United States Department of the Interior
NATIONAL PARK SERVICE
Soundscapes Program Center
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Fort Collins, CO 80525

Ms. Kelly Knight (Code 2033)
Commander, Atlantic Division, Dept. of the Navy
Naval Facilities Engineering Command
1510 Gilbert Street
Norfolk, Virginia 23511-2689

Dear Ms. Knight:

The National Park Service (NPS) offers the following comments for your consideration with regard to the draft environmental assessment (EA) for Proposed Military Operations Areas in Eastern North Carolina.

The document does an excellent job of laying out the objectives of the Marine Corps in proposing the modifications to the military operations areas (MOAs), and in outlining rational for the preferred alternative. It is readily apparent, in reading the draft EA (S.1), why "implementing both (the Core and Mattamuskeet) MOAs would provide improvement to the quality of aviation training for aircraft operating out of MCAS Cherry Point."

However, we are concerned that the draft EA states there would be no significant impacts, thus obviating the need for completing an EIS, and that, "unless new information shows otherwise, a Finding of No Significant Impact (FONSI) would be appropriate". We do not believe that the information in the document supports that conclusion.

In the consultant's "Welcome" to the EA, the statement is made that "The Marine Corps had initially considered preparing an Environmental Impact Statement (EIS) for the proposed action. However, during the course of preparing the environmental documentation, we determined that the impacts of designating a new Special Use Airspace (SUA) in eastern North Carolina would not be significant and, consequently, that an EA would be the appropriate level of documentation." The subject is addressed again in the draft EA under Section 1.3.2 The NEPA Process, but, again the explanation for that decision is extremely limited – echoing the statement quoted above and adding that "This approach is further supported by the fact that FAA regulations do not require preparation of an EA where the proposed SUA are above 3000 ft (914 m) MSL as is the case for the training airspace being proposed by the Marine Corps." There is no further explanation in the document for the decision to change from an EIS to a less comprehensive EA. The NPS believes that the designation of the new SUA in eastern North Carolina could have significant impacts on Cape Lookout National Seashore's resources and visitors.

The statement about FAA regulations not requiring the preparation of environmental documentation where the proposed SUA is above 3000' AGL is undoubtedly accurate. However, the National Park Service, in commenting on the proposed revision to FAA's NEPA regulations, questioned that agency's policy of categorically excluding from environmental review airspace proposals involving only flights above 3000' AGL. In those comments, the NPS expressed the belief that, depending on a variety of factors, including type of terrain, ground cover, etc., even flights at that altitude could have significant adverse effects on parks.

In the Executive Summary, under S.3 Environmental Impacts of Proposed Action, the draft EA states "Implementation of any of the alternatives or selection of the No Action Alternative would result in no significant environmental impacts with respect to five items, including Safety and Hazardous Materials Management, Cultural Resources, Socioeconomics and Community Facilities, Land Use and Coastal Zone Management, and Air Quality. The National Park Service's most crucial concerns – those dealing with the effects of noise on park resources, including threatened and endangered species and the natural soundscape, as well as on visitor experience – are only addressed under subheading S.3.1 Core and Mattamuskeet MOA Alternative. That segment of the Executive Summary speaks to the issue of noise from aircraft flight operations, and refers to the determination of annoyance based on "consideration of the Day-Night Average Sound Level [Ldn] of 65 decibels [dB]...The 65 dB Ldn guideline is the best available measure for determining noise impacts on airport communities... Results of the modeling showed that there were no significant impacts among the alternatives."

We have questions regarding the statement quoted just above, and we specifically point out that the draft EA does not address the impacts of military aircraft flights on the park visitor experience. The average day-night decibel level metric provides some valuable information but was developed for areas around airports with regular operations. Cape Lookout and Cape Hatteras National Seashores are not "airport communities." Park visitors are not the same as local residents, even though some local residents are likely to be park visitors at one time or another. Unlike residents near airports, park visitors have expectations for experiencing the park in its natural setting including the opportunity to hear natural sounds without noise intrusions. For example, the average day-night decibel level would not be relevant to a park visitor who is at Cape Lookout National Seashore, perhaps for the first and only time, seeking solitude and a quiet environment just as a Harrier aircraft is flying overhead.

The NPS feels that the draft EA is deficient in relying entirely on the L_{dnmr} as the metric for assessing noise impacts. This is an inappropriate metric because the peak noise levels for the military aircraft are considerably higher than the Ldnmr, and the peak levels would have the greatest impact on park resources and visitor experiences. The noise analysis would be far more meaningful to both park visitors and the affected residents of the area if certain essential additional metrics were provided, namely, SEL levels, Lmax values, and a meaningful Time Above (T_A) analysis. Many people visit the Cape Lookout National Seashore to enjoy the peace, tranquility, and natural sounds of undeveloped beach and shore areas. The periodic noise intrusions associated with military aircraft training exercises may encroach upon and degrade that desired visitor experience.

Further, a day-night decibel level metric would not adequately describe noise impacts in light of the fact that almost 97% (3827 of 3959) of the sorties planned for the Core and Mattamuskeet MOAs would take place during the day. Even applying a 10dB "penalty" for night flights, the use of this metric would appear to seriously understate the real average dB level because such an overwhelming percentage of flights would take place during the day.

As for the projected night flights, our understanding is that the FAA, which is listed as a cooperating agency on the subject proposal, has recently started requiring an additional noise analysis where, as here, an airspace proposal involves night flights between the hours of 2200 and 0700 hours.

Our primary natural resource protection concern is potential disturbance of nesting shorebirds in general and the federally threatened piping plover, in particular, at Cape Lookout National Seashore, a 56-mile long section of the Outer Banks that runs from Oracoke Inlet in the northeast to Beaufort Inlet in the southeast and is composed of three undeveloped barrier islands. The draft EA does not adequately address impacts on shorebirds nesting within the proposed MOA such as various terns, wilson plovers, oystercatchers, black skimmers, and willets, and pointed out that the only data presented in the draft EA regarding potential effects on piping plovers concern the effects of rocket launches on snowy plovers in California (page 4.4-6).

According to the Executive Summary (S.1), the Core MOA "would eliminate the 'speed bump' that is currently imposed when a pilot flying at an altitude greater than 3,000 ft (914 m) mean sea level (MSL) but less than 10,000 ft (3,048 m) MSL and greater than 250 knots (kt) in W-122, for example, must pass through non-SUA along the North Carolina coastline in order to reach R-5306A." As we interpret that information, the implementation of the Core MOA would result in flights going over Cape Lookout at higher speeds, which would presumably result in more noise over the park per sortie but for a shorter period of time. Since the draft EA projects that the bulk of the flights will be operating at altitudes greater than 5,000' AGL one mitigation measure might be to significantly raise the minimum altitude of flights crossing the Core MOA.

The findings of no impact appear to be based on anecdotal data or computer models, not on actual relevant data. NPS accepts, and in fact uses, noise modeling, but we could not find in the EA any information about the actual noise characteristics of the various aircraft that are expected to use the Core and Mattamuskeet MOAs, despite the fact that such information is available on most if not all of those aircraft.

There is no information on what noise characteristic data were input to the computer model for any of the identified aircraft. Simply referencing a Wyle report in the draft EA and stating, in essence, "we analyzed the noise issues and there is no problem," is inadequate. There should be sufficient information in the EA to allow readers to independently assess the validity of that conclusion.

Table 4.1-1 indicates that if the proposed action is implemented there will be an increase of 2678 sorties, or roughly 18.1%, over the present number. Between the increased number of sorties and the elimination of the "speed bump" we see the proposed action as having potentially significant impacts on Cape Lookout National Seashore. The entire

park is a noise sensitive area, from both park resource and visitor experience standpoints, and park management is addressing major noise intrusions, including personal watercraft use, which is currently banned pending further study.

A fundamental problem with the draft EA is the fact that there are no noise data specific to the aircraft to be used or soundscapes data specific to the affected environment. Therefore, all of the projections are speculative at best.

One example of the consequence of the failure to collect soundscape data is Table 3.2-2, which is entitled "Ambient Noise Values (Without Aircraft Noise) for Representative Environments." This table is later cited as authority in Section 4.2.2.1. Data collected in NPS wilderness areas indicate a range of 0 to 20 dBA raising questions on the table where a value of 30 – 54 dBA is referenced. Similarly, Figure 3.2-1 uses 40 dBA as representative of "Quiet *Urban* Nighttime" sound levels and 50 dBA as typical of "Quiet *Urban* Daytime" levels whereas Table 3.2-2 suggests 40 – 50 dBA levels are typical of a "*Rural and small town* environment." Therefore, the question surfaces regarding use in Figure 3.2-1, of 70 dBA by the public as a reference level to aid understanding noise intrusion. Using 40 dBA for small town or urban, as the reference level, a Harrier flyover at 100 dBA would be 64 times as loud as the normal soundscape rather than the 8 times that might be inferred from your noise thermometer?

The first full paragraph on page 3.2-6 starts out "There are limited sources on general ambient noise levels occurring in locations similar to those found in eastern North Carolina." However, the report does not provide even those "limited data." The paragraph goes on to cite a reference to sound level variations associated with wind in the pine trees in the Sierras, but does not indicate how that information would apply to the barrier island environment of Cape Lookout that is affected by this airspace proposal.

The treatment of noise is superficial and contains inaccuracies and non-sequiturs. For example, the title of Section 3.2.2.2 is "Ambient Noise Levels in Areas Underlying Existing SUA". However, the text does not describe the ambient noise levels from existing data but rather, as is correctly noted in the 4th line of the first paragraph, describes the results of the use of the noise model to *predict aircraft noise.*

Of greatest concern is that the document fails to recognize that the natural soundscape is a natural resource of the park or to treat it as such in Section 3.4 of the report. Such recognition and adequate scientific information with which to evaluate adverse effects on park resources and visitors is essential to completing an adequate and appropriate level of environmental review of the proposal under NEPA.

The NPS strongly recommends that an environmental impact statement be prepared for this proposal. The reason for this strong recommendation is that the information and analysis of effects in the proposal as written is not sufficient to come to a finding of no significant impact (FONSI). The draft EA notes that a supplemental EIS was done in 1992 to support the MOA as presently configured. The potential effects and complexities are greater today and therefore warrant a full EIS for the current proposal.

The National Park Service has consistently acknowledged the importance of the training mission of the Department of Defense, and its components, and has repeatedly expressed its willingness to work with the involved DoD component to identify mutually satisfactory solutions in circumstances such as this one. Given the potential effects of this proposal on Cape Lookout National Seashore's resources and visitors the NPS requests that it be designated a cooperating agency for the preparation of the environmental review of the proposed modification of MOA R-5306A. The National Park Service has special expertise and jurisdiction under the law as outlined in DEQ Regulations (43 CFR 1501.6) and stands ready to provide assistance as a cooperating agency in developing an EIS in conjunction with this airspace proposal.

Sincerely,

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