



2nd Meeting of the
Nautical Cartography Working Group

26-29 April 2016
Monaco

NCWG2-11.2C
US Response
(Floating Barriers)

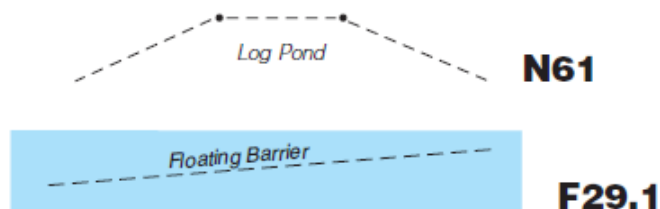
Introduction

- ✦ S-4 lists various types of floating barriers
 - single textual description of the symbol
 - two example graphics for symbolization
- ✦ INT1 has two entries for floating barriers
 - each shows a different symbol
 - each lists a different set of barrier types
 - likely to give mariners the impression that different symbols are used for different barriers



B-449.2

B-449.2 **Floating barriers.** The limits of log ponds (timber pounds, log booms), oil barriers, security barriers, ice booms, shark nets and any other floating barriers must be charted as a black dashed line (N1.1) with small black (solid) circles (F22) where there are posts, piles or other supports. A legend, for example: 'Log pond', 'Floating Barrier', or equivalent, should be inserted in the area or along the inside of the limit as appropriate.



- ★ Why 2 INT1 entries? Why different lists? Why list security barrier in both?
 - F29.1, "Floating barrier, e.g., oil barrier, security barrier"
 - N61, "Floating barrier, including log ponds, security barriers, ice booms, shark nets"



Oil Barriers



Security Barriers



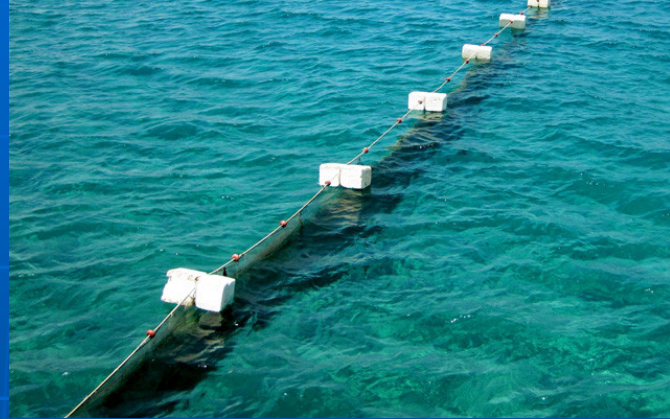
Log Ponds



Ice Booms



Shark Nets



Recommendation 1

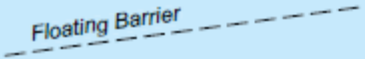
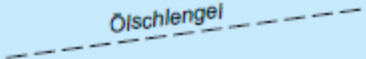

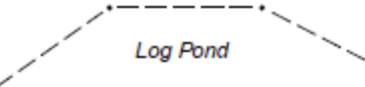
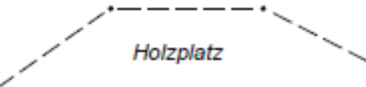
- ✦ Use the same list of barrier types in both entries
- ✦ "Floating barrier, e.g., security, oil retention, log and ice booms, shark nets"

No clear case for which barriers are more likely to be in ports verses other areas and limits outside of ports.

Therefore, the same list should be used for both entries.



Different Symbols

29.1		Schwimmende Sperre, z. B. Ölschlengel, Sicherheitssperre <i>Floating barrier, e. g. oil barrier, security barrier</i>		449.2
29.2		Ölsperre (Druckluftleitung) <i>Oil retention barrier (high pressure pipe)</i>		
61		Schlengel, Schwimmsperre (z. B. Balkensperren für Holzplätze), Sicherheits-, Eissperren, Hainetze <i>Floating barrier, including log ponds, security barriers, ice booms, shark nets</i>		449.2

- ✦ S-4 and INT1 show two different symbols
- ✦ N61 shows "posts, piles or other supports," as specified in S-4 , F29.1 does not
- ✦ Both entries describe the same type of feature, so the same symbol should be shown in both entries



Recommendation 2

- ✦ Change the symbols shown for each entry (F29.1 and N61) to be the same.
 - Either a single example showing piles, or
 - two examples at each entry, one with piles and one without them
 - Different labels could be used on each example.



F29.2 Oil retention barrier (high pressure pipe)

- ✦ Neither S-4, nor INT1 provide any definition for "oil retention barrier (high pressure pipe"
- ✦ S-57 describes this value of the ENC "Category of oil barrier" attribute as:
 - ✦ Oil retention (high pressure pipe): a pipe with holes from which air blows. When the air bubbles reach the surface they form a barrier which prevents the spread of oil.




Also called "pneumatic oil barriers" or "air bubble curtains"



- ✦ Bubble curtain is a more general term
 - can also refer to uses that channel or otherwise restrict the movement of fish, or aerate water



Recommendation 3

- ✦ Retain F29.2, but change description to "Submerged pneumatic barrier pipe"
 - ✦ Adopt magenta pipe symbol shown German INT1
- 
- ✦ Specify a more meaningful label, such as Air bubble curtain, Air curtain, Bubble curtain, or similar term
 - "Oil barrier" does not adequately inform mariners as to the nature of the obstacle. The suggested labels are also more intuitive and more likely to be understood than "pneumatic barrier"
 - ✦ Modify S-4 to implement this symbol



Recommendations

1. Change the description for each of F29.1 and N61 to:

"Floating barrier, e.g., security, oil retention, log and ice booms, shark nets"

2. Change the symbols shown for each entry (F29.1 and N61) to be the same. Either an example showing piles, or two examples at each entry, one with piles and one without them. Different labels could be used on each example.

3. Change the INT1 description of F29.2 to the more descriptive term of "Submerged pneumatic barrier pipe."

Adopt the magenta pipe symbol that is shown in the German INT1 for this feature.

Adopt meaningful label, such as Air bubble curtain, Air curtain, Bubble curtain, or the like to be used with the symbol

Modify S-4 to reflect the INT1 implementation of this symbol.

4. Consider standardizing the use of "e.g.," "including," and "such as" in future modifications of S-4 and INT1.

