



**ONNETTOMUUSTUTKINTAKESKUS
CENTRALEN FÖR UNDERSÖKNING AV OLYCKOR
ACCIDENT INVESTIGATION BOARD FINLAND**

Sörnäisten rantatie 33 C, 00580 Helsinki, Finland
www.onnettomuustutkinta.fi

RUOTSINSALMI FAIRWAY

Risto Repo

EMAIIF 5

Budapest

29 - 31 March 2009

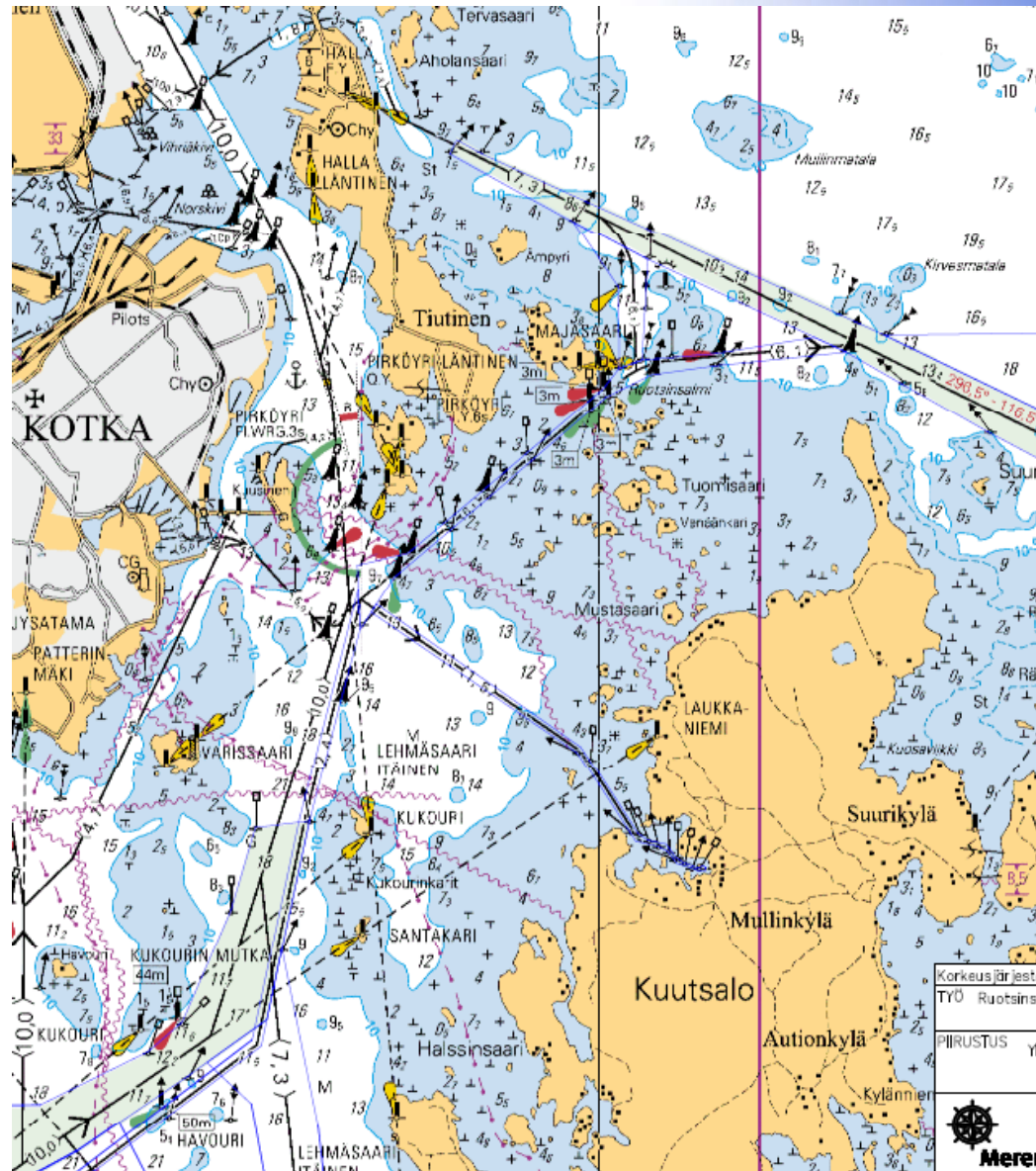
Battle of Svensksund 9-10 July 1790

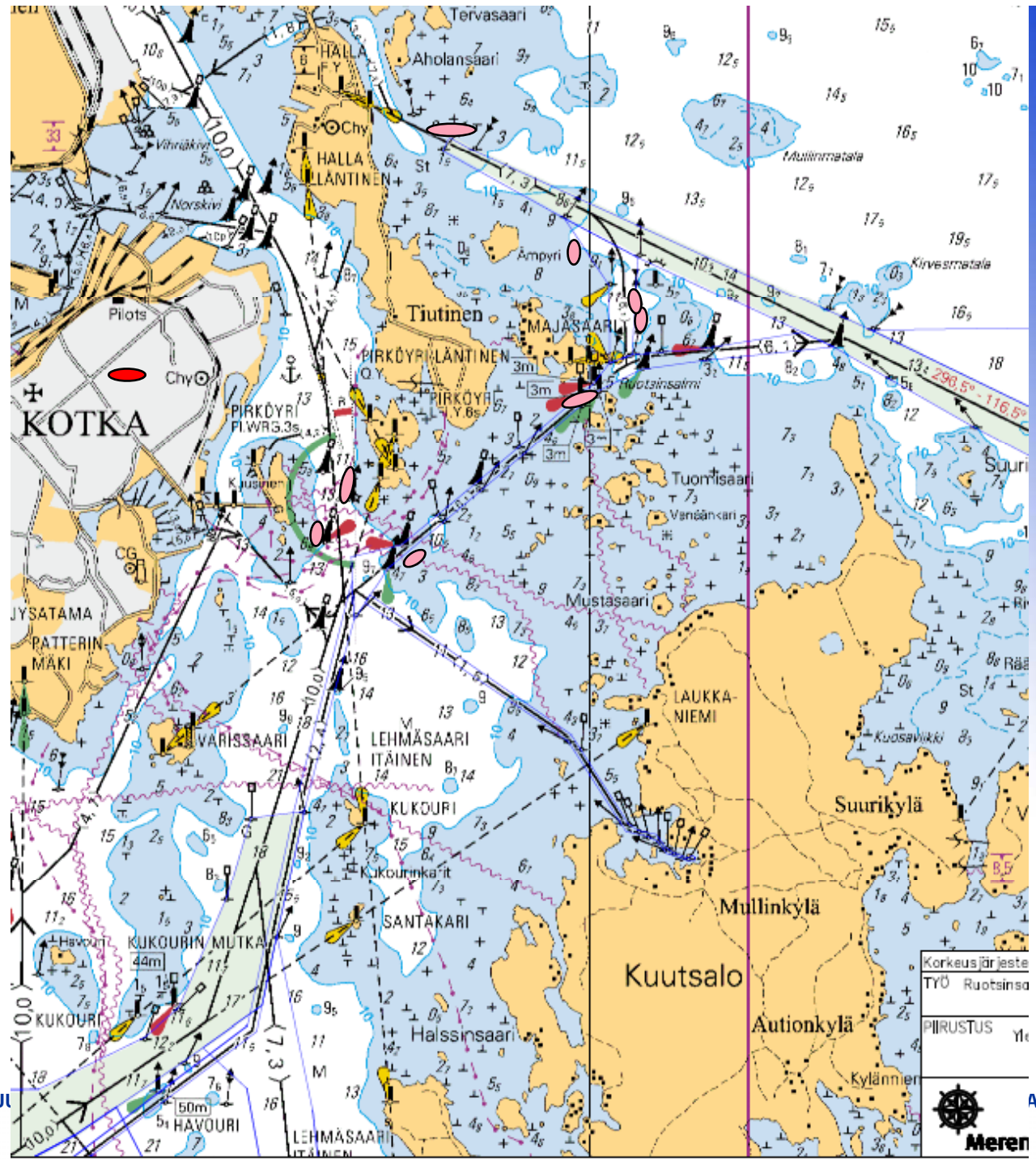




- **The second battle of Svensksund is the biggest naval battle ever fought in the Baltic sea: 500 ships (including supply ships and other ships not involved in combat), close to 30,000 men and several thousand cannons. In Svensksund, the Swedes boasted to have destroyed 40 percent of the Russian coastal fleet.**







ONNETTOMUUS
1.4.2009

ARD FINLAND



ms CHRISTA 23.11.1998



TRAVEBERG 26.12.1998





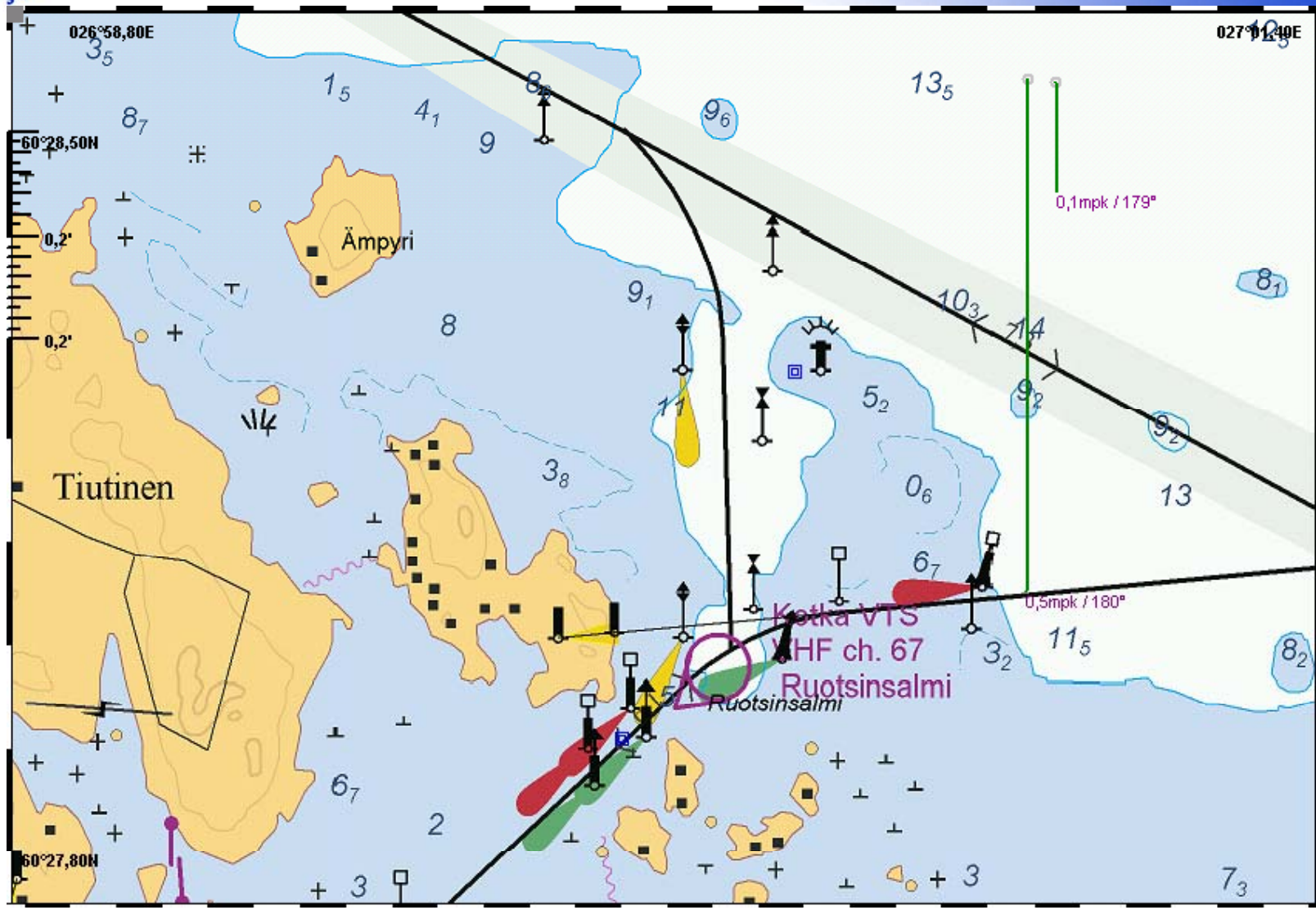
GARDWIND 5.12.1998 77 metres

foto Jan Melchers



The radius of turn, 400 meters

- According to Fairway planning instructions the radius of a turn must be minimum 5 times of the length of the vessel and between two turns there must be a direct line of 5 times of the length of the vessel.



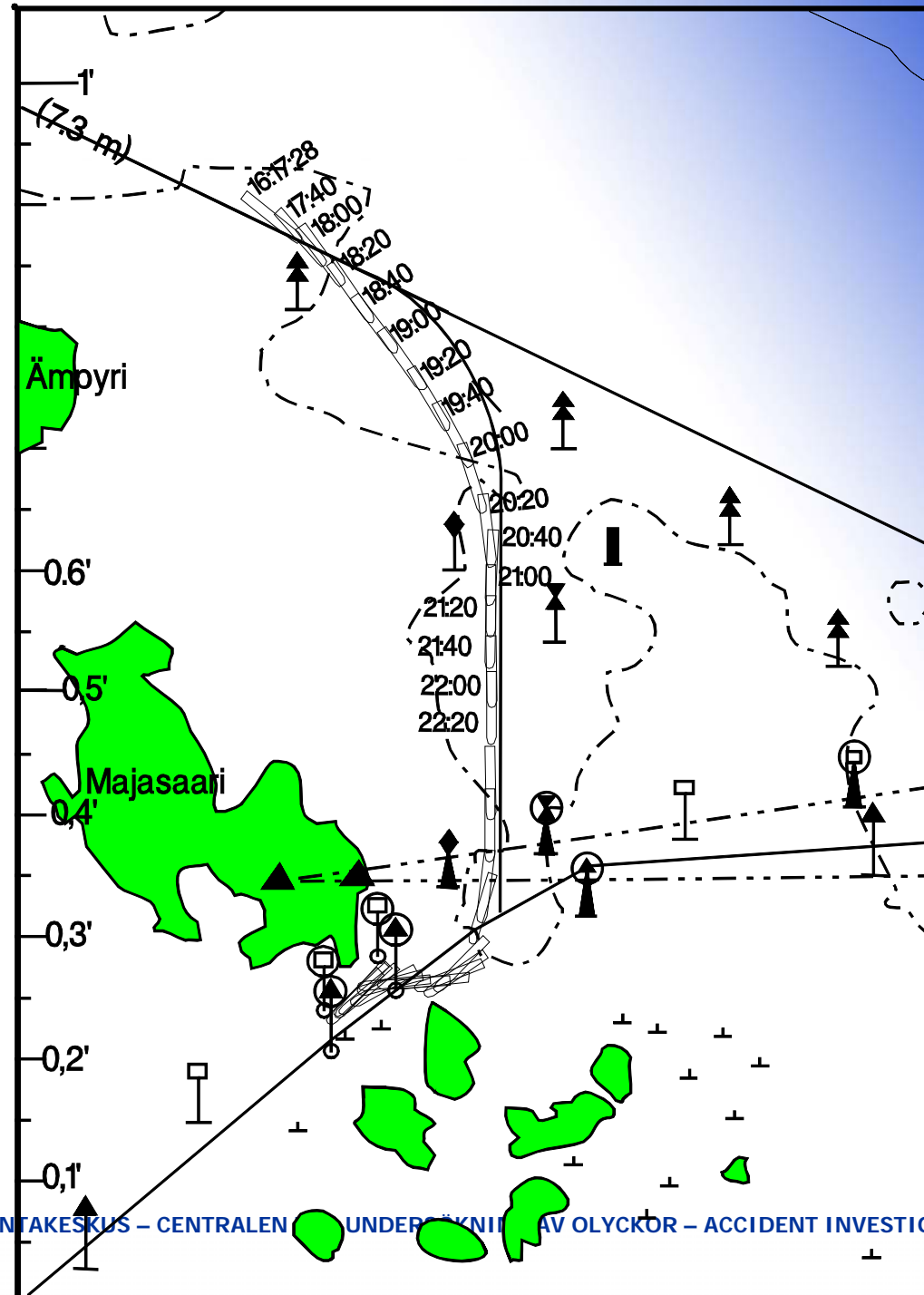
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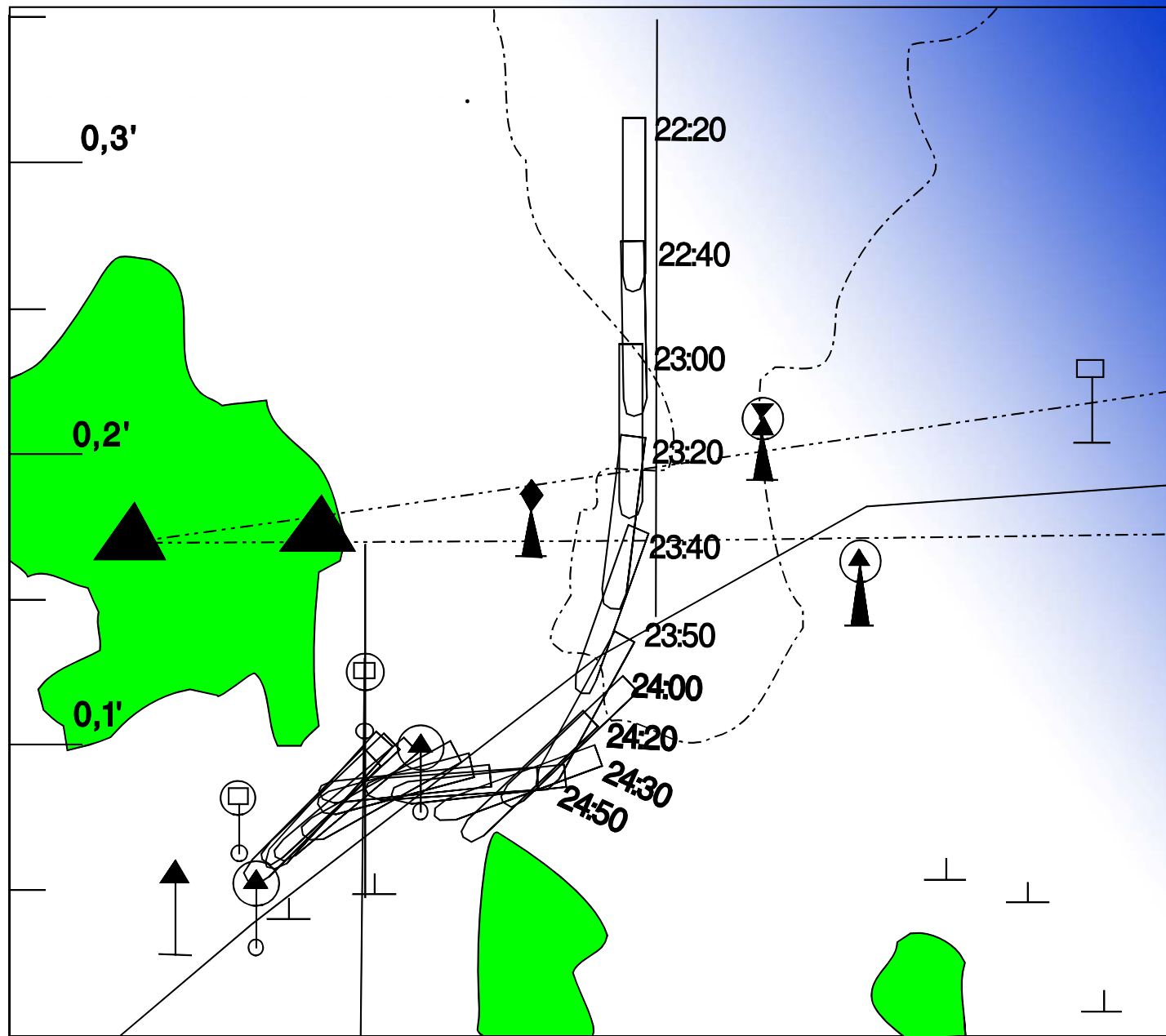
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Volgo-Balt 235, 113,7 m









Forte 91 metres



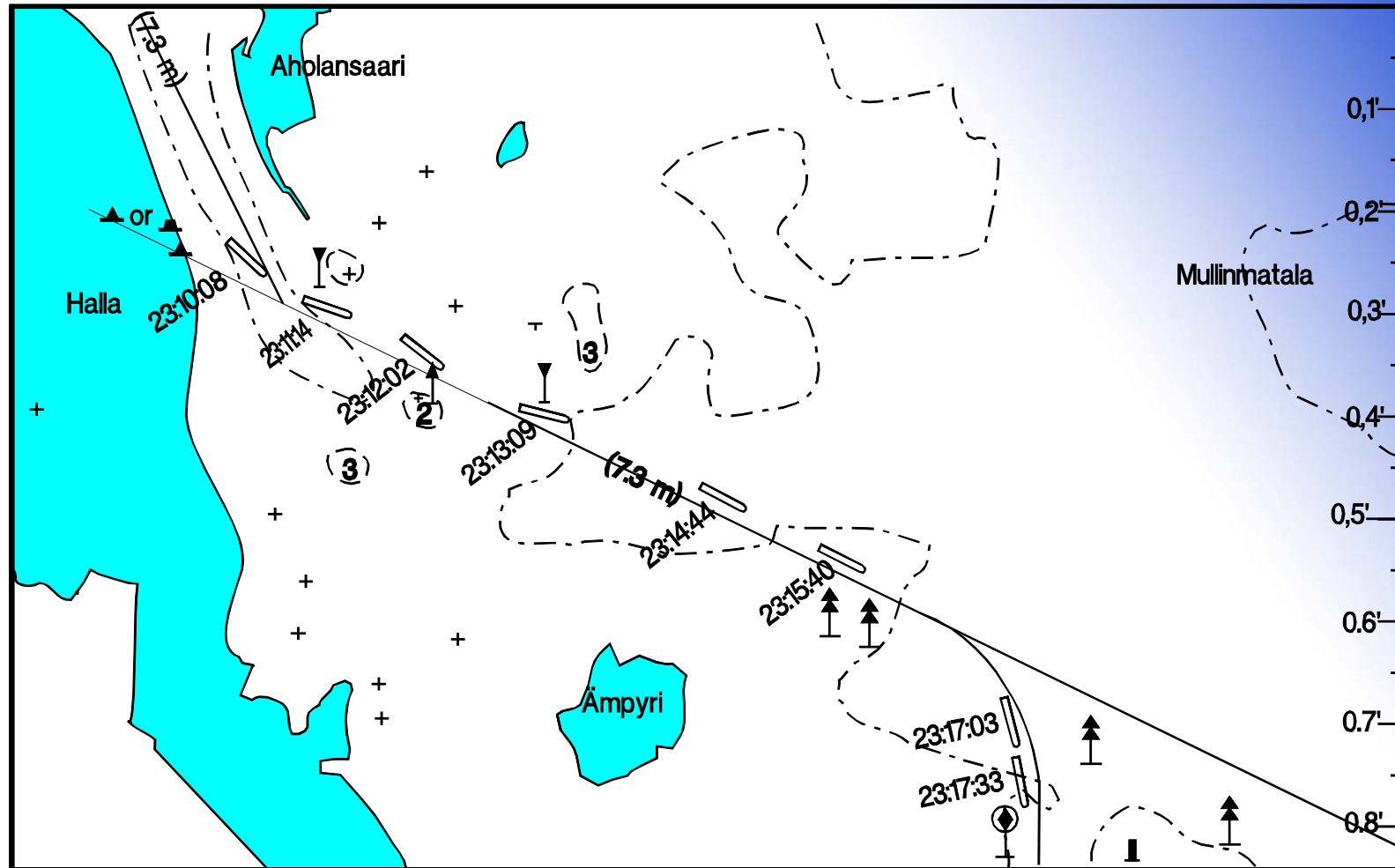
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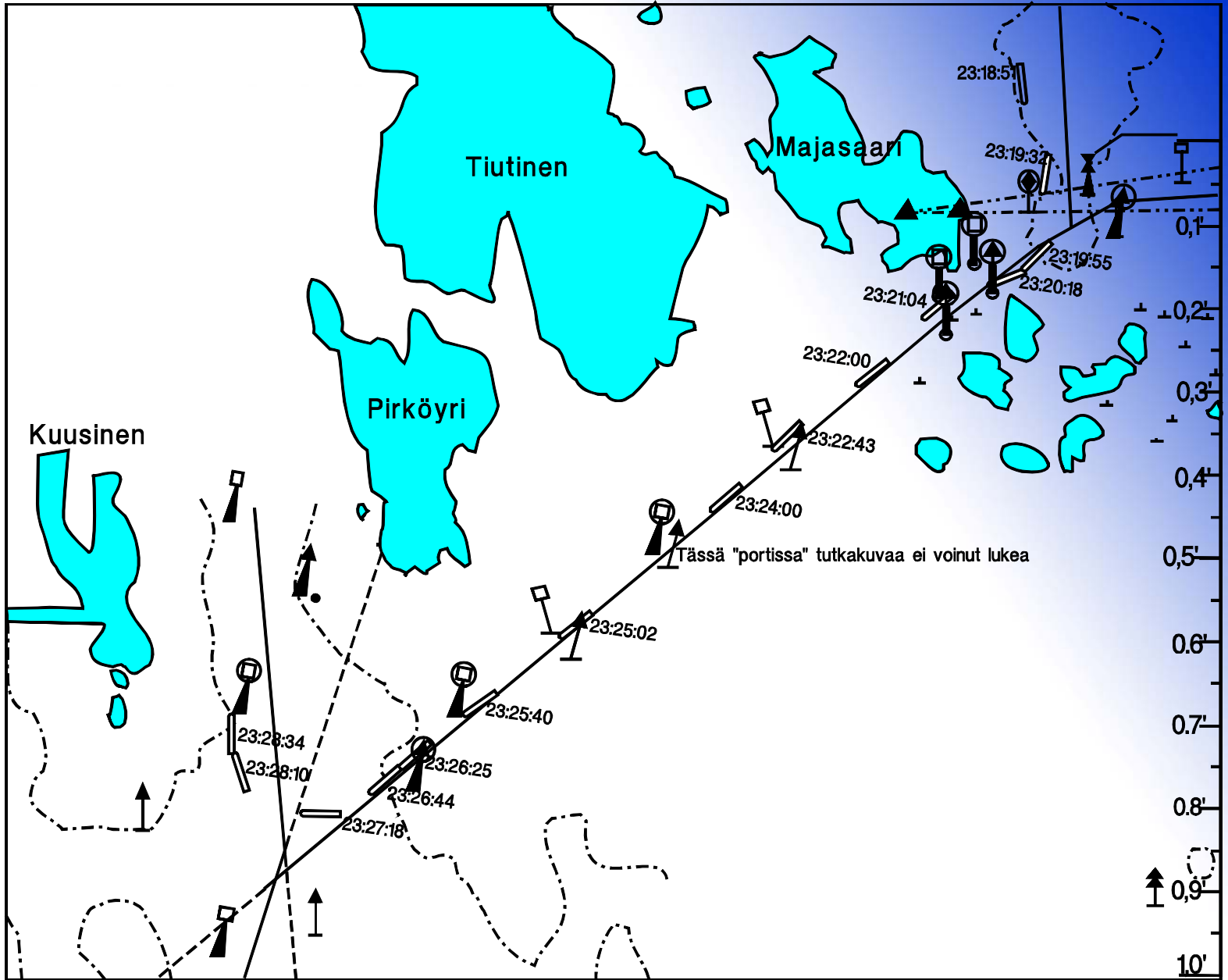
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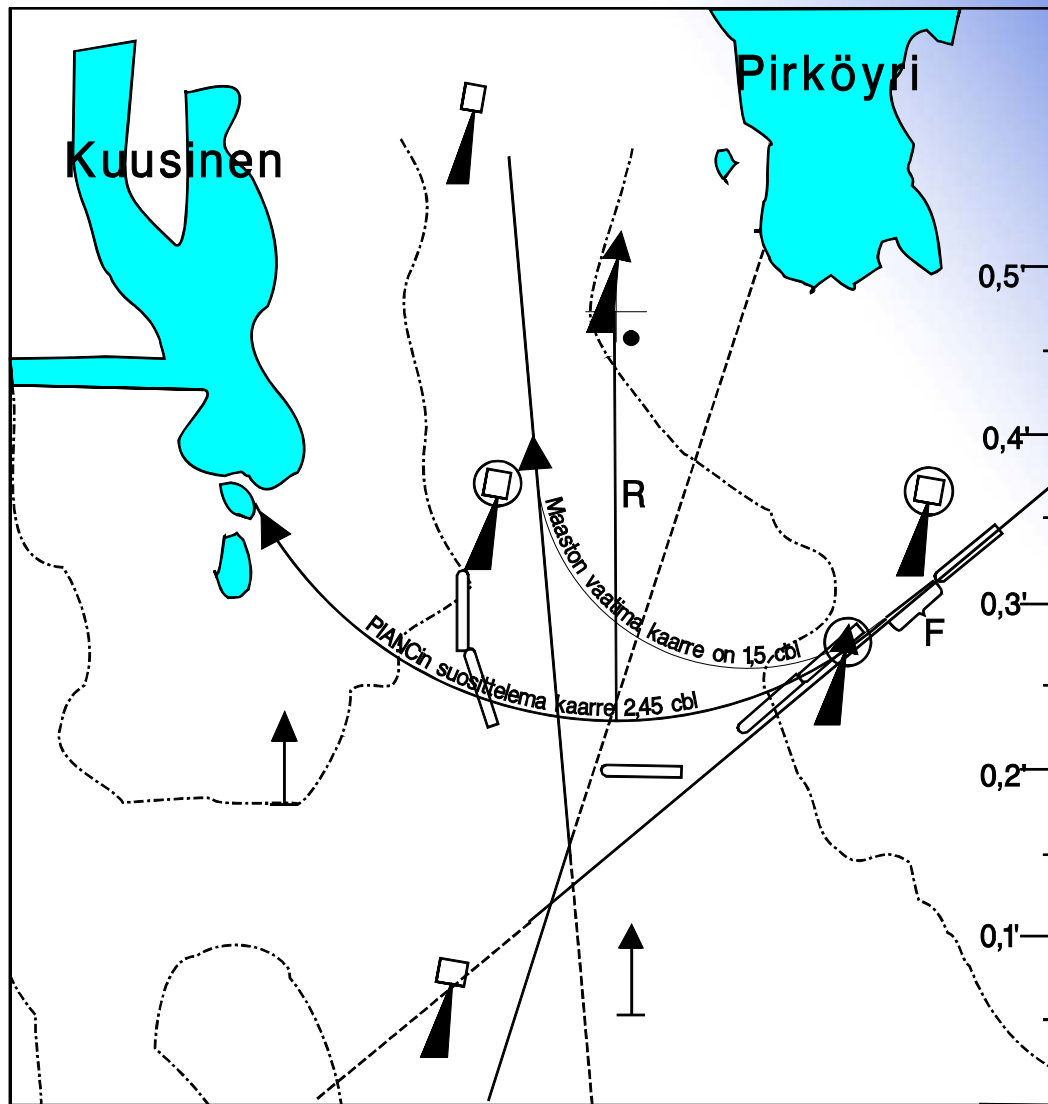


Deviating handling in the beginning



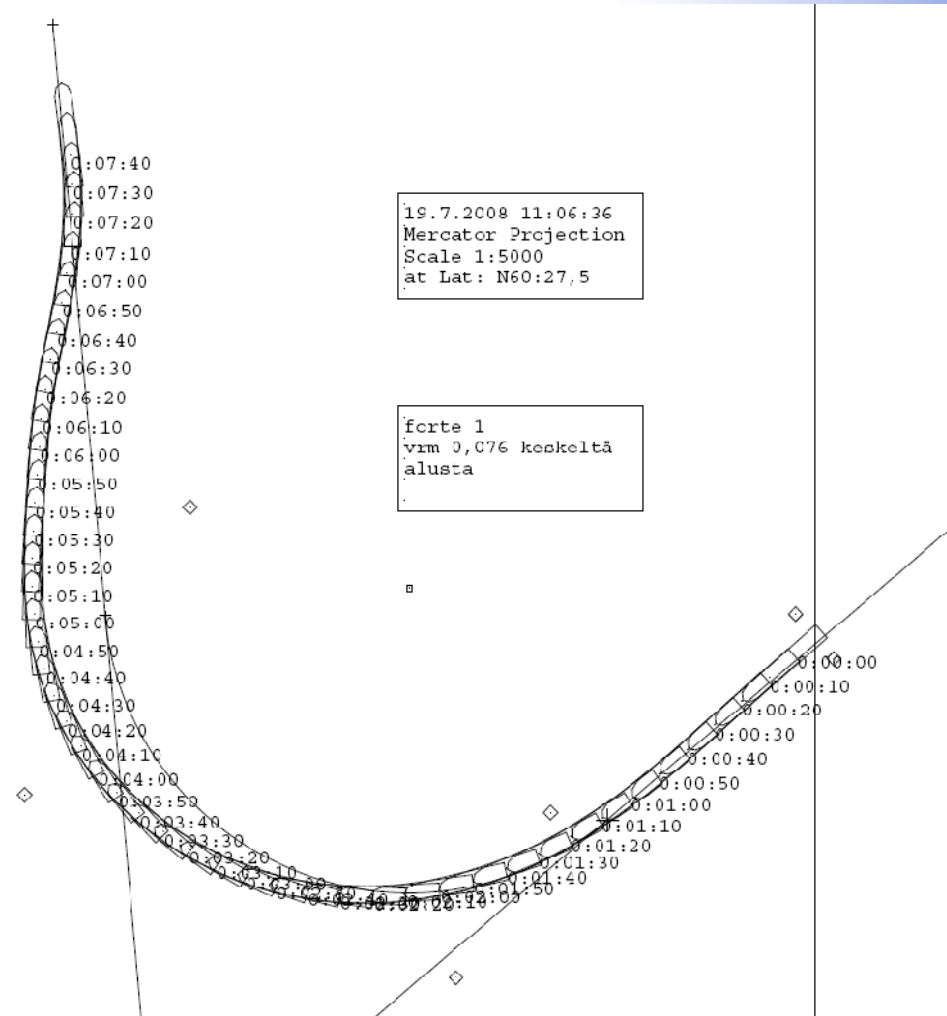


ANALYSIS

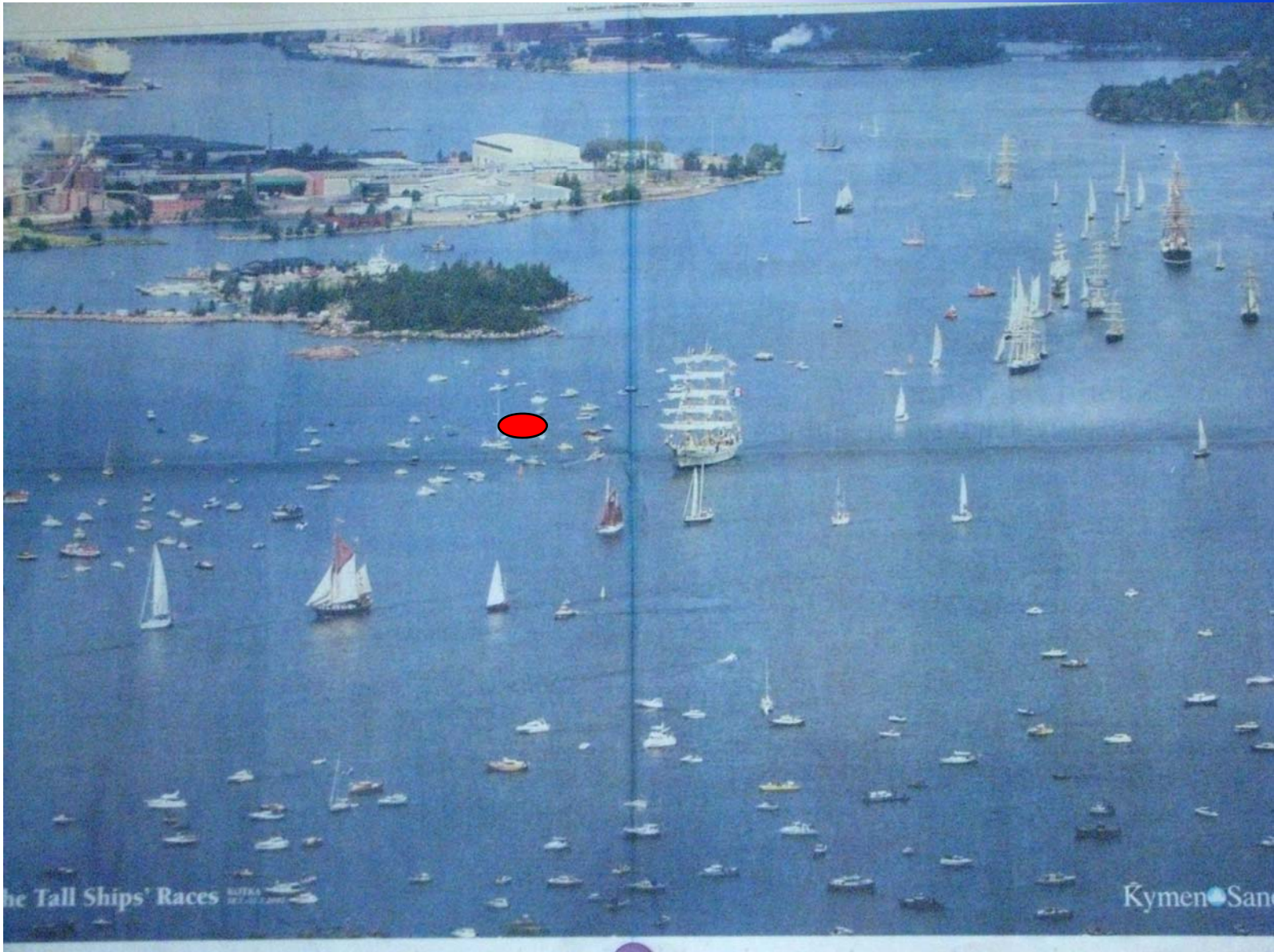




Simulation show how the curve could have been done, but this is difficult, if the vessel is too south in the start of the curve.







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