



**NATIONAL STRIKE TEAM STATION**  
***JAPAN COAST GUARD***

# JCG National Strike Team



# Japan Coast Guard

1st Regional Coast Guard Headquarters

2nd Regional Coast Guard Headquarters

3rd Regional Coast Guard Headquarters

Yokohama National Strike Team Station

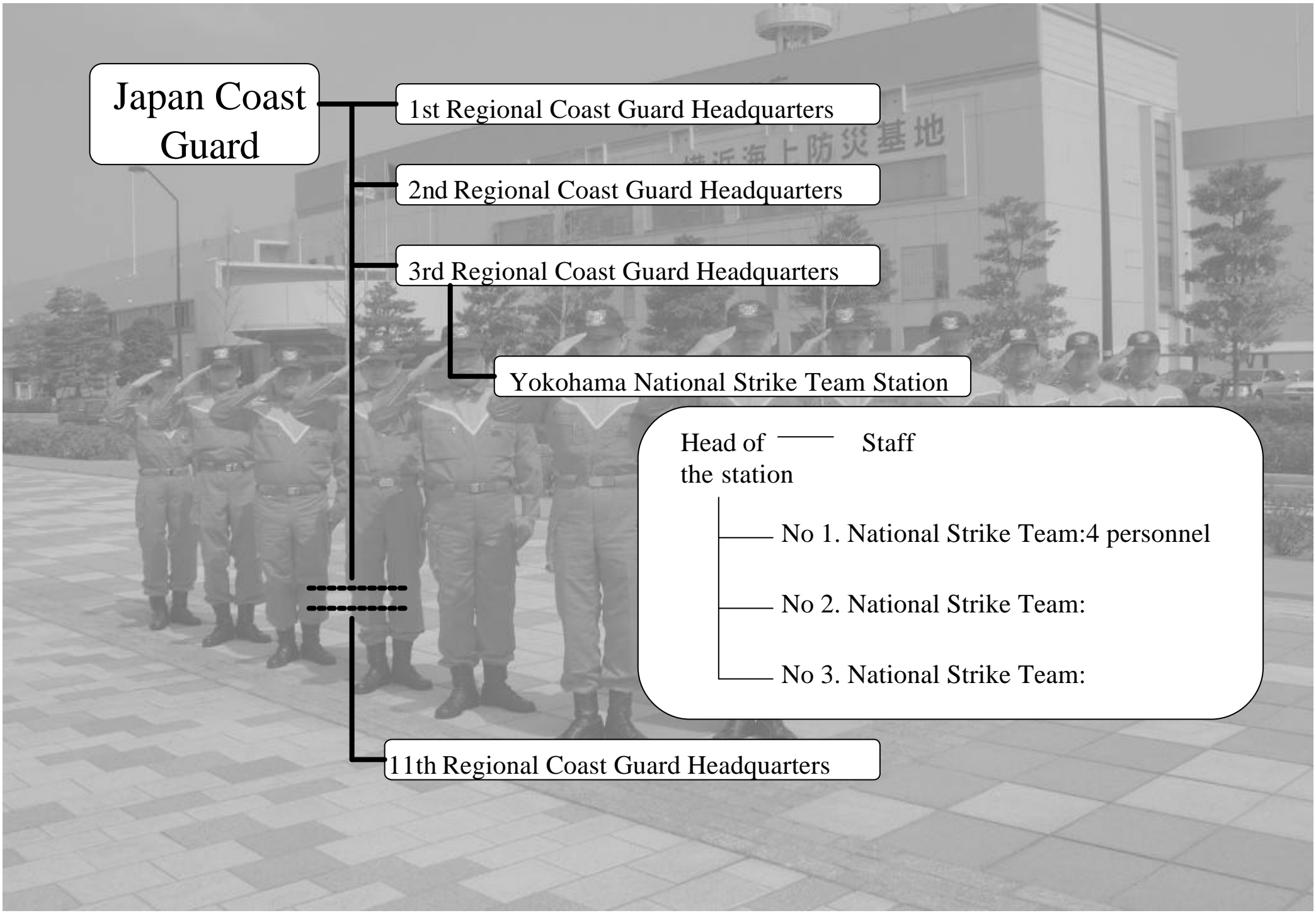
Head of the station — Staff

— No 1. National Strike Team: 4 personnel

— No 2. National Strike Team:

— No 3. National Strike Team:

11th Regional Coast Guard Headquarters



# Activities of the National Strike Team

- 1. Response to accidents**
  - 1) Oil spill accidents**
  - 2) Accidents involving spillage of toxic liquid substances and dangerous substances**
  - 3) Maritime fire accidents**
- 2. Training and drilling**
- 3. Surveys and research**
- 4. Seminars**
- 5. International cooperation**



# Response to Co-op Venture incident

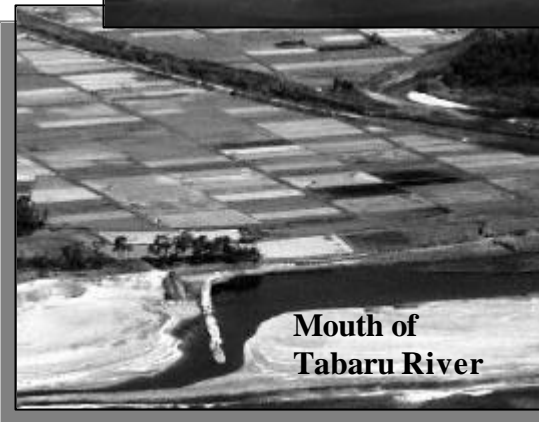
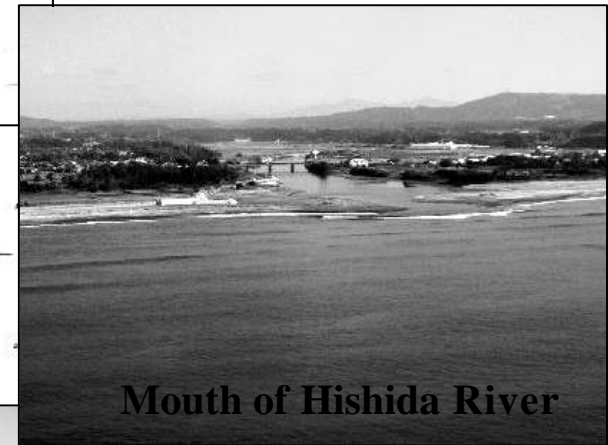
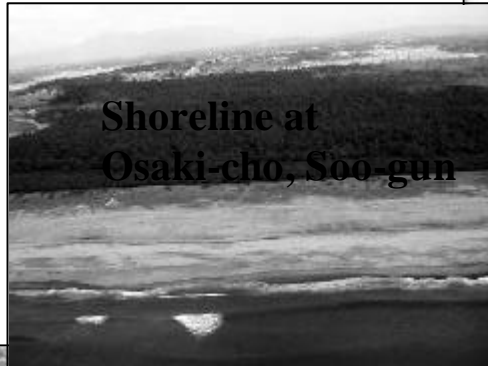
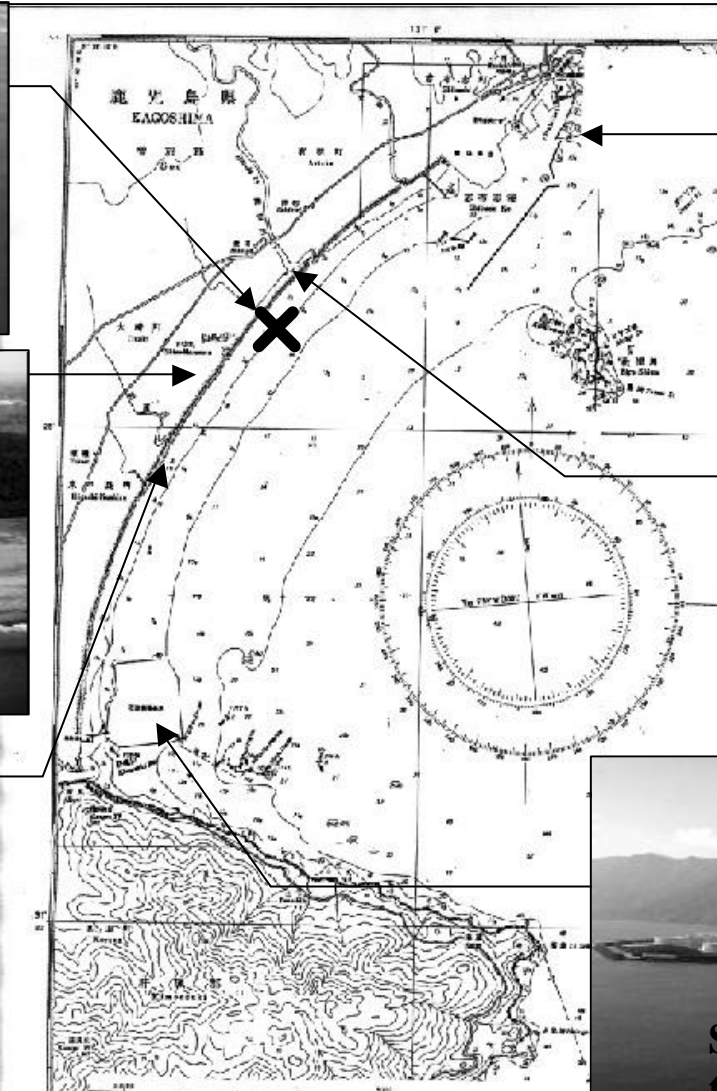
— National Strike Team —



Approximately 1,500 meters southwest of the mouth of  
Hishida River, Osaki-cho, Kagoshima

Photographed by Japan Coast Guard helicopter on July 26.

# Geography of location where ship ran aground





# Overview of the ship and Her voyage

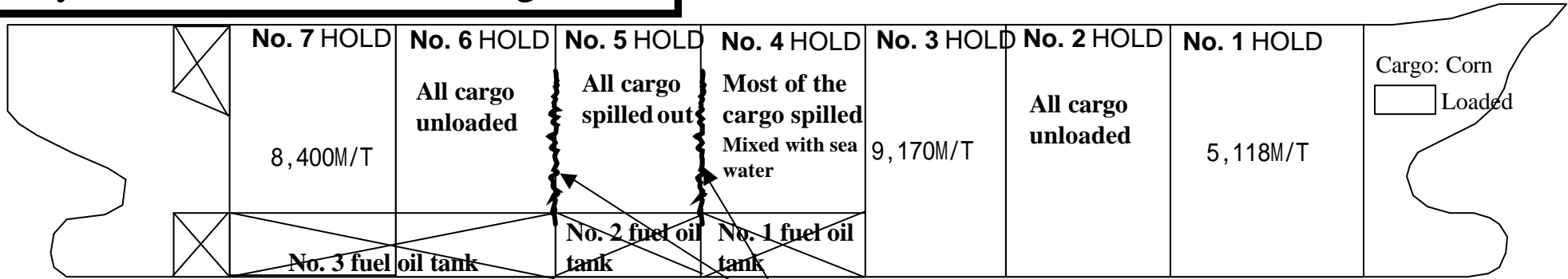
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- Name of the vessel: Co-op Venture
- Total tonnage: 36,080 tons
- Length: 224 m
- Draft: 18 m
- Nationality: Panama
- Number of crew: 19 (15 Filipinos and 4 Indians)
- Cargo: Corn
- Owner in the book: Southern Pacific Holding Corp.
- Actual owner: Kumiai Senpaku Co., Ltd.
- Operating company: Tshudi and Eitzen Ship Management PTE, Ltd. (Singapore)
- Year of built: 1990
- Builder: Sasebo Heavy Industries Co., Ltd.
- Brief of her voyage:
  - June 9, 2002: Departs from New Orleans
  - June 16, 2002: Sails for Shibushi via Panama
  - July 22 - July 24, 2002: Takes shelter from typhoon in Shibushi Bay
  - Evacuates ship due to typhoon while unloading in Shibushi Port

# Location of break-up section of Co-op Venture



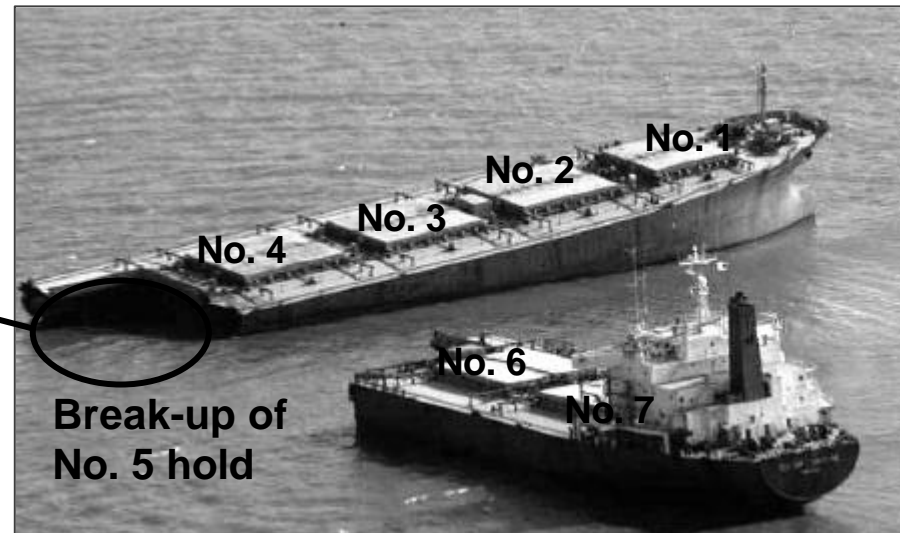
## Lay-out of fuel tanks and cargo holds



Big holes on the both bulk heads

### Fuel tanks

| (Unit: kL)    |            |            |            |                 |                      |                  |            |           |
|---------------|------------|------------|------------|-----------------|----------------------|------------------|------------|-----------|
| Tank No.      | No. 1 tank | No. 2 tank | No. 3 tank | FOW tank (port) | FOW tank (starboard) | DO tank (center) | ENG        | RM        |
| Oil type      | Fuel oil C | Fuel oil C | Fuel oil C | Fuel oil C      | Fuel oil C           | Fuel oil A       | Fuel oil A | LO        |
| Loaded amount | 225        | 400        | 5          | 100             | 125                  | 60               | 20         | 23        |
| <b>Total</b>  | <b>855</b> |            |            |                 |                      | <b>80</b>        |            | <b>23</b> |



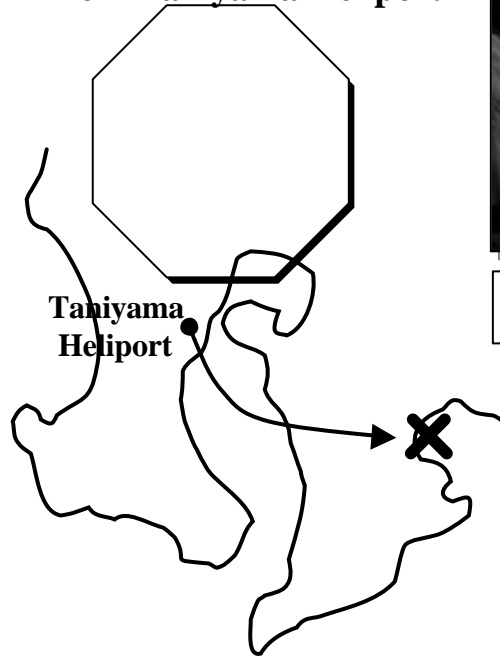


# Surveillance of oil spill by aircrafts



Taking videos

National Strike Team  
personnel riding in helicopter  
from Taniyama Heliport



Charting the status of the oil spill

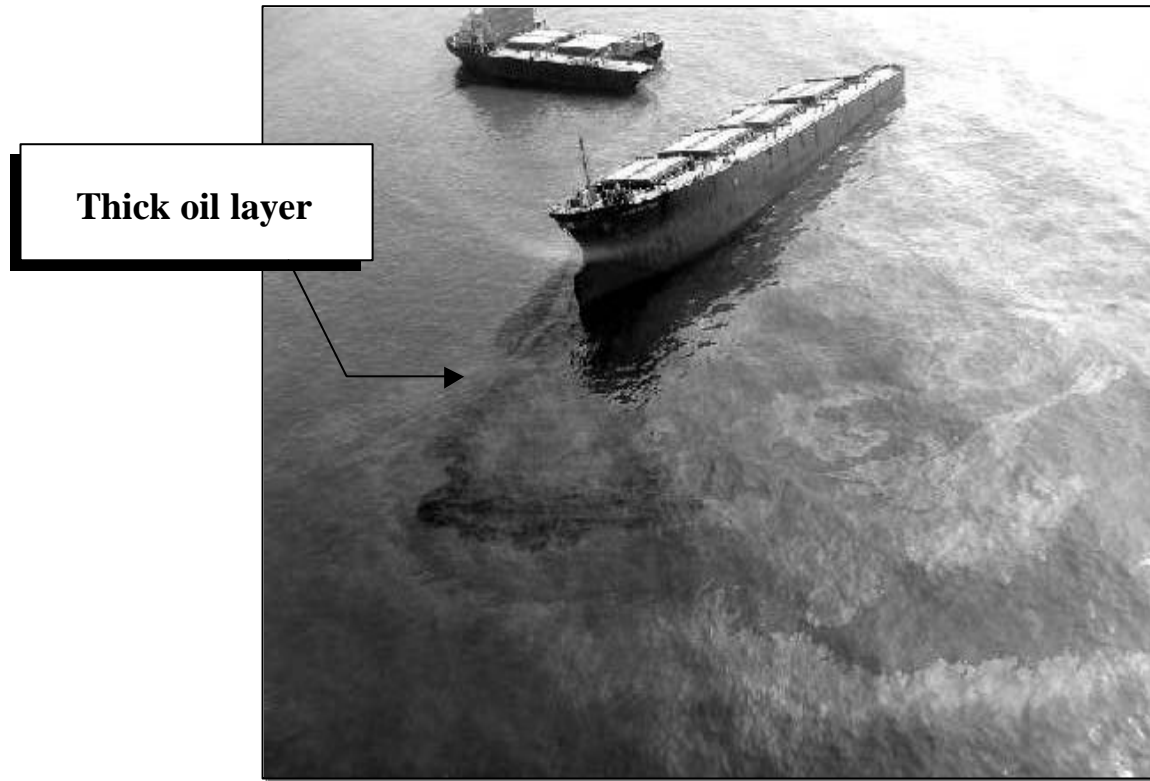


Guiding rescue patrol boat "Satsuma" and sampling  
floating oil



# State of spilt oil

Conditions of sea surface before applying documentation operation by absorbent assembly (“Oil snare ” )



Sea surface covered with oil spilt



Oil slick floats towards shore

# The oil outflow



**Fresh oil flowed out from this point.**

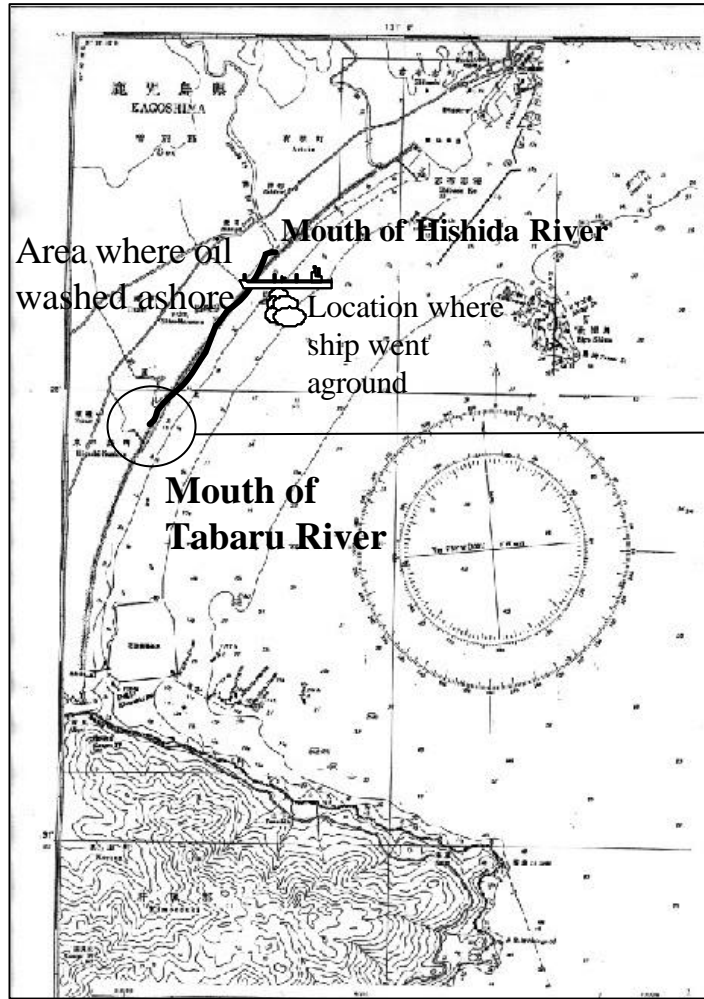
Thick oil lump around the severed bow section



# State of oil washed ashore

The spilled oil was spread by the tide and wind from the east, adhering to debris as it floated, with much of it stranded ashore onto the mouth of Tabaru River.

It is interpreted that natural dispersion of the oil was promoted by rough weather and big surf caused by the typhoon, also rising water level of Hishida and Tabaru River by rainfall on the previous days formed a natural barrier, led majority of the oil to drift ashore on relatively narrow area than originally expected.



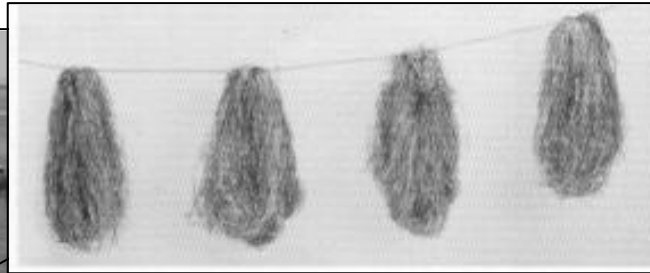
Debris covered with oil



Stranded onto sandy shore

# Decontamination of “oil snare”

The oil snare array on the deck



## “Oil snare”

Coming 30 pompoms made of 2mm width polypropylene strips (about 230gr. each) into the line on 15m length rope, and is capable to absorb / adsorb high viscous oil which conventional absorbent cannot be effectively worked.



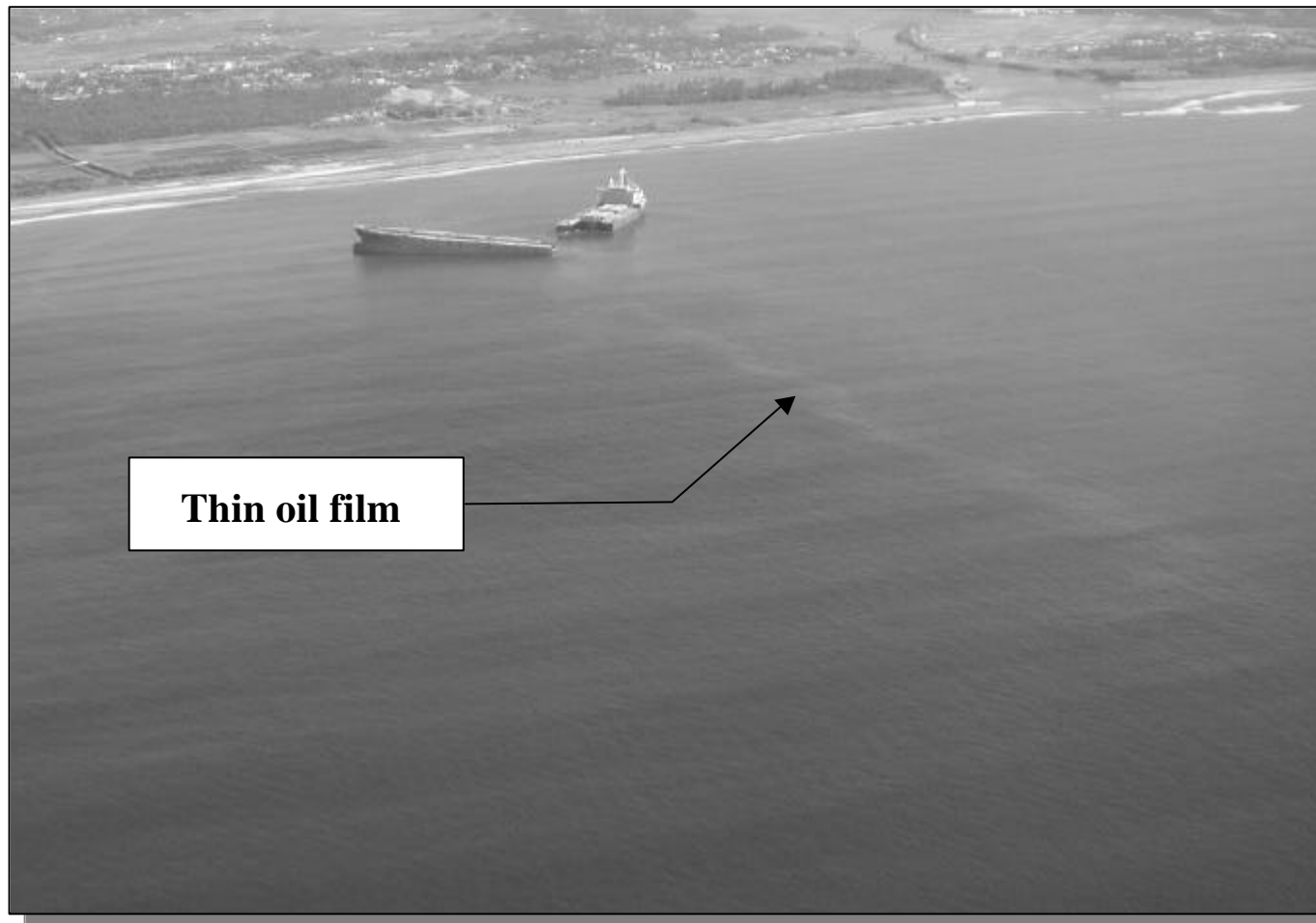
“Oil snare” in position (black color indicated absorbed oil)



Deploying the oil snare

# Situation of the spilt oil after oil spread prevention

**No thick oil layer remaining on the sea surface,**  
but a thin oil film, formed by oil oozing from the oil adhered to the “oil snare”, floats on  
the water, and the outer reaches thereof are **dispersed** by wind and waves.



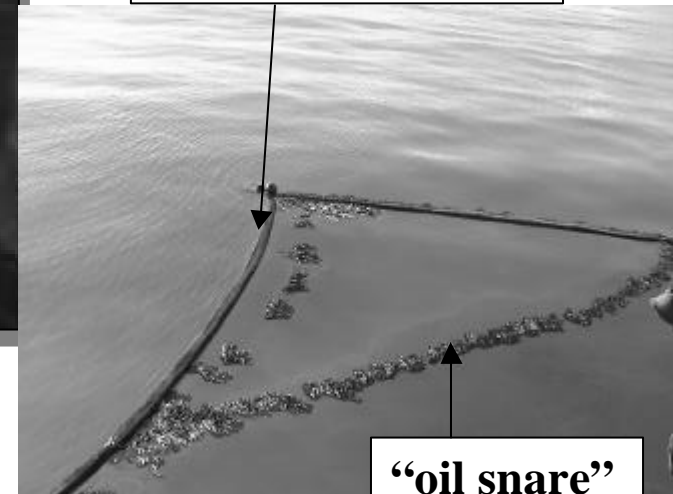
# Preventing the spread of the oil outflow (containment)



An absorbent booms capable to block oil flow.



“oil skimming net”



“oil snare”





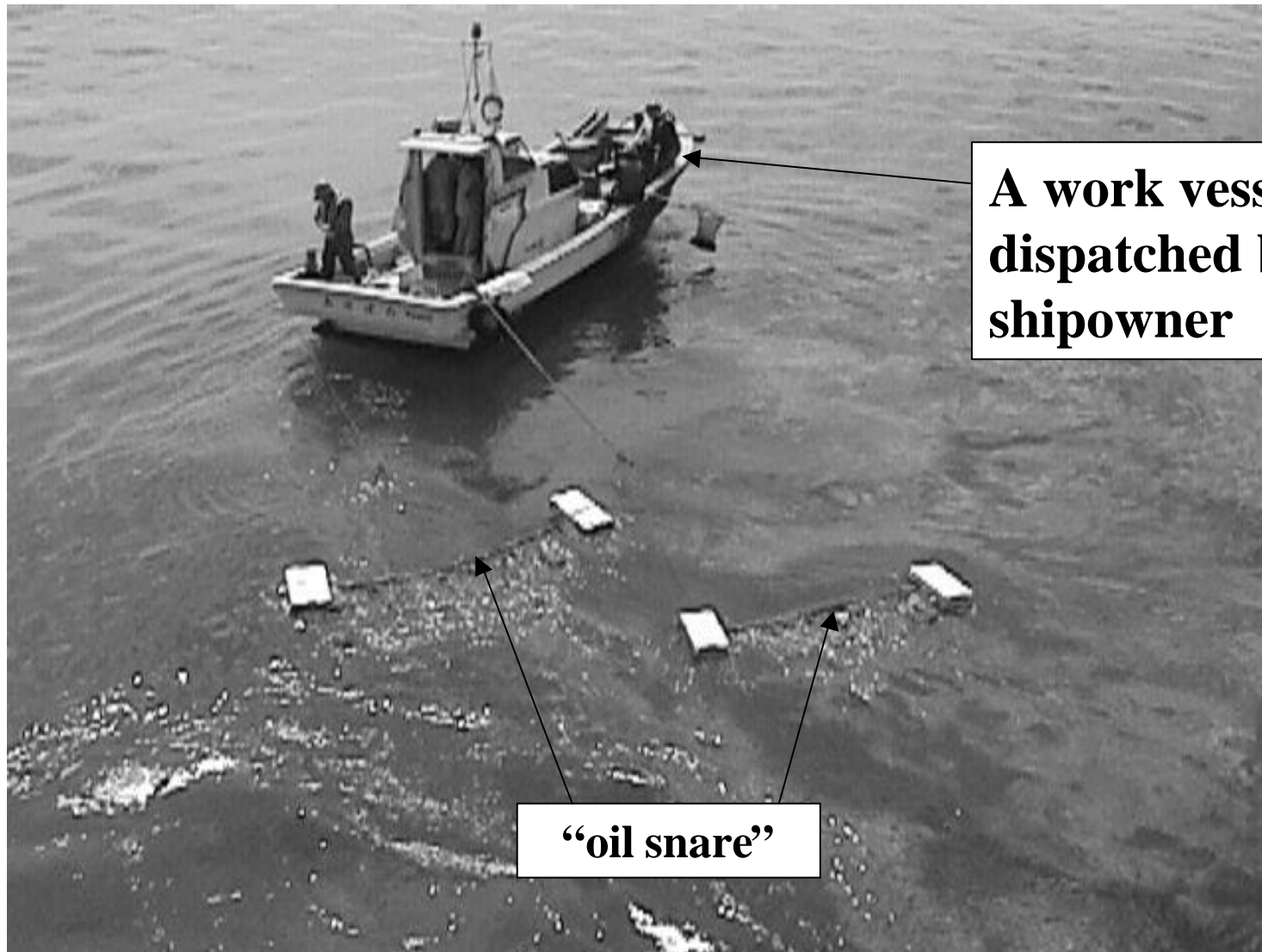
# Dispersion of the spilt oil by boat running

Rescue patrol boat of “Satsuma” disperses the thin oil film.



The rescue patrol boat is blackened by the oil spilt.

## Recovering the dense oil film that could not be dispersed by boat-running



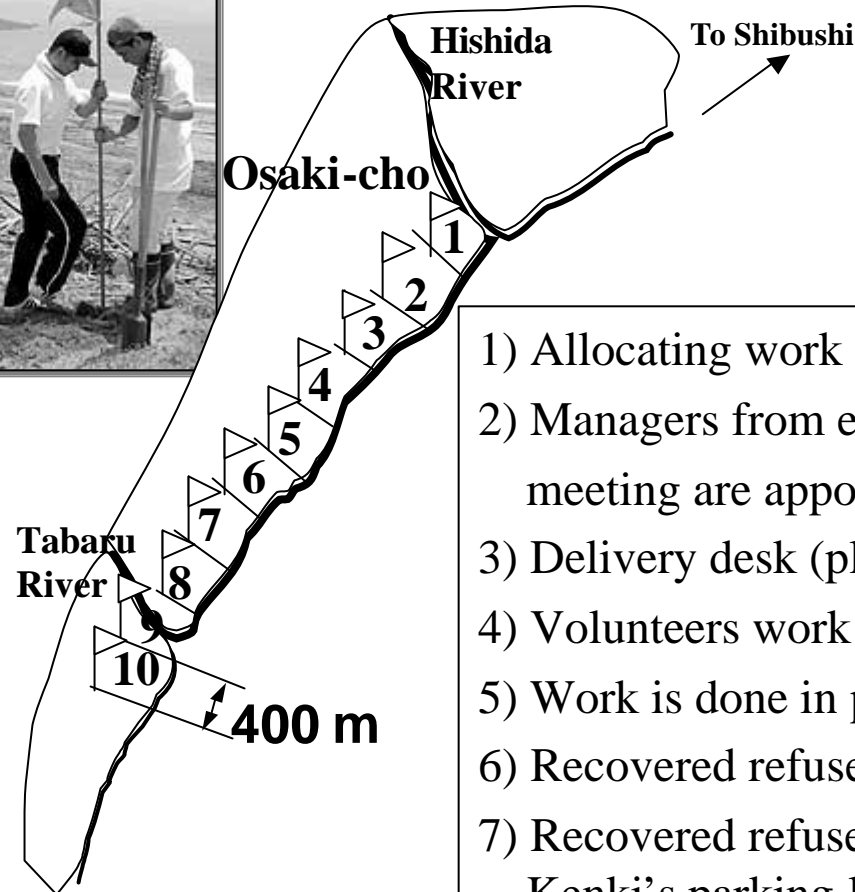
**A work vessel  
dispatched by the  
shipowner**

**“oil snare”**

# The system for cleaning up the shore

Maritime Disaster Prevention Center conducts work based on agreement  
(Class 2 operations) with shipowner

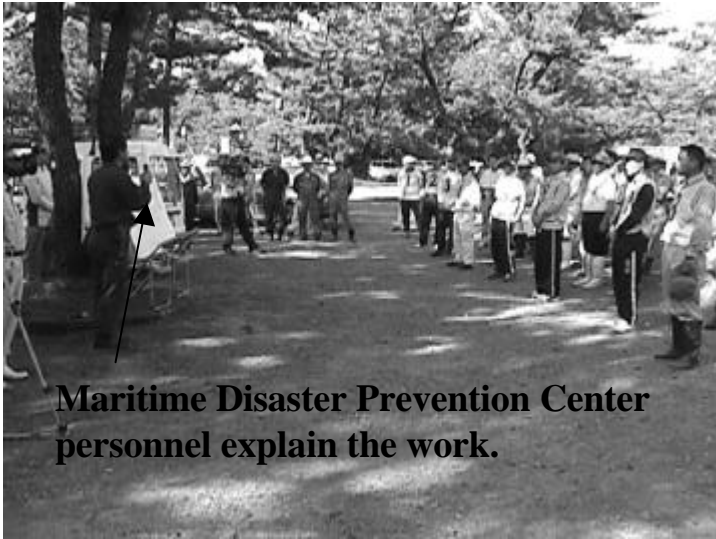
Conducted from July 30 to August 1



- 1) Allocating work areas (1 work area is approx. 400m, 20 workers)
- 2) Managers from each organization attending to the on-site taskforce meeting are appointed as heads of work areas.
- 3) Delivery desk (plastic bags and sandbags are passed to managers)
- 4) Volunteers work in designated locations.
- 5) Work is done in pairs, proceeding inland from the costal line.
- 6) Recovered refuses are gathered in one location.
- 7) Recovered refuses are transported by light trucks to Marusho Kenki's parking lot.
- 8) When one's own work is finished, workers assist other areas.

# Shore clean-up

July 30



Maritime Disaster Prevention Center personnel explain the work.

Recovering refuse using brooms and rakes



Japan Coast Guard officials are wearing yellow vest.



**Participating people:**

**Cumulative: 550**

**Recovered refuse: 200m<sup>3</sup>**

**Equipments used:**

- Light truck: 14
- 2-ton dump truck: 2
- Tire shovel: 1
- 2-ton dumper carrier: 4
- Forklift: 1
- Beach cleaner: 2

(owned by Shibushi Oil Storage Company, Ltd.)

- Drum: approximately 20



# Machinery used in the shore clean-up



**Aeration work**

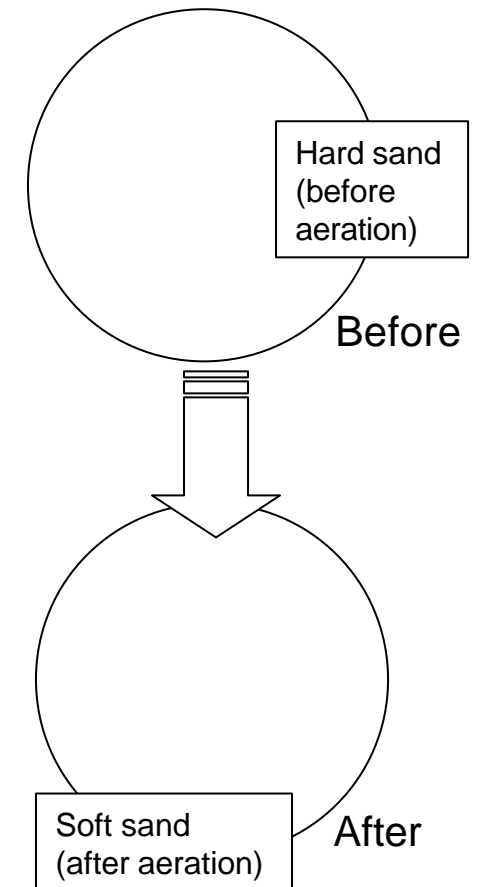


## Aeration

This refers to the plowing of sand / soil that has been polluted with oil, during which air is mingled to promote natural remediation.



**Recovery work using heavy machinery**



# After completing shore clean-up (August 1)



Check the result of works with putting up tent.



Refuses stored in sandbags and drums



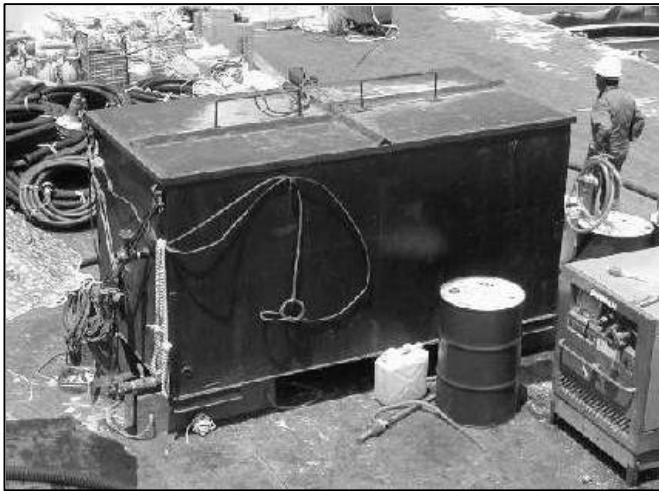
The recovered refuse is temporarily stored at a parking lot of Marusho Construction Machinery near the shore.



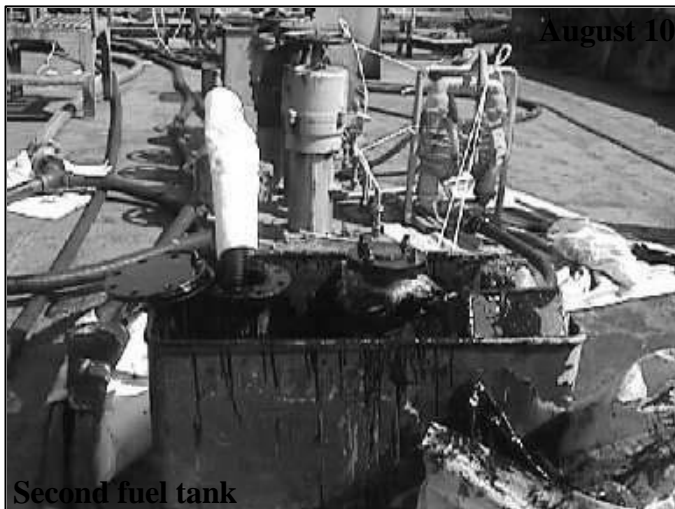
The shoreline after the recovery effort

# Recovery of the remaining oil in the vessel

Recovery operation starts (August 4 - 15)



oil-water separator tank on the barge

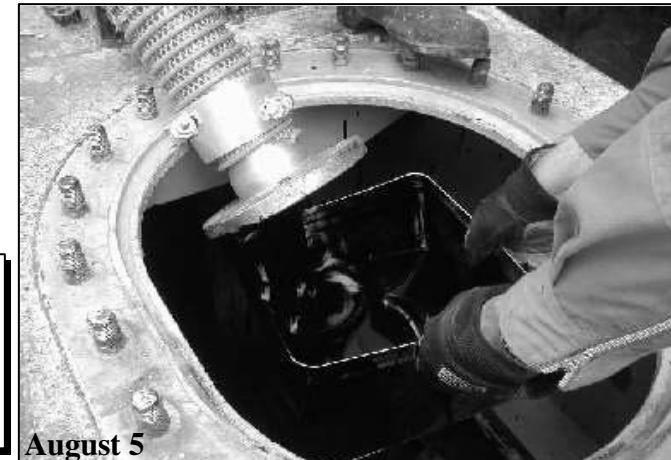


Second fuel tank

Withdrwing oil from air vent pipe

Amount of oil  
recovered  
659 kl

No. 1: 235 kl  
No. 2: 38 kl  
Rear tank: 386 kl



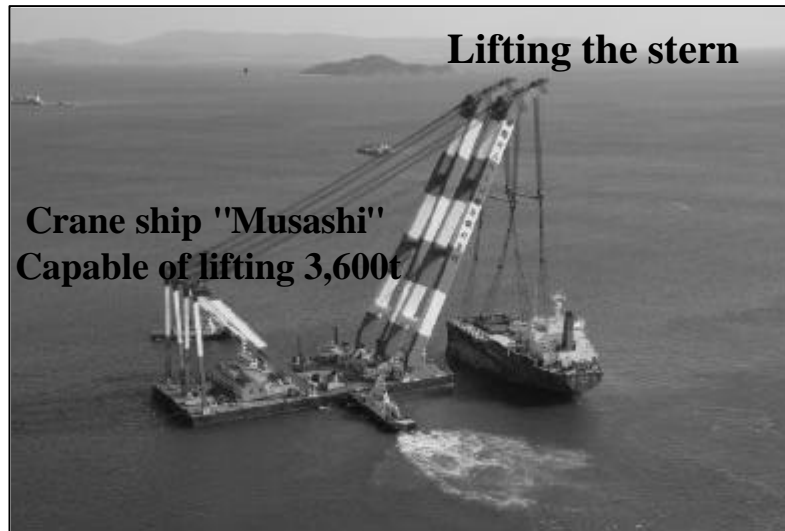
August 5

Putting withdrawn oil in a pale and examining pumping rate



National Strike Team personnel surveying the inside of a tank

# Removal of ship remains (completed December 27)





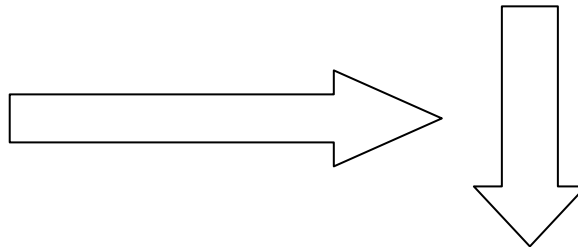
# Promotion of cooperation and coordination between parties concerned



## Cooperation and coordination between parties concerned is crucial.

- Understanding one's own role and OSR capabilities
- Sharing of information
- Conducting an organizational effort with mutual understanding

Supervision and assistance by Japan Coast Guard (including National Strike Team)



**Swift fulfillment of end goal of the OSR effort**

Swift completion of OSR effort while keeping damage to a minimum

# Cooperation and coordination with relevant government authorities



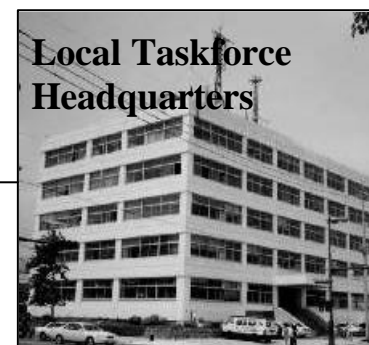
## Kagoshima Bay / Shibushi Bay Anti-Oil Spill Council



**Regional  
Taskforce Headquarters**

10th Regional  
Coast Guard  
Headquarters

22:30 July 25 to  
08:15 December 27



**Local Taskforce  
Headquarters**

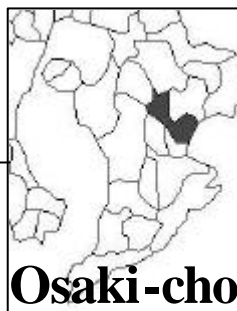
Kagoshima Maritime  
Safety Office

18:00 July 26 to  
08:15 December 27



**Prefectural Taskforce Headquarters  
for Oil Spills and Other Disasters**

17:00 July 26 to present



**Osaki-cho**

**Oily Refuse  
Recovery Headquarters**

21:50 July 25 to August 2



**Communications  
Liaison Headquarters**

Shibushi  
Branch Office

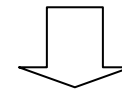
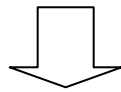
18:00 July 26 to  
08:15 December 27

# Keyword from the Co-op Venture incident

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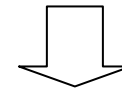
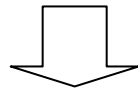
**Keyword**

**The huge power of nature**



**Easily  
destroyed a  
huge ship**

**Effectively  
dispersed a  
large oil spill**



**A large oil spill**

**Achieved  
minimization of  
damage**