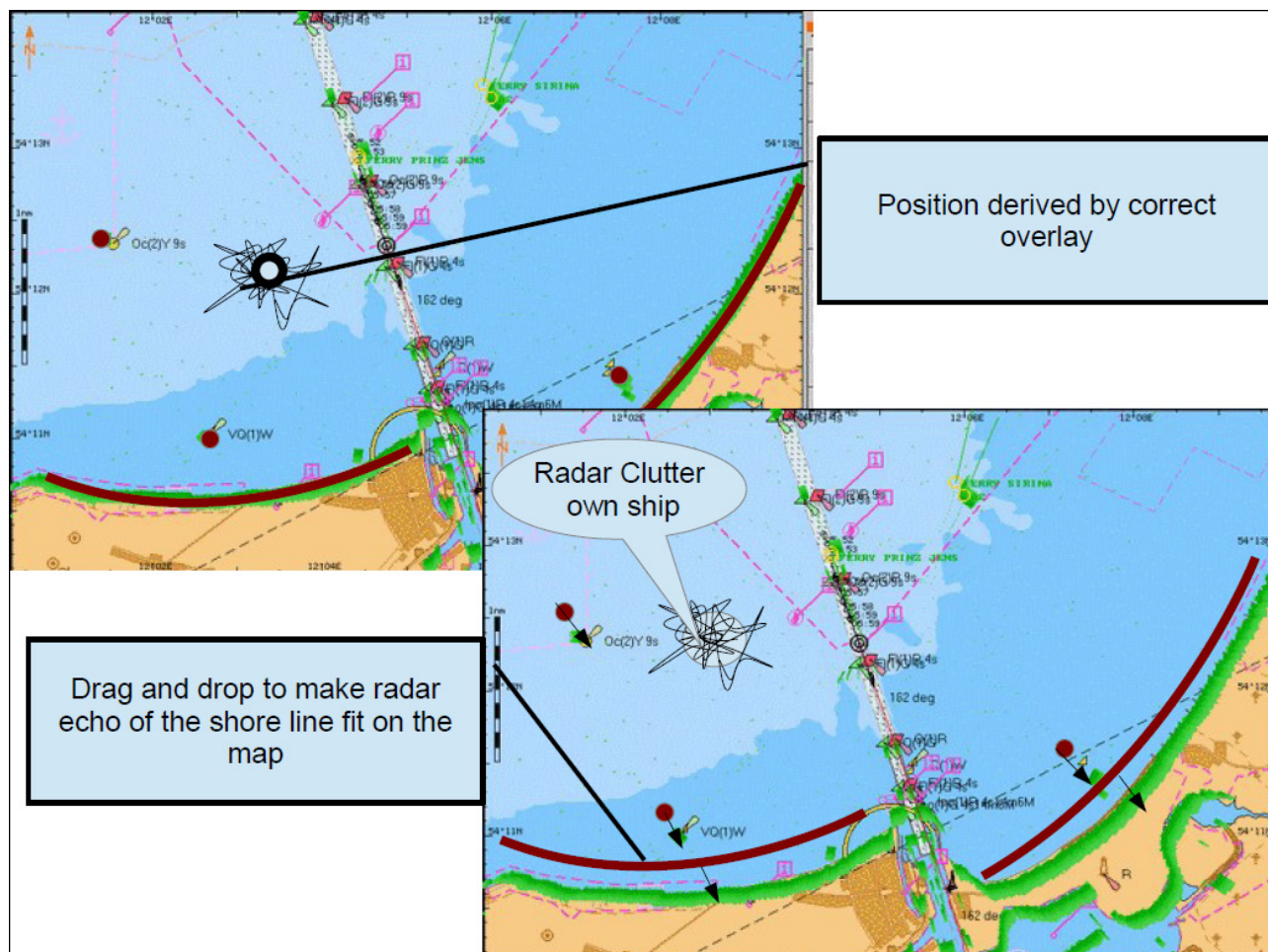


Radar overlay

In my experience as navigator I was missing the capability to drag and drop the radar overlay. Often navy ships have a very good inertial navigation system and a good gyro. Of course leisure crafts have less of these fancy tools but who knows that changes in the future. But the capability and ease of use is still there. A trained human mind is very good in evaluating if a radar overlay on a nautical chart is correct or not. I missed at the time the capability to drag and drop the overlay (only lat and lon as degrees of freedom but in theory you could also “solve” gyro errors to a certain degree of accuracy by rotating it as well) on a nautical chart. The moment you drop the overlay you have created a radar fix that is far more accurate then your 2-3 radar bearing/distance fix.



If from that moment the DR takes over then you can visually check if the position stays accurate and if needed update it again by drag and drop. Another option is, when the DR accuracy is not so good, by assigning one or more fixed points on the chart like poles in the water or other radar trackable features and have the position updated by plotting the bearing and distance from that point on to the nautical chart. If only your GPS input is broken you could even hook the updating of your position on a radar contact that is transmitting AIS. The AIS provides the position of that contact on a chart and together with the radar tracking (bearing and distance) you solve your own position. Of course this is not a fool proof system which always needs to be monitored on its correctness. This may not be a solution you read in the textbooks but navigation is in my view a combination of skills and art, using what is available at that moment keeping in mind its pitfalls and its pool of errors. The data is out there and some of these features require only a few line of codes and could make your life a lot easier at some moments. The trick is to know when to use it and when not to.