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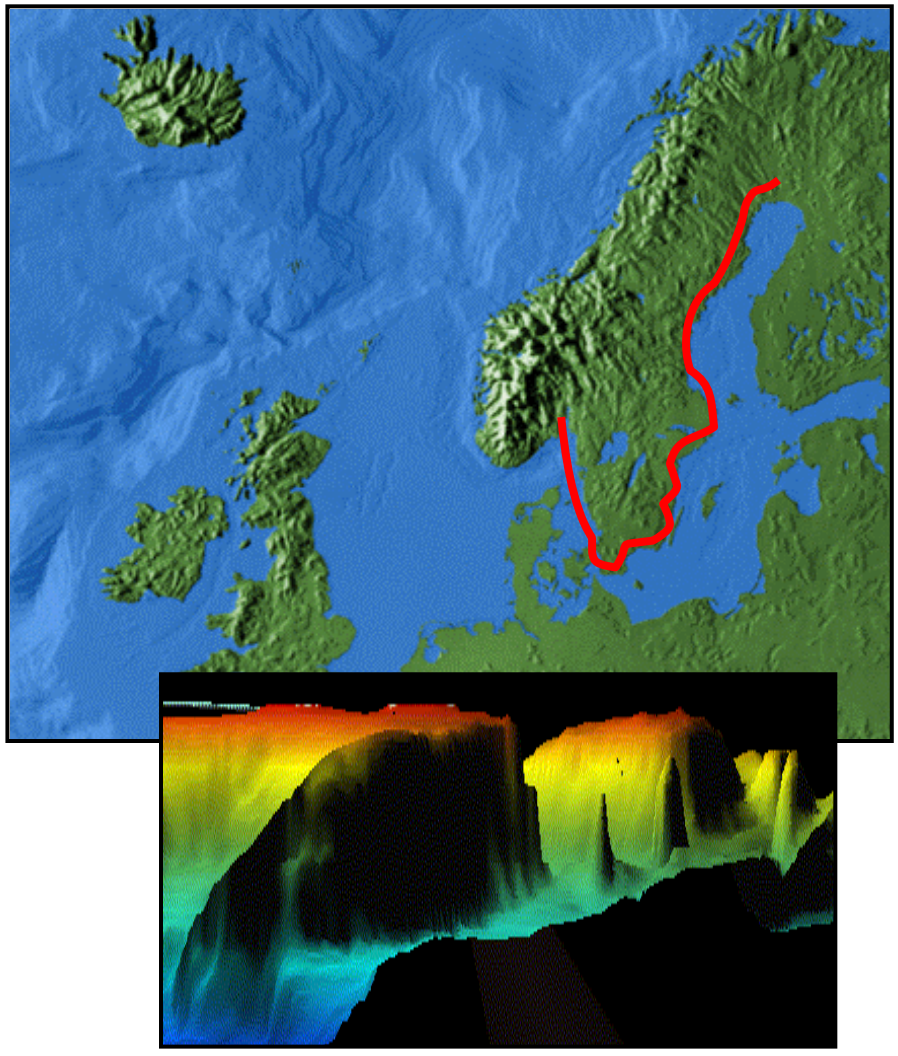
COM 42. MCM SQN

Underwater operations in the littorals – considerations for Mine Warfare

- The environment
- The threat
- Own assets and concept
- Why is the littoral area different? Or is it?

Geographical outlines of the Baltic Sea

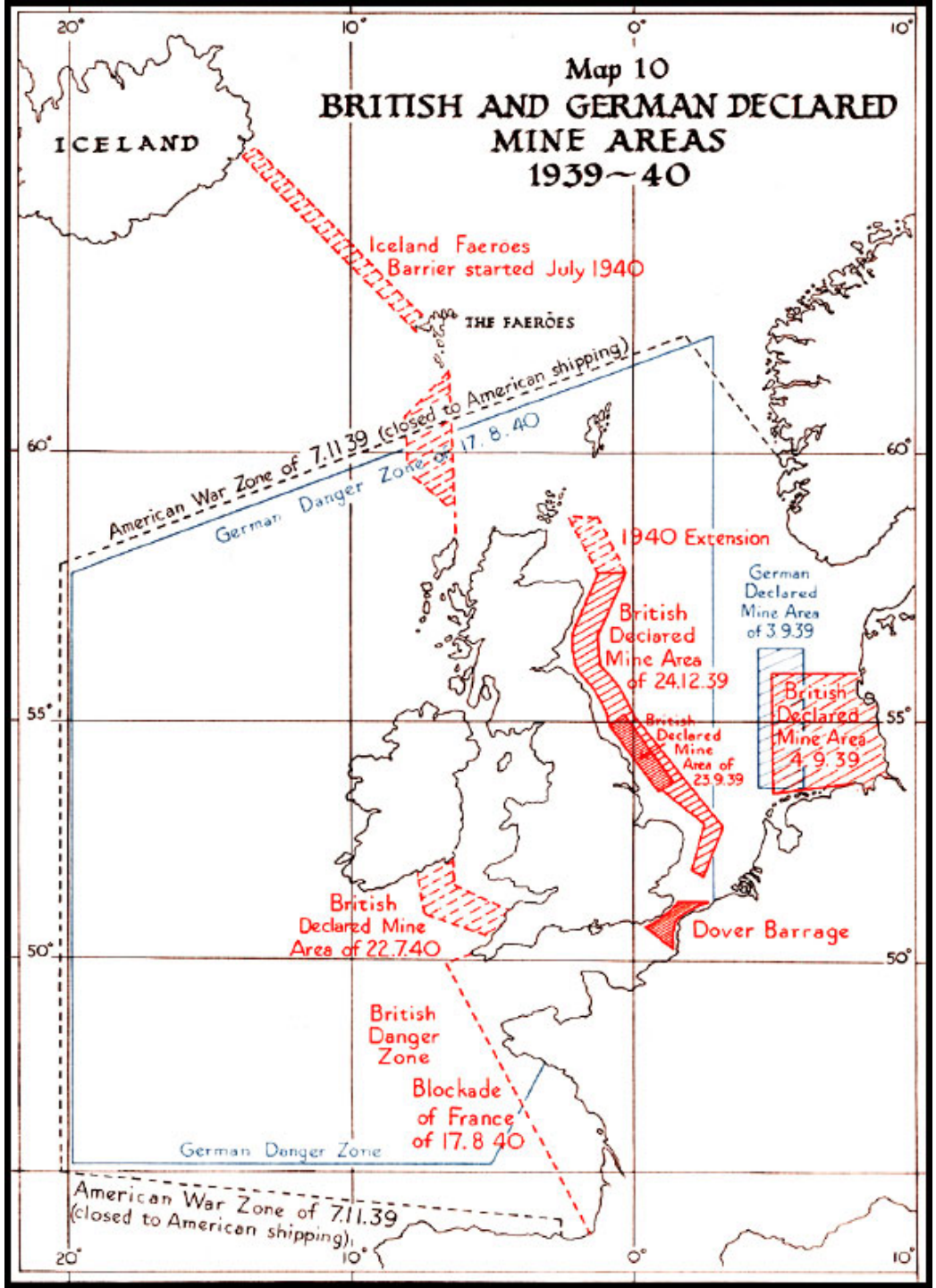


- Sweden has a 2 700 kilometer long coastline
- Average depth of the Baltic Sea is 60 meters
- Topographic variations
- Bottom composition variations
- Hydrographic variations
- Magnetic variation variations
- Ice during winter

If land looks like this…

Explained on a chart

Classic Mine Warfare in the ”non-littorals”.



Modern Mine Warfare - Iraq 2003

A handful of mines hit directly on coalition´s critical vulnerability.

Covertly laid.

Control of the sea or littoral maritime control?

The modern mine threat

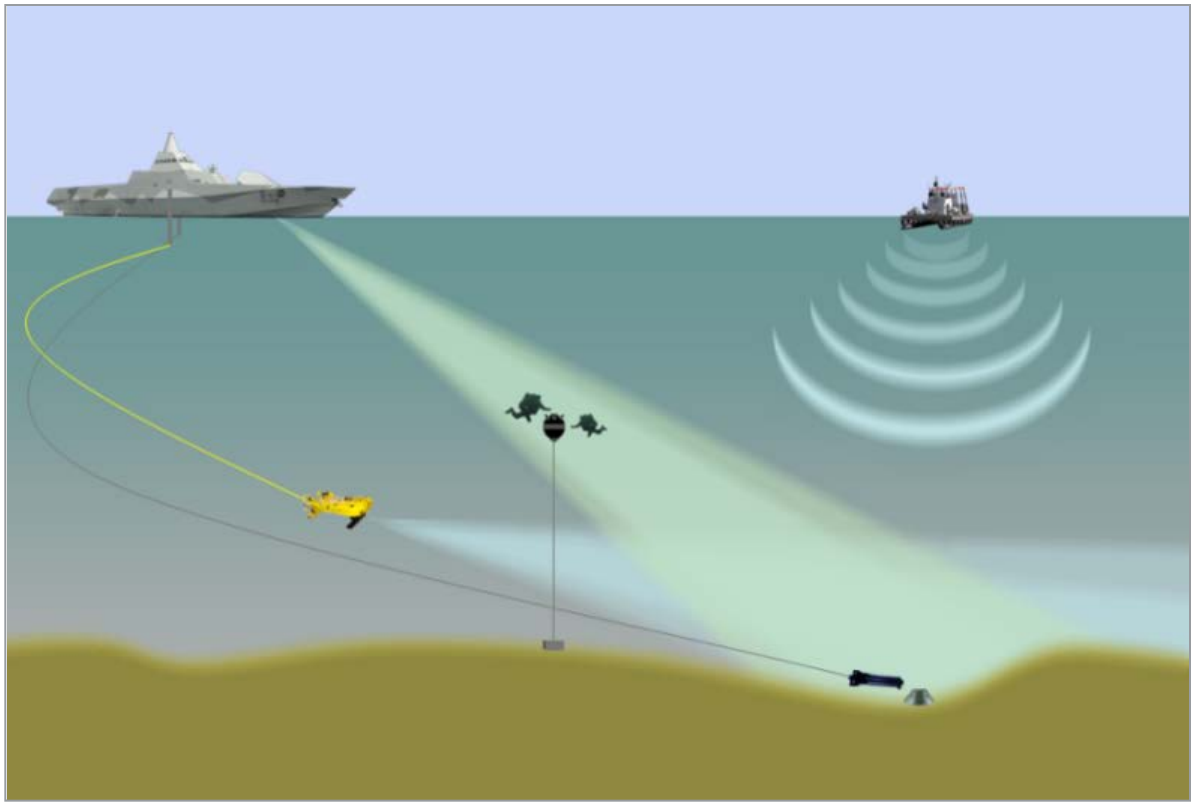
- Stealth Mines
- Multisensor fused
- May be laid – or placed – ideally
- New signatures: seismic, electrical,
- New sensors in old mines
- Anti-sweep/anti-hunt devices

- In the littorals: some mines will be unhuntable or unsweepable!

Littoral difference?

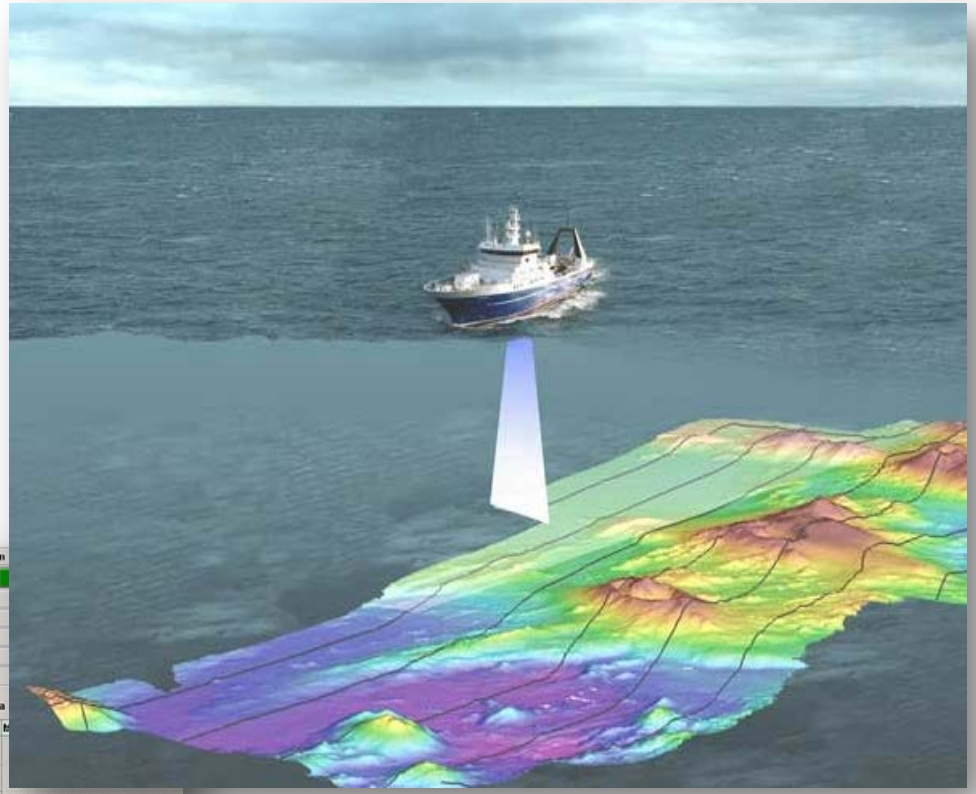
- The total threat is the environment * mines
- The same mine in two positions poses two different threats and demand different counter measures.
- Mine fields should, doctrinally, be defended. Inshore threat to MCMVs must be reduced.

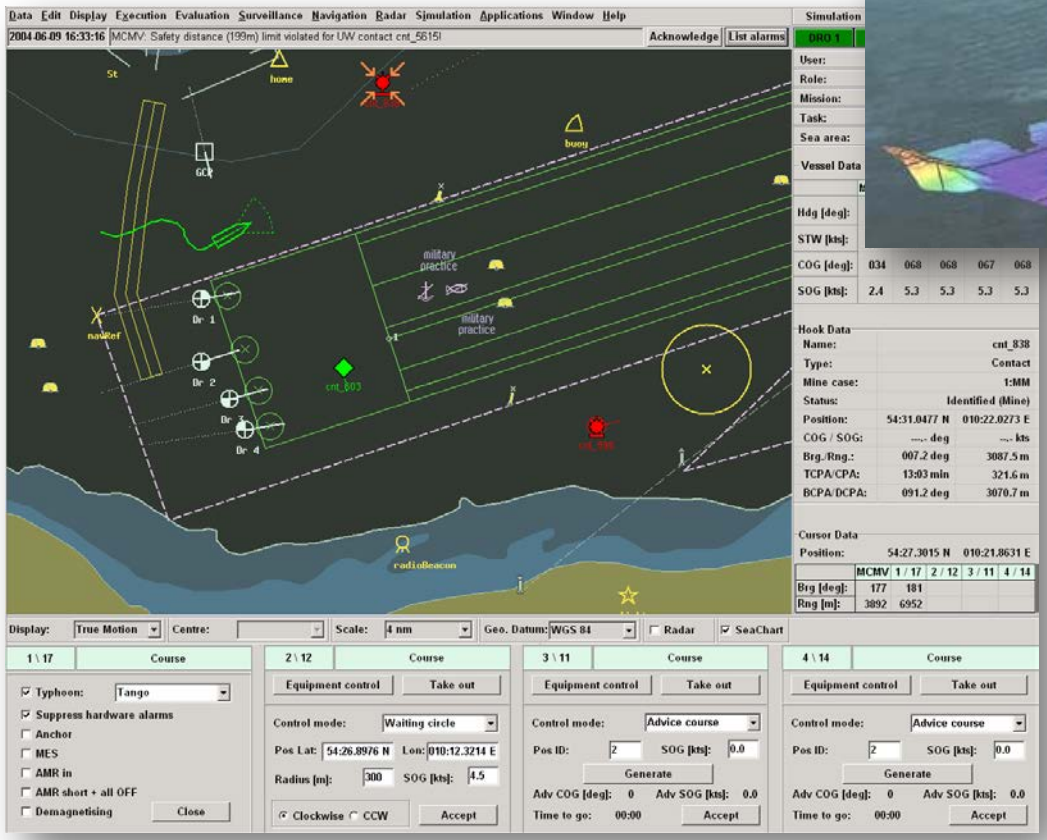
RSwN MCM-concept today



SWEDISH ARMED FORCES

Tactical Survey – Terrain Awareness & Time Saver





Change detection for mine hunting

Choice of SLOCs / Q-routes

Self-protection

- Blue water
  - ”Babysitter” concept
  - RMP/CSP
  - NCAGS
- Littorals
  - ”Help yourself” concept
  - Very local situational awareness
  - Civilian traffic

Sum up – MW in the littorals

- Three-dimensional
- Environmental dimension to mine threat
- Tactical survey component
- Variety of means crucial
- Stronger reliance on organic self defence