Original draft CEIS
rewritten 27 Aug 79
Wooten, Herring
Peterson, Kiebler, 2 Marines

SUMMARY SHEET

1. This is a draft Candidate Environmental Impact Statement (CEIS).

2. This statement pertains to the training area known as the Armor/Mechanized-Infantry Training Area. It is located on Marine Corps Base, Camp Lejeune, North Carolina. The following information is provided:

a. Armor/mechanized-infantry training, Basic School Landing Excercises, Combat Readiness Evaluations, VIP demonstrations, and routine unit training are conducted in this area twelve months a year. These activities involve approximately 35,000 training mandays and cumulatively operations by 800 tanks and 1800 LVT's on an annual basis. The training site is in use about 215 days per year, thus the daily averages for area utilization are 163 Marines, 3 tanks, and 8 LVT's.

b. Located within this site are red-cockaded woodpecker colonies and several fish management ponds. The high usage rate, particularly by heavy equipment, has caused some damage to the environment in the area. Action is required to ensure that the natural habitat of endangered species is not damaged or destroyed. Further, the remaining areas not currently used by the woodpeckers should not be adversely impacted by bearing an unnatural adverse impact from increased tracked vehicle use due to the channelization of equipment.

3. The following alternatives are discussed:

a. Suspend all training activity in the area.

b. Continue to conduct training as it is currently conducted, including channelizing tracked vehicles and equipment into non-woodpecker areas.

c. Establish buffer areas and operating restrictions.

d. Utilize other training facilities or sites, both at and away from Camp Lejeune.

4. This statement will be forwarded to the Environmental Enhancement/Environmental Impact Review Board, Marine Corps Base, Camp Lejeune, North Carolina, for review.

# CANDIDATE ENVIRONMENTAL IMPACT STATEMENT

## I. Introduction

### A. Project Description

1. General. Within the Camp Lejeune complex exists a tri-command structure, consisting of Marine Corps Base, the Second Marine Division, and the Second Force Service Support Group. Within this structure Marine Corps Base performs a host function, providing personnel, material, and services for the maintenance, training, and support of Marine Corps forces. The other commands play a tenant role in this concept.

a. Mission. The mission assigned to the Second Marine Division is to maintain a state of operational readiness for prompt employment in an amphibious assault operation and such other operations as may be directed. An integral aspect of the training program conducted within the Division to support this mission is armor/mechanized-infantry operations. After considerable evaluation of training requirements and the training facilities available at Camp Lejeune, the training areas commonly referred to as the "Hotel" and "India" training areas were selected for armor/mechanized-infantry block training in 1975. Prior to that time the area had been used, only less intensively, since the 1950's.

b. Background. The "Hotel" and "India" areas have further been subdivided into sectors, and within this Candidate Environmental Impact Statement, Armor/Mechanized-Infantry Training Area specifically refers to the HB, HE, HF, IA, and IE areas which are indicated by the map in Appendix A. In addition to armor/mechanized-infantry block training, other types of training are conducted in this area, specifically Basic School Landing Exercises (BASCOLEX), Combat Readiness Evaluations (CRE), demonstrations, and routine training exercises. Appendix B provides usage data for the area.

#### (1) Types of Training

(a) Armor/Mechanized-Infantry Block Training. This five-day training package is presented to infantry units by the Second Tank Battalion. The training is directed towards refining the execution of the tank/mechanized-infantry team concept. Appendix explains the details of this training program.

1 The first day of training con-

sists primarily of classroom instruction, whereas the final four days consist of field operations. These operations are conducted in the HB, HE, HF, IA, and IE areas.

2 In order to prepare for combat in the most realistic manner possible, the field exercises involve tanks and LVT's in both daylight and night attacks.

(b) BASCOLEX. The Basic School periodically conducts landing exercises at Camp Lejeune. The amphibious landing occurs on Onslow Beach with the students attacking on a northwest axis, culminating with an assault on Combat Town (this area is indicated on the Map in Appendix A). The scheme of maneuver necessitates operations in the Armor/Mechanized-Infantry Training Area. Because of the configuration of Camp Lejeune the only avenue of advance from a landing on Onslow Beach is through the area under review.

(c) Combat Readiness Evaluation (CRE) The CRE is a training exercise through which the Division evaluates a battalion landing team's level of readiness. Within the Division are nine infantry battalions, each of which must be evaluated biennally. Thus four to five CRE's are conducted annually. The scenario of this exercise is initially somewhat similar as that of the BASCOLEX, beginning with a landing on Onslow Beach and subsequent maneuver towards Combat Town.

(d) Demonstrations. Armor/mechanized-infantry demonstrations are frequently conducted in the Armor/Mechanized-Infantry Training Area. These demonstrations are conducted for such groups as visiting dignitaries, Field Medical Service School students, ROTC/JROTC groups, and various Marine Corps organizations.

(e) Routine Training. Second Marine Division units conduct routine training exercises which may or may not include tracked vehicles or heavy equipment in the Armor/Mechanized-Infantry Training Area approximately thirty days per year.

2. Purpose. The Second Marine Division has developed its armor/mechanized-infantry training to achieve the high level of proficiency required to remain an effective "force in readiness." The ability to effectively utilize the tank/mechanized-infantry team is an integral aspect of the Division's overall readiness posture. Field training exercises are the only effective training method to achieve the desired level of readiness.

3. Training Area. The maneuver areas used for armor/mechanized-infantry training are the HB, HE, HF, IA, and IE areas of Marine Corps Base, Camp Lejeune, North Carolina. These areas are shown in Appendix A.

## II. Existing Environment of Site

### A. General Description - HB, HE, HF, IA, and IE Areas

1. The Armor/Mechanized-Infantry Training Area is a triangular-shaped area, the center of which is located approximately four miles south of the Hadnot Point area of Marine Corps Base, Camp Lejeune. The Atlantic Ocean is approximately 1½ miles south of the southernmost boundary of this training area.

2. The Armor/Mechanized-Infantry Training Area covers almost 4,200 acres of gently rolling terrain, with numerous open spaces. The area is bounded on the east by Sneads Ferry Road, to the southeast and south by Highway 172, and to the west by Marines Road.

### B. Environmental Setting

1. Geology. The land of the Camp Lejeune area originated in a marine or coastal environment similar to that along the present Atlantic coast. The soils in the Armor/Mechanized-Infantry Training Area are primarily of the Leon, Lynn/Murville, and Kureb/Lakeland types. These soils are characterized by a sandy composition and poor drainage.

2. Climate. Camp Lejeune, located just below the 35th parallel of latitude, has a mild climate. The summers are usually hot and humid. Winters are fairly mild with temperatures frequently dropping below freezing. Annual precipitation averages 47 inches, with the average temperature being 61 degrees. There is a long growing season of approximately 230 days. See Appendix D for rainfall and temperature details.

3. Air Quality. Camp Lejeune has never had any major air pollution problems. Located far from any large industrial center, there are few sources of air pollution for the area. Any polluting elements which might occur would come from ammunition firing or vehicle exhaust. It would be of a localized nature and very short duration. There is no effect on the regional air quality.

4. Vegetation

a. General. The vegetation in the area is typical of the coastal plains forest. There are basically six broad types of soil series, consequently there is a corresponding number of natural forest types. However, there exists some crossover between the soil series and the normal forest type, both naturally and/or as a result of past land treatment and artificial forest type changes. The predominant natural overstory forest type groups in the area are: Loblolly Pine, Longleaf Pine, Pond Pine, Oak-Gum-Cypress, Oak-Pine, and Coastal Bottomland Hardwoods. Each of these forest type groups has a rather definite associated understory vegetation. Appendix E provides a list of understory vegetation.

b. Forest Management

(1) Forest management in the area is basically the same as for all other forested areas at Camp Lejeune. The only major change is the interval between prescribe burns. The normal burning cycle is at five-year intervals. Due to the high forest fire incident rate in the vicinity of Combat Town, the interval between burns has been shortened. The interval between burns in this area is determined by the buildup of fuels and not on a planned cycle.

(2) The rotation age for all pine species has been extended to 100 years as a result of formal consultation with the Fish and Wildlife Service on protection and management of habitat for the red-cockaded woodpecker. A ten-year cutting cycle has been established for forest management purposes with re-entry as needed to meet military training requirements and followup silvicultural needs. All forest management practices are closely coordinated with other functions in an attempt to meet the multiple use management objective and fulfill the needs of the present generation as well as providing for future generations to come.

5. Wildlife. The wildlife resources inhabiting the Armor/Mechanized-Infantry Training Area are those generally found throughout the Coastal Plain Region of the Carolinas. Appendix F provides a listing of the species which occur.

a. Wildlife Management. The management of wildlife resources for Marine Corps Base is established under the featured species concept and is compatible with other multiple land uses. The United States Forest Service Handbook 2609.23R (Wildlife Habitat Management) is adopted as a basic guide for managing wildlife resources. Long-range management is through Camp Lejeune's Natural Resource Management Plan and is implemented through an Annual Operational Plan.

b. Fish Ponds. There are ~~three~~ four freshwater ponds

within the Armor/Mechanized-Infantry Training Area. The ponds are stocked with large-mouth bass, red-ear, bluegill, and channel catfish. Management consists of water chemistry checks, aquatic weed control, shoreline management, fertilization of pond waters, and feeding channel catfish.

6. Endangered Species. Within the Armor/Mechanized-Infantry Training Area are the following endangered species:

a. American Alligator. This species inhabits swamp-type areas, however, training has not adversely impacted on the alligator inasmuch as the type of habitat sought by this species is not suitable for armor/mechanized operations.

b. Red-Cockaded Woodpecker. Nine colonies of red-cockaded woodpeckers currently occur in the Armor/Mechanized-Infantry Training Area. This population composes thirty percent of the basewide population of this listed species. Six hundred and ninety-six acres of contiguous habitat has been marked for protection in the area. A two-hundred foot buffer has been marked around each cavity or nesting tree. All colonies are located in longleaf pine stands, except for one colony which is in a loblolly pine stand. Cavities are located in mature pines which are extremely few in number.

c. Habitat Monitoring. The Natural Resources and Environmental Affairs Division conducts periodic monitoring of habitat in the Armor/Mechanized-Infantry Training Area. Habitat monitoring adheres to the revised Biological Opinion drafted by the Consultation Team on 26 April 1979.

7. Cultural Features. There are no known cultural features or archaeological sites in the Armor/Mechanized-Infantry Training Area. Marine Corps Base is currently initiating efforts to sponsor a search.

## III. Relationships of Proposed Action to Land Use Plans, Policies, and Controls for the Affected Area

A. Camp Lejeune, created in the early 1940's, is one of the main training bases in the continental United States for the Marine Corps. The utilization of the "Hotel" and "India" areas for military training is in consonance with the intended use of the land.

B. The land surrounding Camp Lejeune is primarily used for residential, silvicultural, and agricultural purposes. The use of the Armor/Mechanized-Infantry Training Area will not affect the use of the area surrounding Camp Lejeune.

C. In March 1975, Marine Corps Base, Camp Lejeune, pub-

lished a Natural Resources Management Plan. This was arranged through a cooperative agreement between the Department of the Navy, the Marine Corps Base, and the Soil Conservation Service (United States Department of Agriculture). Since that time consultations with the United States Fish and Wildlife Service under the Endangered Species Act, Section 7, requirements have been held. As a result of this procedure the Fish and Wildlife Service issued their biological opinions and recommendations for the red-cockaded woodpecker. These recommendations have resulted in new base procedures for the Armor/Mechanized-Infantry Training Area. Appendix G provides the biological opinions and Appendix H provides base regulations.

IV. The Probable Impact of the Proposed Action on the Environment. Armor/mechanized-infantry training in the area will not result in a significant impact on the quality of the environment. Insofar as practicable, exercise planning and execution is conducted so as to eliminate potential problems and to minimize those which are unavoidable. Those impacts which could occur are discussed below.

A. Noise. There are occasional and sporadic noise levels generated by weapons firing, operation of tracked vehicles, and low-flying aircraft. The animal life, especially the red-cockaded woodpecker, appear not to be adversely affected.

B. Air Quality. Intermittent, highly localized increases in exhaust emissions could occur due to tracked vehicle and automotive operations. Because of the limited number of vehicles and the very short duration of the exercises, these emissions are not expected to provide any adverse effect.

C. Soils. Operation of wheeled and tracked vehicles over the area will have a long-term effect on the soils. There are wheeled and tracked vehicle tracks on the ground surface in many areas which are the result of many years of continuous use. However, because movement of tracked vehicles through ~~the maneuver area~~ is now restricted to "tank trails" it is considered that any adverse effect on the soils will be minimal; previously impacted soils are in varying stages of recovery. New trails will be judiciously chosen.

D. Vegetation

1. Estimation of the potential impact of armor/mechanized-infantry training on the native vegetation is based on field observation of damage accrued inthe training area since 1975.

2. Where vehicles tend to follow in the same trail,

the sides of the tank trail have become denuded of vegetation. These trails are used as the primary routes through the maneuver area. Individual tank or mechanized vehicle dispersion sites or defense positions are also devoid of vegetation. However, these are few and used continuously for all operations, thus protecting all other roadside vegetation.

3. When vehicles, both large-wheeled and tracked, make sharp turns, it will displace soil and vegetation. This will inhibit recovery of vegetation in the immediate vicinity, however, the impact is limited due to restricted vehicle movement on present roadways and trails. New trails will be chosen with the assistance of the base natural resources staff.

4. Command Post Sites. Ground cover vegetation in these areas is all that is affected, and then only where the actual tentage is placed. These sites are continuously used for all operations and the main vegetation remains in excellent condition. It is to the best military advantage that these sites remain in good condition for protective, secure cover during operations.

5. If shrub or pine vegetation is cut for use in camouflaging personnel and equipment, it could have an adverse impact on vegetation near nesting sites of birds, particularly those of the red-cockaded woodpecker. However, new base regulations restrict this and areas are delineated for troops where vegetation may safely be cut.

E. Wildlife. Vehicular and troop traffic through the training area will not have an adverse effect on the wildlife of the area. Disturbance of the cavity trees and nesting sites of the red-cockaded woodpecker, particularly by tracked vehicles could occur by accident, however, new base regulations and a required environmental education program will ensure that these rare accidents will be kept to a minimum. Garbage left is and will continue to be an attraction for the black bears on the base, however, strict enforcement of required cleanup procedures will help to eliminate most of the problem.

F. Irritant Gasses. Prior experience with CN/CS gas has indicated that the impact to the environment created by the use of these gasses is negligible~~, provided it is not used in the vicinity of the woodpecker colonies -- which it will not be~~. These gasses are used infrequently and with great environmental and safety considerations.

G. Roads. Armor/mechanized-infantry training will have little to no impact upon the public or paved roads and traffic. Specific tracked vehicle routes through designated training

areas enable tracked vehicles to bypass primary roads.

H. Sewage. Sewage generated by personnel participating in the training is handled by existing field sanitation methods and by use of chemical toilets where available. These collection facilities are periodically cleaned out and their residues processed at the local sewage treatment system. These procedures are not expected to overly task existing systems and will not have an adverse impact upon sewage treatment systems. All base sewage systems are in conformance with state imposed requirements.

I. Solid Waste. Solid waste generated by training activity takes the form of garbage, paper, paper products, and other debris. Disposal of this waste product will be at the existing base sanitary landfill. Waste disposal procedures, coupled with the cleanup and post-training inspection requirements, will ensure that there is no significant impact upon the environment.

V. Alternatives

A. General. In selecting a suitable site for armor/mechanized-infantry training, several factors have been taken into consideration. Additional considerations are summarized in the paragraph below relating to Alternative Site Evaluation.

1. Basic Considerations. These factors fall into the following general categories:

a. Military training objectives.

b. Availability of physical resources to conduct the training.

c. Health and safety of personnel and equipment.

2. Interrelated Factors. Within each of the areas noted above, several qualitative and quantitative decisions had to be made, which were in turn influenced by considerations involving:

a. Environmental conditions.

b. Cost factors.

c. Marine force composition.

d. Integration into the overall Division training program.

3. Coordination of Factors. Once preliminary evaluation outlined above was completed, various associated decisions based on a comparative evaluation of the factors involved had to be made.

B. Alternative Sites. The Armor/Mechanized-Infantry Training Area at Camp Lejeune was not the only area considered for armor/mechanized-infantry training. The following training sites were considered:

1. Fort Stewart, Georgia.

2. Camp Pickett, Virginia.

3. Camp Lejeune, North Carolina.

a. Starretts Meadow Area.

b. TLZ Goose/Falcon Area.

c. "Hotel/India" Area.

C. Alternative Site Evaluation. Each of the alternative sites noted above was separately evaluated. As a result, it became evident that the "Hotel/India" training area was the most suitable.

1. Fort Stewart, Georgia, and Camp Pickett, Virginia, were both eliminated for the same reasons. Neither of these U.S. Army facilities would be available as often as the recurring nature of the armor/mechanized-infantry training requires. Conflicts would occur with Army training priorities. The cost of moving personnel and equipment to either of these locations for operations thirty-seven weeks annually would be prohibitive. Additionally, these areas would preclude much effective training of the Marine Corps air-ground team.

2. Camp Lejeune

a. Starretts Meadow. This area was considered for armor/mechanized-infantry operations, but was eliminated as a feasible site. This area is "not currently suitable" for such operations, and the support requirements and environmental impacts associated with preparation of this area are as follows. Appendix I provides details.

(1) By the estimate of the base forester, full use of the trafficable area within the deployment paths will require clear-cutting timber volumes estimated to be

approximately three to four million board feet and removal of the remaining stumps from 451 acres. Stumpage would involve burning, burial, and/or stockpiling.

(2) Extensive engineering in terms of roadwork and construction of access facilities for stream crossings at four points along the deployment avenues. Soil types along parts of the deployment avenues will cause access problems to be acute during wet weather. The extent of stream engineering would have an adverse impact on stream ecology, with siltation of the streams a likely result.

(3) About 40 percent of the area (296 acres) lying within the planned use area is classed as wetland which cannot support armor/mechanized-infantry training except during periods following prolonged droughts. Drainage of the wetland areas to permanently lower the water table is an impractical and costly undertaking which is not in line with the President's Executive Order #11990 on protection of wetlands.

(4) Clear-cutting and stump removal from portions of the area, followed by heavy use on the sloping sites, will create a soil stabilization problem that may change the Wallace Creek watershed through altering natural drainage systems by sedimentation loads and erosion. Due to elevation changes in the Starretts Meadow area, this negative environmental impact cannot be avoided should the project be implemented. The full impact on the Wallace Creek watershed or ecosystem cannot be fully determined without an extensive and lengthy ecological study.

b. TLZ Goose/Falcon Area. This training area is not presently suitable for armor/mechanized-infantry operations, but with engineering support it is feasible that this area can be utilized to partially meet the Division's armor/mechanized-infantry training requirements. There will be limiting factors which will preclude this area from fulfilling all the armor/mechanized-infantry training requirements. Appendix I provides specific details.

(1) This area will require extensive engineering efforts, although less than in the case of the Starretts Meadow area.

(2) The timber and stump removal requirements would be greater than at Starretts Meadow.

(3) This area provides only about 10 percent the maneuver area available in the Armor/Mechanized-Infantry Training Area which consequently limits training flexibility.

c. "Hotel/India" Area. This is the training area that is currently utilized for armor/mechanized-infantry training aboard Camp Lejeune. The terrain and vegetation in this area have been determined to be the training area best suited for these types of operations. The terrain is for the most part open and sufficient tank trails exist to permit good movement within the area.

(1) This area requires no engineering support or removal of timber inasmuch as it is already suitable to meet training requirements.

(2) The large number of tank trails throughout the area are sufficient to enable the Division to conduct armor/mechanized-infantry training without violating buffer areas around red-cockaded woodpecker colony sites.

(3) The following site selection factors were considered in depth and all favored the Armor/Mechanized-Infantry Training Area ("Hotel/India" Area) at Camp Lejeune:

(a) Economy of forces.

(b) Cost factors.

(c) Availability of contiguous areas (restricted airspace; adequate maneuver area).

(d) Potential effects on nonmilitary operations in the area.

D. Training Intensity Alternatives

1. No Armor/Mechanized-Infantry Training in Area
This alternative is considered unsatisfactory. It would satisfy the requirement of not damaging/disturbing the wildlife, specifically the red-cockaded woodpecker. This solution does not provide an acceptable alternative for training requirements inasmuch as there is no other area available within the Camp Lejeune complex in which this essential training can be effectively accomplished. It prevents the Division from maintaining an acceptable readiness posture in mechanized warfare. Use of training areas distant from Camp Lejeune is not considered a viable alternative for the reasons stated above.

2. Continue with Training as Currently Conducted
This alternative would satisfy all Division armor/mechanized-infantry training requirements and ensure facilities are available in which to conduct the desired training. This alternative

would require additional base regulations to bring the use of the Armor/Mechanized-Infantry Training Area into full compliance with the recommendations of the Fish and Wildlife Service for protection of the red-cockaded woodpecker.

3. Establishment of Buffer Area. During the summer of 1978, buffer areas around red-cockaded woodpecker colony sites were clearly delineated. The overlay contained in Appendix H indicates the location of identified colony sites. There will be controlled corridors through the designated areas where all vehicular traffic would travel. Such an approach will aid in preventing ~~troops or~~ vehicles from penetrating nesting/foraging areas and fish management ponds. Some disturbance from noise can be anticipated, but these agitations will be extremely minor. This alternative will provide the maximum amount of protection and control, and yet will allow sufficient flexibility to ensure effective training.

E. Alternative Exercise Design. In the light of all that has been stated in this and preceding sections, one should consider the fact that the armor/mechanized-infantry training is always planned for accomplishment with a minimum impact on the environment. Planning and conducting training without regard to environmental considerations would not be in the best national interest. Maintenance of the forest ecology will assure the continued protective vegetative cover which is necessary for proper training. Training has been designed as a realistic balance of practical training objectives and environmental concern. It is believed that armor/mechanized-infantry training and base environmental directives represent an effective combination of military training objectives and procedures coupled with genuine concern for the quality of the human environment, its enhancement, and protection.

## VI. Probable Adverse Environmental Effects Which Could Not Be Avoided Should the Proposed Action Be Implemented

A. Soils. Erosion from the "channelization" effect of standing waters in vehicle tracks ~~may~~ have a localized short-term effect on soil stability. This impact will be minimized through restriction of vehicular movement to currently existing roads and the regrading of trails.

B. Vegetation. Unrestricted use of the Armor/Mechanized-Infantry Training Area would result in significant vegetative destruction and root damage, but adherence to ~~proposed~~ boundary restrictions will cause little vegetation damage of long-term nature. Vegetation used for camouflage will be carefully

selected per base regulations.

C. Wildlife. The disturbance of wildlife, including some endangered species, is expected to have a short-term effect. Violation of established buffer areas for the red-cockaded woodpecker might have a long-term impact on the species, however, adherence to base regulations will assure protection to endangered species and the habitat.

D. Irritant Gasses. Irritant gasses are biodegradable and have been used in many previous training exercises. Laboratory tests of the gasses have shown them to be non-toxic and noneffective on wildlife and vegetation, ~~provided they are not used in the nesting areas -- which they will not.~~ The gasses will have a temporary discomforting effect on target personnel.

E. Waste Disposal. Actual training in the area will generate small amounts of dry waste and sewage, some of which will become windblown litter. Discards of individuals in the field may be expected to contribute to the existing litter, although periodic range cleanups will reduce the impact of this. Increased requirement for cleanups after field exercises has already given an indication of improvement in this area.

F. Petroleum

1. Fuel consumption in the implementation of armor/mechanized-infantry training represents an expenditure of an irretrievable resource for military training purposes.

2. The required quantities of fuel are available through regular military supply channels and will not impact upon supplies available to the communities in the local area.

## VII. The Relationship Between Local Short-term Use of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

A. With the implementation of new base control measures and usage guidelines as presented in Appendix H, the environment should remain relatively unaffected in both the short and long term. Productivity of the endangered species should continue in harmony with the required training evolutions over the short term and long-term benefits would be derived by both man and his environment.

B. Mitigations of adverse effects, restoration techniques (reforesting), and adequate protection of the endangered species will minimize any long-term losses resulting

from armor/mechanized-infantry training.

C. Follow-up analysis will be conducted to evaluate the effectiveness of implemented control measures.

VIII. Any Irreversible and Irretrievable Commitments of Resources that Would Be Involved if the Proposed Action Were Implemented

A. Generally, destruction of vegetation in areas of concentrations of personnel and equipment with resulting degradation of wildlife habitat is considered irreversible unless recommendations for mitigation are implemented.

B. There will be no irreversible or irretrievable commitments levied on the existing ecosystem and natural physiographic features provided that mitigating, stabilization, and restoration measures are accomplished.

IX. Considerations that Offset the Adverse Environmental Effects

A. General. If the Marine Corps is to be ready to accomplish the many different missions that may be assigned, it is mandatory that the Second Marine Division maintain an effective armor/mechanized-infantry capability. With the increasing emphasis on the NATO area, the Division has continued to develop its armor/mech training. The armor/mechanized-infantry training currently conducted has been designed to meet the basic objective of preparing the Division to be responsive to global commitments/contingencies, regardless of their nature.

B. Countervailing Benefits or Factors. The armor/mechanized-infantry training as planned and executed produces a generalized, unquantifiable benefit to the Marine Corps within the category of enhancing operational readiness. Steps have been taken to reduce or otherwise mitigate the potential for accidental damage. In view of the considerations noted above, and further discussed in the CEIS, as well as the fact that this training is conducted on a recurring basis, it is believed that the benefits accruable from the training outweigh the potential environmental impact. The various alternatives to the exercise discussed in other parts of this CEIS fail to meet the overall existing requirements of the Second Marine Division relative to armor/mechanized-infantry training. Additionally, pertinent alternatives are discussed below:

1. No Exercise. This alternative would not allow the Division to test, develop, or evaluate its capabilities.

2. Alternative Exercise Design. It is considered that the overall planning for this type of training has identified all reasonably expectable environmental impacts and instituted procedures to minimize such impacts. This training is designed to meet specific training requirements and the combination of procedures adopted are relevant to those requirements only. The balance of requirements and adopted procedures which minimize the environmental impact are considered the optimum balance applicable to this type of training.

3. Environmental Risks. The integration of an individual training program into the overall training program pursued by the Marine Corps and the value of such intangibles as the military training realized from an exercise, render cost-benefit analysis impractical. Such analysis is considered nonproductive in this case. Nevertheless, environmental risks are evaluated as evidenced by the consideration noted throughout this CEIS.

C. Adverse Environmental Effects. The adverse environmental effects noted elsewhere are primarily associated with the normal operations of armor/mechanized-infantry training. The mitigation of these adverse effects are as follows:

1. Implementation of operational restrictions to protect the habitat of the red-cockaded woodpecker.

2. Use of existing main roads and trails to the maximum extent tactically feasible will considerably reduce vehicular damage to wildlife, soils, and vegetation. Strict control and restriction of non-operational traffic to existing roads and trails will further reduce environmental damage. Vehicle traffic, particularly tracked vehicles, should avoid making fast, sharp, or spinning turns to reduce the displacement of soils and vegetation.

3. Discipline and control of personnel will offset unneeessary damage to all natural resources in the training area.

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

IN REPLY REFER TO
LFF-2-CWS:ed

18 SEP 1979

From: Commandant of the Marine Corps
To: Commanding General, Second Marine Division,
Camp Lejeune, North Carolina 28542
Commanding General, Marine Corps Base,
Camp Lejeune, North Carolina 28542

Subj: Candidate Environmental Impact Statement for
Mechanized Infantry Training Area

Ref: (a) CG, MCB, Camp Lejeune ltr MAIN-TRB:fm over 11000
dtd 27 Jul 79; forwarding subject CEIS
(b) Marine Corps Base, Camp Lejeune Order 11015.6
(c) MCO 11015.4B

1. The subject Candidate Environmental Impact Statement (CEIS) for the Mechanized Infantry Training Area forwarded by reference (a) was reviewed by the Headquarters Marine Corps Environmental Impact Statement Review Board on 6 September 1979. The Board determined that reference (b), when fully implemented, would substantially provide for the maintenance of the red-cockaded woodpecker population within the training area. Therefore, it was the unanimous decision of the Board that "no significant adverse environmental impact" would result with continued mechanized infantry training operations at Camp Lejeune and the CEIS has been filed for record purposes at this Headquarters.

2. The Board's review of recent events involving noncompliance with reference (b) determined that intensified enforcement and monitoring is necessary to fully implement reference (c) thereby assuring Marine Corps compliance with the Endangered Species Act of 1973, 16 U. S.C., 1531-1543. It is recognized that the Base has primary responsibility for enforcement, training and monitoring, however, each command involved in training within the subject area must comply with reference (b).

3. It should be recognized that additional local study and management of the woodpecker habitat could provide improved measures for protecting the species without seriously impacting the conduct of the training operations. This Headquarters is

Subj: Candidate Environmental Impact Statement for Mechanized Infantry Training Area

maintaining close contact with other agencies who manage habitat for the species and is available for further consultation in this matter.

4. In the event there are instances of significant degradation of training as a result of compliance, such instances should be documented. This request, however, should in no manner be interpreted other than that full compliance is required.

V. J. WALLS
Acting Deputy Chief of Staff
for Installations and Logistics

Copy to:
CG, FMFLANT
CG, 2d MAW
CG, 4th MARDIV
CG, 2d FSSG (Rein)