

I-013

March 23, 2008

Naval Facilities Engineering Command, Atlantic Division
Attention: Code EV22 (Atlantic Fleet Sonar Project Manager)
6506 Hampton Boulevard
Norfolk, VA 23508-1278

Subject: Comments on the Draft Atlantic Fleet Active Sonar Training EIS/OEIS

462 [Three comments on the Draft Atlantic Fleet Active Sonar Training EIS/OEIS are submitted herein. The comments pertain to:] 463

- A logical conflict in the rationale given for selecting the no action alternative and the process used to estimate the number of marine mammal takes for the no action alternative.]

464 • [Whether or not the legal requirements for public review are met given the rationale for selecting the no action alternative involves unknown and undefined future training needs.]

465 • [Uncertainties associated with the data and models used to develop the estimates of marine mammal takes.]

✓ [These comments are given and developed below. As background to these comments it is noted that all 4 of the alternatives evaluated meet the operational screening criteria (EIS/OEIS page 2-37, lines 11 and 12).]

467 [**Comment 1 – The No Action Alternative was selected in part because of a desire to retain flexibility as to where future training exercises can be held, but the analysis of acoustic effects on marine mammals does not account for potential future changes as to where the training exercises are held.**]

468 [The rationale for selecting the no action alternative is to allow flexibility to train in all areas thus giving the ability to train for any future threats *and* that there is no significant difference in the acoustic effects analysis (i.e. estimated marine mammal takes) for the no action alternate and alternative 3 (paragraph 2.9 on page 2-83). [The models for the 469 acoustic effects analyses take into account the estimated calendar of the training exercises and their location within the OPAREAs (page H-13, lines 4 – 8). Therefore, the acoustic effects estimates are based on some assumption of where the training exercises will be located. There is a built in conflict between the rationale for selecting the no action alternative and the way its acoustic effects estimates was made.] [The no action alternative would allow training effort to be performed, and concentrated, anywhere based on any future threats. However, the assertion that there is no difference in acoustic effects compared to alternative 3 is based on model results for the no action alternative that assume training effort is performed in defined areas. (Presumably the model's assumed training exercise locations for the no action alternative are based on where current training takes place.)

To illustrate the above idea, consider the following. Hypothetically under the no action alternative, in the future more training can take place in the environmentally sensitive areas

identified in alternative 3. If future levels of training in environmentally sensitive areas are higher than the training levels assumed for the acoustic effects analysis of the no action alternative, then the acoustic effects analysis results are no longer valid. For example, under the no action alternative let's just arbitrarily say that in the future three times as much training takes place in environmentally sensitive areas as was modeled for the no action alternative's acoustics effects analysis. We don't know what the acoustic effects are for this future scenario because the increased level of training in the environmentally sensitive areas was not analyzed, and therefore we can't do a valid comparison between the no action alternative and alternative 3. Again, the issue is the acoustic effects analysis for the no action alternative does not account for possible future elevated levels of training in environmentally sensitive areas, and therefore the analysis is not valid.

Recommendations

1. For the no action alternative, the level of testing in environmentally sensitive areas that was assumed for the acoustic effects analysis should be given.
2. For the no action alternative, acoustic effects should be modeled for a range of postulated training efforts in environmentally sensitive areas. For example, an estimate could be made of marine mammal takes if 5%, 10%, 15%, ... of sonar training occurred in environmentally sensitive areas. This would give some measure of the possible takes under the no action alternative that would occur if higher levels of training were to occur in environmentally sensitive areas in the future. As the no action alternative theoretically allows any level of training in environmentally sensitive areas, the marine mammal takes that occur with elevated levels of training in these areas should be used when deciding between the 4 alternatives under consideration.]

472.3 [If future training needs do in fact dictate a requirement for increased training in environmentally sensitive areas, then the appropriate course is to define the increased training levels and repeat the EIS/OEIS, including updating the acoustic effects analysis to account for the new, now defined, training needs. The rationale for selecting the no action alternative states that future needs can change quickly. It is understood that repeating the EIS/OEIS may be a lengthy process, however in cases of a true national security emergency there are provisions for exemptions to the environmental regulations. (Again, it is noted the current EIS/OEIS states that all of the alternatives considered, including alternative 3, meet the screening criteria that were established to determine operational needs.)]

473 [Comment 2 (This is a question really.) - Are the legal requirements for public review met?

As future, unknown and undefined, training needs are used as a rationale for selecting the no action alternative (paragraph 2.9 on page 2-83), can the legal requirements for a public review be met?

Future training needs are not defined. How can a public review be made of requirements that are not defined? In effect future, undefined actions (e.g. elevated training in environmentally sensitive areas to meet an undefined future ASW training needs) can take place under the no action alternative, and there is no way to evaluate these actions because by their very nature their effects are contingent on unknown and undefined future events.

Recommendation

4. Perform a legal review to determine if using future, undefined threats as a rationale for selecting an alternative meets legal requirements.]

474 [**Comment 3 – Uncertainty in the data and the acoustic models should be addressed.**

There is much we do not know about marine mammal behavior and marine mammal distribution and population levels. It is understood that a decision must be made using the best available scientific information, but this is not the same as saying that uncertainties in the best available data can be ignored. The estimated marine mammal takes due to acoustic effects come from models that make assumptions and simplifications, and use input data (e.g. marine mammal population sizes and distribution) that in some cases is very uncertain. Some accounting for the uncertainty associated with the data and the models should be made, even if it is a qualitative judgment.

Recommendations

5. Devise a means to evaluate and account for uncertainties in the data used to model acoustic exposure.
6. Devise a means to evaluate and account for uncertainties in acoustic effects modeling results caused by the model's simplifications and assumptions.]

475 [(Without trying to presume the outcome of this effort too much, it seems clear that by its very nature alternative 3 does a better job of addressing uncertainties in the data. Alternative 3 places certain areas off limits to sonar training based on observations of high marine mammal density, observed behaviors of marine mammals, and known properties of sound propagation. Because the marine mammal densities and behaviors are observed data, the quality of this data is higher than some of the other less certain data, assumptions and simplifications used for the other alternatives. For example: Data showing an area has a low density of marine mammals may be because no surveys have been done, and therefore is of low confidence. Conversely, data showing high marine mammal densities is based on actual observations and thus is of higher confidence.)]

476 [**Summary and Overall Recommendation**

The preferred no action alternative leaves open the possibility of any level of training in the future, in any area, including environmentally sensitive areas. The comparison of the no action alternative with the other alternatives is not valid because the acoustic effects

analysis for the no action alternative does not account for possible increased levels of training in environmentally sensitive areas in the future. [Additionally, uncertainties in the data and acoustic effects model are not accounted for in the comparison of alternatives. 477

478 [Overall Recommendation

7. The comparison of the no action alternative and alternative 3 should be repeated taking into consideration the following points.

- The no action alternative should be modified to define levels and areas of future training. Particular attention should be paid to defining the level of allowed future training in environmentally sensitive areas.]

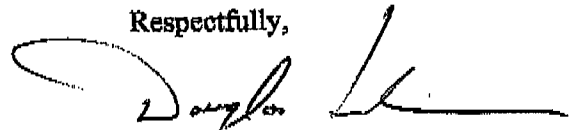
479 • [To help define the levels and areas of allowed future training under the no action alternative, the acoustic effects model should be used to evaluate a range of options for training in environmentally sensitive areas. This modeling effort would give an idea of marine mammal takes under different postulated levels of training in environmentally sensitive areas that are possible in the future under the no action alternative.]

480 • [Once levels and areas of allowed future training are defined under this newly developed no action alternative, an estimate of the marine mammal takes associated with this new no action alternative should be developed.]

481 • [Then another evaluation and selection between this newly developed no action alternative and alternative 3 should be performed. The new evaluation and selection would use the estimated marine mammal takes resulting from the now defined future levels and areas of training that would be allowed under the no action alternative. For this new evaluation, due consideration should be given to uncertainties in the data and models, and that all the alternatives considered meet the screening criteria for operational feasibility.]

✓ [Thank you for considering these comments. It is acknowledged that there are legitimate ASW training needs. These comments are offered in the spirit of finding the appropriate balance between legitimate training needs and protecting marine mammals.]

Respectfully,



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