

Recommended format for Submission of Proposals to CSPCWG10
Paper for Consideration by CSPCWG
Anomalous soundings, reported depths and obstructions

Submitted by:	ITALY
Executive Summary:	Criteria to define when an anomalous sounding can represent an obstruction.
Related Documents:	CSPCWG9-08.15A, CSPCWG9-08.6A, S-4 B-424.5, B-422.9, B-620.3
Related Projects:	S-4

Introduction / Background

This paper is related to discussions about obstructions in CSPCWG9-08.15A and CSPCWG9-08.6A.

Last year, the final report, for the paper CSPCWG9-08.15A indicated:

There was some debate over whether the abbreviation 'Obstn' actually adds anything useful, but the consensus was that it should be retained; it at least clarifies for the mariner that an identifying legend such as 'Wk' or 'Well' has not been missed. Additionally, B-422.9 implies that an abbreviation must be added and it was decided no change to the specification is required.

There was consensus that danger circles should not be generally used for anomalous soundings; there would need to be clear reason to consider the anomalous sounding to be dangerous to some vessels capable of navigating in the vicinity. (This is related to the discussion about the use of I4 at 8.6).

for the paper CSPCWG9-08.6A it indicated:

.....

Reported symbol on small-scale charts. The meeting agreed that the danger circle without abbreviation to imply a reported depth, as originally used on the small-scale INT chart series, is potentially confusing and should be made obsolescent. Approximate contours (if appropriate) and the legend 'Rep' are clearer. The danger line should only be retained if the reported depth is 30m or less. See also discussion at 8.15.

ACTION 29: INT1subWG to make I4 obsolescent.

ACTION 30: Secretary to draft revised wording on 'Rep', to remove danger line for depths >30m.

Formerly, cartographers used to represent soundings considered anomalous, especially for their position, drawing a dotted line (circle or area). This practice was applied also into medium and large scale charts (Fig.1), to highlight, for example 5.9 m in DEPARE=5-10 m very close to DEPCNT= 10 m or 2.9 m in DEPARE=2-5 m very close to DEPCNT= 5 m .

According to clarification sorted by CSPCWG9 and B-422.9, we should add the abbreviation 'Obstn' to these soundings.

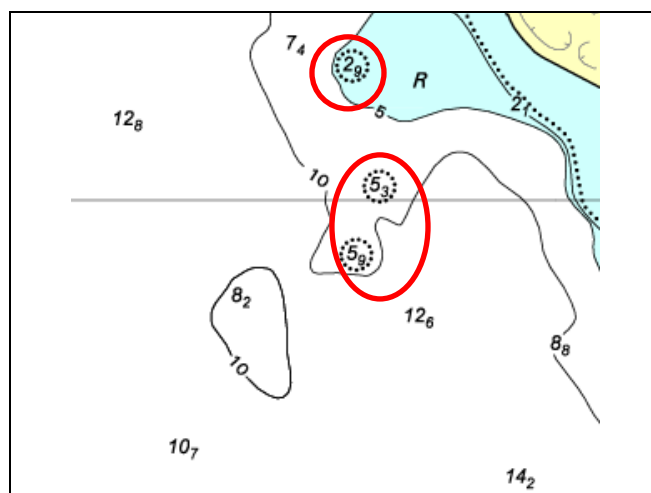


Fig.1 - Chart Scale 1:10.000

In Fig.2 we have the same situation as in Fig.1, but the depth value encircled by a danger line is 128 m (in DEPART= 100-200 m very close to DEPCNT= 200 m).

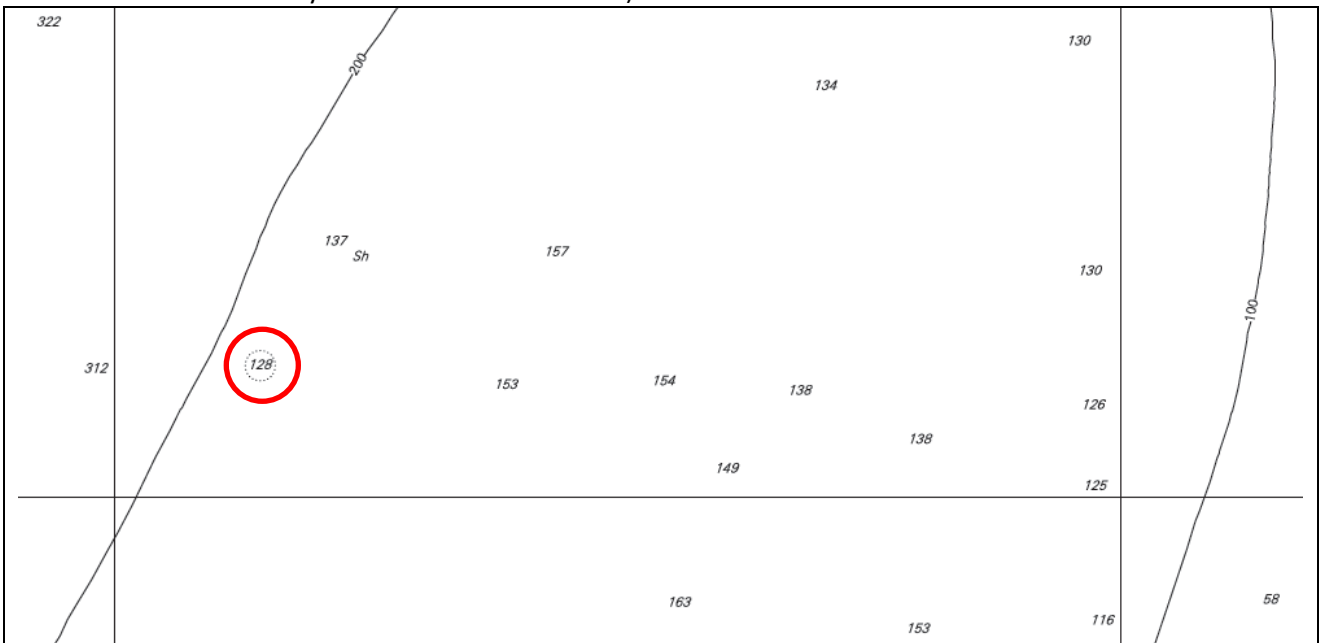


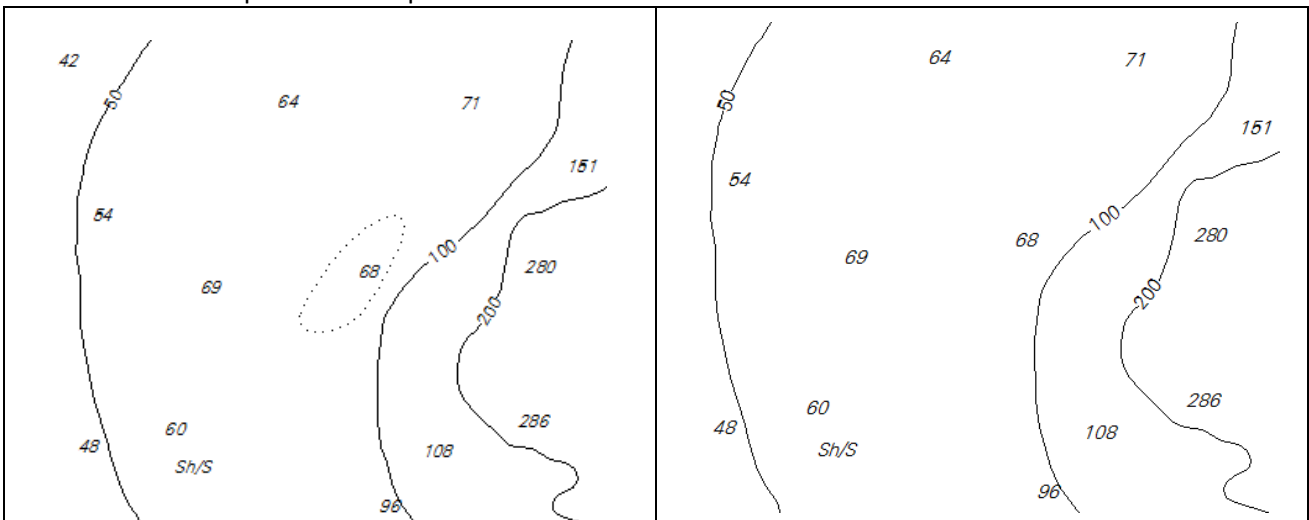
Fig. 2 – Chart Scale 1:100.000

Supposing 128 m is a reported depth, as an approximate contour is not appropriate, and the depth is >31 m, according to clarification sorted by CSPCWG9-08.6A, we should represent 128 without a dotted circle and with the legend 'Rep'.

Analysis / Discussion

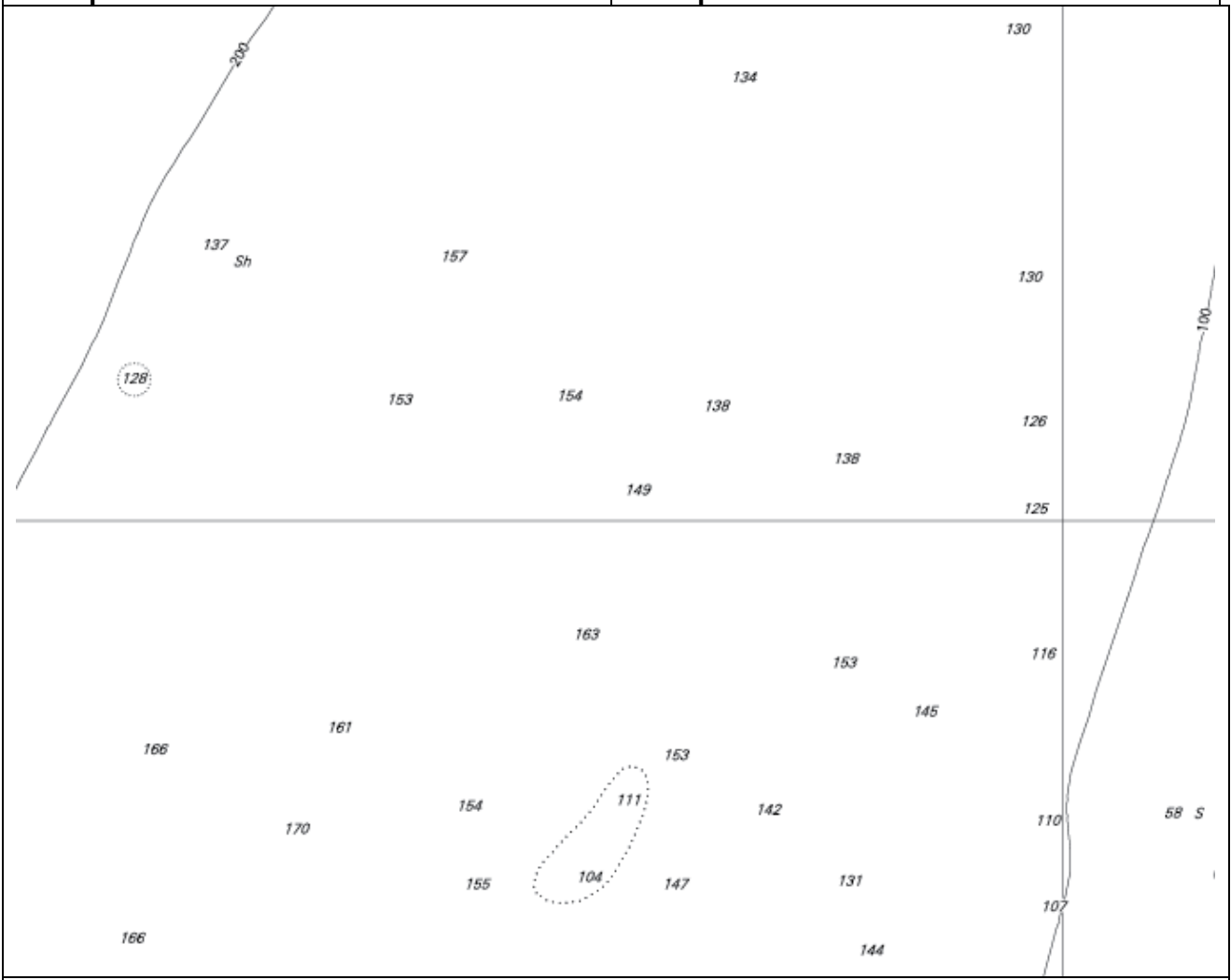
We would be interested to know whether other members have taken into consideration similar situations. In detail:

- 1) What kind of criteria do you apply to decide if a sounding (not reported), expected in the DEPART but unexpected for its position, is potentially a danger to surface navigation?
- 2) Could we set a threshold to define a sounding potentially dangerous to surface navigation?
- 3) If for reported depth the threshold is 31 m could we assume the same threshold to represent obstructions expected in the DEPART but unexpected for their position ?
- 4) If for question 3) the answer is YES could we assume that we can modify the representation below from example A to example B?

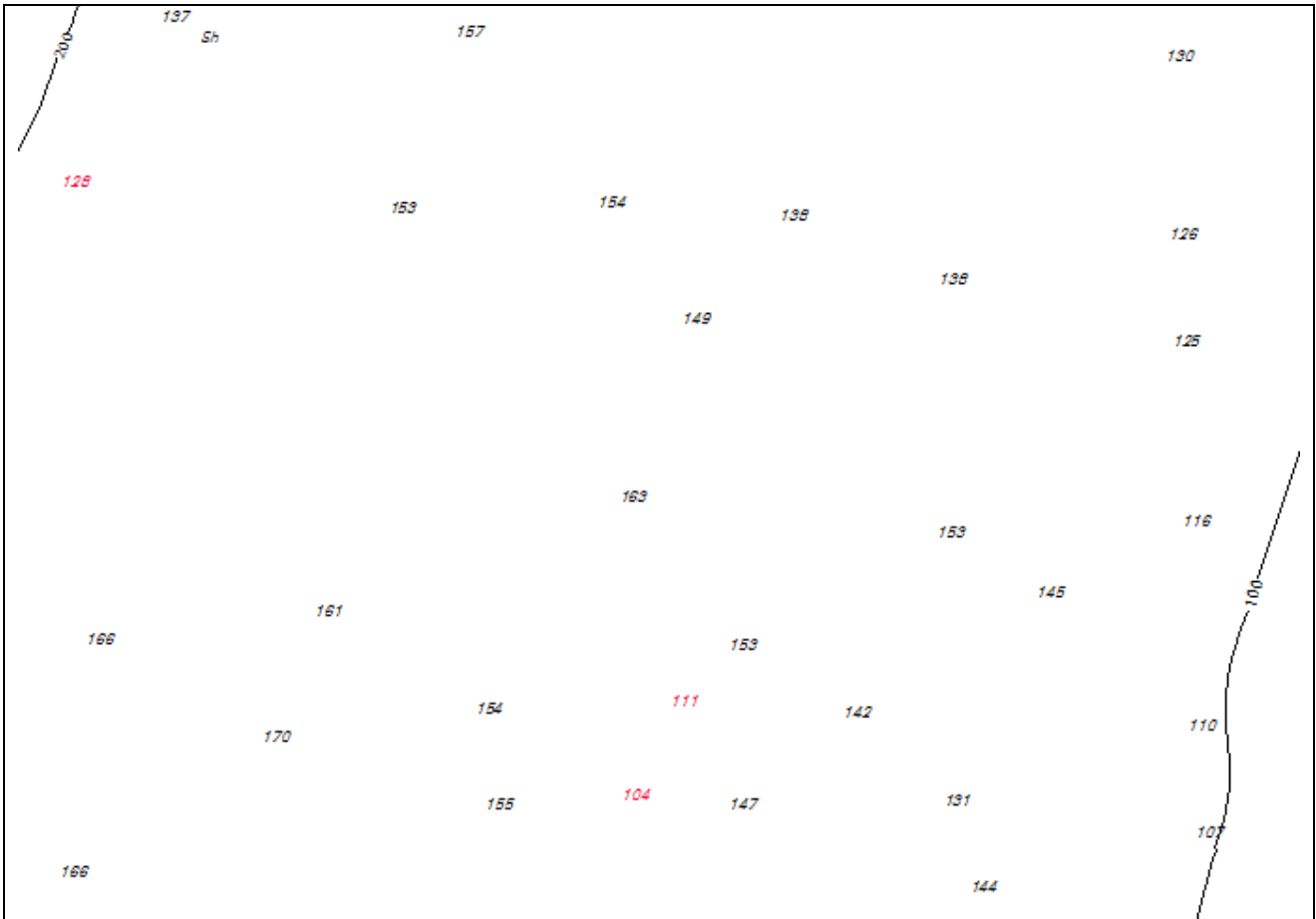


Example A

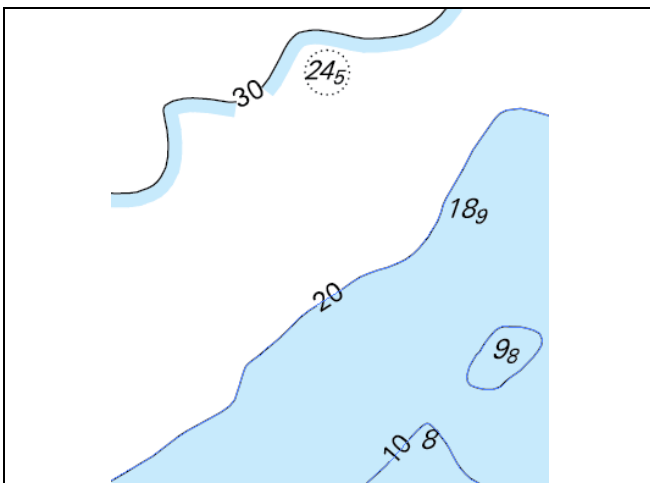
Example B



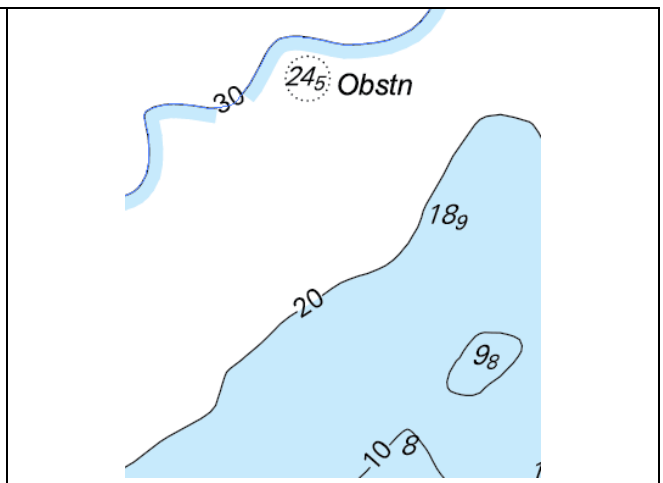
Example A



Example B



Example A



Example B

- 5) What kind of information did you take into consideration to define the threshold of 31 m (CL 70/2013), quoted also in B-620.3?

Justification and Impacts

Discussion in this paper may result in a more complete guidance for the cartographer in providing information to the mariner as regards to soundings, obstructions and dangers to surface navigation.

Action required of CSPCWG

CSPCWG is invited to:

Consider this paper and possible changes to S-4.