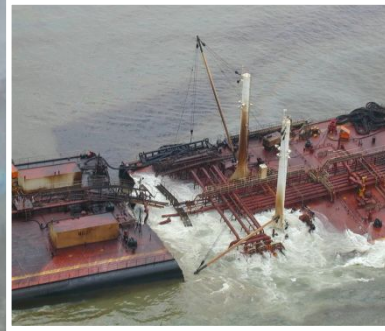


## Oil spill response in low level planning and preparedness areas: a case study

Dr. Franck Laruelle – Technical Team Manager – ITOPF  
PAJ Symposium, 7-8 March 2012, Tokyo

## INTRODUCTION TO ITOPF



- >40-year history - Established in 1968, after TORREY CANYON incident
- Technical organisation, 13 Technical Advisors, various nationalities
  - Marine Biology
  - Chemistry
  - Coastal Resource Management
  - Natural Resource Economics
- Advice on marine spills of oil & chemicals:
  - Clean-up techniques
  - Damage assessment
  - Claims analysis
- Non-profit status, based in London
- Service provided by shipping industry & P&I Insurers for the benefit of all parties involved



## ITOPF MEMBERS



- > 5,000 tanker owners & bareboat charterers
- ~98% of world's bulk oil, chemical & gas carrier tonnage
- ~8,900 tankers, barges & combination carriers (~245 million GT)



## ITOPF ASSOCIATES



- Owners of other types of ship given associate status since 1999
- ~400 million GT of non-tanker shipping
- Account for the majority of spills attended by ITOFF





MEMBER DUES = 0.68 pennies/GT  $\equiv$  47%

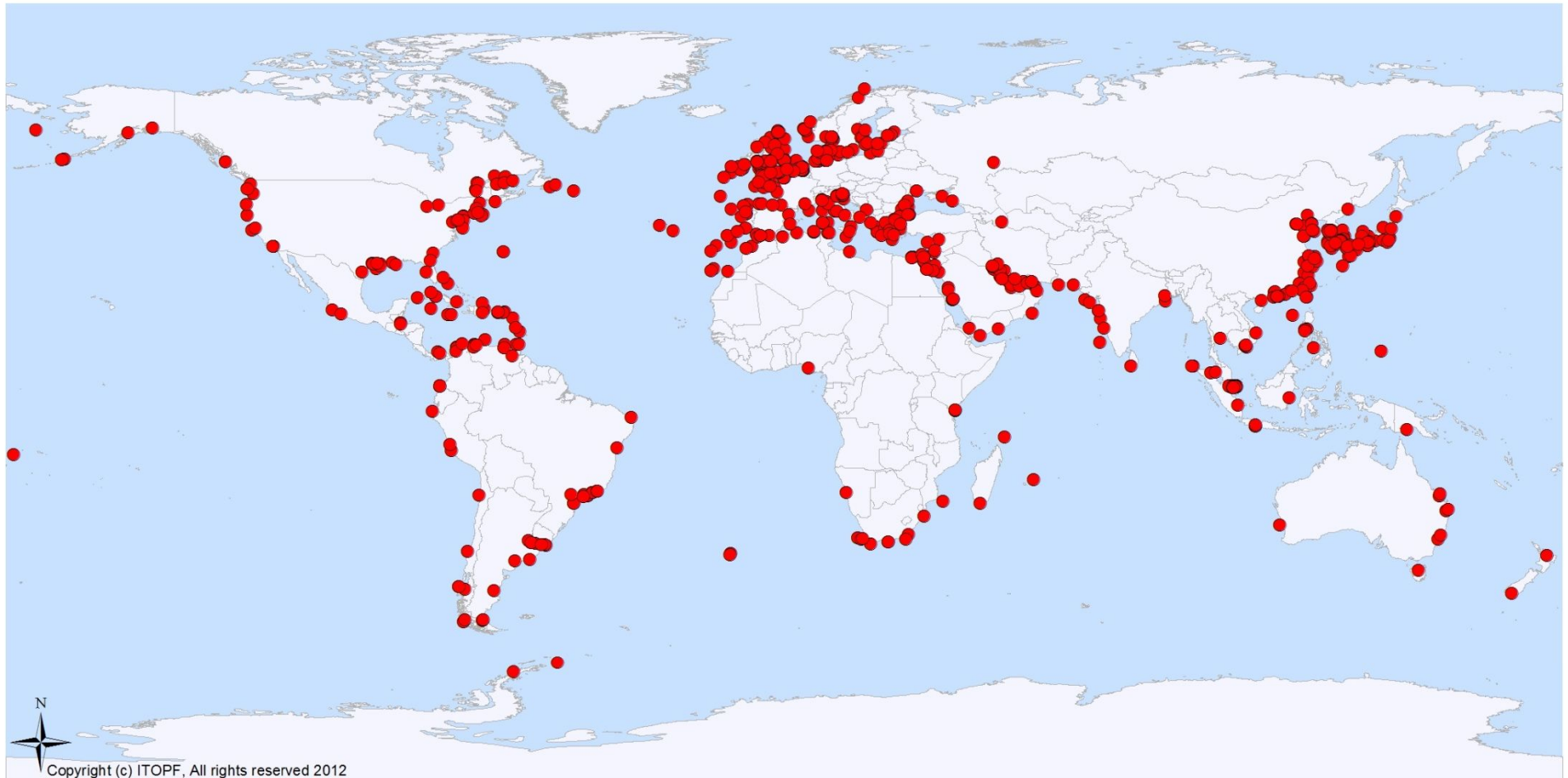


ASSOCIATE DUES = 0.40 pennies/GT  $\equiv$  46%





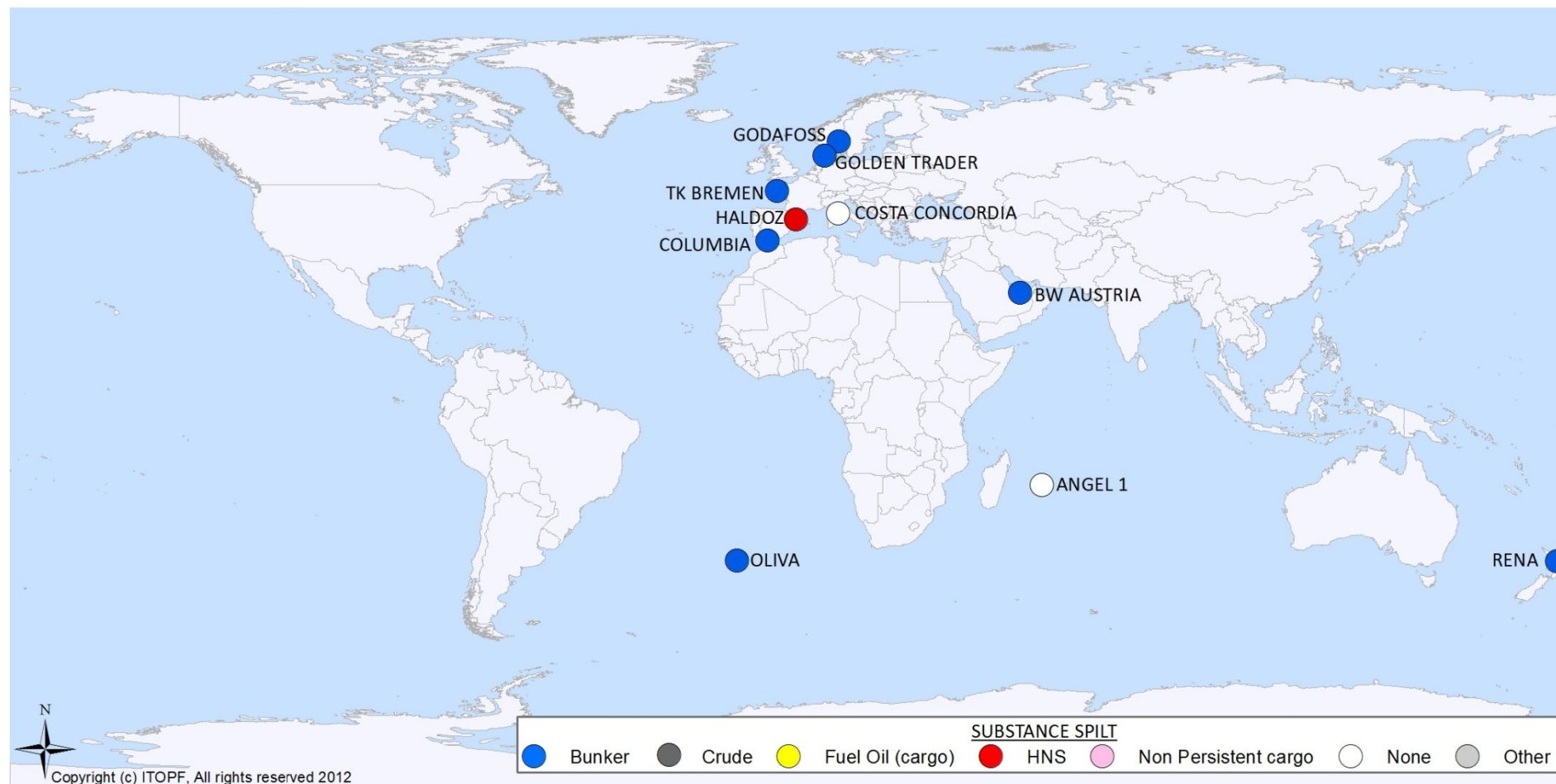
## INCIDENTS ATTENDED WORLDWIDE



Attendance at 670 incidents in 97 countries since 1972



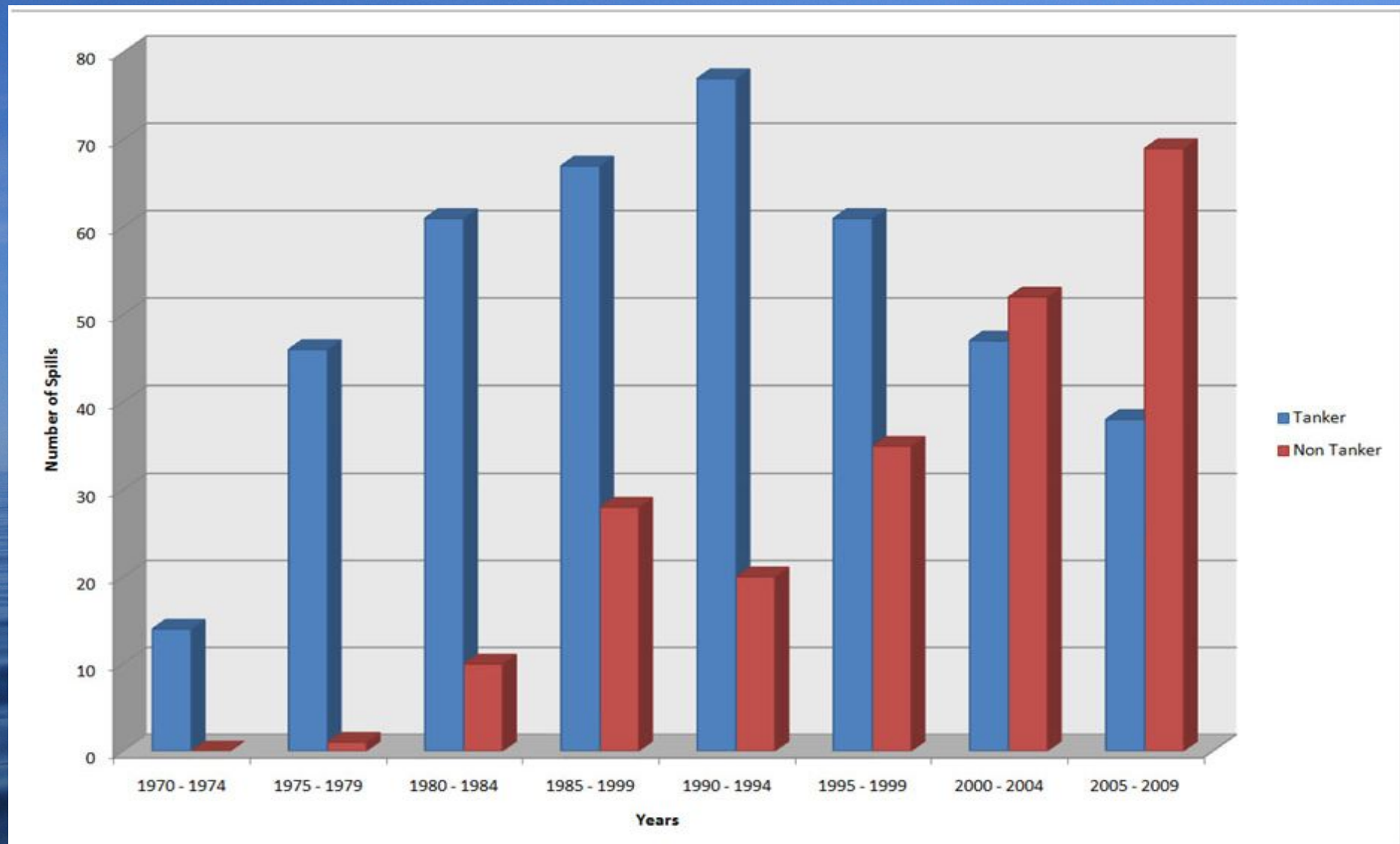
## RECENT SPILLS ATTENDANCE



10 incidents attended from February 2011 – February 2012



## GLOBAL TRENDS



Spills attended by ITOPF: Tankers vs. Non-tankers

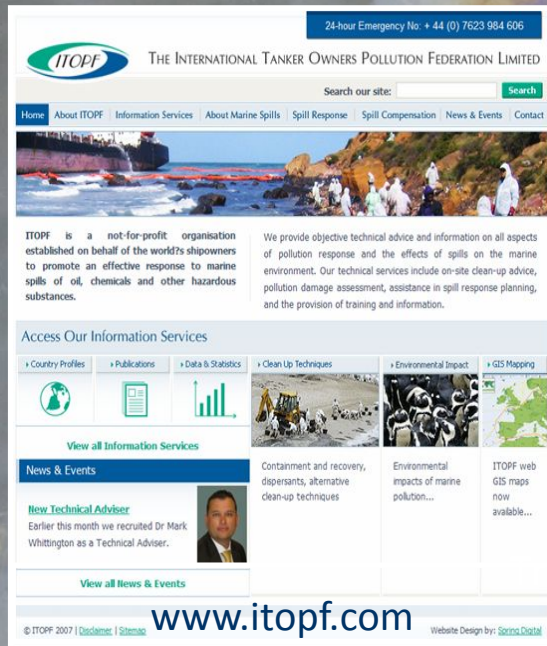
## ITOPF ROLE ON SITE



- Ship owners, P&I clubs, IOPC Funds request
- Survey site & monitor: extent/ nature of incident
- Work with entire spill response community
- Provide technical advice on response methods
- Provide technical advice: response/damage claims
- Assess environmental damage & restoration projects
- Always only in advisory role!



# INFORMATION SERVICES



- Website with downloadable documents (e.g. Country Profiles)
- WebGIS with information on tanker traffic, spills & conventions
- Several ITOPF publications including the TIPS series
- Assist in production of other publications, e.g. the IPIECA series
- Library with an extensive collection of books, reports, conference papers, journals & videos open for visitors

## OIL SPILL RESPONSE IN LOW LEVEL PLANNING AND PREPAREDNESS AREAS: MS OLIVA



- Bulk carrier (40,170 GT; Built 2009)
- Cargo: 65,000 MT of soya beans
- Grounding on Nightingale Island / Tristan da Cunha / UK overseas territories
- Split up after a few days
- 1,400 MT of IFO320 spilled



## TRISTAN DA CUNHA, SOUTH ATLANTIC



- Edinburgh of the Seven Seas / 262 inhabitants
- Low risk area / No local contingency plan / Remote assistance from UK MCA
- No response capacities
- No airstrip / 5-6 days sailing from Cape Town







12°45'

12°30'

12°15'

# TRISTAN DA CUNHA (ST. HELENA)



## Edinburgh of the Seven Seas



Tristan da Cunha

37°15'



Inaccessible Island

Stoltenhoff Island

Middle Island

Nightingale Island

10°

40°15'



Gough  
Island

## INITIAL ASSESSMENT: WILDLIFE AND FISHERY ISSUES



- Very abundant seabird population (> 2 million breeding pairs)
- Endemism: Albatrosses / Great Shearwaters / Northern Rockhopper Penguin
- Rodent free Islands (Nightingale / Inaccessible)
- Lobster fishery



## INITIAL ASSESSMENT



- First picture of shoreline oiling received after a week
- Obvious need for shoreline response and wildlife (penguins) rehab measures
- Initial figures 20,000 to 30,000 penguins oiled
- Response options / techniques worked out from the few pictures available - Clean-up plan set-up remotely (rocky shore clean-up techniques)

23/03/2011 09:19



## RESPONSE : INITIAL STEPS



Salvage tug SMIT AMANDLA



SA Fishery vessel SARAH BAARTMAN

- Mounted from Cape Town by Club correspondent / ITOPF on behalf of P&I Club
- Salvage Tug (SMIT AMANDLA; LOA: 95m) with wildlife response equipment and 1 staff (17<sup>th</sup> March /21<sup>st</sup> March)
- South African seabird rehabilitation NGO (SANCCOB) contracted by the Club
- French clean-up contractor (Le Floch Dépollution) contracted by the Club
- Investigations to charter a second vessel with shoreline/wildlife response equipment and staff
- Discussions between UK and SA government to charter SA Fishery / Environmental protection vessels, but failed to succeed



## RESPONSE: LOGISTICS VESSELS



- Chartering of a second salvage tug SINGAPORE (LOA: 75m)
- SINGAPORE loaded with wildlife response equipment and staff (SANCCOB) departed Cape Town on 29<sup>th</sup> March / 4<sup>th</sup> April
- Wildlife rehabilitation operation scaled for 10,000 birds

## RESPONSE: LOGISTIC VESSELS



- Chartering of a third vessel, Russian icebreaker IVAN PAPANIN (LOA: 166 m)
- Departed Cape Town with oil spill response equipment / personnel (Le Floch Dépollution) and an helicopter on 7<sup>th</sup> April / 12<sup>th</sup> April

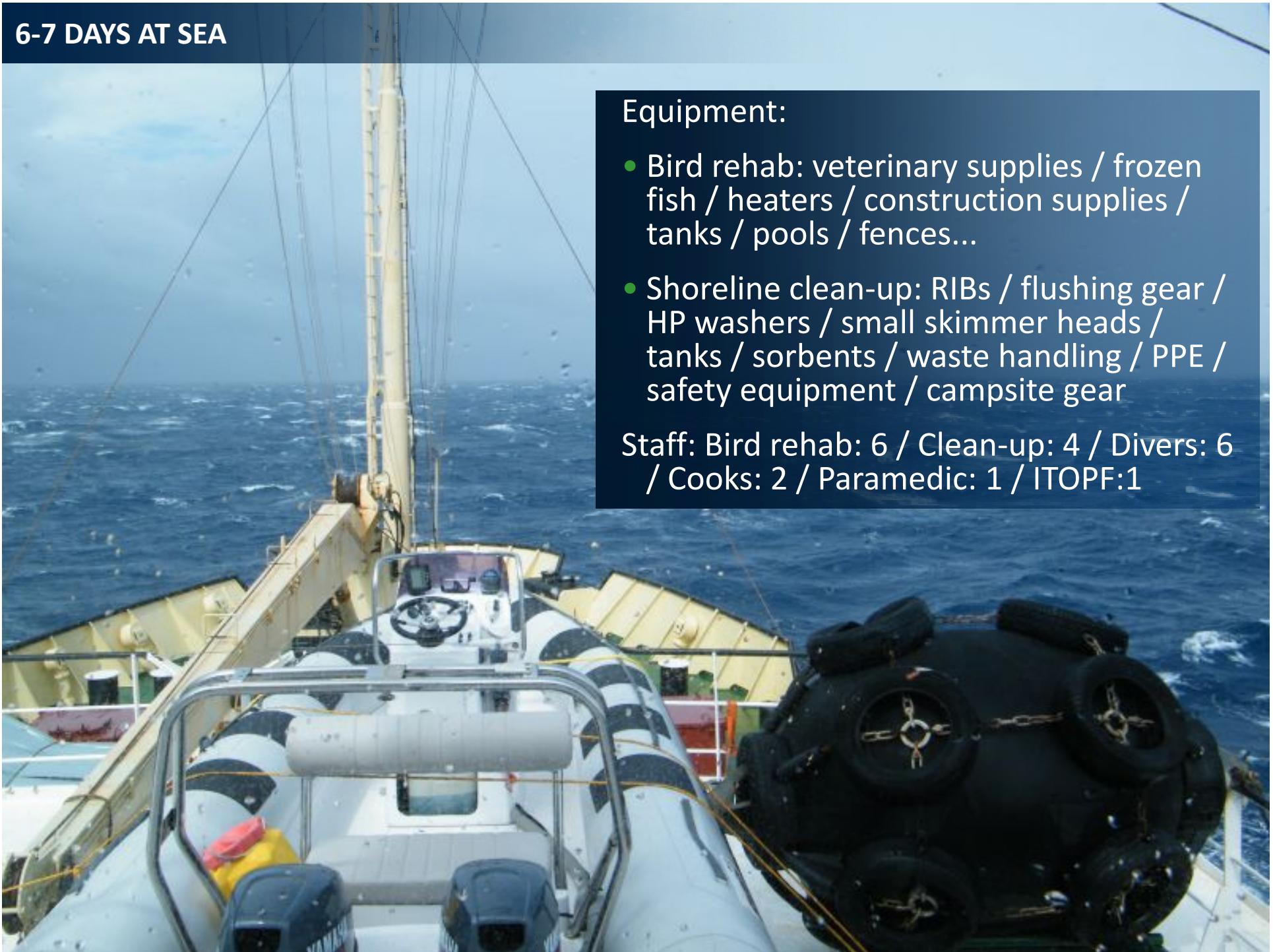


## 6-7 DAYS AT SEA

### Equipment:

- Bird rehab: veterinary supplies / frozen fish / heaters / construction supplies / tanks / pools / fences...
- Shoreline clean-up: RIBs / flushing gear / HP washers / small skimmer heads / tanks / sorbents / waste handling / PPE / safety equipment / campsite gear

Staff: Bird rehab: 6 / Clean-up: 4 / Divers: 6  
/ Cooks: 2 / Paramedic: 1 / ITOPF:1



## ARRIVAL ON SITE



First operation upon arrival of IVAN PAPANIN: rescue of an islander with a broken leg from Nightingale







## WILDLIFE RESPONSE: CAPTURE



3,718 birds captured



## WILDLIFE REHABILITATION



### Set-up of bird rehab units:

- Stabilisation / feeding
- Intensive care unit / Euthanasia
- Washing unit
- Waterproofing / pools





## OIL SPILL RESPONSE: AERIAL SURVEY – OILING AND ACCESSIBILITY





## OIL SPILL RESPONSE: AERIAL SURVEY - IDENTIFICATION OF PRIORITY AREAS





## OIL SPILL RESPONSE: IDENTIFICATION OF PRIORITY AREAS





## OIL SPILL RESPONSE: LANDING AREA



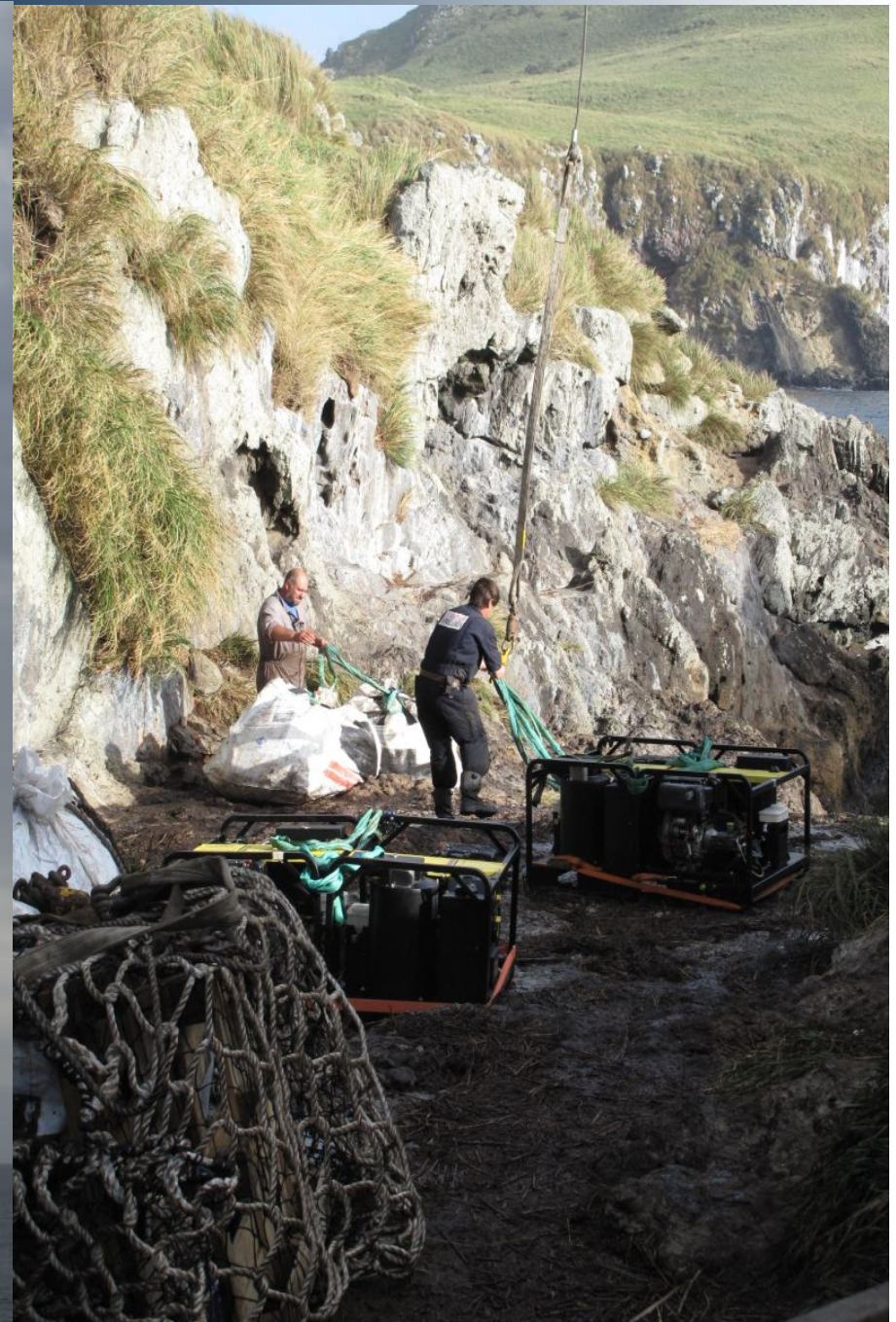


## SHORELINE ASSESSMENT





## SHORELINE CLEAN-UP: LOGISTICS





## SHORELINE CLEAN-UP: WORKSITE SET UP





## SHORELINE CLEAN-UP: TECHNIQUES





## SHORELINE CLEAN-UP: FLUSHING





## SHORELINE CLEAN-UP: HP WASHING





## SHORELINE CLEAN-UP: ENDPOINTS





## SHORELINE CLEAN-UP: WASTE MANAGEMENT

- All waste transferred on board IVAN PAPANIN (by helicopter)
- All waste shipped to and disposed of in South Africa





## OVERALL RESPONSE: CONCLUSIONS

### Despite absence of contingency plan

- Response plan worked out
- Training of islanders
- Clean-up of main affected area carried out (Penguin landing site)
- Equipment left behind for the islanders to use in case of necessity
- Training of the islanders who pursued the rehab operation after SANCCOB's departure
- Penguin rehabilitation operation mounted despite difficulties – 381 released (~10%)

### Challenges

- Vessel availability – commercial chartering vs. State owned vessels
- Equipment mobilisation time
- Delays inherent to the remoteness of the spill location
- Timing of the spill wrt Penguins moult cycle







*Thank you for your attention*

*Any Questions?*