giving a good overview of the ongoing situation – see <http://www.itopf.org/news-events/news/article/oil-spill-in-mauritius-update-18th-august/>

NEWS REPORTS FROM AROUND THE WORLD (COUNTRIES LISTED IN ALPHABETICAL ORDER)

AUSTRALIA: WESTERN AUSTRALIA CORAL REEFS HIT BY BLEACHING EVENT

August 19 - The Western Australian coral reefs have escaped land-based pollution compared to Queensland. With a low population and no intensive agriculture in this WA region, there is less harmful material washing off the land. Up until this summer, coral bleaching on the WA reefs were not highly significant. A sustain period of very warm oceans has caused bleaching on most of the reefs.

Tour boat operators, who currently have no tourists and no work, have been helping to survey the spread of coral bleaching. Reefs have between 10% and 30% bleaching but some were as high as 60%. It's a great shock that these once pristine reefs are being threatened. AUSMEPA / [Source article](#)

CANADA: VOLUNTARY SHIPPING PROTECTION ZONE TRIAL FOR HAIDA GWAII TO START IN FALL

August 17 - The Haida Nation, federal government and shipping industry will soon embark on a voluntary shipping protection zone trial for the west coast of Haida Gwaii.

Speaking at the virtual International Marine Conservation Congress (IMCC) on Aug. 17, Haida Marine Working Group planner Russ Jones, Transport Canada's Louise Murgatroyd and Robert Lewis-Manning of the Chamber of Shipping said the trial will start in September for a one year period.

Lewis-Manning said the trial, agreed to in June, will encourage vessels weighing 500 tonnes or more to observe a minimum distance of 50 miles from the west coast of the island with some exceptions. Vessels going between Pacific Northwest ports will be asked to observe a 25 nautical mile distance and cruise vessels will be asked to observe a 12 nautical mile distance. Tugs and barges will be exempt. Haida Gwaii Observer / [Read more](#)

INDIA: ASSISTANCE SENT TO MAURITIUS TO HELP CONTROL OIL SPILLAGE CRISIS

August 18 - In accordance with the 'Neighbourhood First' policy, a specialised team from India was rushed to Mauritius, not only to rescue people but also to extricate skimmed oil from the Japanese-owned cargo ship MV Wakashio.

Besides choppers, a 10-member technical response team from the Indian Coast Guard, equipped to deal with oil spills, was also dispatched to the southeast coast of Mauritius. The Indian rescue team, trained to deal with such situations, was there at the behest of Mauritius government. The technical equipment was sent via Indian Air Force's C-17 Globemaster. The Week / [Read more](#)

JAPAN TO SEND SECOND RELIEF TEAM TO MAURITIUS IN RESPONSE TO OIL SPILL

August 17 - The government said Monday Japan will dispatch a second disaster relief team to Mauritius this week in response to an oil leak from a Japanese freighter that ran aground off the Indian Ocean island nation last month. The seven-member team, including officials from the Environment Ministry and the National Institute for Environmental Studies, will leave Japan on Wednesday to help clean up oil and assist in grasping the environmental damage of the incident, the ministry said. The team will be dispatched at the request of Mauritius and will carry with them items such as sorbents to combat oil spills, the Japanese Foreign Ministry said.

The first relief team, consisting of officials from the ministry, the Japan Coast Guard, and the Japan International Cooperation Agency, has been already in operation since last week. The Japan Times / [Read more](#)

MAURITIUS: GOVERNMENT DRAWS CRITICISM FOR ITS HANDLING OF SPILL

August 16 - On August 7, nearly two weeks after the shipwreck, the government declared the incident a national emergency. With at least 1,000 tons of fuel oil estimated to have already emptied into the lagoon, two ships moved alongside to transfer off remaining fuel in a race against time as the vessel threatened to shear into two.

The Mauritian government has told volunteers to stop and leave any efforts to officials. But people and local organisations are carrying on their making and deploying booms, which is the only apparent action dealing with the oil floating on the sea. It seems better to risk a fine or arrest than to stop. And local sentiment seems to be unanimously negative about the government's slow response and lack of action targeting the slick.

Satellite evidence suggests in July 2020 the MV Wakashio had been on a clear direct collision course with Mauritius for several days and hit the reefs at Pointe D'Esny with ocean cruising speed maintained, meaning the government was again likely taken by surprise. The same evidence suggests it took six days for the government to even send out a tug to try to refloat the ship. The Maritime Executive / [Read more](#)

NIGERIA: SHELL WORKING TO ELIMINATE OIL POLLUTION IN NIGER DELTA THROUGH EFFECTIVE OPERATIONAL ACTIVITIES

August 15 - According to the "Nigeria Briefing Notes 2020," the SPDC JV, in 2019, reduced operational spills to its lowest levels and significantly reduced breaches from wellheads and cleaned up more spill sites than ever before. The energy company, in the review period, reported a decrease of 46.6 per cent or seven operational spills, relative to 15 spills recorded in the previous year of 2018. Not undermining illegal activities of oil theft, pipeline vandalism and others inhibiting a normal operating environment for its operations, the SPDC has remained resilience in accordance with its policy to eliminate spills from its operational activities. In fact, when a leak is identified, reports say the SPDC JV team responds to contain any of such spilled oil and clean up. In 2019, the company remediated 130 sites.

That said, there is no doubt that, as a company operating to the same technical standards as other Shell companies globally, there is still much work to do to get the company to its target of "Goal Zero" in all spills, operational and third-party vandalism.

But through a solid strategy, active partnerships, closer community engagements, bold security and new surveillance equipment, the SPDC has been steadily making good progress in the areas of performance, illegal activity, response and investigation, remediation and clean-up in Ogoniland. National Accord / [Read more](#)

SOUTH AFRICA: OFFSHORE REFUELLING DEEPENS FEARS FOR PENGUIN HAVEN

August 18 - Generators hum loudly in the background as a tour boat bobs past a towering vessel filled with ship fuel, anchored in Algoa Bay, a stone's throw away from the world's largest breeding colony of African penguins. Mid-way along the Europe- Asia sea route, the bay's deepwater port was an obvious choice for South Africa's first offshore bunkering operation. Since 2016, mostly cargo ships have pulled in for ship-to-ship (STS) refuelling, allowing them to carry more freight, bypass port fees and save time.

But conservationists, ecotour operators and nature lovers are alarmed about the longterm impact in a marine biodiversity hotspot and major foreign tourist magnet. They claim the bunkering takes place too close to foraging and breeding grounds, disrupting the ecosystem and exposing sea animals to oil spills. New Indian Express / [Read more](#)

UK: MAJOR CHANGES AND NEW DEVELOPMENTS AT UK SPILL

Having completed a marathon journey in leading UK Spill since its formation in 2004, Roger Mabbott has handed over his role to past UK Spill Chairman, Mark Orr – but will continue to be very much involved in the industry. Having now left UK Spill, Roger's focus will be on the continuing development of Eurospill and organising the Interspill Conference and Exhibition, scheduled to take place in Amsterdam in 2022.

Until the end of July, Mark was co-Chair of the Association and is familiar with all that has been happening within the Association which is now trading as UK Spill Association Ltd. He is looking forward to reaching out to members and working with them to shape and develop strategy for developing the organisation over the coming years.



Photo: Mark Orr, now leading the forward development of the UK Spill Association

The Association's close liaison with the Maritime and Coastal Agency is being maintained.

Mark looks forward to a good working relationship with ISCO and will be meeting with ISCO Secretary Matthew Sommerville after his return from Mauritius to discuss potential areas of co-operation.

UK Spill members have been invited to contribute to the updating of CIRIA 736. CIRIA is the Construction Industry Research Association and works alongside its members to produce guidance and best practice on Containment Systems for Prevention of Pollution.

UK Spill Association has also been in touch with the emergency teams at the UK's Department for Environment, Food and Rural Affairs (DEFRA), responsible for Chemical, Biological and Nuclear Incident Response and looking for a co-operative engagement with the private sector.

With current restrictions on face-to-face meetings, the Association is keen to develop a series of monthly webinars on topics that are key to interests of members and a number of suggestion have already been received.

With these and other new developments in the pipeline, UK Spill looks forward to an exciting future. Mark Orr, chairman@ukspill.org

USA: LATEST ACTIVITY REPORTS FROM NOAA OR&R

August 17 – Please click on the links below to read the latest News Reports from NOAA O&R

[NOAA and the Gulf States Marine Fisheries Commission Partner to Restore Recreational Fish](#)

NOAA's awarding \$870,592 to support a project working with recreational anglers aimed at restoring reef fish species impacted by the 2010 Deepwater Horizon oil spill.

[Support for Mauritius Oil Spill](#)

Effective immediately, NOAA will remotely support the global response to an environmental emergency in the Indian Ocean island nation of Mauritius, after the bulk carrier Wakashio ran aground on a coral reef on July 25. Several U.S. agencies involved in spill response were convened last week as part of the [National Response Team\(link is external\)](#) to answer a formal request from Mauritius under the [procedures for international spill response support\(link is external\)](#). Working through the State Department on Aug.12, the government of Mauritius accepted an offer of scientific and technical assistance from NOAA's Office of Response and Restoration.

[Oyster Shells into the Eastern Branch of Virginia's Elizabeth River](#)

If you ever wondered how oyster reefs are built, it involves a team of dedicated experts and a water cannon. Over the last month, barges have blasted 100,000 bushels of small fossilized oyster shells, called oyster hash, into the Eastern Branch of Virginia's Elizabeth River.

[OR&R Participates in NOS Zero Waste Challenge](#)

On August 10, the National Ocean Service (NOS) launched a Zero Waste Challenge. The NOS Zero Waste Initiative, supported by the Marine Debris Program, was created to reduce the amount of waste, especially single-use items, that we generate in our daily office operations and at NOS events.

[Portland Harbor Trustees Propose Innovative Restoration Banks to Help Resources Recover from Pollution](#)

NOAA, and the state, federal, and Tribal Trustees working on restoring habitat and resources impacted by the [Portland Harbor hazardous waste site](#) in Oregon have released a [Draft Supplemental Restoration Plan and Environmental Assessment\(link is external\)](#) for public comment.

YEMEN: IMPASSE LEAVES 'TIME BOMB' OIL TANKER OFF YEMEN

August 16 - Huthi rebels and the UN are again at an impasse over a loaded oil storage tanker decaying off Yemen, despite parallels to this month's catastrophes in Beirut and Mauritius. Hicham Charaf, foreign minister in the Huthi administration which is not internationally recognised, said Saturday the dispute now centres on the process for repairing the tanker. The rebels insist that a UN inspection team evaluates and repairs the vessel in a single visit, he said. Macau Business / [Read more](#)

YEMEN: GOVERNMENT REJECTS HOUTHIS EXTRACTION OF OIL FROM 'SAFER' TANKER

August 18 - Yemen's internationally recognised government on Wednesday rejected conditions set by Houthi rebels to extract oil from a rusting tanker off the country's western coast. The rebels have their eyes set on the million barrels of crude oil stored in the FSO Safer tanker. In exchange for the oil, the rebels said they would allow a group of UN experts to board the ship for inspection. The National / [Read more](#)

CORRESPONDENCE

LETTER FROM GERALD GRAHAM – MAURITIUS APPEAL FROM MALINA CHEENEEBASH IN LAST WEEK'S ISCO NEWSLETTER

“Regarding the request in the latest newsletter, I contacted a fellow marine expert at ESRI, who recommends that Ms. Malina Cheeneebash contact ESRI's Disaster Response Program. Their Twitter handle is @esridrp . Hope this helps. Please pass the info on to her, because no contact info for her was provided in the notice. I will, however, try to contact her via social media”.

Gerald Graham, Victoria, British Columbia, Canada. World Ocean Consulting. geraldgraham@gmail.com

LETTER FROM TIM NEDWED, PHD, PE, OIL SPILL RESPONSE SENIOR TECHNICAL PROFESSIONAL ADVISOR, EXXONMOBIL

ExxonMobil has coordinated a dispersant workshop at Ohmsett annually since 2018. Ohmsett has an excellent space for a large group meeting but more importantly it provides attendees the opportunity to observe dispersant-effectiveness tests firsthand. Unfortunately, the travel restrictions forced us to cancel this year's workshop. Instead we intend to hold a virtual workshop via a series of webinars starting in September.

The goal of the workshop / series of webinars is to provide a setting to communicate knowledge / perspectives on why dispersants are an important contingency planning tool, dispersant efficacy, and oil / dispersed oil behavior, fate and effects as well as new understandings in these areas. In addition, I've included one webinar focused on herders. The webinar series will be an opportunity for industry experts, academics, oil spill responders, and oil spill response experts to discuss these things with a hopefully very broad audience.

Anyone interested in participating should email me: tim.j.nedwed@exxonmobil.com

SCIENCE & TECHNOLOGY

POLARIZED THERMAL HYBRID CAMERAS FOR IMPROVED DETECTION OF OIL SPILLS

It's been known for many years that an oil spill can mean disaster for an ecosystem. One need only to go back to 2010 and see the damage caused by the Deepwater Horizon oil spill in the Gulf of Mexico to see how it decimated the coasts of Florida, Alabama, Mississippi, and Louisiana. Covering an area the size of the state of Oklahoma, oil spill detection in this situation became a top priority to contain and respond to the damage. The shock of the disaster drove a national effort on the part of both governmental organizations and private industry to improve both our containment capabilities and also our oil spill detection capabilities.

During this time Polaris Sensor Technologies was working on a disruptive technology to add polarization data to thermal imaging and in 2015 introduced the Pyxis camera, a combined infrared/polarization based camera that allows for improved detection capability of oil spills and other petroleum based products. Pyxis takes both long wave infrared (LWIR) data and polarization data at the same time from the same image and combines them. Why is this an important accomplishment? Because there are times when LWIR radiation provides a stronger signal allowing for easier detection of an oil slick. However, there are also many times such as night time or when oil has reached thermal equilibrium with the surrounding water when polarization gives a stronger signal. Up to 2015, the added detection capability of polarization wasn't an option because imaging systems with polarization imaging capability didn't exist. You had thermal imagery, radar, and not much else. Now, with the addition of polarization data to LWIR thermal imagery data, a much stronger and more reliable signal can be detected since polarization won't detect seaweed and other biological matter that often results in false positives when using just LWIR data alone.

When comparing the two methods on their own, polarization by itself usually provides a stronger signal over a wider variety of conditions than is provided by LWIR thermal imagery. However, the Pyxis camera combines the two methods allowing for the viewer to see only the infrared image, only the polarization image, or a superimposed image where both thermal imagery and polarization imagery are displayed at the same time. This means that it doesn't matter which type of signal is stronger at any one moment because both sets of data are captured in the same image.

A great deal of research has gone into determining these performance parameters. A series of tests were carried out in 2017 at the Ohmsett National Oil Spill Response and Renewable Energy Test Facility located in Leonardo, New Jersey, USA. Figure 1 below shows the differences in performance between visible, thermal, and polarization based cameras at three different times of day 3:27 PM, 5:17 PM, and 9:27 PM. Each of the images shows 2 floating "boxes" which are simply 4 walls with no bottom containing oil on top of water in a pool. These walls help prevent the oil from leaking out into the surrounding pool water. As expected, the visible camera shows good contrast between the oil (black) and the water (clear in a yellow colored pool) at 3:27 PM and 5:17 PM but just shows a black screen after sundown in the picture taken at 9:27 PM.

The thermal imagery shows relatively weak contrast in all three pictures between the gray water and the lighter gray oil but at least you get some image at night time when compared to the visible camera. However, polarization gives a consistently strong contrast of black oil on gray water at all times of day.

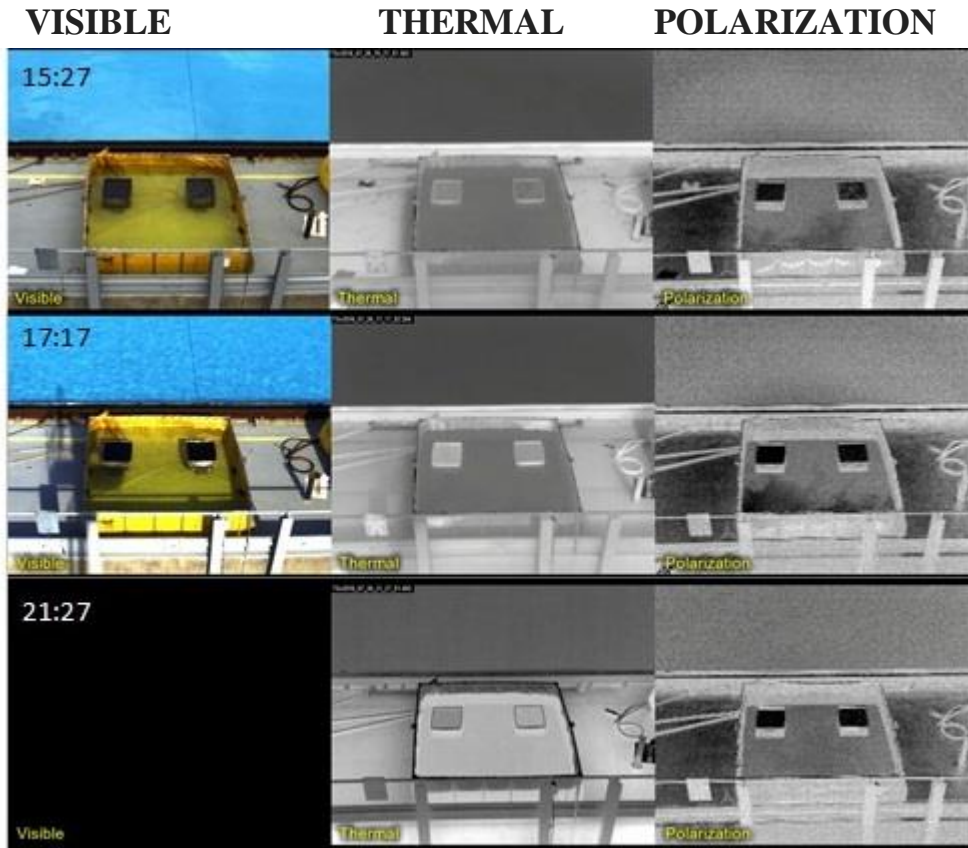
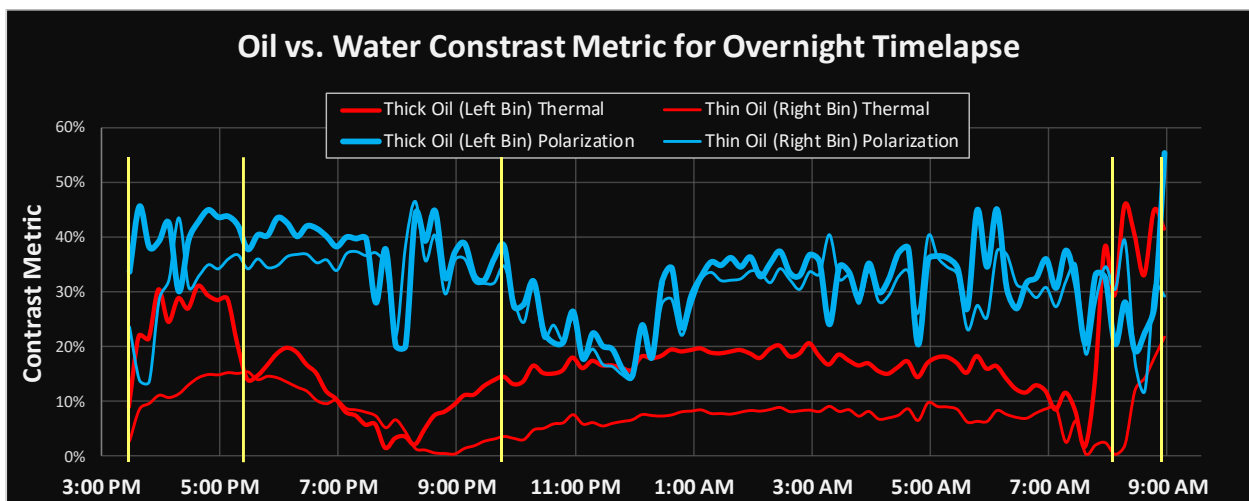


Figure 1. Comparison of visible, thermal IR, and polarization imagery of oil on water at the Ohmsett Oil Spill Response facility operated by the Bureau of Safety and Environmental Enforcement (BSEE) and examined thick (on the left) and thin (on the right) oil floating on water in 2017.

Figure 2 below compares thermal IR (red) and polarization (blue) camera imagery contrast of the oil vs. water signal taken from the same test as shown in Figure 1. A test to show night time performance between thermal imagery and polarization imagery was conducted from 3:00 PM in the afternoon to 9:00 AM the following morning. This test shows that there was superior contrast obtained by polarization as opposed to thermal IR imagery at almost all times during the entire 18 hour test. A small window of time occurred when the rising sun heated up the oil faster than the water resulting in thermal imagery having a stronger contrast starting somewhere around 8:00 AM but by 9:00 AM the polarization imagery once again showed a stronger signal than did the LWIR data.



So Figures 1 and 2 show the results in calm water. What happens when wave action complicates the situation? Figure 3 below shows the difference in performance of visible, thermal, and polarization imagery in the presence of waves. The result shows that, if you didn't know to look for oil in the image, then you wouldn't know that a contaminant was in the water in either the visible or the

thermal imagery. Only the polarization image provides a strong enough contrast to make it obvious that some kind of contamination exists. In addition, it was expected that the oil would stay in the "boxes" shown in the middle of the image. However, very shortly after the wave pool was turned on, the oil quickly migrated out of the containment boxes and spread over a much larger surface area and polarization was easily able to clearly show the spread.

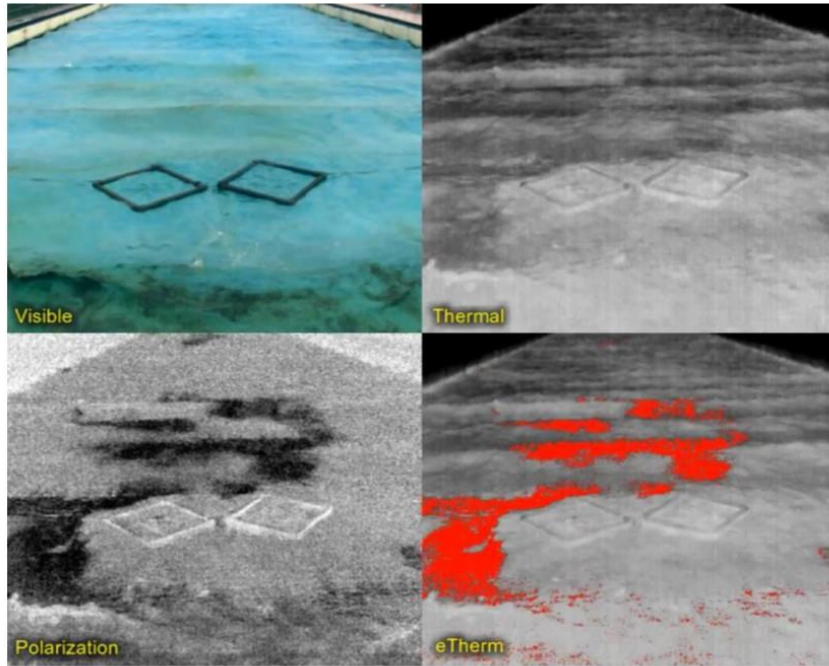


Figure 3. Detection capability of visible (upper left), thermal (upper right), and polarization (lower left) and the combined IR/polarization signal (lower right) in breaking waves.

Detecting solid oil slicks on the surface of the water is one thing, but very often oil doesn't form a solid sheet and becomes emulsified. In a real oil spill, floating oil ages and changes properties significantly due the action of UV radiation and wave action. As the water content increases, the oil becomes emulsified and detection can change significantly, in particular IR detection can suffer dramatically. Polarization yields significant benefits under these conditions also. One of the tests conducted during our Ohmsett research created emulsified oil by leaving oil on the surface of a calm pool for several days exposed to the sunlight so that any chemical changes caused by UV radiation had time to take effect. One hour before the test was conducted the wave generator was turned on. After this one hour period the image below shown in figure 4 was taken. Despite the mixing and emulsifying that occurs from the wave action, it can be seen that a strong signal is obtained in the visible waveband and that polarization also strongly identifies the oil but thermal imagery is unable to clearly identify the oil in the water.

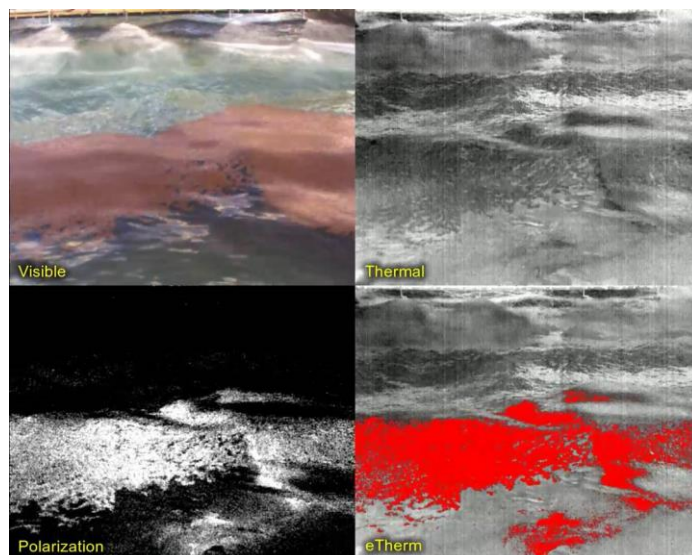


Figure 4. Detection capability of visible (upper left), thermal (upper right), and polarization (lower left) and the combined IR/polarization signal (lower right) when dealing with emulsified oil.

SCIENCE & TECHNOLOGY (CONTINUED)

A chart showing a summary of oil detection testing results from Ohmsett and other testing is presented here.

Description	LWIR camera only	Polarization enhanced LWIR
Well understood technology	Yes	Yes
General availability of camera	Multiple sources	One source
Strong signal with temperature difference	Yes	No effect on performance
Strong signal with no temperature difference	No	No effect on performance
Strong night time performance	No	Yes
Strong performance in waves	No	Yes
Strong performance in rain	No	No
Strong detection of emulsified oil	No	Yes
Strong performance in warm, low clouds	No	No

These tests and others not mentioned here show that, in most situations, polarization imagery gives a much stronger signal when trying to detect oil on water than does thermal IR imagery. However, the Pyxis camera from Polaris Sensor Technologies doesn't make you choose between polarization or thermal imagery because Pyxis gives you both. The Pyxis thermal/polarization hybrid camera captures the LWIR data as well as the polarization data in a single image and allows the user to view just the thermal, just the polarization, or both combined into a single image called eTherm.



The testing above shows that Pyxis provides better detection capabilities for oil on water at night, in both calm water and under breaking waves, and when the oil has become emulsified. Other less rigorous tests imply that vegetation and water fowl that have oil on them can also be identified by Pyxis (it is difficult to ethically do this testing on a large scale).

Small enough and light enough (fits in a 4" x 2" x 2" envelope, weighs less than one half pound) to fit on a drone but robust enough to endure constant salt spray when mounted on an oil rig in the open ocean, the Pyxis camera is a leap forward in oil detection and is a valuable tool for use in our efforts to keep our waterways and coastlines clean and the ecology healthy. More info: john.rauseo@polarissensor.com

WEBINARS & ONLINE TRAINING

INDIA: SPILL PREPAREDNESS & RESPONSE READINESS DURING A CRISIS

Oil Spill India is Pleased to Announce & Welcome onboard Mr. Arun Mittal, Executive Director, Oil Industry Safety Directorate (OISD) For Our Upcoming Online Leadership Panel Discussion on "Spill Preparedness & Response Readiness During A Crisis!" Scheduled For 27th Aug 2020, 15:30 Hrs. [More info](#)

INDIA: VIRTUAL CONFERENCE: TECHNOLOGIES & SOLUTIONS FOR OCEAN CLEANUP - SEPT 18, 2020 (FRIDAY) 10:30 AM TO 5:00 PM (+5:30 GMT)



Topic: THE CHALLENGES AND OPPORTUNITIES OF CLEANING OUR WATERS 11:40 AM - 12:20 PM (Indian Time) 2:10 - 2:50 PM (Hong Kong Time) Speaker: Doug Woodring (Pictured on right), Founder, Managing Director, Ocean Recovery Alliance

Topic: SUSTAINABLE APPROACH TO REDUCE & REUSE OF PLASTICS: 01:00 PM - 01:40 PM Speaker: D C Sekhar (Pictured on left), Director, AlphaMERS Ltd. and Member of ISCO Council for India.



Over 100 million marine lives die due to the ocean plastic waste and over 5.25 trillion pieces of plastics waste are estimated to be in our oceans which is a new disaster challenging to us.

There are many issues, policies and technologies working for the ocean cleanup and marine solutions. We have made more plastics in the last 10 years than the last century, but littering and unorganized management has led us into the worst situation so far as the ocean situation is concerned.

This virtual conference will cover the entire ecosystem, issues and solutions of ocean plastics waste in the world. [More info](#)

UPCOMING EVENTS

Event organisers are requested to notify ISCO immediately if a listed event is cancelled or postponed

Your Editor is doing his best to keep this listing up-to-date but it should not be assumed that listed events have not been cancelled or postponed. It is recommended that you check with event organisers before finalising your attendance plans.

If an event title is not printed in blue ink it is not hyperlinked to the event website. This may be because the website is not yet available or because the link for the website has not yet been sent to the Editor.

COUNTRY	2020	TITLE OF EVENT	LOCATION
For more information click on Title of Event			
ESTONIA	August 25-27	BALEX DELTA 2020 pollution response exercise	Talinn
USA	CANCELLED	Oil Spill Response Strategies & Tactics Training	Leonardo, NJ
ONLINE	Sept. 15-17	Ecoforum Conference & Exhibition (Virtual)	Internet

INDIA	POSTPONED	Oil Spill Conference & Exhibition	Mumbai
ONLINE	September 16	UK Spill Annual General Meeting	Internet
ICELAND	Sept. 28-30	International Symposium on Plastics in the Arctic and Sub-Arctic Region	Reykjavik
MALTA	October 6-7	Regional Meeting of National Experts on the Post-2021 Mediterranean Strategy for Prevention of and Response to Marine Pollution from Ships	Valetta
UK	October 12-13	El Hazardous Area Classification	London
UK	October 19-23	IMO Marine Environment Protection Committee	London
USA	October 20-22	Clean Gulf Conference & Exhibition	San Antonio, TX
ONLINE	October 27-29	Arctic Shipping Forum North America	Internet
MONACO	October 27-29	Regional Workshop to enhance Marine Oil and HNS regional cooperation in the Mediterranean (MEDEXPOL 2020)	Monaco
NETHERLANDS	November 4-5	European Environmental Ports Conference 2020	Rotterdam
UK	December 2-3	Salvage & Wreck Removal Conference	London
UK	December 2-4	Meetings of the IOPC Funds' Governing Bodies	London
BAHREIN	December 7-8	El Middle East HSE Forum	Bahrein
COUNTRY	2021	TITLE OF EVENT	LOCATION
FRANCE	March 23	CEDRE Information Day on Containers	Paris
USA	May 10-13	International Oil Spill Conference (IOSC 2021)	New Orleans, LA
MALTA	May 25-27	Fourteenth Meeting of the Focal Points of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)	Valetta
CANADA	June 8-10	43rd AMOP Technical Seminar on Environmental Contamination and Response	Edmonton, Alberta
USA	June 28-30	Clean Pacific Conference & Exhibition	Seattle, WA
USA	September 7-10	Hazmat Emergency Response Workshop	Sacramento, CA
COUNTRY	2022	TITLE OF EVENT	LOCATION
NETHERLANDS	Details TBA	Interspill Conference & Exhibition	Amsterdam

CONTRACTS, TENDERS & BUSINESS OPPORTUNITIES

INTERNATIONAL OPEN TENDER NOTIFICATION SERVICE

This is a subscription service. [Have a look to see examples of open tenders.](#)

OTHER OPPORTUNITIES: USA & EUROPE

USA - Government solicitations are frequently posted in Technology Innovation News Survey and US EPA Tech Direct.

EUROPE – European Maritime Safety Agency invitations to tender are often posted in The EMSA Newsletter.

See “Links for other publications” for links to download current issues.

ISCO Members are welcome to post tender invitations in this section.

LINKS FOR DOWNLOADING & READING OTHER PUBLICATIONS

ALGA Cronicle	News from Australasia on Contaminated Land Remediation	April 2020
AMSA Update	Latest News from the Australian Maritime Safety Authority	Current issue
ATRAC Newsletter	News from the Adriatic Training and Research Centre	December 2019
AUSMEPA Bulletin	News from the Australian Marine Environment Protection Assoc'n	Summer 2020
BIMCO Bulletin	Marine and shipping-related news from BIMCO	June 2020
Newsletter from George Holliday	News and commentary on HSE issues from George Holliday	On request email
Cedre Newsletter	News from Cedre in Brittany, France	June 2020
Clean Nigeria Associates Newsletter	News from CNA about Oil Spill Response in Nigeria	Publication paused
EMSA Newsletter	News from the European Maritime Safety Agency	Current issue
Environmental Expert	Environmental News from Environmental Expert	Current issue
GEF Newsletter	Monthly Newsletter from the Global Environment Facility	Subscription
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection	Latest news
GISEA Quarterly Newsletter	News from Global Initiative for South-East Asia	Q2 2020
IMO News Magazine	News from the International Maritime Organization	Summer 2020
IMO Publishing Newsletter	New and forthcoming IMO publications	June-July 2020
ITOPF Ocean Orbit	News magazine from ITOPF with interesting spill response articles	October 2019
JOIFF Catalyst Newsletter	Int'l Organisation for Industrial Hazard Management	Q3 2020 issue
Maritime Executive Magazine	Often contains articles of interest to the spill response community	March–April 2020
MEDNEWS	News from UNEP Mediterranean Action Programme	02 / 2020
MOIG Newsletter	News from the Mediterranean Oil Industry Group	January 2020
NCEC Newsletter	News from the National Chemical Emergency Centre	March 2020
Nautical Institute News	News from the Nautical Institute	Jan.–Feb. 2020
Navigate Response	Global crisis communications network for shipping & marine	June 2020
NOAA OR&R	Weekly round-up of news from NOAA's Office of Response & Restoration	Latest issue
Oceanbuzz	Newsletter giving news on the Ocean Technology Industry	Current issue
OCIMF Newsletter	News from the Oil Companies International Marine Forum	July 2020
OHMSETT Gazette	Oil Spill Response Research & Renewable Energy Test Facility Quarterly	Spring 2020
OSPAR Newsletter	Protecting & Conserving the N.E. Atlantic and its resources	End of year 2019
PEMSEA Newsletter	Healthy oceans, people and economies in the East Asian Seas	March 2020
Pollution Online Newsletter	News for pollution prevention & control professionals	Current issue
Safe Seas, Clean Seas	Quarterly Newsletter from Maritime New Zealand	July 2018 issue
Salvage World	Quarterly Newsletter of the International Salvage Union	Current issue
Sea Alarm Foundation Newsletter	Oiled wildlife Preparedness and Response news from Sea Alarm	Current issue
Technology Innovation News Survey	News from US EPA – Contaminated Site Decontamination	July 1-15, 2020
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	August 1, 2020
WestMOPoCo	Western Mediterranean Region Marine Oil & HNS Pollution Cooperation	January 2020

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

INCIDENT REPORTS

MAURITIUS: RESPONSE ACTIVITIES CONTINUE AFTER THE GROUNDED BULKER WAKASHIO BROKE. UNFORTUNATELY AN EARLIER REPORT THAT ALL THE REMAINING OIL IN THE AFT SECTION HAD BEEN REMOVED HAS PROVED TO BE INCORRECT.

August 16 - The salvage crew had been planning for this contingency and they had a plan in place to secure and tow the forward section. The aft section remains firmly on the reef and will likely be scrapped there. In addition, fearing further oil leakage after the vessel split, additional booms had been deployed and the coast guard and skimmers were reportedly on standby in the area. The fear now is that the weather is going to worsen in the area. The Mauritius Meteorological Services warns that the waves will reach a maximum height of 4.5 meters in the coming days. The rough seas hold the potential to further disperse the oil that was spilled from the Wakashio and hamper the efforts to clean up the oil spill. [BBC News / Read more](#)

August 16 - Experts and volunteers scramble to save Mauritius's wildlife after oil spill. International experts and thousands of local volunteers were making frantic efforts on Sunday to protect Mauritius's pristine beaches and rich marine wildlife. Scientists say the oil has already reached exceptional zones of marine life, including the Ile aux Aigrettes nature reserve and the Blue Bay Marine Park, a unique coastal wetland recognised for the diversity of its coral and fish species, as well as for the endangered green turtle. [The Guardian / Read more](#)

August 16 - India dispatches over 30 tonnes of technical equipment to help Mauritius to contain oil spill. India has dispatched over 30 tonnes of technical equipment and material on board an IAF Aircraft along with a 10-member Technical Response Team to assist Mauritius in its ongoing oil spill containment and salvage operations. [Yahoo News / Read more](#)



Wakashio shortly after it broke - courtesy of the IMO

August 17 - 166 Tons Of Fuel Oil Still Aboard - Most of the oil from the vessels has been pumped out, the Mauritian government said on Thursday, but there was still 166 tonnes of fuel oil inside and authorities were working to remove it. gCaptain / [Read more](#)

August 17 - Weather Hampers Wakashio Recovery While Panama Defends Registry. As expected, deteriorating weather conditions in Mauritius have begun to hamper the efforts at the site of the bulk carrier Wakashio which has now broken in two. Rough seas have also been dispersing the oil while the strong surf has sent parts of the barriers deployed to catch the oil up on to the shore itself. At the same time, Panama spoke out about the accident defending its registry of the Wakashio. The Maritime Executive / [Read more](#)

August 18 - The bow section of the Wakashio bulk carrier is being towed eight nautical miles to an area with 2 km depth with its hatches open, while the stern of the Japanese vessel remains on a reef off Mauritius, with salvors waiting for the bad weather to pass. Splash 247 / [Read more](#)

August 18 - The Mauritius government has closed off the coastal area of the eastern part of the island, where thousands of civilian volunteers worked for days to try to minimize damage to the Mahebourg lagoon and protected marine wetlands polluted by the spilled fuel. Phys Org / [Read more](#)

August 18 - Mauritius Oil Clean-up Turns Focus From Ship To Shore. “As most of the spilled oil at sea has been collected, we are moving into the next stage, with the focus on cleaning up the seaside and minimizing the environmental impact,” Keiji Takechi, deputy team leader, told an online news conference from Mahebourg, Mauritius. gCaptain / [Read more](#)

August 18 - MV Wakashio captain arrested. He will be held in a police cell until he returns to court on 25 August. Police said crew members questioned as part of their investigation informed them there had been a birthday party on the ship the day it ran aground. Another theory being investigated is that the ship navigated close to the shore in order to pick up WiFi signal, the BBC's Yasmine Mohabuth, in Port Louis, reports. BBC News / [Read more](#)

August 18 - In order to assist the local effort, the vessel's insurers have appointed Le Floch Dépollution to take charge of the clean-up operation. Le Floch are highly regarded responders from France, with extensive experience of organising and conducting oil spill clean-ups, particularly on shorelines. ITOPF / [Read more](#)

August 18 - Experts from Strathclyde are providing vital data modelling after a huge oil spillage off the coast of Mauritius in the Indian Ocean. Mechanical Engineer Dr Kamila Nieradzinska and Environmental scientist Dr Kieran Tierney from the University of Strathclyde, have been carrying out oil spill modelling in a bid to forecast the oil spillage directions in the surrounding waters and identify the zones most impacted. Strathclyde University / [Read more](#)

August 18 – An expert from CEDRE and those from Ceppol have arrived in Mauritius. They are placed with the Mauritian authorities at the pollution control centre. CEDRE / [Read more](#)

INCIDENT REPORTS (CONTINUED)

August 20 - British experts help Mauritius protect coral reefs from oil spill. The UK Government has sent three British ecology experts and one marine legal expert to Mauritius to support the next phase of the country's response. The scientists, from the UK's Centre for Environment, Fisheries and Aquaculture Science (Cefas) and funded by UK aid, flew from the UK on Wednesday evening (19 August) at the request of the Mauritian Government. UK Government / [Read more](#)

August 20 - Mauritius Proceeds to Scuttle Wakashio with Support From British Team. Mauritius is proceeding with its efforts to clear away the impact of the grounded bulker Wakashio. In its latest actions, supported by experts from the UK, efforts proceeded to scuttle the ship despite the concerns voiced by residents and environmental groups. The salvage team have confirmed to the committee that all the hydraulic oil as well as debris that could float away from the forward section have been removed from the vessel. The Maritime Executive / [Read more](#)

August 20 - Recovery Fund to Be Set Up By the UN to Support Mauritian Fishermen. The United Nations (UN) intends to set up a Recovery Fund to support the Government of Mauritius and the local communities following the oil spill which resulted from the grounding of the bulk carrier MV Wakashio at Pointe d'Esny. As such, assistance will be extended in particular to the fishermen whose livelihoods have been affected by this oil spillage. Government of Mauritius / [Read more](#)

August 21 - Wakashio bow section sunk. Malta-flagged 2007-built Boka Expedition and 2005-built Boka Summit – towed the bow section and sank it 16 km south east of the island, according to satellite imagery from Maxar Technologies. There are fears the wreck has been disposed of in what is a nursing ground for whales during the southern Indian Ocean migration season. Riviera / [Read more](#)

August 21 - Mauritians Launch Rescue to Save Wildlife from Oil Spill. Conservationists at the Mauritian Wildlife Foundation (MWF) had started preparing for the eventuality of spreading oil as soon as the ship ran aground, and they swiftly implemented a well-rehearsed plan to evacuate some of the animals and plants that were most at risk. "We had to relocate critically endangered species first, then we moved to endangered ones," says Vikash Tatayah, MWF's conservation director. Scientific American / [Read more](#) [Thanks to Marc Shaye MISCO]

Aug 22 - Why the Mauritius Oil Spill Needs an Independent Investigation. Satellite evidence showed the Wakashio was on a collision course to Mauritius, hitting the reefs at Pointe D'Esny at ocean-cruising speed. Its route clearly deviated from the traffic that usually passes by the island. The Maritime Executive / [Read more](#)

FRANCE: TONNES OF DEAD FISH CLEANED FROM FRENCH RIVER AFTER NESTLÉ SPILL: 'A SPECTACLE OF DESOLATION'

August 17 - Thousands of fish were found dead on the banks and in the Aisne river near Brécy-Brières in northeastern France on August 10. Local fishermen place the blame on waste runoff from a Nestlé factory in Challerange less than three kilometres away. Volunteers, firefighters and fishermen spent three days clearing the remains of the fish from the river. Observers / [Read more](#)

VENEZUELA: MORE NEWS FROM CARLOS SAGRERA ON THE REFINERY SPILL



August 21 – "Without any official information about this spill (ISCO Newsletters N° 748-749) here enclosed some links with the last references from the National Assembly, the Scientific Associations and the Venezuelan Universities and especially the journalistic reference of the spill evaluation report from the Simón Bolívar University that confirms the origin in the El Palito Refinery".

<https://www.minuto.com.mx/internacionales/2020/8/16/desastre-ecologico-grave-derrame-de-petroleo-en-las-costas-de-venezuela-2650.html>

<https://presidenciave.com/regiones/derrame-petrolero-se-convierte-en-tragedia-en-riesgo-cientos-de-especies-de-flora-y-fauna-en-venezuela/>

<https://twitter.com/SVEcologia> [Thanks to Carlos Sagrera, MSC, MISCO]

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