Date	Document
11 May 2009	Compiled comments on S12/LB728 BSR/ASA S12.64-200X

Item	Initials	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	Comment	Proposed change	Observations of WG on each comment submitted
1	CERL - MJW	1	(para 2, last sentence)	Ed.	… However, this standard does not specify or provide guidance [on/for/about?-append] underwater noise criteria		Revised to read, "…or provided guidance [ON] underwater noise criteria…
2	NIOSH - WJM	1	3	Ed		A specific locean location is not required to use this standard, but the requirements for an ocean test site are provided.	Revised as noted.
3	NIOSH - WJM	2	1	Ed	Change indispensable to necessary	"…Documents are necessary…"	Revised as noted.
4	CERL - MJW	3.3		Ed.	3.3 beam aspect to either [the-omit] side of the ship Also, is this a direction, or angle (aspect angle), or is it a side?		Definition to read, "direction to either side from the ship under test".
5	CERL - MJW	3.3	NOTE	Ed.	… where the hydrophone[s-append] are mounted at or near the sea floor.		Revised as noted. Also, replaced "mounted" with "aspect", as in "bottom aspect".

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6	CERL - MJW	3.5		Ed.	3.5 closest point of approach (CPA) the horizontal distance (during a test run) where the acoustic center of ship under test is the closest to the hydrophone(s) Usually "closest point of approach" indicates a location. As described, this distance would normally be known as the "distance of closest approach (DCA)".	Suggest to clarify by defining both CPA and DCA, and relabeling fig 4.	CPA shall refer to the location or point. Any reference to the distance shall use terminology “distance at CPA”. The distance at CPA will use the symbol d_{CPA}. This term only appears Eqn (1) and Figures 1, 2 & 4.
7	CERL - MJW	3.7		Ed.	3.7 data window angle	consider: angle subtended at the hydrophone, between the start data location and end data location	Revised as noted.
8	CERL - MJW	3.8		Ed.	3.8 data window length (DWL) consider shortened version: distance between the start data point and end data point [along the vessel course with the CPA centered on this total length.-omit?] Usually, the definition should not contain the constraint (with CPA centered). The constraints can be placed in the text description.		Revised as noted. Also, added more descriptive note which reads as follows: “The DWL is defined by the distance at CPA and the Data Window Angle of ±30° as given in Equation 1 and shown in Figure 4. See comment #9.
9	NIOSH - WJM	3.8	1	Ed	Why isn’t the Data window length based upon the start data location and end data location? Change data point to data location.	…the start data location and the end data location along….	See Comment #8, Also, changed “Start (End) Data Point” to “Start(End) Data Location”.

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10	NIOSH - WJM	3.10/3.24	1	Ed	Should the position be refined/restricted to the acoustic center of the ship?	End data location Position of the acoustic cetner of the vessel under test one data window length after the start data location.	Revised definition for 3.8 to, "position of the acoustic center of the vessel under test where data recording is ended". Also added a note which states, "End data location is one data window length after the start data location."
11	CERL - MJW	3.10		Ed.	3.10 end data location this definition trio 3.8, 3.10, 3.24 seems circular!	consider just removing circular references: position on the vessel course where data recording is ended	Definition for End Data Location as given in Comment #10. Start Data location generally stayed the same, just add acoustic center.
12	CERL - MJW	3.10		Ed.	3.10 finish Exercise (FINEX) Has the same number as 3.10 end data location.		Numbering of all terms past Finex to be increased by one.
13	ASA-RH	3.26		Technical	The reference pressure for underwater sound is different than for airborne sound. To avoid confustion a note should be added to warn the user.	Add a note to 3.26. Proposed note: NOTE: The reference sound pressure for underwater is different from the reference sound pressure for airborne sound: 1 uPa for underwater sound and 20 uPa for airborne sound.	Revised as noted.
14	NIOSH - WJM	3.26	1	Ed	Add the equation 10 Log10(p^2 / p0^2) where p0 = 1 microPa		Equation added to end of definition.
15	NIOSH - WJM	5.3	1	Ed	Line 2, ship's should be ships. In the definitions, you used vessel. Should this be used consistently through out the standard?		Replacing "ship's" with ships. The terms Ship(s) and vessel(s) are used interchangeably throughout the standard.
16	DOT-AK	5.4	Fig 1 &2	Editorial	Equations shown in figures are cast in terms of abbreviations.	Recast in terms of symbols as required by ANSI.	No standard symbols exist for the parameters in question. Furhter, use of abbreviations was found to be consistent with other ASA/ANSI standards. All terms in all equiations are defined.
17	DOT-AK	6.1	Equations 1 & 2	Editorial	Equations (1) and (2) are cast in terms of abbreviations.	Recast in terms of symbols as required by ANSI.	See Comment 16 above.

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18	NIOSH - WJM	6.1	Eq 2	Ed	Not being a nautical officer, Can you add the conversion factor in a fractional form? 1852meter/nautical mile, 3600 sec/hour	…by 0.51444 (1852/3600) to get speed in m/s	Suggested change does not necessarily add clairification. Conversion factor 0.541444 can be left to user to work out.
19	NCE-RWF	6.4		Tech	Redefine dHorz as the geometric mean of the distance between Comex and CPA	Define dHorz as the geometric mean, that is dHorz = CPA/0.866	This change will require revision of the equations, figures equation numbers figure numbers and some nomenclature. By not using this method, the results for Grade B & C are about 0.5 dB lower than Grade A. A comment in the uncertainy about this affect will be added.
20	NIOSH - WJM	6.4	Eq 7	Ed	Unitalicize Log in the equation.	$L''_p\ 20$ Log(d_{Total} / d_{ref})	Revised as noted in both equation 7 and Eqn 8. Also, need a plus (+) between the L"p and 20log in Eqn 7.
21	NIOSH - WJM	6.5	Eq 9	Tech	If the power average from the three hydrophones is computed, would it be possible to have significant differences (>3 dB) in the power averages from the port and starboard sides? If they are different then does it make sense to arithmetically average the results in Equation 9? What if the values for a run are different by more than a dB or so for a set of port/starboard aspect mearurements?	Consider whether logarithmic average should be performed	Will keep arithmetic average for equation 9 based on discussion documented in meeting minutes for May 20th WG-47 meeting. However, will add to section 8 that maximum, minimum and/or range be reported when requested.
22	NIOSH - WJM	7	3	Ed	"This is …. " In the last line. What is "This" referring to?	The typical uncertainty specified fro naval acoustic ranges is about 2 dB.	Will revised the sentence as follows: "The typical uncertainty specified for naval acoustic range is about 1.5 to 2 dB."
23	NIOSH - WJM	7	6	Ed	It should be noted….	The estimates given above are provided as representative values for guidance and should not be considered to be exact.	Revised as noted.
24	NIOSH - WJM	7	6	Ed	It is recommended	Users of this standard are recommended to determine their own assessment of uncertainty based on the guidance in this standard and the methods descrbided in the references on expression of uncertainty in measurement [refs. 4 and 7].	Revised as noted.
25	NIOSH - WJM	Bibliography	Ref 3	Ed	Abbreviate the title appropriately	Int. J. Soc. Underwater Tech.	Revised as noted.
26	NIOSH - WJM	Bibliography	Ref 1	Ed	"J. Acoust. Soc. Am. Title of Journal"	J. Acoust. Soc. Am.	Deleted "Title of Journal"

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27	CERL - MJW	Bibliography		Ed.	ARVESON, Paul and VENDITTIS, David. "Radiated noise characteristics of a modern cargo ship." J. Acoust. Soc. Am. [Title of Journal-omit], Vol. 107, No. 1, January 2000, pages 118 ‚Äì 129.		Deleted “Title of Journal”
28	WG-47	5	Figures 1 & 2	Tech.	During final review a WG-47 member commented that for some Grades the sea floor which is shown in the diagram would not be so close to the bottom hydrophone. Showing the bottom makes the diagram not to scale.	Remove the bottom from Figures 1 and 2.	Both Figures 1 and 2 were changed to remove the sea floor.
29	WG-47	5	Figure 3	Tech	Also, during final review, a WG-47 member stated that as with Figure 1 and 2, Figure 3 may not be to scale in some cases.	Remove the bottom for diagrams (i) & (iii). Add break symbol between bottom hydrophone and anchor on diagrams (i), (ii) & (iii). Add break symbol between subsurface buoy and first hydrophone for diagram (ii). Add note that states “diagram not to scale, see 5.2 and 5.4 for details”, etc.	Figure 3 and its caption were changed as noted.
30	WG-47	5.6	Table 1	Ed	Also, during final review, a public comment suggested clarifying the term condition with regard to number of survey runs per condition	Add the word “vessel” before “condition”	Comment incorporated in one place in Table 1 and two places in Section 5.6

NOTES:

Comments 1 to 27 were provided from S-12 review. Comments 28 to 30 were provided by Working Group-47 committee members and public during final document review.