



SWEDISH COAST GUARD



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imaros



Makassar Highway

23 July – 3 August 2018

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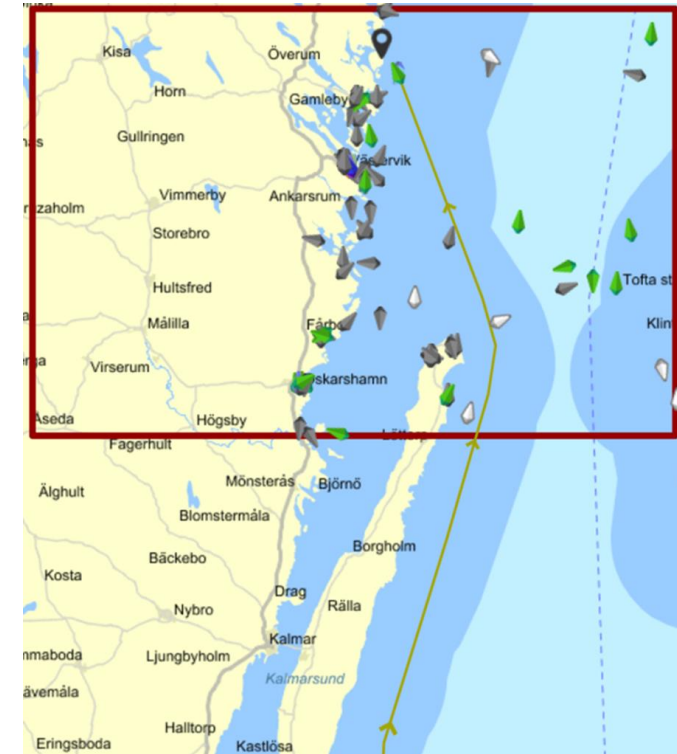
- On July 23 2018 Panama-flagged Makassar Highway ran hard aground in the Baltic Sea near Västervik, Sweden.
- 139m long, 23m wide ,1325 vehicles
- 333m³ bunker oil, 38m³ diesel and 25m³ lubricating oil

- Makassar's satellite system was not working and Officer in command wanted to get closer to land.

- The vessel deviated from the normal route in fairway.

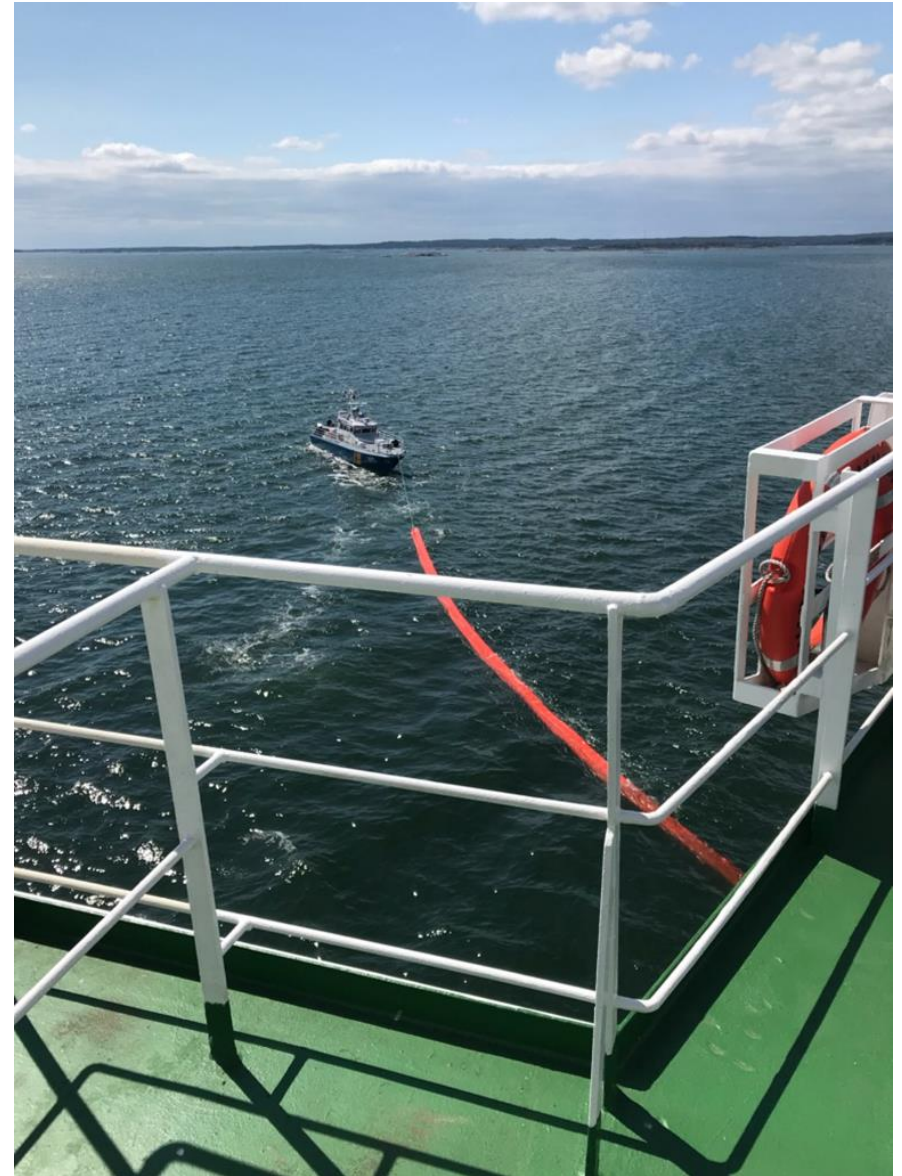
The dashed **blue line** shows the route that ships of this type normally travel.

The **yellow line** shows Makassar Highway's journey along Öland's east side.



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- The first information came 24th July - oil shine was seen on the water, but it was not possible to recover.
- The SCG aircraft was occupied by the ongoing forest fires so a Police helicopter from Gothenburg assisted with aerial footage.
- SCG Rescue leader recommendation was put booms around Makassar



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Initial damage situation

- Holes in the forepeak with water penetration in the front ballast tanks.
- Holes in the bow thruster room.
- Water penetration in at least two tanks.
- Extensive damage on the hull, ships' bulb and its port side.

SGC strong recommendation is to start emergency lightering operation and empty Makassar as soon as possible.



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25th and 26th July

- The weather was calm and no oil was leaking at the time.
- Salvage plan is presented, including Emergency lightering (planned for 29th July) and towing

28th July

Strong winds made the work difficult and the wind pressure listed grounded vessel about 20 degrees. Oil started to leak but it was not spreading of oil (oil boom)



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An aerial photograph of a large-scale oil spill in the ocean. A massive, dark, irregular slick of oil spreads across the water's surface. Two ships are visible: a smaller one in the upper left and a larger white tanker in the lower right, connected by a red line. The background shows small islands and a clear sky.

29th July

Makassar unexpectedly slid off the ground, due to strong winds and drag down the surrounding oil boom.

Vessel was still floating and anchored but oil started to leak and spread.

First came a shine of diesel with strong smell, and later the thick bunker oil.

The same morning an on-shore rescue operation was initiated and a big response organization was quickly established.



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Response operations, at sea and on-shore were focused on preventing oil from contaminating the shores.

30th July – the oil reached land and we have now two parallel operations.



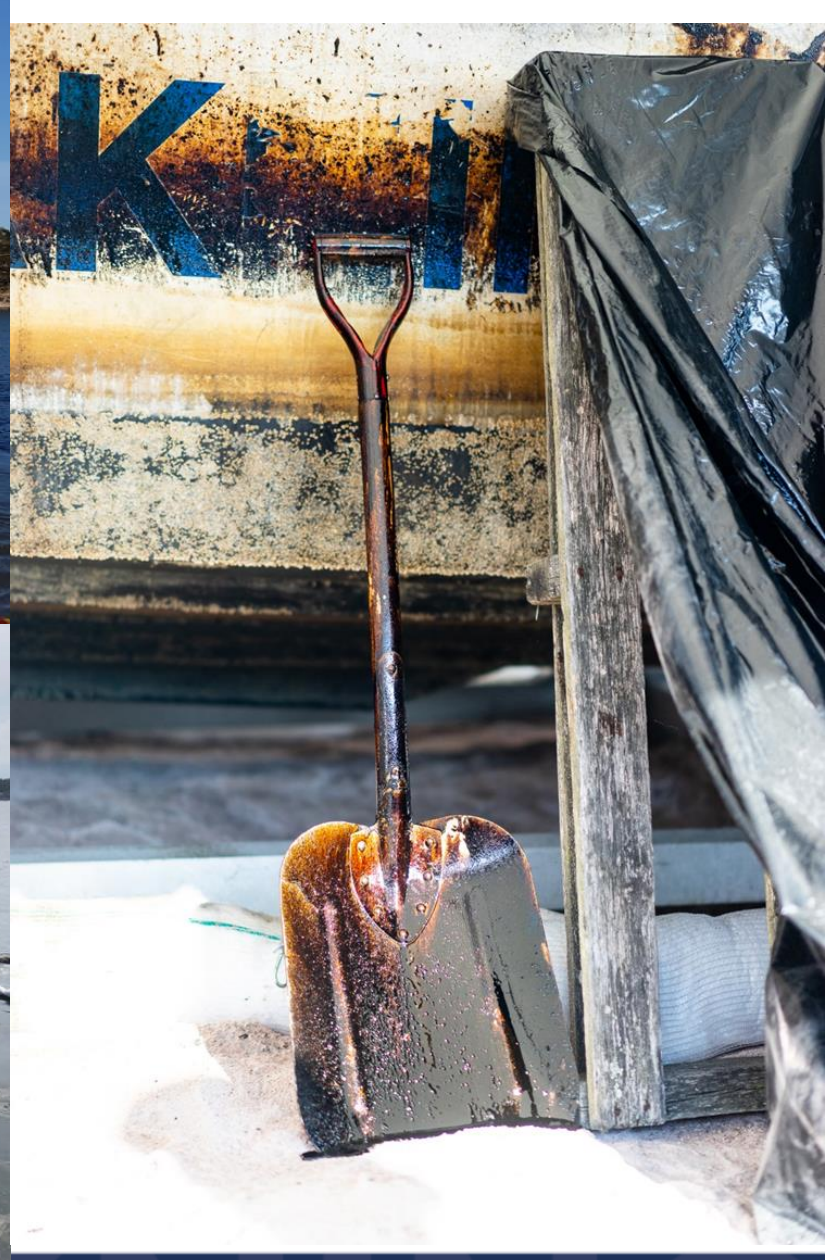
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Fuel Oil characterization

- RMD80
- ULSFO, 0,09% sulphur content
- Density 897 kg/m³ @15°C
- Viscosity, 78 cSt @ 50°C
- Pour Point 18 °C
- Flash point >70 °C









Build-in oil recovery system – chain brush conveyor –

- Good weather conditions
- Water temperature above oils pour point (23°C - 18°C)



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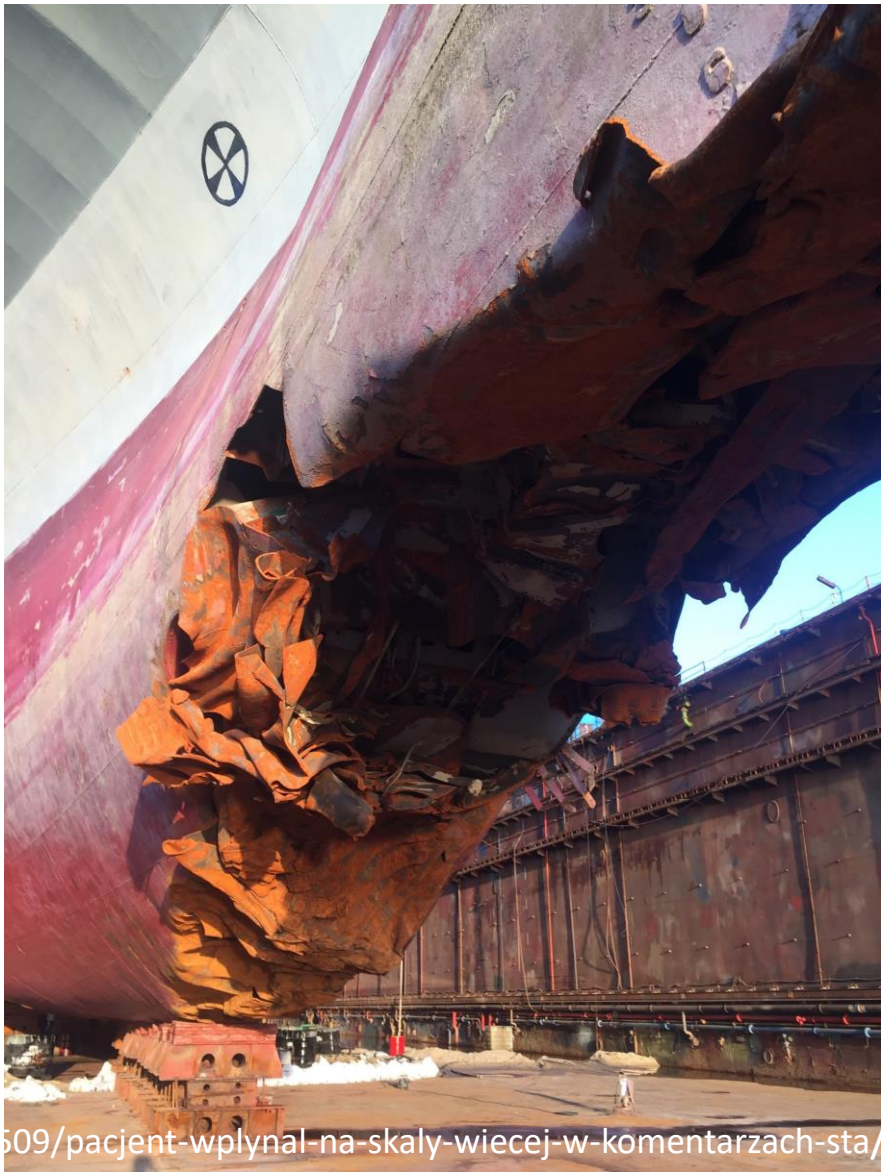
2th August

Makassar was successfully towed to Oskarshamn port and later to ship repair yard in Poland.



Makassar Highway was put out of Service 2018





Borrowed pictures: <https://www.wykop.pl/wpis/3465609/pacjent-wplynal-na-skaly-wiecej-w-komentarzach-sta/>