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ITAC – Dispersants in a Response

George Stafford / Dave Redington

Oil Spill Response

Agenda

- Why use Dispersants
- Application Systems
- Dispersant Stockpiles
- Logistics
- Stockpile Readiness
- Questions

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Why Dispersants?

The advantages of a dispersant strategy…

- Response Speed: can be transported and applied by aircraft, travelling at speeds more than 25 times faster than vessels.

- Encounter rate: Aerial application allows slicks to be treated at 100 ~ 150 kts compared with 1-4 kts for mechanical recovery

- Subsea spills: can be applied 24/7 in almost all weather conditions to treat the oil and keep it from surfacing near the spill site, protecting responders from volatile hydrocarbons.

- Mechanical recovery efficiency: Historically, booms and skimmers have only recovered a small fraction (2 ~ 6%) of any large offshore oil spill.

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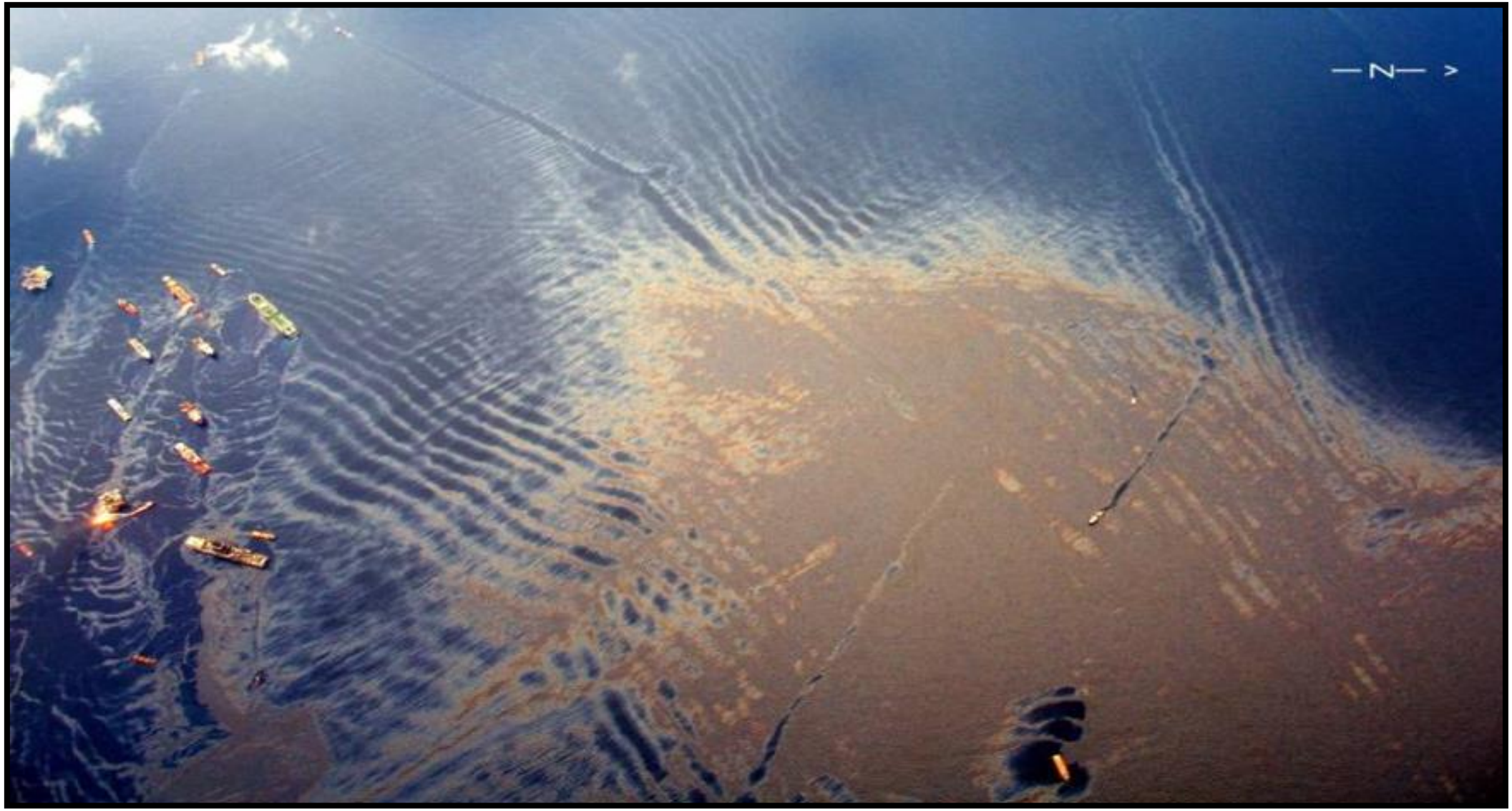

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Net Environmental Benefit Analysis (NEBA)

- Evaluate the benefits and drawbacks of potential response options
- Benefit vs damage of clean-up
- Dispersant is one option in the toolbox

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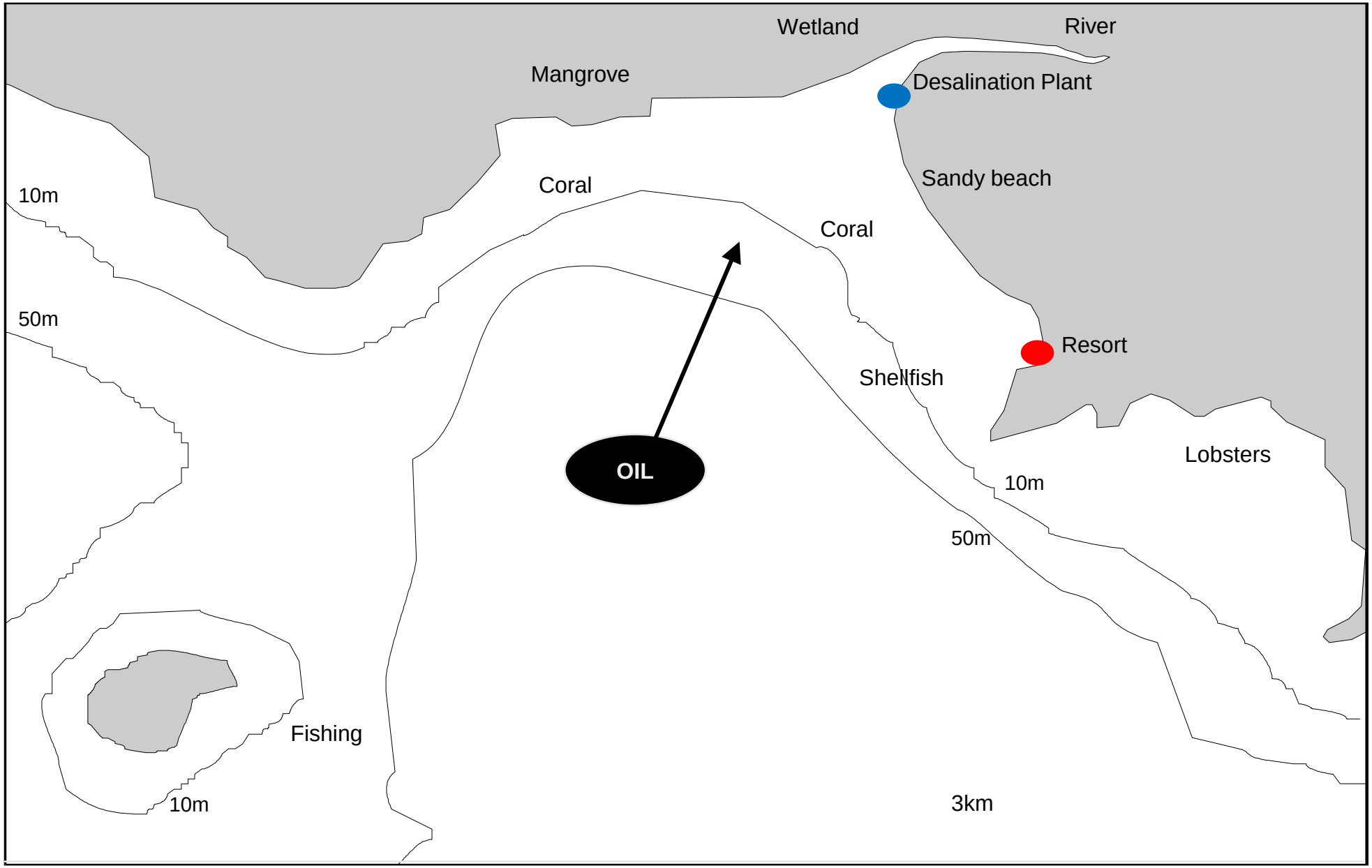

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Application Systems

- Boat Spray Systems

- Spray Arm Systems

- Active Boom Systems

- Aerial Application Systems

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Application – Boat Spray Systems

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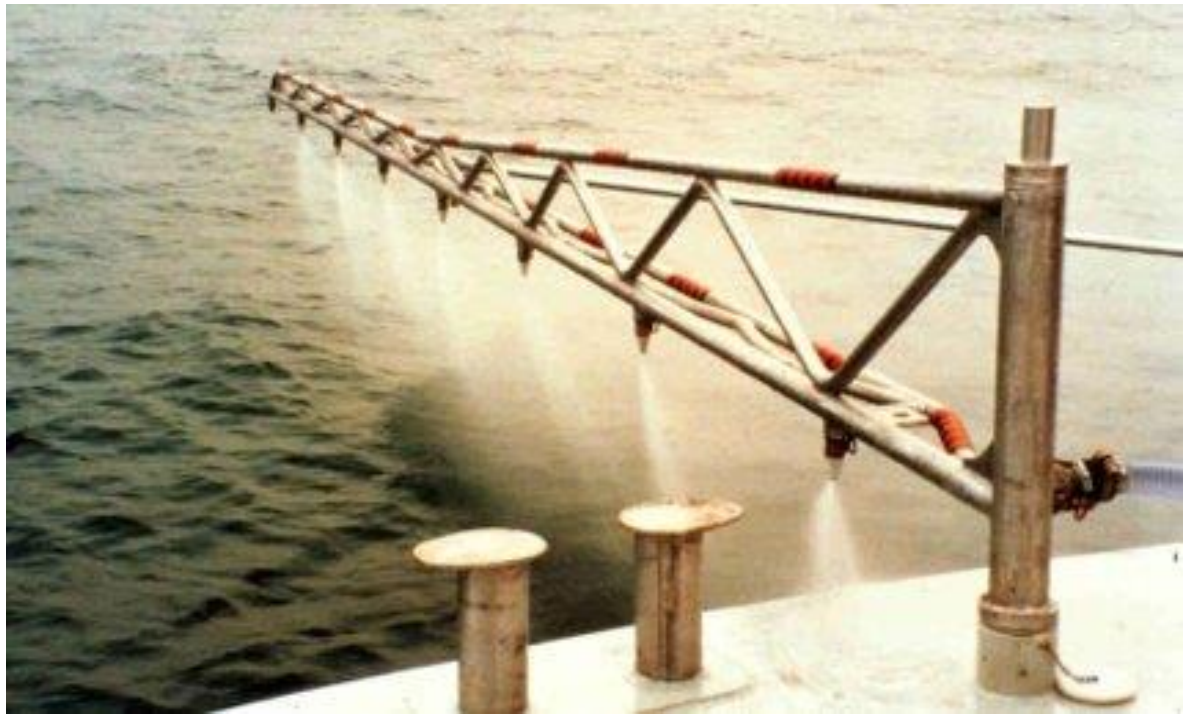
Application - Spray Arms



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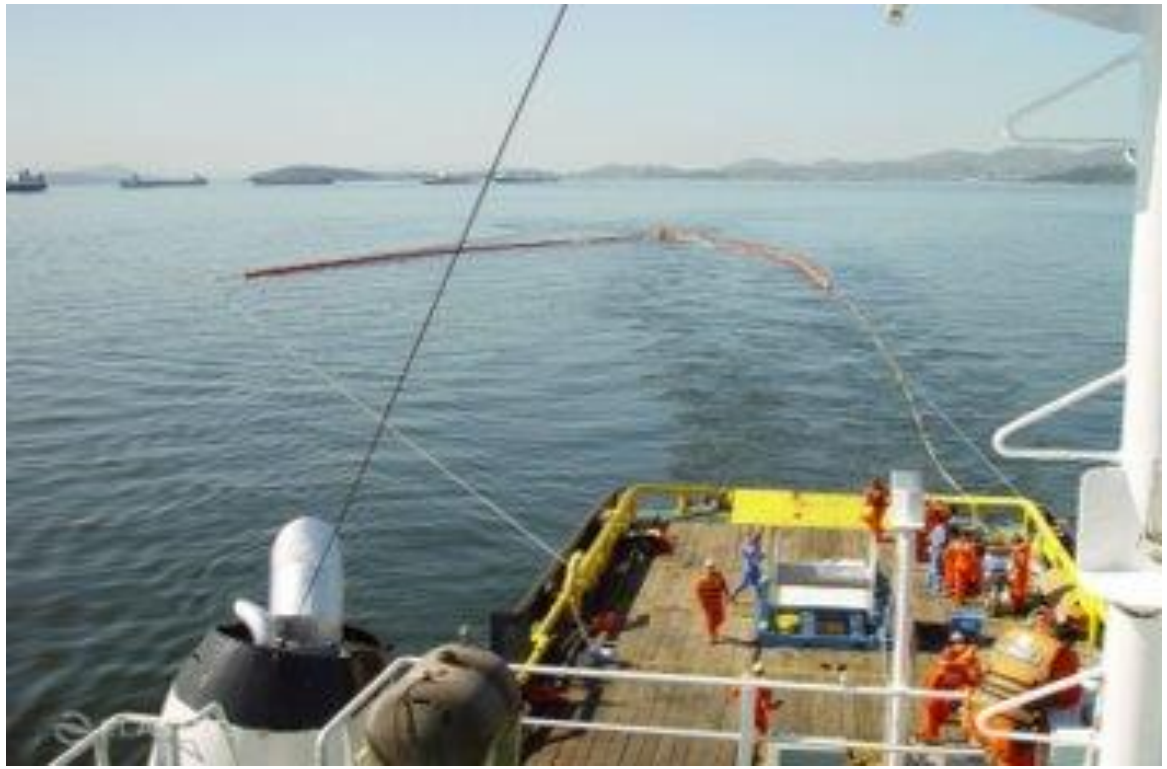
Application – Active Boom Systems



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Application – Aerial Platforms

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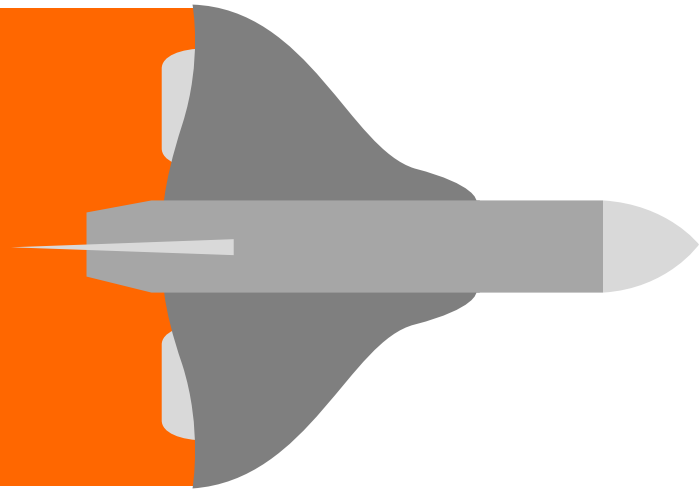
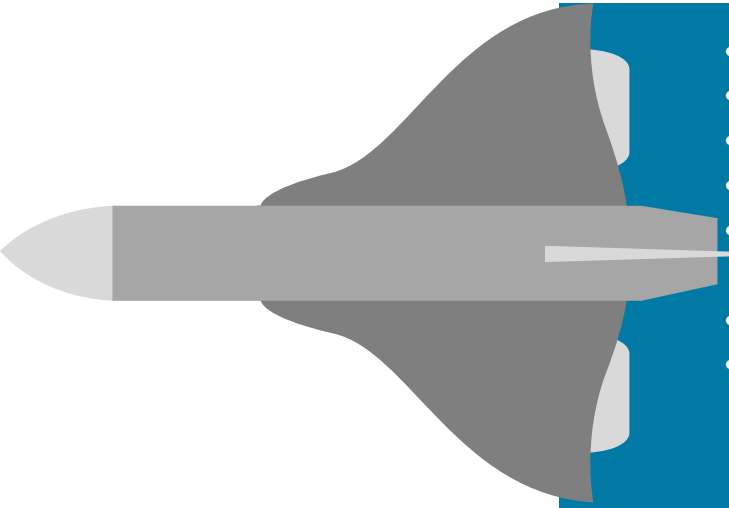
Application – Aerial Platforms

Boeing 727
2Excel

- Southend, UK
- 4hrs call to wheels-up
- Range: 2,500nm unladen
- 480 kts
- Live tracking
- Dispersant System
  - 15m^3 capacity
  - 800 – 1,200 l/min flowrate
  - Swath width 150ft
  - Data logging of spray volumes / locations





- Senai, Malaysia
- 6hrs call to wheels-up
- Range 2,080nm unladen
- 300 kts
- Dispersant spray application and monitoring system (SATLOCK)
- GPS Positioning (Spidertrack)
- Rapid Installation Dispersant Spray System (RIDDS)
  - 13m^3 capacity
  - 170 – 1360 l/min flowrate
  - Swath width 150ft

C130 Hercules
International Air Response

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Dispersant Stockpiles

- OSRL SLA (Service Level Agreement) Stockpile – 750m^3 available to all members of OSRL.

- OSRL Global Dispersant Stockpile (GDS) – 5000m^3 available as a subscription service.

- OSRL UK Dispersant Inventory (UKDI) - 500m^3 available as a subscription service to UK members.

- Other Global Dispersant Stockpiles – Available to view on OSRL website.

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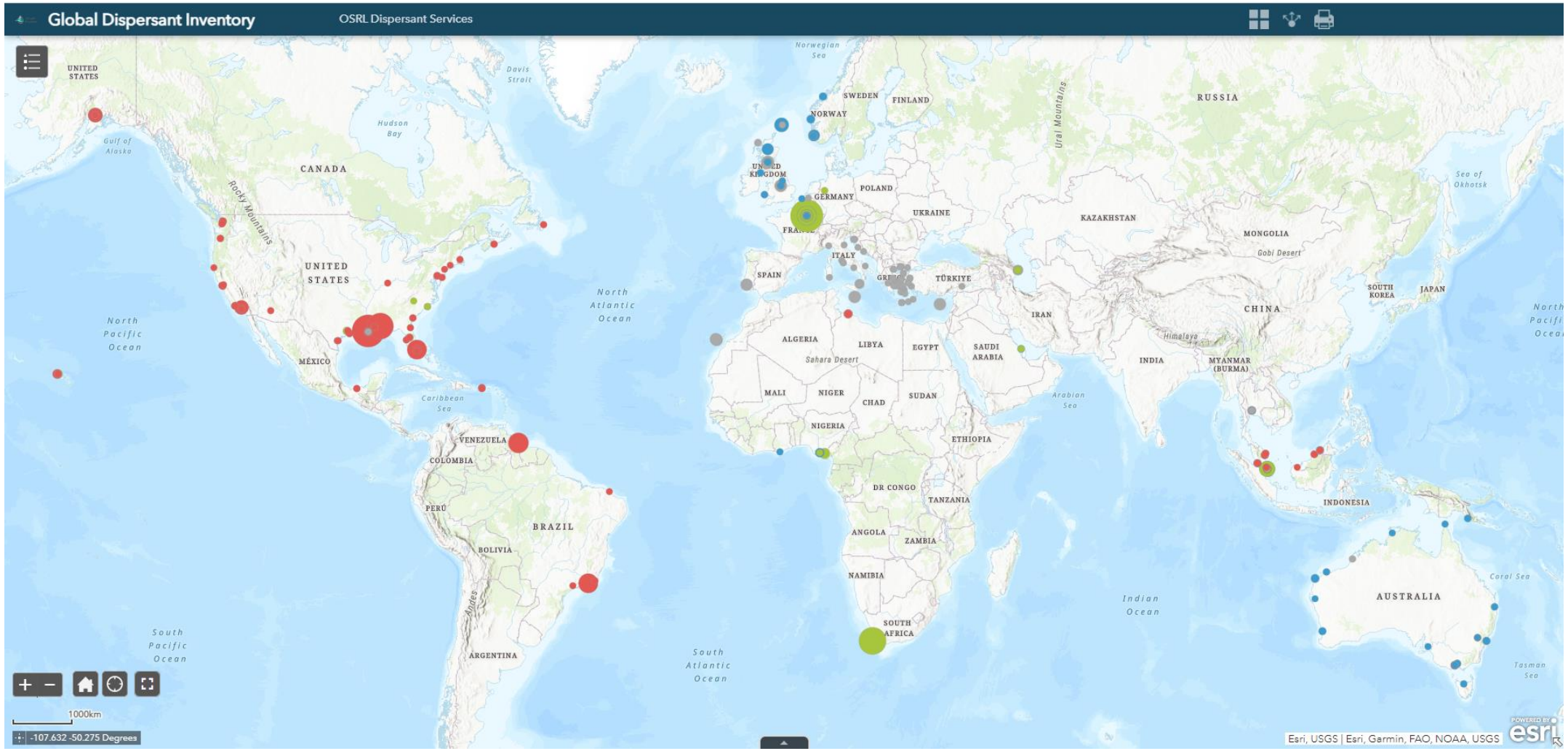
Global Dispersant Inventory



www.oilspillresponse.com/services/member-response-services/dispersant-stockpiles/

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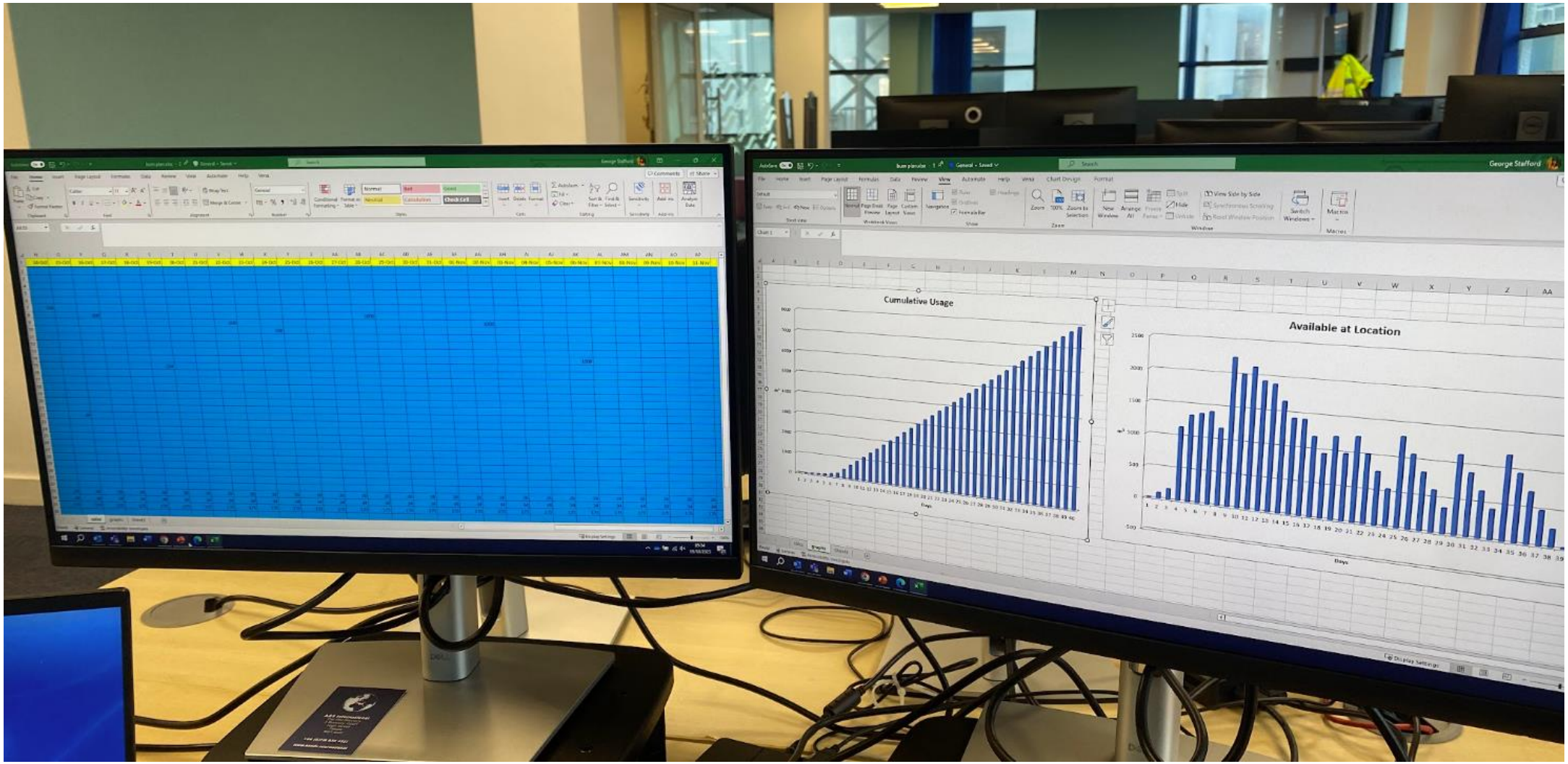
Logistics Planning



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Dispersant Resupply

Slickgone Products

90 IBCs In Stock → **12 Week Lead Time** → 108 IBCs per Day

Finasol Products

12 Week Lead Time → 60 IBCs per Day

Corexit Products

Currently Unavailable

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Stockpile Readiness

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Maintenance – Efficacy Testing

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Maintenance – Efficacy Testing

Dispersant Stockpile Testing Certificate

To be filled in by OSRL or their agent					To be filled in by Ricardo-Energy & Environment		
Dispersant Sample Number	Dispersant Type e.g. Superdispersant 25 Dasic Slickgone LTSW	Container / Batch code / Vessel	Sampled by	Sample Date	Sample received	Mean Dispersant Efficiency	Pass / Fail
1	Corexit CEC9500A	OSRL No. 57502 SL1D1428A1	OSRL Brazilian	18/03/21	02/06/21	95	**PASS**
2	Corexit CEC9500A	OSRL No. 57503 SL1F1454A1	OSRL Brazilian	18/03/21	02/06/21	93	**PASS**
3	Corexit CEC9500A	OSRL No. 57504 SL1G1000A1	OSRL Brazilian	18/03/21	02/06/21	93	**PASS**
4	Corexit CEC9500A	OSRL No. 57505 SL1D2039A0	OSRL Brazilian	18/03/21	02/06/21	95	**PASS**
5	Corexit CEC9500A	OSRL No. 57506 SL1D1429A0	OSRL Brazilian	18/03/21	02/06/21	94	**PASS**
6	Corexit CEC9500A	OSRL No. 57507 SL1G1000A1	OSRL Brazilian	18/03/21	02/06/21	93	**PASS**
7	Corexit CEC9500A	OSRL No. 57508 SLIG1000A1	OSRL Brazilian	18/03/21	02/06/21	95	**PASS**

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Any Questions

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