**R1 Comment, Line 144:** what about the instances where multiple ships were broadcasting (cumulative exposure)? Did you have a covariate for multiple ships to see if there was any interaction/effect by including whether there were multiple sources?

I think we had a covariate for “ships” that was 1 if 1 ship was present, 2 if 2 or more were present? But that also included other sources (submarines, recovery boats). I guess we could say that this is something we’re looking into as a follow-up study? Liz, thoughts on this?

**R1 Comment, Line 190:** can we assume that the detection range (6.5 km) will be the same at PMRF as it is at AUTEC? As you mentioned earlier, the two ranges have different bathymetries and depths. Has it been estimated what the detection range is at PMRF?

Hasn’t been estimated at PMRF, yes, different bathymetries and depths . . . but same species and bottom-mounted HP setup. Could probably say that the results are unlikely to be sensitive to this parameter since it only affects edge hydrophones. If 6.5km is an underestimate, then we would expect detection rates at the edges to be even lower.

**R1 Comment, Line 193:** what do you mean “different combinations of hydrophones were used”? Are you saying that the range operators only had certain hydrophones on/recording for one SCC and then a different hydrophone set for another SCC? Please clarify. Does this also mean you generated different probability models pre-SCC for each SCC as opposed to combining them all (so one M1 per SCC)? – I see the answer to my question in section 2.2.2. Maybe introduce on line 193 a little more clearly (ie: “different combinations of hydrophones were used due to...”)?

**Response:** We have modified the text to explain that “Due to recording capacity and occasional instrument failure, not all hydrophones were recorded during all SCCs. Because different combinations of hydrophones were used during different SCCs, we created separate tessellations for each SCC.”

**R1 Comment,** Line 197: please include how long it had been since the last exercise ie “no other naval activity was known to occur for at least 1 week prior” as we saw with McCarthy et al. 2011 and Stanistreet et al. 2022 that it takes time for baseline foraging to resume (sometimes as much as 1 week)

Liz can you confirm how long since last exercise?

R2 Comment: The use of the term “MFAS” (mid frequency active sonar) should be reconsidered. At least it should be defined but my preference would be to replace it with the frequency band meant. Mid frequency means different things between different navies and if you ask a fishery acoustician it means something very different. Please define or replace MFAS.

Liz, can you provide the frequency band that we’re talking about, or a citation that defines it?

R2 Comment: I propose to replace the term “general navy activity” with “navy activity without 1-10 kHz sonar” (or whatever frequency range MFAS means here) to increase readability. Or at least it should be defined the first time it is mentioned.

Will do once the above is sorted.

R2 Comment: The dB metrics used for received and source level are not clearly defined. I assume it is rms levels. Add proper definition of even better reference the ISO standard (ISO 18405:2017).

I can’t access this. Liz can you confirm dB definitions?  
  
R2 Comment: In cases were estimated max received level at the hydrophones were lower than 140dB my understanding is that the phones have enough dynamic range to record it. Did you do any comparison between the measured and estimated levels for those cases?

Not as part of this study, but Liz I assume you’ve looked into this to check that prop modelling is reasonable?