FINDING OF NO SIGNIFICANT IMPACT

1.0 NAME OF ACTION: Combat Search and Rescue (CSAR) Training Maneuvers at Davis-Monthan Air Force Base (DMAFB), Arizona.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The 79 RQS in association with the 48 RQS and 55 RQS will conduct various training maneuvers to improve the ability of personnel to engage in CSAR during actual combat conditions. Maneuvers would include parachute drops of personnel and equipment, helicopter discharge and recovery of personnel, firing range practice; and use of All Terrain Vehicles (ATVs) to simulate rescue of personnel behind enemy combat lines. Approximately two maneuvers per week involving up to six personnel would go forward. The 79 RQS designated a preferred alternative site and two additional sites for the same project as meeting the above specifications, identified as Alternatives A and B, for consideration. If DMAFB is not utilized, the same activities would be conducted at the US Army’s installation, Ft Huachuca AZ and on nearby lands in that area managed by the US Department of the Interior’s Bureau of Land Management (BLM).

3.0 SUMMARY OF ANTICIPATED ENVIRONMENTAL IMPACTS:
Implementing the proposed action at the preferred location would have the following impacts on the local environment:

3.1 Land Use. The project will include three drop zones designated as PI-1, 1,500 yards by 1,000 yards, PI-2, 2,000 yards by 1,500 yards, and PI-3, 1,500 yards by 1,000 yards for parachute landings. Other maneuvers will take place throughout a larger area totalling approximately 1,242 acres. Existing shooting ranges would be employed.

3.2 Air Quality. The proposed action will have minimal impact on air quality. Long-term use of the new facilities will lessen overall air emissions by eliminating approximately 30% of vehicle trips as compared with conducting maneuvers at Ft Huachuca AZ.

3.3 Health and Safety. The maneuvers will present some possibility of accidents, but no more than any similar project of this magnitude. Careful scheduling would specifically be designed to ensure against conflicts from use of firing ranges by other units and to ensure against conflicts in explosive detonation in the same areas. After personnel complete the training here, their improved capabilities will greatly improve safety for participation in actual CSAR actions in combat situations.

3.4 Geology and Soils. The proposed action will have minor impacts on soils from the use of ATVs. No impacts to geology below the level of soils are anticipated.

3.5 Water. The proposed action will have no impacts on surface or groundwater resources.
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**22 JAN 2003**

2. REPORT TYPE

3. DATES COVERED  
**00-00-2003 to 00-00-2003**

4. TITLE AND SUBTITLE  
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5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

5d. PROJECT NUMBER

5e. TASK NUMBER

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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

**355th Civil Engineer Squadron (CES/CEVA), 710 Third Street, Davis-Monthan AFB, AZ, 85707**

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11. SPONSOR/MONITOR'S REPORT NUMBER(S)

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13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

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<table>
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<th>a. REPORT</th>
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17. LIMITATION OF ABSTRACT  
**Same as Report (SAR)**

18. NUMBER OF PAGES  
**50**

19a. NAME OF RESPONSIBLE PERSON

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Standard Form 298 (Rev. 8-98)  
Prepared by ANSI X39-18
3.6 **Solid Waste.** Activities at the existing firing ranges will produce some waste materials. These items will be disposed of in approved landfills or will be recycled.

3.7 **Cultural Resources.** The proposed action will have no impacts on cultural resources (items of historical and archaeological significance).

3.8 **Biological Resources.** Approximately half of the PI-1 drop zone is “bare earth” so there will be minimal impact on biological resources at that site. The remainder of the extended area totaling approximately 1,242 acres includes native vegetation typical of the region of southern Arizona. Parachute drops, use of ATVs, and helicopter landings with discharge of personnel and equipment could minimally affect some vegetation. Most of this vegetation consists of common species including prickly pear cactus, chollas, creosote, and mesquite trees. However, a number of barrel cactus are present, but are so naturally situated that even direct hits by most unmanned parachuted packages would have minimal impact.

3.9 **Social, Economic, and Quality of Life.** The project is not associated with any increase in personnel; hence there should be no additional demands on housing, schools, and other social services. (A separate Environmental Assessment has addressed those issues and the location of the 79 RQS, the 48 RQS, and the 55 RQS to DMAFB.) Availability of the sites will eliminate the need for transportation to Ft Huachua AZ, thus saving as much as 4,800 worker hours or approximately 30% of the travel time presently required annually and saving an equivalent usage of vehicles.

4.0 **CONCLUSION:** Based on the findings of the Environmental Assessment, Combat Search and Rescue (CSAR) Training Maneuvers at Davis-Monthan Air Force Base (DMAFB), Arizona (2003), and adherence to standard operating procedures with regard to site preparation and construction, operation, and maintenance, no significant impacts are expected from the proposed action. No negative cumulative impacts are identified with this project as associated with any other nearby activities. Instead, this project will markedly improve overall environmental quality as compared to continued use of existing facilities and processes. An issuance of a Finding of No Significant Impact (FONSI) is thus warranted. This action does not constitute a major federal action of significant magnitude to warrant preparation of an Environmental Impact Statement.

MARVIN T. HERSHEY, Colonel, USAF
Vice Commander, 355th Wing

20 May 03
Date
ENVIRONMENTAL ASSESSMENT

COMBAT SEARCH AND RESCUE (CSAR)

TRAINING MANEUVERS

DAVIS-MONTHAN A.F.B.

22 JANUARY 2003
C.W. Miller, Ph.D.
SUMMARY OF ENVIRONMENTAL ASSESSMENT BY SECTION

1.0 Outlines the purpose of and need for action and the process of identifying relevant environmental issues.

2.0 Provides a description of the Proposed Action and reasonable alternatives that have been identified and provides a comparative summary table of the effects of the alternatives on the environment.

3.0 Presents the affected environment under baseline conditions, providing a basis for analyzing the impacts of alternatives.

4.0 Presents the results of the environmental analysis (summary in section 2.0 derives from this).

Appendix A includes maps of the general locale of the project within Davis-Monthan A.F.B. (DMAFB) and more detailed maps of the particular project.

Appendix B includes documentation of authority for undertaking the project and other items of importance for coordination of the effort among various entities.
ENVIRONMENTAL ASSESSMENT

1.0 PURPOSE AND NEED FOR ACTION

The National Environmental Policy Act of 1969 (NEPA) requires preparation of an Environmental Assessment (EA) by the responsible federal agency for certain projects. Details of the preparation of this EA are mandated by the Council of Environmental Quality (CEQ) in the series of regulations 40 CFR 1500-1508 as mandated by NEPA. This project is sufficient to require an EA which will be available for inspection in Rm. 216 of Bldg 4300 at DMAFB, 355 CES/CEVA. Notice of this availability will be made by 355 WG/PA through the Desert Airman, through the DMAFB Intranet web site, and possibly other sources as well.

The 79 RQS proposes to conduct training activities at DMAFB on unoccupied space designated adequate for combat search and rescue (CSAR) maneuvers. When implemented, the training activities would also require participation by the 48 RQS and the 55 RQS. The present EA supplements a more extensive EA completed in June 2002 that addresses a major beddown of CSAR units at DMAFB, including construction of new facilities and training activities over a wide region. CSAR will serve a crucial function in the event of outright hostile action. Hence extensive training is crucial for preparation of personnel with equipment for actual hostile conditions. However, the only base with full CSAR capability is Moody AFB, Georgia, with limited capability at Nellis AFB, Nevada. Hence, more capability is needed both for rescue actions in the western US and for training for worldwide commitments (USAF, 2002).

1.1 PURPOSE AND NEED

At present, the 79 RQS, the 48 RQS, and the 55 RQS are becoming established at DMAFB with training planned through much of Arizona. The 79 RQS specializes in operation of HC-130 transports and parachute drops. The 55 RQS specializes in operation of HH-60 helicopters. And the 48 RQS specializes in ground activities, especially with All Terrain Vehicles (ATVs) and small arms. The initial parachute drops, helicopter landings, and related ground activities could be conducted at the US Army’s installation at Ft. Huachuca, Arizona, approximately 90 miles from DMAFB, or lands in that area which are administered by the Bureau of Land Management of the US Department of the Interior. However, the transportation time and costs to Ft. Huachuca would seriously affect the mission. Designation of space for maneuvers at DMAFB, where the personnel are stationed, is most effective and conserves time and resources.
1.2 DECISIONS TO BE MADE

After considering this EA and other pertinent information, the Chairperson of the Environmental Protection Committee (EPC) at DMAFB will decide if the environmental consequences resulting from the proposed action, including Alternatives A and B and the No Action alternative, qualify for a Finding of No Significant Impact (FONSI) or if an Environmental Impact Statement (EIS) will be required.

At the DMAFB level a final decision will determine the location of the activities, though a tentative decision has already identified the preferred alternative. Further, the No Action alternative could still be selected.

1.3 LOCATION OF PROPOSED ACTION

The preferred alternative location for the training area stands just south of the existing munitions storage area, north of Yuma Street in the far east central portion of DMAFB, and extends through the area north of Yuma St. to the eastern boundary of DMAFB. This total area covers 1,242 acres. Within that extended area three smaller areas specifically designated for parachute drops would be used. These areas are identified as PI-1, 1,500 yards by 1,000 yards, PI-2, 2,000 yards by 1,500 yards, and PI-3, 1,500 yards by 1,000 yards.

However, the 79 RQS has identified two alternatives for CSAR training areas, designated Alternative A and Alternative B. An alternative of “No Action” is also on record.

Under Alternative A, the CSAR training activities would occur in an area near the very center of the flightline on a rectangular area approximately 2,100 feet by 900 feet.

Under Alternative B, the CSAR training area would be in a developed area, including the northwest end of the flightline at DMAFB, on a rectangular area of approximately 1,750 feet by 750 feet.

The map in Appendix A shows the proposed locations for the activities at the preferred alternative site as well as Alternatives A and B.

1.4 SCOPING AND ENVIRONMENTAL ISSUES

1.4.1 SCOPING PROCESS

An interdisciplinary team conducted a scoping process for this project to identify relevant environmental issues. An environmental issue is defined as the effect of an unresolved conflict on a physical, biological, social or economic resource. The team
identified a range of environmental issues potentially relevant to the decision to be made. The team examined these issues and eliminated non-relevant items from study while analyzing all relevant environmental issues for potential environmental impacts.

1.4.2 RELEVANT ENVIRONMENTAL ISSUES

The team identified these issues as germane to the project: land use, air quality, health and safety, biological resources, waste, soils, socio-economic, and quality-of-life.

1.4.3 NON-RELEVANT ENVIRONMENTAL ISSUES

The team considered other environmental issues, but determined that they are associated with limited or no impact in this project. The project would have no effect on geology or water resources. The project would have no effect on cultural resources since no items of historical or archaeological significance are in the area.

1.5 PERMITS, ENTITLEMENTS, AND LICENSES

For this activity no airspace permit will be required. No other activities would require licenses or permits.

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 DESCRIPTION OF ALTERNATIVES INCLUDING NO ACTION AND PROPOSED ACTION

In this section alternatives that have been identified as legitimate are compared to the alternative of No Action. A preferred alternative is readily identified because of the presence of other support facilities and prior use of the area for similar functions. However, Alternatives A and B are logistically feasible since they are very close to the site of the preferred alternative, with these same factors relating to the selection.

2.1.1 NO ACTION

Under the No Action alternative, CSAR training would not go forward at DMAFB. Hence use of space at the Army installation, Ft. Huachuca, and adjacent BLM lands would subject personnel to occupational hazards and slow completion of tasks at additional cost to the government due to the transportation requirements noted in Sect. 1.1.
2.1.2 PROPOSED ACTION

Under the preferred alternative, Alternative A, or Alternative B, CSAR would include training at one of the three extended areas (map, Appendix A).

At the preferred alternative, several activities would be conducted. For one phase of training, one or two HC-130 transport aircraft would fly over a drop zone at approximately 500 feet elevation. In events twice a week, three parachutists would drop from each plane onto the PI-1 drop zone. On the ground, the troops would move onto the more extended area of approximately 1,242 acres, attempting to locate a simulated rescue subject and/or practice shooting at several firing ranges adjacent to the training area. In some training events, the troops would travel on foot while in others they could utilize an ATV, which had also been dropped by parachute. Occasionally, parachute drops would occur in the PI-2 and PI-3 areas but the PI-1 area would be utilized most frequently. ATVs would only be used approximately twelve times per year. Most training would use sandbags of approximately 25 lbs., dropped by parachute. Maneuvers would ordinarily not occur after 2200 hours or before 0700 hours on any day, though some rare late night events could occur during the summer months.

Other training exercises, also twice weekly, would utilize HH-60 helicopters, which could land and discharge up to 10 troops for maneuvers to accomplish simulated rescues, and/or use the firing ranges. HH-60 helicopters could discharge four to six troops per exercise. In some instances helicopters would actually land while in other exercises personnel would ascend or descend from helicopters by helo-rappelle, hoist, or rope methods from elevations of 40 to 100 feet. The PI-1, PI-2, and PI-3 areas would be utilized for these activities. Once on the ground, as with parachute activities, personnel would move about the larger training area of 1,242 acres and possibly employ equipment or the adjacent firing ranges. In other activities, personnel would begin an exercise by practicing various techniques on the ground in the larger area, then board helicopters by any of the noted methods. Again, maneuvers would not ordinarily occur after 2200 hours or before 0700 hours on any day, though a few very late night events could be scheduled during the summer months.

At Alternative A or B, similar training exercises could be conducted, but over a much more restricted and less challenging area since the flightline would not present the natural setting available at the preferred alternative. Further, shooting exercises would not be part of the activities since the shooting ranges available under the preferred alternative would not be available at either Alternative A or B.
### 2.2 SUMMARY OF ENVIRONMENTAL IMPACTS

The following matrix summarizes probable effects of the preferred alternative, Alternatives A or B, and the No Action alternative on the existing baseline environmental issues, if any of the alternatives are implemented.

#### COMPARATIVE MATRIX

<table>
<thead>
<tr>
<th>RELEVANT ISSUES</th>
<th>NO ACTION</th>
<th>PROPOSED ACTION at preferred location</th>
<th>PROPOSED ACTION At Alternatives A and B</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND USE</td>
<td>Sites remain “bare earth” or are covered with native vegetation or runways.</td>
<td>Three areas of 1.5, 2.0, and 1.5 million sq. yds. used for parachute and helicopter landing with 1242 acres used for ground maneuvers, and existing shooting ranges also used.</td>
<td>Alternative A (1.9 million sq. ft.) and Alternative B (1.4 million sq. ft.) would have no access to shooting range and only allow a much more limited area for ground maneuvers. Otherwise, These lands would continue use for flightlines.</td>
</tr>
<tr>
<td>AIR QUALITY</td>
<td>No increases in overall emissions.</td>
<td>Short-term increases in carbon monoxide, particulate, and nitrogen oxide emissions from aircraft during maneuvers.</td>
<td>Short-term increases in carbon monoxide, particulate, and nitrogen oxide emissions from aircraft during maneuvers.</td>
</tr>
<tr>
<td>SOILS</td>
<td>Some soils remain “bare earth” and open to erosion, but native vegetation covers one area with runways on others.</td>
<td>Some surface erosion from landing parachutists and use of ATVs in maneuvers.</td>
<td>Very little impact since areas are covered with concrete or are hardly packed soils as part of the flightline.</td>
</tr>
<tr>
<td>SOLID WASTE</td>
<td>No increase in current volumes used and disposed as part of exercises.</td>
<td>Waste collected and salvageable materials recycled off base.</td>
<td>Waste collected and salvageable materials recycled off base.</td>
</tr>
<tr>
<td>BIOLOGICAL</td>
<td>Areas remain covered by native vegetation or are “bare earth.”</td>
<td>Rare instances of plants hit during parachute drops or by ATVs.</td>
<td>Very little impact since training would be on cleared flightline areas.</td>
</tr>
</tbody>
</table>
### 3.0 AFFECTED ENVIRONMENT

#### 3.1 LAND USE

The preferred alternative is a minimally undeveloped area of DMAFB of approximately 1,242 acres that is adjacent to an existing group of facilities devoted to maintenance and handling of munitions. The PI-1, PI-2, and PI-3 drop zones are within the larger area.

Much of the PI-1 area within the larger area is used for detonation of explosives and is completely cleared. The PI-2 and PI-3 areas are not cleared. Existing firing ranges are just beyond the southern portion of the area.

Alternative A, 2,100 feet by 900 feet, is in an area of the central portion of the flightline and includes runways and cleared lands nearby.

Alternative B, 1,750 feet by 750 feet, is in an area of the north end of the flightline and includes runways and cleared lands nearby.

#### 3.2 AIR QUALITY

DMAFB is part of an air quality district managed by Pima County. Pima County is currently in attainment for all National Ambient Air Quality Standards.
Vehicles, aircraft, firing ranges, and other urban sources of pollution locally impact the air quality at all the alternative locations. Typical air pollutants in the flightline area are carbon monoxide and nitrogen oxides from fuel combustion, and volatile organic compounds from fueling/defueling operations.

3.3 HEALTH and SAFETY

Areas designated for the preferred alternative are either “bare earth” or are covered with native vegetation typical of the area and are not associated with any functions that have current bearing on health and safety. However, some remnants of explosive ordnance disposal may be present below the surface at four sites designated OT-12, OT-13, OT-14, and OT-15. Even so, the USAF has determined that “no further action” is needed on these sites (Appendix C).

Alternatives A and B are in areas covered by runways or cleared adjacent areas and are associated with continuous take off and landings of aircraft.

3.4 GEOLOGY and SOILS

The project would have no impact on geology below the level of soils but would have impacts on soils at and near the surface at the preferred alternative location. The soils in this area are of the Mojave type, consisting of sand-sized particles, weathered from the surrounding exposed rocks in several mountain ranges, fringing the Tucson Valley. Mojave soils are very deep (60 inches) but are not particularly fertile and, when exposed, are subject to wind and water erosion. Mojave soils are of low permeability of $3 \times 10^{-4}$ to $3 \times 10^{-3}$. 

3.5 BIOLOGICAL

The preferred alternative includes an extended area of approximately 1,242 acres, which is almost entirely undeveloped land covered with typical native vegetation of Southern Arizona, though a tract of approximately 750 yards by 500 yards is cleared and is essentially “bare earth.” Approximately 46 percent (4,741 acres) of the land at DMAFB is unimproved and inhabited by native plant communities. The remaining area of 54 percent (5,892 acres) is devoted to mission activities and consists of graded and developed land.

DMAFB lies within the biotic region known as the Sonoran Desert. This region is uniquely characterized by an unreliable and uneven bi seasonal rainfall pattern, separated by periods of spring and fall drought and short-duration freezing temperatures. The Sonoran Desert reaches its northern limits in central Arizona, where it contains two distinctive subdivisions: (1) the Lower Colorado River Valley, and (2) the Arizona Upland.
The Lower Colorado River Valley subdivision is the driest of the Sonoran subdivisions because of the combination of high temperature and low rainfall. Plant growth is typically both open and simple, reflecting the intense competition between plants for the scarce water resource.

The Arizona Upland subdivision has been described as the best watered and least desert-like desert scrub in North America. The vegetation in this subdivision is more varied than in the Lower Colorado River Valley subdivision and consists of more succulent species among the leguminous trees. More than 12 species of cholla (Opuntia spp.) cacti are represented in and are largely confined to this subdivision in addition to the abundant Saguaro (Carnegia gigantea), barrel (Ferocactus spp.), and various pincushion (Mammillaria spp.) cacti.

The vegetation habitat of DMAFB represents an overlap area for the Lower Colorado River Valley subdivision and the Arizona Upland subdivision. The ecotone between the two subdivisions is a common feature along the margins of the valleys in this area. This ecotone contains a unique variety of both species from the drier valleys and the lower bajada. Some of the species contributing to the diversity of this community included ocotillo (Iouquieria splendens), jojoba (Simmondsia chinensis), desert Christmas cactus (Opuntia leptocaulis), Engelmann prickly pear (Opuntia phaeacantha var. discata), fishhook pincushion (Mammillaria microcarpa), and Fendler hedgehog (Echinocereus fendleri). Dominant species along drainages include western honey mesquite (Prosopis glandulosa var. torreyanna), cat claw acadia (Acacia greggii), and blue palo verde (Cercidium floridum). Lesser species are present but too numerous to enumerate (USAF, November 1992).

A brief inspection revealed the presence of various chollas, prickly pear, creosote, and mesquite trees in the area proposed as the preferred alternative. However, those varieties are quite common. A number of barrel cacti are also present; thus one species which falls under some protections is identified in the area.

The creosote bush (Larrea tridentata) - white bursage (Ambrosia dumosa) vegetation association of DMAFB supports a wide variety of animal life including the coyote (Canis latrans), jackrabbit (Lepus spp.), desert cottomail (Sylvilagus audubonii), mule deer (Odocoileus hemionus), cactus wren (Canylorhynchus brunnicepilus), curve billed thrasher (Taxostoma curvirostre), Gambel’s quail (Callipepla gambelii), Inca dove (Columbina inca), and numerous rodents. More than 120 species of birds are present or use the desert scrub community of the base. These species include hawks, owls, doves, quail, thrashers, wrens, roadrunners, bunting, sparrows, warblers, and crows. Common reptiles indigenous to the base include the regal horned lizard (Phrynosoma solaris), eastern fence lizard (Sceloporus undulatus), gopher snake (Pituophis melanolucus), and western diamondback rattlesnake (Crotalus atrox).
The common reptiles and amphibians are usually found only in undeveloped areas. Invertebrate wildlife, including insects, spiders, and snails, probably total in excess of 1,000 species in the area.

The current DMAFB Fish/Wildlife Management Plan is dated 2001. It is a component plan of the base’s Integrated Natural Resources Management Plan (INRMP) dated April 1998.

Under the Arizona Native Plant Law, several species, including barrel cactus (Ferocactus spp.) can legally be moved from a locale but must be replanted elsewhere.

Although a large number of federally and state-listed threatened, endangered, protected, and statues review (i.e., species under review for possible listing) plant and animal species occur in the vicinity of DMAFB, little evidence exists to indicate their presence on base. In September and October 1990, all undeveloped areas of the base were surveyed for three species with a reasonable potential for occurring: (1) the Federally endangered-Tumamoc globbeberry (Tumamoca macedougalii), (2) the Federal candidate category I-muley cactus (Coryphantha scheeri var. robustispina), and (3) the desert tortoise (Gopherus agassizii), the Sonoran population of which is currently under petition for listing as threatened or endangered. No signs of any of these species were found nor are they thought to occur on base. Threatened or endangered plant and animal species residing or transient within a 10-mile radius of DMAFB are listed as follow (USAF, November 1992).

**PLANTS**

- Pima pineapple cactus (Coryphantha scheeri var. robustispina) - Proposed endangered

- Tumamoc globbeberry (Tumamoca macedougalii) - Endangered

**AMPHIBIANS**

- Lowland leopard frog (Rana vavapaiensis) - Candidate 2

**REPTILES**

- Mexican garter snake (Thamnophis eques) - Candidate 2
Canyon spotted whiptail  
(Cnemidophorus burti)  
Candidate 2

BIRDS

Cactus ferruginous pygmy Owl  
( Glaucidium brasiliarum cactorum )  
Endangered

MAMMALS

California leaf-nosed bat  
(Macrotus californicus)  
Candidate 2

Lesser long-nosed bat  
(Leptonycteris curasoe verbabuenae )  
Endangered

The sites of Alternatives A and B are cleared lands adjacent to runways and have very firmly packed soils or are covered with concrete or gravel. Consequently there are only very scattered plants and occasional animals, which may enter from more remote habitats.

3.6 SOLID WASTE

The preferred alternative includes lands completely cleared and in a “bare earth” condition or are undeveloped desert lands. However, in the central area a number of old vehicles and parts of aircraft have been used for target practice. Four sites associated with burial of waste from incineration of unused or outdated ordnance. These sites are officially noted in records as OT12, OT-13, OT-14, and OT-15. However, the USAF has designated these sites as requiring “no further action” (USAF, December 2001).

Alternatives A and B are part of the flightline area including portions of runways so there is no association of these sites with solid waste or hazardous waste in any form.

3.7 SOCIAL, ECONOMIC, and QUALITY OF LIFE

The preferred alternative is near an area of DMAFB devoted to storage of munitions for various types of weapons with other areas within the site devoted to firing range activities. The nearby existing munitions bunkers and firing range facilities are correlative with other buildings at DMAFB with colors that blend in the desert environment using “earth tones.”
Alternatives A and B are in areas of active runways and adjacent flightline facilities which demonstrate continual activity. Further, Alternative A includes an active gravel processing facility, which provides gravel for road and runway maintenance and construction.

The entire DMAFB area is subject to noise levels associated with frequent operation of jet aircraft. Alternatives A and B, immediately adjacent to the flightline, are subject to sound levels above 85 LDN. The preferred alternative, at some distance from the flightline, is subject to sound levels below 65 LDN.

4.0 ENVIRONMENTAL IMPACTS

4.1 NO ACTION

The primary drop site of the preferred alternative is on soils openly exposed to wind and water erosion with no vegetation covering; the area may be described as essentially "bare earth." The same area is used for detonation of explosives. Those sites would remain in their current state. The additional portions of the preferred alternative area would remain in their current undeveloped state with substantial native vegetation and firing ranges with old vehicles and equipment as firing targets. Alternatives A and B would remain portions of the flightline and runways and would not be changed. However, important combat training for personnel to be assigned to combat duty would have no appropriate sites.

4.2 PROPOSED ACTION

4.2.1 LAND USE

At the preferred alternative the various maneuvers would occur approximately twice weekly on lands otherwise used for explosive detonation and firearms training. This usage conforms to the overall philosophy of “multiple use” for government lands as mandated by the US Congress in a 1955 Act, commonly known as Public Law 167. Careful scheduling would insure that explosive detonations occur at safely different times from maneuvers. No conflict with proposed expansion of activities in the nearby Aerospace Maintenance and Regeneration Center (AMARC) is identified.

At Alternatives A and B the maneuvers would not include firearms training but would occur on lands otherwise used for aircraft take-off and landing. Again, careful scheduling would insure that the maneuvers not conflict with operation of other aircraft. At Alternative A, a gravel processing facility which provides materials for maintenance and construction of runways and roads would have to be removed and another source of gravel developed.

4.2.2 AIR QUALITY
Some particulates and vehicle emissions would be generated during maneuvers. However, use of these sites would lessen total transportation and emissions as much as 30% from use of sites at Ft. Huachuca AZ. This impact would be the same at the preferred alternative or Alternatives A or B.

4.2.3 HEALTH AND SAFETY

As with any maneuvers, some possibility exists of injury to personnel from parachute drops, entering or leaving hovering helicopters, and use of ATVs. However, the same personnel would be better prepared to successfully complete a variety of possible operations in outright combat situations. Training would be much more realistic to actual combat at the much larger area available at the preferred alternative than at Alternative A or B.

At the preferred alternative site, training at shooting ranges would further enhance the combat readiness of the personnel. However, the controlled nature of the ranges makes injury in shooting training extremely remote. Firmly enforced scheduling would minimize the possibility of accident from other units' use of firing ranges. Lack of availability of shooting ranges at Alternatives A and B makes the training less useful at those locales.

4.2.4 GEOLOGY AND SOILS

The project would have no impact on geology below the level of soils, since parachutists, helicopter landings, and use of ATVs will disturb surface materials only. The preferred alternative site would be subject to more damage of soils than Alternatives A or B since soils are very firmly packed or covered with pavement or gravels in those areas.

4.2.5 BIOLOGICAL

At the preferred alternative, occasional incidents of plants hit by dropping parachutes, landing helicopters, or ATVs may be expected. In most cases, however, parachutists, drivers, and helicopter pilots will be able to avoid any vegetation. Rarely, an unmanned parachute drop could encounter vegetation, but in those cases, only barrel cacti are protected. Only the largest parachuted packages would be capable of doing damage to a barrel cactus; most items would be too small. Hence there is relatively little probability of substantial damage to protected species.

Alternatives A and B are in areas that have few biological resources at all so parachute drops, helicopter landings, and use of ATVs would be very unlikely to cause damage to any protected species.

4.2.6 SOLID WASTE
At the preferred alternative, occasional waste may be generated from operations and equipment. The shooting ranges could be expected to produce some volumes of spent cartridge casings and discharged bullets. These items would be disposed of in accordance with Air Force Instructions, as with all materials generated from firing ranges.

Alternatives A and B would have no shooting range availability, so few items of solid waste would be generated.

4.2.7 SOCIAL, ECONOMIC, AND QUALITY OF LIFE

Since this action is not associated with any increases in personnel, no additional housing, schools or other public services would be needed. The relocation of the 48 RQS, the 55 RQS, and the 79 RQS has been addressed in the earlier EA (USAF, June 2002) for construction, social issues, etc. In the action addressed by the present document, personnel would save approximately 4,800 worker hours per year or 30% in travel time compared with conducting the maneuvers at Ft. Huachuca AZ.

4.3 CUMULATIVE IMPACTS

In 2002 an Environmental Assessment on Construction of Munitions Storage Facilities by the Arizona Air National Guard was completed. To date in year 2003 an Environmental Assessment on Construction of a Hazardous Cargo Pad has been completed while an Environmental Assessment on a new facility for the Bank of America at DMAFB is pending. The present project has no cumulative impacts related to any of these other recent projects.

5.0 CONCLUSION

A review of this document and coordination with the appropriate agencies indicate that the project as proposed would have no significant impacts upon the existing environment. Only minor differences are evident between the preferred action and Alternatives A and B in environmental impacts. Better logistical functions of the project are evident at the preferred location. Thus the proposed project does not add to any cumulative negative impacts from other recent nearby activities, but will make an overall net positive contribution to protection of the environment when viewed with reference to the Alternative of “No Action.” It is recommended that a Finding of No Significant Impact (FONSI) be signed.

Therefore, preparation of an EIS is not required.
Appendix A

Map
NOTES:
A-B = 2500YDS
B-C = 2500YDS
C-D = 1500YDS
D-E = 1400YDS
E-A = 1800YDS
Appendix B

Documentation and Coordination
REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROVENT INFORMATION

1. TO [Environmental Planning Function]
   355 CES/CEVA
2. FROM [Proponent organization and functional address symbol]
   79th RQS/CC
2a. TELEPHONE NO.
   228-7901

3. TITLE OF PROPOSED ACTION
   Combat Search and Rescue (CSAR) Utilization of East Side of Davis-Monthan AFB, AZ

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)
   Request environmental impact analysis for CSAR use of East Base. CSAR use will include parachute activities, small unit ground maneuver elements and helicopter landing zone operations. Parachute activities will include airdrop of personnel

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES
   Preferred alternative environmental approval of East Base for CSAR use. For requested area see attachment 1. Alternative A - center of runway. Alternative B - Field north of West Ramp.

6. PROPONENT APPROVAL (Name and Grade)
   Steven B. Alderfer, Lt Col

6a. SIGNATURE
   [Signature]

6b. DATE
   20021106

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY.

(Check appropriate box and describe potential environmental effects including cumulative effects) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)
   X

8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)
   X

9. WATER RESOURCES (Quality, quantity, source, etc.)
   X

10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure; explosives safety, quantity-distance, bird/wildlife aircraft hazard, etc.)
    X

11. HAZARDOUS MATERIALS/WASTE (Storage/generation, solid waste, etc.)
    X

12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)
    X

13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)
    X

14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)
    X

15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)
    X

16. OTHER (Potential impacts not addressed above.)
    X

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17. PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX)

   X

   PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
   EA in progress.

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION
   (Name and Grade)
   Charles W. Miller Ph.D. GS-11

   [Signature]

   19b. DATE
   13 Nov. 2002
4 cont. (maximum 20), sandbag and equipment (maximum 1200lbs.). Parachute activities will be limited to the points of impact on attachment 1. With the gradual build up of our unit, operations will build up to 104 drops per year (twice per week). Drop bundles will be equipment (12 times per year), 25lb sandbags (104 times a year) and personnel (3-6 per activity, 52 periods a year. Total jumpers 312 on an annual basis). Small unit maneuver will be accomplished on current active ranges and will include live fire of small arms (up to 5.56mm) from currently surveyed firing points. Max of 20 personnel will be involved in any one training period, 12 periods per year. Landing zone operations will be conducted from HH-60 platforms to include hover insertion/extraction. Actual touchdown will only be accomplished in previously cleared and surveyed areas. All operations will be 500' AGL and below. Total HH-60 sorties over the east base would be twice a week (104 a year).
Dr. Miller,

Reference telephone conversation 09 Jan 03. HH-60 helicopter operations both in a hover and on final approach increase the amount of rotor wash on the terrain around the rotor blades. However, only 100-200 feet of buffer is needed to dissipate the wind to a safe wind speed for both personnel and equipment.

Brad Grambo
55 RQS/DO
DSN: 228-3344
Comm: 520-228-3344
Cell: 520-940-4334
### STAFF SUMMARY SHEET

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**SUBJECT**

Environmental Assessment Combat Search and Rescue Training Maneuvers

**DATE**

20030108

**SUMMARY**

1. At Tab 1 is the Environmental Assessment Combat Search and Rescue (CSAR) Training Maneuvers. This assessment details the training area for the 79 RQS, 48 RQS, and the 55 RQS. This training area has a significant impact on operations of AMARC and its property as well as the portion of property that is utilized by other Federal agencies according to support agreements currently in place. Dr. Miller, 355 CES/CEV, verbally agreed to move the optional area line AB down to equal fenceline as shown in Appendix A of the assessment; this would then move the training maneuvers into the munitions area and completely out of the AMARC area.

2. **RECOMMENDATION**: CC approve revised map at Tab 2 which displays modification of the AB line as explained above.

---

FRANK L. YEAGER
Chief, Facilities and Equipment Division

2 Tabs
1. Environmental Assessment CSAR Training Maneuvers
2. Revised Map–Appendix A
Appendix C

Reports of Explosive Ordinance Disposal (EOD) Burial Sites (US Air Force, December 2001)
CURRENT EXPLOSIVE ORDNANCE DISPOSAL (EOD) BURIAL SITE,

This site is located near the southeast corner of the Base and is used to dispose of residue from the incineration of unused or outdated ordnance. Open burning and open detonation of unserviceable munitions are performed prior to burial. However, some live ordnance may have been disposed of in the past. The ERP records search conducted in 1982 concluded that the incineration of ordnance should have destroyed any hazardous constituents. Although there may be unexploded ordnance, there is no mitigation potential. Based on these findings, the AFB decided on no further action for this site.
OLD EOD BURIAL, OT-13 AND OT-14

These two sites are located in the far eastern part of the Base. They are similar to OT-12, but are no longer in use. The AFB concluded that no further action will be taken at these sites for the same reason given for OT-12.
D1-1.14 RIFLE RANGE BURIAL, OT-15

This site is located in the far southeastern corner of the Base, at the Base firing range. The site was used to bury brush and debris from the construction of the firing range site. No known or suspected hazardous materials were disposed of at this site. Based on findings from the ERP records search conducted in 1982, the AFB has decided on no further action at this site.
BIBLIOGRAPHY


INTERDISCIPLINARY TEAM

C.W. Miller, Team Leader

Gwen Lisa, Natural/Cultural Resources

David Sumner, Community Planning

Janie McLaury, Public Affairs

Lt. G. Boone, Bioenvironmental

Maj. Christopher Colclasure, Legal Issues

Mike Barnes, Safety

Patrick Ross, Air Pollution Issues
Lt. Col. Steven B. Alderfer, 79 RQS
Maj. Michael Hinsch, 79 RQS
Lt. Col. Tim Healy, 55 RQS
SMSGt. Joel W. Lukens, 48 RQS
MEMORANDUM FOR 355 WG/CV

FROM: 355 WG/JA

SUBJECT: Legal Review -- Environmental Assessment and Finding of No Significant Impact for Combat Search and Rescue (CSAR) Training Maneuvers

1. The 79th RQS and 55th RQS have requested designation of a training area on Davis-Monthan AFB. The request identifies a preferred site, two alternative sites, and the No Action alternative. I have reviewed the attached Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), and find them to be legally sufficient.

2. The National Environmental Policy Act (NEPA) requires the Air Force to incorporate environmental impacts into the decision making process. This requirement is met by accomplishing a Categorical Exclusion, an EA, or an Environmental Impact Statement (EIS). When a proposed action is too small to require an EIS but too large to be categorically excluded, an EA must be prepared. Every EA must lead to either a FONSI, a decision to prepare an EIS, or disapproval of the proposal. The attached EA and FONSI meet the requirements of NEPA.

3. In this case, an EA is required because no categorical exclusion applies. The proposed training area would cover 1,242 acres on the southeastern portion of the base. Three parachute drop zones would be established within the 1,242 acres. CSAR maneuvers would include parachute drops of personnel and equipment, helicopter insertion and extraction, use of All Terrain Vehicles, and firing range practice. The rescue squadrons would conduct maneuvers approximately twice per week. No construction would required at the site, but it would require scheduling deconfliction with explosives demolition and firing range activities. The most significant environmental impact of the training area would be an increase in aircraft activity, but a June 2002 EA already considered the effects of basing the units here. Accordingly, it is reasonable to find designation of the training area would result in no significant impact to the environment.

4. I recommend approval of the EA and FONSI. My point of contact for this matter is Maj Colclasure, 8-5242/3733.

W. THOMAS CUMBIE, Lt Col, USAF
Staff Judge Advocate

Global Power For America
1. The purpose of this Staff Summary Sheet is to obtain 355 WG/CV signature on the EA and FONSI documents on the proposed maneuvers.

2. BACKGROUND: To prepare for combat readiness, CSAR proposes use of an area totalling 1,242 acres in the eastern portion of DMAFB for parachute drops and helicopter maneuvers. The purpose is to train for recovery of personnel from behind enemy lines. A preferred locale for the training is identified in the EA. However, two other smaller sites adjacent to the flightline, designated Alternatives A and B, are also identified as part of the discussion in the EA. Maneuvers in these areas would be less effective. Scheduling of activities will preclude conflict between other usage of firing ranges and the CSAR activities, and the proposed AMARC expansion will not be affected. However, the AMRAC staff requested a minor adjustment of the north edge of the maneuver area which is included in the revised map and discussion.

3. DISCUSSION: The National Environmental Policy Act of 1969 requires preparation of an EA for each project (Tab 2). A FONSI document is also included for the project (Tab 1). The FONSI document summarizes the EA document and states that the project is too small to constitute a “major federal action resulting in significant impacts to the environment,” and therefore does not require preparation of an Environmental Impact Statement (EIS).

4. RECOMMENDATION: 355 WG/CV sign the FONSI document at Tab 1.