



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Fisheries Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396

September 25, 1987

F/SWC2:GHB

Colonel Samuel N. Liberatore  
Acting Defense Deputy for Operations  
U.S. Army Strategic Defense Command  
P. O. Box 1500  
Huntsville, Alabama 35807-3801

Dear Colonel Liberatore:

Thank you for your letter of August 26, 1987 requesting that I provide comments on your draft environmental assessment for the STARBIRD launch project relating to Wake Island. Two of my publications on sea turtles are cited in this document, as well as a "personal communication" (telephone inquiry to me?) dated 1987. I would like to clarify and correct several items in this regard. A reprint of my paper "Status of Sea Turtles in the Central Pacific Ocean" (Smithsonian Institution Press) has been enclosed with certain highlighted sections for your information.

On page 8 of the STARBIRD document, the first sentence states "No threatened or endangered terrestrial (my underscore) species of plant or animal is known or expected to occur on Wake." The paragraph then goes on to say that certain threatened or endangered species of sea turtles inhabit or may inhabit the nearshore waters. On page 246 of my enclosed paper, I stated "Both immature and adult green turtles (Chelonia mydas) are regularly observed foraging in the lagoon and along the outside perimeter of the atoll." The green turtle, as you know, is listed and protected as a threatened species under the U.S. Endangered Species Act. It is my opinion that your paragraph is confusing because it leaves the impression that there are no threatened or endangered species at Wake because they are not terrestrial and "on" the island. The U.S. territorial waters surrounding Wake are clearly under U.S. (Air Force) jurisdiction, as are the threatened green turtles living and foraging commonly within a few dozen meters of the shoreline. My point here becomes particularly <sup>Hawaii</sup> relevant in view of your Appendix H ("to be published in local and Florida newspapers") where the sentence appears "No threatened or endangered species are known or suspected on Wake Island." The planned newspaper notice then goes on to discuss non-threatened and non-endangered (but protected) seabirds, but fails to make any mention of sea turtles, specifically the green turtle.

Even though the planned construction action will take place on land, there is the distinct potential for adverse impact on green turtles and their nearshore habitat, including the marine vegetation upon which they forage. A spent rocket, or post-launch destruction, could impact this surrounding nearby habitat, both in





the lagoon and along the outside perimeter of the atoll. Also, I note on page 3 that "...there may be some eye safety hazard to the civilian population...due to the nature of the Shuttle sensor." Green turtles are air breathing reptiles, consequently they are often at or near the ocean surface. Would not an "eye safety hazard" also exist for these nearby turtles (and seabirds also)? What is the nature of this hazard? I note that the document contains a section, starting on page 23, titled "Operations Phase," where environmental impacts are discussed for the "Cape Canaveral Air Force Station" component of the project. There should be a counterpart section "Operations Phase" for Wake Island, but I note that one has not been included. This would seem essential for an important environmental document of this nature.

In the section on Cape Canaveral (page 24), it is stated that "Although it is theoretically possible for the booster casing or debris from a destroyed vehicle to hit a sea turtle, the probability of this occurring is considered extremely remote (less than a one-in-a-million chance)." Would the chances of a direct hit at Wake be equally remote? In what concentrates do the green turtles occur around Wake? Are there special foraging habitat sites that should be given special consideration for protection? I believe these are important questions that need to be answered for your STARBIRD project. In my enclosed paper, on page 250, I listed the following recommendation: "Military agencies of the U.S. government administering islands covered in this report should undertake a thorough investigation of the aggregations of sea turtles occurring at such sites."

If I can be of any additional assistance, please feel free to contact me.

Sincerely,

George H. Balazs  
Zoologist

Enclosure

cc: U.S. Fish & Wildlife Service, Honolulu  
NMFS Western Pacific Program Office