

Edwards Air Force Base

PLANS, PROGRAMS AND CONSERVATION

Status Report 31 March 2003

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Table of Contents

Non-Project Specific Programs

- **Geographic Information System (GIS)**
- **Information Technology (IT)**
- **Project Planning**
- **Support Agreements (SA)**
- **Plans**
- **Desert Managers Group (DMG)**
- **Public Outreach**

Natural Resources

- **Inventory Reports**
- **Biological Assessments**
- **NR Damage Assessments**
- **NR Monitoring Reports**
- **NR Restoration Projects**
- **No Effect Letters**
- **NR Research Studies**
- **NR Plans**
- **NR Operations and Maintenance**

Cultural Resources

- **Phase I Surveys/Inventories**
- **Phase II/III Studies**
- **CR Damage Assessments**
- **CR Monitoring Reports**
- **CR Research Studies**
- **CR Plans**
- **CR Operations and Maintenance**

Environmental Impact Analysis Process

- **Environmental Impact Statements (EIS)**
- **Environmental Assessments (EAs)**
- **Best Management Practices (BMPs)**
- **Categorical Exclusions (CATEX)**
- **Environmental Baseline Surveys (EBS)**
- **AF Form 813s/332s/103s**
- **Engineering Design Reviews**
- **EIS/Environmental Impact Reports (EIRs)/EA Reviews (Outside Agencies)**
- **Airspace Analysis Studies**

Introduction

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This status report includes summaries of activities performed at Edwards Air Force Base (EAFB) under the Plans, Programs and Conservation Division from 1 Jan through 31 Mar 03. This report describes the most important activities that have occurred in the program and summarizes the status of each project.

The sections summarize the Non-Project-Specific Programs, Natural Resources, Cultural Resources, and Environmental Impact Analysis Process activities being worked or completed during the reporting period.

Non-Project Specific Programs - The Non-Project-Specific Programs section includes activities performed for overall Geographic Information Systems (GIS), Information Technology (IT), Project Planning, Support Agreements (SA), Plans, Desert Managers Group (DMG) and Public Outreach (training, awards, news articles, public notices, etc.).

Natural Resources - The Natural Resources section includes Inventory Reports, Biological Assessments, Damage Assessments, Monitoring Reports, Restoration Projects, No Effect Letters, Research Studies, Plans and Operations and Maintenance.

Cultural Resources – The Cultural Resources section includes Phase I Surveys/Inventories, Phase II/III Studies, Damage Assessments, Monitoring

Reports, Research Studies, Plans, and Operations and Maintenance.

Environmental Impact Assessment Process (EIAP) – The EIAP includes preparation of Environmental Impact Statements (EIS'), Environmental Assessments (EAs), Categorical Exclusions (CATEXs), Environmental Baseline Surveys (EBS'), Air Force Forms 813, 332, and 103, Engineering Design Reviews (EDRs), EIS/EIR/EA reviews for outside agency documents, and Airspace Analysis Studies.

Non-Project Specific Programs

Geographic Information System (GIS)

Program Manager – Stephen Watts
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This section summarizes major projects GIS has completed or has been working on during the reporting period including the end product and a completion date if applicable.

Crosscutting Support

- Mapping efforts - Updated AFFTC 11-1 for Air Field Management.
- WebMap - Established additional security to access web site.
- Updates – data-dictionaries. Added SDS attributes to Oracle Spatial.

- Began effort to integrate META Data into WebMap.
- Other support - WebMap was updated to reference live data from Oracle Spatial Database.
- Data support - Detailed feature development of range attributes to increase usefulness of system to range personnel.

Restoration Support

- Mapping efforts - Contaminant field data is available in WebMap for all Land Use Control (LUC) locations. Provided customized maps for leadership briefing to City of Lancaster Board Members.
- Data support - Produced field collection interface to capture Ground Water Sampling data and reduce the time it takes to get information analyzed and into GIS. Provided GPS support for Earth Tech in their data gathering efforts at various ERP Sites and Areas Of Concern (AOCs).
- Updates - Updated well/sample points in the GIS well/sample location layers, updated the ERP Site/AOC GIS Layer, and updated the WebMap LUC Buffer Zones.
- Other support - Obtained data and produced information to support presentation for addressing Natural Resource Injury.

Conservation Support

- Mapping efforts - Produced design drawings of Adopt-A-Pet facility.
- Data support - Added a Cultural Resource Management Layer to WebMap.

- Updates - Desert Cymopterus California distribution map.
- Other support - Developed predictive Model of Desert Cymopterus habitat.

Compliance Support

- Mapping support - Provided updated floor plans for asbestos team investigations.
- Data support - Continued converting storage tank data to SDS standards.
- Updates - Produced maps for ECAMP support.
- Other Support - Researched Environmental Quality regulated tanks, HAZMAT pharmacy points, hazardous waste collection points, spill plan, storm water management, solid waste and water quality for data/spatial requirements.

Information Technology (IT)

Program Manager - Lisa Galloway
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Major projects IT has completed or has been working on during the reporting period.

Crosscutting Support

- EM IT continued development of AFFTC PRIME system. (Livelink) implementation for the EM Directorate. During this period, Phase I of the EM PRIME (Livelink) system implementation roll-out plan was begun. Final

details were resolved to ensure implementation was as trouble-free as possible from the end-user's point of view. Users will begin an up-to-four-part training program, depending on their role in Livelink, by the end of this quarter.

- EM IT continued to work with EM's Librarian to tackle Document Management processes. This quarter, efforts have focused on the integration of Techlib with EM's Livelink implementation. For EM, the focus of this effort continues to be to provide "cradle to grave" tracking for EM's documents, helping to ensure that expensive documents are tracked and fully utilized and that information is not purchased redundantly.
- EM IT worked with EM biologists to design and develop a hunter-friendly web page to give hunter/blind information – available by password only. Efforts to bring waterfowl hunting data up to date are also continuing.

Project Planning

Program Manager - Lisa Galloway
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The following project planning tasks were completed during the reporting period.

- The FY05-09 Amended Program Objective Memorandum (APOM) data call was sent to

Edwards AFB on 8 Jan 03. The suspense date of 3 Mar 03 was met. A review was performed for each project to ensure project consistency for the Natural and Cultural Resources program. At this time multiple Natural Resource projects were added as level one and O&S projects. Coordinated PM project concurrence and project entry and routing to AFMC.

- Provided FY03 through FY09 project list and project information for the Natural Resource project planning meeting on 3 Mar 03.
- Attended Conservation Quarterly Report meeting on 11 Mar 03.
- Received data call for FY04 validated Level I Base priority list for the FY04 Fin Plan on 13 Mar 03. Suspense date was 21 Mar 03.

Support Agreements

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The following Support Agreement tasks were completed during this reporting period.

Program Introduction Document/Statement of Capability (PID/SOC)

- Supported expedited review and 24 hour concurrence on UARRSI, C-12 RADES, Software Configuration Set 17C-ITIII and T-38 Rudder Force Producer Spring Program projects.

- Provided Cost and Resource Estimates for Boeing 777-300, F-16 SCU, JSF, Have Syclops, C-17 LARCIM, UCAV, DARPA X-34, Exercise Ended Drama, Radiant Knight, Track Haven, Koch Modified Canopy Release, JSF EO DAS, F-15 (3), C-135 FOQT&E Review 4, KC-135 GATM, Space Shuttle Support, B-2 IFC-PD3 and F-16 SCU 5E1.
- Revised and coordinated Standard Statements for SOCs to include requirements for non-DoD commercial projects. Currently under review.

Interservice/Intragovernmental Support Agreements

- Updated and coordinated Support Agreements for Det 3, 645 MATS, GSA, 163 ARW, and U.S. ACE.
- Revised and coordinated changes to Standard Statements for Support Agreements adding requirement for EM review of agreements for non-DoD commercial projects.

Memorandum for Record (MFR)/Memorandum of Agreement (MOA)

- Reviewed, revised and coordinated MOA for Industries for the Blind.
- Reviewed, revised and coordinated draft DRMO Hazardous Properties MOA to address refrigerants.
- Reviewed and coordinated MOA for Storage of Fuel at Hydrant #1, Tank #3.

Plans

None.

Desert Managers Group (DMG)

Program Manager – Shannon Collis
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The following DMG issues and activities were briefed at the 3-4 Mar meeting held in Palm Springs, CA.

- This meeting was held in conjunction with the Arid Southwest Lands Habitat Restoration Conference, sponsored by DMG members. The conference focused on restoration technologies and science based land management. In response to the GAO report regarding desert tortoise recovery, US Fish and Wildlife Service (USFWS) proposes revision of the recovery plan. Two teams, a recovery team and an assessment team, will implement and monitor the effect of recovery actions. Funding remains an issue and an MOU is being developed according to the GAO recommendation.
- Discussion of threats analysis continued. California Department of Fish & Game briefed that a summary of information and recommendations resulting from the 2002 Disease Workshop, held at Zyzzx, CA, would be published on the DMG website in June.
- USFWS is coordinating a meeting on predator/raven control relative to the desert tortoise. The meeting is scheduled for 2 May 03 at the BLM Desert District Office.

- Subcommittee briefings were presented, and several briefings were given by other agencies regarding their programs. These included David Smith of the Natural Resource Conservation Service, Chris McCreedy of Partners in Flight, Val Page of the Mojave Weed Management Area.

Public Outreach

Project Manager - Shannon Collis
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Articles

The following articles were written during the quarterly monitoring period for the Desert Wings.

- “Environmental Management offers desert tour of wildflowers” (Stacey Re’).
- “The lakebeds are alive!” (Mark Bratton).
- “Moderate irrigation conserves water” (Linda Anton and Manuel Guerrero).

Training

Project Manager – Chris Rush
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The following desert tortoise awareness trainings were conducted.

- From 10 Dec 02 to 13 Jan 03, three formal desert tortoise (*Gopherus agassizii*) briefings, one general, and two environmental training briefings

were conducted for a total of 117 people.

- From 13 Jan to 10 Feb 03, one building managers training, three environmental management newcomers training, one general, and one formal desert tortoise (*Gopherus agassizii*) briefings were conducted for a total of 90 people.
- From 11 Feb to 10 Mar 03, three environmental management newcomers training, and four formal desert tortoise (*Gopherus agassizii*) briefings were conducted for a total of 83 people.

Consultant – JT3/CH2M HILL.

Public Awareness, Cultural (2002-E)

Project Manager - Richard Norwood
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Provides for public relations projects to educate base personnel/public about cultural resources. Includes update of cultural resource brochure informing about Edwards AFB cultural resources and cultural resource law (for newcomers and general public), 4 interpretive displays in main Environmental Management building, 1 traveling display for Oasis Club and other high-traffic buildings, 1 display at the annual air show and wayside exhibit at homestead ruins on the Branch Park interpretive trail. Also includes 2 articles in base newspaper (Desert Wings) and information package (25) for building managers on how to deal appropriately with maintenance of eligible structures, and 3 specialized training "speakers program" sessions for Civil Engineering, 412 Test Wing, and Range Control. Contractor will implement methods for

best educating the base population to include a web page and informational mailings/news releases.

Consultant - JT3/CH2MHILL. Study products include items listed above.

Current status – Ongoing.

Completion date – 30 Sep 03.

Natural Resources

Inventory Reports

Inventory of Plant Species Critical Habitat Zone 3, Creosote Bush, and Halophytic Saltbush

Project Manager - Mark Hagan
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The purpose of the Zone 3 plant inventory is to provide a focused inventory of plant species and an evaluation of invasive species in critical habitat within the Precision Impact Range Area (PIRA). This is a high priority area on base because of the designation as critical habitat for the desert tortoise. The purpose of creosote plant inventory is to provide a focused inventory of plant species and an evaluation of invasive species in critical habitat within creosote bush plant community. This is a high priority area on base because of the designation as critical habitat for the desert tortoise. The purpose of halophytic saltbush plant inventory is to provide a focused inventory of plant species and an evaluation of invasive species within

halophytic saltbush bush plant community. Consultant - Jones & Stokes. Study products include research design, field surveys, data evaluation, written report and management plan.

Current status on both surveys – Awaiting field surveys for spring 03.

Completion dates – Halophytic Saltbush - Dec 03; Creosote Scrub – Sep 03.

Inventory of Desert Cymopterus and Population Research

Project Manager - Mark Hagan
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This study includes population viability analysis and population dynamics research on desert cymopterus. Study is being conducted at two known population locations near AFRL. This is a three phased project.

Consultant - Tetra Tech. Study products include written report and GIS deliverables.

Current status - Field work in progress.

Completion date - Sep 04.

Baseline Migratory Bird Inventory and Study

Project Manager - Mark Hagan
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Study of bird populations including a series of 5 surveys per year over a 3 year period which began in 2000.

Consultant - URS. Study products include 5 surveys per year over 3 years, 2 GIS

updates and draft and final summary of the avian study.

Current status - Completed surveys for the first 2 years, working 3rd year.

Current survey due by 30 Sep 03. Final survey due Dec 03. GIS updates and summary report to be completed.

Completion date - 04.

Presurveys

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Presurveys are presence-or-absence surveys conducted in areas deemed as potential tortoise habitat. These surveys identify potential impacts from project activities and are used to determine the appropriate avoidance and minimization measures.

Desert tortoise presurveys were performed for the following projects.

- Drainage Channel Maintenance at Avenue E and 10th Street East.
- Re-alignment of two F-16 Radar Reflector Arrays.
- Grading Road Shoulders of Area 1-30B.

Desert Tortoise presurveys were also conducted for the following ERP projects.

- Installation of borehole at Site 293.
- Installation of borehole at Site 280.
- Installation of monitoring wells 325-MW14, 325-MW16, 27-MW09, 325-MW15, and 116-

MW05 at various locations throughout the AFRL and PIRA.

Scoping Surveys

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Scoping surveys are conducted early in the planning stage to determine potential impacts from project activities. Scoping surveys identify further minimization requirements such as project presurveys and monitoring.

Scoping surveys were performed for the following projects.

- Closure of historic water wells at various locations on the Precision Impact Range Area (PIRA).
- Repair three sections of the Kender Morgan Petroleum Pipeline.
- Upgrade munitions complex at South Base.
- Desert Wind 03-1 “Operation Right Start”.

Clearance Surveys

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Clearance surveys are conducted to temporarily relocate tortoises from an area to avoid or minimize injury or death that may be caused by project activities.

A Clearance Survey was conducted for the following project.

- Water discharge from catch tank at Test Area 1-14.

Damage Assessments

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Habitat Disturbance Delineation was performed for the following projects.

- Install cabling between site C-15 and Building 5790.
- Desert Wind 03-1 “Operation Right Start”.

Monitoring Reports

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Compliance monitoring was provided for the following projects.

- Removing communication lines on Scout Road and Lancaster Blvd.
- Desert Wind 03-1 “Operation Right Start”.
- Communications upgrade to South Base.
- Re-alignment of two F-16 Radar Reflector Arrays.

Annual Reports and Permit Renewals.

- United States Fish and Wildlife Service Biological Opinion Annual Report.
- Migratory Bird Treaty Act Annual Permit Renewal.

- Migratory Bird Treaty Act Annual Report.
- Tortoise Adoption Program Report 2003 (covering 1 Apr 02 to 31 Mar 03).

Monthly Reports

- Monthly Desert Tortoise Awareness Briefing Report from 10 Dec 02 to 12 Jan 03.
- Monthly Desert Tortoise Awareness Briefing Report from 13 Jan 03 to 10 Feb 03.
- Monthly Desert Tortoise Awareness Briefing Report from 11 Feb 03 to 10 Mar 03.
- Natural Resources Monitoring/Presurvey Report from 10 Dec 02 to 13 Jan 03.
- Natural Resources Monitoring/Presurvey Report from 14 Jan 03 to 10 Feb 03.
- Natural Resources Monitoring/Presurvey Report from 11 Feb 03 to 10 Mar 03.

Consultant – JT3/CH2M HILL.

Restoration Projects

Desert Tortoise Habitat Revegetation

Project Manager - Mark Hagan
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Revegetation of various sites on Base to improve desert tortoise habitat.

Consultant - Tetra Tech. Study products include a monitoring report, rehabilitation design plan, GPS data for GIS and a draft revegetation plan.

Current status - Monitoring report, GIS and other deliverables completed.

Completion date – Completed Jan 03.

Just Add Water

Program Manager – Shannon Collis
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POC – Danny Reinke

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This study will evaluate a new approach to habitat restoration in the desert. The goals are to develop an approach that is effective, relatively low cost and requires a minimum amount of maintenance. The first step is a demonstration project to evaluate habitat restoration techniques.

Consultant – Tetra Tech. Study products include Design report and monitoring report.

Current status – Waiting for award of contract.

Completion date – Jun 04.

Line Distance Sampling

Project Manager – Shannon Collis
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POC - Tom Mull, (661) 277-9066

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The project supports USFWS efforts on the recovery of the desert tortoise, a Federal and State listed threatened species, by sampling the population throughout the Fremont-Kramer Critical Habitat Unit in the Mojave Desert. Fifty transects will be inventoried on Edwards

AFB and data collected will be shared with AFFTC/EM.

Consultant – USFWS. Study products include spreadsheets with locations, numbers of live and dead tortoises, sex, age class, and general health observations.

Current status – Awaiting coordination from USFWS contractor regarding access permissions to conduct sampling on the PIRA.

Completion date - Sep 03.

No Effect Letters

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POC – Linda Anton

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No Effect Letters are written for actions not covered under an existing United States Fish and Wildlife Service biological opinion.

The following No Effect Letters were completed during the reporting period.

- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Drainage Channel Maintenance at Avenue E and 10th Street East*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Desert Wind 03-1 “Operation Right Start”*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Repair North Gate Entry Point*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Repair Three Sections of the Kender Morgan Petroleum Pipeline*.

- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Grade Road Leading to Radar 41*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Paintball Training Activity at Camp Corum*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Install Cabling Between Site C-15 and Building 5790*.
- No Adverse Effect to Desert Tortoise (*Gopherus agassizii*), *Install Fencing by 20 Mule Team Road*.

Consultant – JT3/CH2M HILL.

Research/Studies

Saline Valley Radar Floodplain Assessment

Project Manager – Robert Shirley
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POC - Tom Mull, (661) 277-9066
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Survey radar and repeater site locations in the Saline Valley to determine if any sites are located in a floodplain.

Consultant – Desert Research Institute (DRI). Study products include summary report and maps showing location of sites and flood hazard zones at such sites.

Current status – EM accepted final flood assessment report of identified sites.

Completion date – Completed Jan 03.

Multi-spectral Imagery

Project Manager – Dr. Stephen Watts
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This project will produce vegetation maps with landscape-level plant communities to determine how plant communities change over time. Maps will be used to evaluate habitat recovery from mission related projects, activities, and operations.

Consultant - Tetra Tech. Study products include acquiring multi-spectral LANDSAT imagery and Digital Elevation Model (DEM) data and processing such data to make GIS vegetation maps.

Current status – EM approved work schedule and contractor completed background research. DEM data was acquired. LANDSAT data order is complete. Regarding Image/DEM processing; preliminary GIS data products are complete; preparing electronic metadata archives for GIS layers; unsupervised classifications are complete; and results of vegetation boundaries are being compared with EAFB vegetation maps. Ground-truthing vegetation community boundaries to be completed in spring 03.

Completion date – Sep 03.

Inventory Wetlands/Floodplains

Project Manager – Christopher Rush
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Multiple studies (FY00/01/02) include delineation of the 100-year floodplain boundaries of developed areas of Main Base, North Base, South Base, Rogers

Lake, Rosamond Lake, an extension of Mojave Creek along Lancaster Boulevard south of Wolfe Avenue, and a portion of developed areas of the Air Force Research Laboratory. Information will be placed on Base GIS layer to be used for planning purposes.

Consultant – DRI. Study products include multiple reports and GIS deliverables showing 100-year floodplain boundary, concentration points in drainages of developed areas, flow rates, and methods/ models used to make determinations.

Current Status – Provided comments to DRI on draft flood assessment report for Rogers Lake. Coordinating review and comments on Main Base flood assessment. Compiling comments from CE and EM to forward to DRI. Expect final on these two reports in Apr 03. DRI is working on flood assessments of other areas described above.

Completion Date - DRI will complete the FY02 contract with remainder of reports being delivered this summer through spring of 2004.

Ecosystem Modeling

Program Manager - Shannon Collis
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The Ecosystem Modeling effort is being undertaken to assess and monitor the health of the base ecosystem to facilitate accomplishment of the AFFTC's various missions while maintaining the diversity of the natural resources.

Consultant – TYBRIN/JT3/CH2M HILL. Study products include data analysis and development of a model using various parameters from data collected and disturbance indicators from various mission activities and operations to determine what impacts such activities and operations might have on the desert environment.

Current status - Ongoing

Research on Applicable Models for Ecosystem Modeling

- Reviewed a large number of collection protocol and models available on the Internet.
- US Army LCTA II Model - Reviewed the model and methodology for measuring vegetation attributes and other habitat trend conditions. The LCTA II Model encompasses the collection and analysis of both field-scale (i.e., HQA) and spatial (i.e., GIS) data. The model is designed to address all Army installations and includes many parameters that do not apply to Edwards AFB. However, it does include all parameters measured in the Edwards HQA study. Based on models we have reviewed to date, we are looking at whether to recommend the LCTA approach for the data collection protocol. The model is in the third generation of use by the Army. That lets EM compare data with other military installations. In addition, it covers the full array of possible collection issues.
- Contacted Environmental Planning/Management organizations at other DoD installations to determine if others have had success in developing an

ecosystem data model that EM might leverage off. Results were negative, however, still waiting for a response from China Lake.

- Recommended further research on models (unless China Lake identified a suitable model). TYBRIN cannot get access through the University system without paying big bucks in advance for models that may not be ones we could use, but would have to pay for in advance. TYBRIN proposed having a university based review of models not available on-line. Coordinating with EMXP on wording for a small contract (6K or less). The contract would pass through TYBRIN to Desert Research Institute to research applicable models that may exist in the university system but are not available to TYBRIN via known sources.

Existing Documents/Databases/GIS

- Efforts are underway to locate and evaluate existing sources of EM data (e.g., reports, documents, spreadsheets, data tables). The EM Librarian has confirmed that the scope of the development of an electronic library system for EM includes documents and data not in the current manual library system. A coordinated effort will be made to benefit both projects.
- TYBRIN biologists are working on identifying and reviewing existing studies and evaluating data for value in the Ecosystem Modeling effort. They will work with database/GIS staff to compare data from hard copies of

studies found to be valuable in this effort with data found by database staff in the existing databases and GIS to ensure valuable data not currently incorporated into database/GIS information is identified.

- Evaluating existing GIS data, as well as various data stores currently in Access tables on network shares, for modeling purposes. Many of the table structures are poorly formed, with work in progress to normalize the data in preparation for inclusion in the model.
- Examined the original HQA deliverable and found that it was summary data only; the raw data exists, but will need to be input manually into any data store. Analysis of this data should be instrumental in determining the scope of future sampling efforts.

Future POM Projects to Support Ecosystem Modeling

- Recommend raptor baseline inventory project be moved forward in POM to FY04 from FY06 to supply more data for Ecosystem Model and that duplication of effort projects in out-years (POM) be redefined to fit our data needs per HQA plots.

Completion date – TBD.

Characterize Alkali Mariposa Lily, Desert Cymopterus and Barstow Woolly Sunflower Habitat.

Project Manager – Shannon Collis
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This study was designed to utilize existing information on the known habitat requirements for each sensitive plant species. These parameters, such as elevation, plant community, and soil type, were then used to identify areas on Base that met all of the species requirements and would then be deemed predicted habitat.

Consultant – JT3/CH2M HILL. Study products include an interim report, an annotated bibliography, copies of documentation not in the EM library, a map product showing the known locations and the predicted locations of this species, final report, GIS data layers, software, and any shortcomings identified in the Government system for collecting, storing, or analyzing environmental data.

Current status - An interim report was delivered 24 Feb 03. Predicted habitat has been determined for desert cymopterus and alkali Mariposa lily. Ground-truthing is currently underway for desert cymopterus. Completion date – TBD.

Habitat Quality Analysis (HQA) Evaluation/HQA Inventory

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Evaluation of HQA document data that was collected in 92-93 was initiated to determine useful parameters for the baseline data for the Ecosystem Modeling Project. A second inventory

of 60 existing study plots begin Apr 03 to compare with the data collected in 92-93. The 03 inventory will collect vegetation and wildlife data using the same methodologies that were used in 92-93. These data will be analyzed and used to build the baseline parameters of the ecosystem model.

Consultant – TYBRIN is lead on initial planning effort and structure of model. HQA Inventory consultant is pending award of contract. Study products include draft and final reports.

Current status - Reviewed previous HQA for applicability to current efforts. Determined that prior HQA (performed during 92-93) provides good existing environment baseline and basis for future studies and modeling data. Collected protocol for Line Intercept Vegetation Analysis Method used in the HQA from the web. Reviewed other HQA field methods and found that the methods are brief but additional information is needed. Prepared preliminary Statement of Work (SOW) that was sent to U.S. Army Corps of Engineers (USACE) for award of contract. TYBRIN prepared HQA study plan proposal that is being reviewed by staff before submitting to EM in Apr 03. Study plan to address why we are preparing the study, what we expect to achieve, more detailed methodologies and protocol, research and monitoring design and references. Contractor staff who accomplished the fieldwork and prepared original HQA inventory report will complete all 60 study plots in 03. Awaiting award of contract.

Completion date - Draft report to be submitted by Sept 03.

Plant Metals Study

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POC – Danny Reinke
(661) 277-9080
danny.reinke@edwards.af.mil

This study will determine the natural background levels of 22 metals in soils and selected plant species on Edwards AFB. Special emphasis will be placed on plant species known to be eaten by the desert tortoise.

Consultant – TYBRIN Corp.
Study products include reports documenting natural metal levels.

Current status - Field samples are being collected at randomly selected sites. The goal is to collect 20% of the HQA sites during the 03 growing season. Draft work plan being completed.

Completion date – A test and evaluation phase will be completed by Jun 03.

Plans

Mesquite Woodland Plan Development

Project Manager - Mark Hagan
(661) 277-1418,
mark.hagan@edwards.af.mil.

This project includes study of health of mesquite woodland on the southern portion of the base.

Consultant – Waterways Experiment Station/UCLA. Study products include a written report.

Current status - Field work in progress.

Completion date - Dec 03.

Operations and Maintenance

Pitfall Closure

Project Manager – Chris Rush
(661) 277-1225
chris.rush@edwards.af.mil
POC - Tom Mull, (661) 277-9066,
thomas.mull@edwards.af.mil.
The purpose of this project is to close pitfalls (prospect pits, mine shafts, etc.) deemed hazardous to desert tortoise in critical habitat and other high-density areas. The FY00 contract called for the closure of 91 pitfalls. The FY02 contract called for the closure of 60 pitfalls.

Consultant – Earth Tech. Study products include draft and final reports and GIS deliverables.

Current status – The 91 pitfalls were closed and report received. Of the 60 pitfalls for the FY02 project, 32 pitfalls have been identified for closure. Need to identify 28 more pitfalls. AF Form 813 will be submitted in April and completed prior to beginning work. Expected contract starting date is May 03.

Completion dates – FY00 contract is completed. FY02 contract will be completed in Sep 03.

Wildlife Response

Project Manager – Chris Rush
(661) 277-1425
chris.rush@edwards.af.mil
POC – Linda Anton
(661) 277-2017
linda.anton@edwards.af.mil

The following wildlife calls were responded to during the reporting period.

- Red tailed hawk in Housing Area “E”, not found.
- A Kit fox was struck by a car and collected for taxidermy.
- A captive desert tortoise “Speedy” was found in the ORV 2 Area.
- Responded to a dead raven call for potential taxidermy.

Consultant – JT3/CH2M HILL.

Other Field Support

Project Manager – Chris Rush
(661) 277-1425

chris.rush@edwards.af.mil

POC – Linda Anton

(661) 277-2017

linda.anton@edwards.af.mil

- Off road vehicle sign installation.

Consultant – JT3/CH2M HILL.

Cultural Resources

Phase I Surveys/Inventories

ARCHAEOLOGICAL SURVEY/FY 2000 (SURVEY) (2000-D)

Project Manager - Richard Norwood
(661) 277-7077,

rick.norwood@edwards.af.mil.

The purpose of this phase I survey is to identify and associate archivally recorded home site properties recorded during the 1938 Karpe real property survey, and various unrecorded well locations, with physical remains and

ensure proper site recording and documentation is completed. The work will support program work under 2002-K (Thematic Homestead evaluation).

Consultant - JT3/CH2MHILL. Study products include draft technical report, final management report, photographs, and site record forms.

Current Status - Draft technical report due on 30 Jul 03, final management report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

ENDANGERED SPECIES COMPLIANCE PITS (PITFALL) (2002-F)

Project Manager - Richard Norwood
(661) 277-7077

rick.norwood@edwards.af.mil.

This project is part of the pitfall closure project to protect the desert tortoise. The intent is to evaluate and/or mitigate adverse effects on cultural resource sites that need to be altered by filling in or otherwise compromising the integrity of the cultural resource of concern.

Consultant - Earth Tech. Study products include – draft and final technical reports, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report due on 30 Jul 03, final management report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Inventory, Building (Monuments and Memorials) (2002-J)

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

The project provides for the inventory, documentation and NRHP eligibility evaluation of monuments and memorials necessary to complete the base-wide inventory. This project includes the HABS/HAER level III documentation and evaluation of 20 monuments and memorials associated with cold war and man-in-space themes. Archival research will be conducted to help establish historic context and determine NRHP eligibility. This project completes the inventory of all monuments and memorials on base.

Consultant - Tetra Tech. Study products include draft and final technical report, photographs, and site record forms.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Inventory, Archaeological (Rosamond DL) (2003-G)

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

The purpose of this project is to fully identify and record archaeological sites in a sensitive area adjacent to Rosamond Dry Lake. The proposed 1250 acre survey area is in Management Area 2 where extensive archaeological deposits were discovered during the

sample survey. Due to time and budget constraints during prior survey efforts the full extent of these deposits could not be adequately investigated. This project involves performing additional survey work outside of completed sample units to discover the full extent of site sensitivity. The purpose of the project is also to assess the intensity and extent of any potential impacts.

Consultant - JT3/CH2MHILL. Study products include draft technical report, final technical report, catalogued artifacts, photographs, and site record forms.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Phase II/III Studies

Preservation, Cultural Resources (1999-M)

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This project has two purposes 1) to assess short and long term site erosion and potential stabilization and mitigation measures for sites situated in unstable and semi-stable sand dune deposits; and 2) to evaluate 3 prehistoric and 3 historic period sites located in sand dune environments.

Consultant - Ancient Enterprises. Study products include draft technical report, final technical report, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report due on 30 Jul 03, final technical report,

photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVAL, UTIL CORRIDOR 3&4
(ARCH_99) (1999-P)**

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil.

The phase II project was designed to assess sites associated with selected utility corridors in Management Regions 3 and 4 for eligibility to the National Register of Historic Places IAW the National Historic Preservation Act. As a result of the investigation no new sites were determined eligible to the National Register.

Consultant - Ancient Enterprises. Study products include catalogued artifacts, draft technical report, final technical report, and site record forms.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVALUATION / KRAMER
DISTRICT (KRMR_99) (1999-R)**

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil.

The project was designed to assess the Kramer Mining District for eligibility to the National Register of Historic Places IAW the National Historic Preservation Act. The investigation was a combined phase I survey and phase II evaluation encompassing 993 acres in the core of

the 1884-period mining district. Work was undertaken to accurately characterize the nature and frequency of mining sites in this key area. As a result 59 new sites were discovered, of which 46 are mining related. Assessment also involved consideration of the configuration of the district as a whole based on archival research. The contractor recommends a total of 43 mining-related sites as potentially eligible as contributing elements of a Kramer Mining Historic District.

Consultant - Jones and Stokes. Study products include catalogued artifacts, draft technical report, final technical report, and site record forms.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**INV AND EVAL/PHILLIPS LAB
(PHIL_99) (1999-S)**

Project Manager - Richard Norwood
(661) 277-7077,
rick.norwood@edwards.af.mil.

A sample of historic period archaeological sites located at AFRL (Management Region 4) was assessed for eligibility to the National Register of Historic Places IAW the National Historic Preservation Act. As a result of the investigation no archaeological sites were determined eligible to the National Register.

Consultant - Jones and Stokes. Study products include catalogued artifacts, draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

EVALUATION, ARCHAEOLOGICAL SITE (50 SITES) (T_AND_E) (2000-E)

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This is a phase II evaluation of 50 selected sites situated primarily in or near populated "high risk" areas such as Main Base, South Base, North Base and the flight line. Sites include both prehistoric and historic periods and work contributed to the sample for the Management Region 3 evaluation program.

Consultant - JT3/CH2MHILL. Study products include draft technical report, final technical report, site record forms, photographs, and catalogued artifacts.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

ARCH DATA RECOV/REG3 FSPM007309 (DATAREC) (2000-H)

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This project was designed to evaluate a series of sites located in the south-central portion of the base in the vicinity of the south base sled track and Avenue B.

Work was done in response to activity in and around the South Base Boy Scout Camp and in conjunction with the placement of a tortoise protection fence.

Consultant - Ancient Enterprises. Study products include draft technical report, final technical report, catalogued artifacts, photographs, and site record forms. Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

EVALUATION, ARCHAEOLOGICAL SITES (RANGE ROADS 1) (2000-O)

Project Manager - Richard Norwood
(661) 277-7077
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This is a phase II evaluation of 67 selected prehistoric archaeological sites situated in or adjacent to dirt roads on the PIRA. This work contributed to the sample for the Management Region 5 evaluation program and will alleviate the need for Section 106 actions for many PIRA road grading projects in the future. Sites were assessed for eligibility to the National Register of Historic Places. None of the 67 sites were determined eligible.

Consultant - Ancient Enterprises. Study products include draft technical report, final technical report, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report and site record forms due on 20 Jun 03. Final technical report, photographs, and catalogued artifacts due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVALUATION,
ARCHAEOLOGICAL SITE
(MR3EVAL) (2000-P)**

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This is a phase II evaluation of 92 selected archaeological sites situated primarily in or near populated "high risk" areas such as Main Base and South Base. Sites include both prehistoric and historic period sites. Work contributed to the sample for the Management Region 3 evaluation program and complements the "50 sites" evaluation effort undertaken under 2000-E and clearance of road rights-of-way effort.

Consultant - Earth Tech. Study products include draft technical report, final technical report, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report and site record forms delivered on 20 Nov 02. Final technical report, photographs, and catalogued artifacts due on 30 Sep 03.

Completion date – 30 Sep 03.

**HISTORIC PROPERTY INV &
EVAL (MR4EVAL) (2000-Q)**

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This project was designed to accomplish 1) a formal evaluation of site EAFB-30, a 1950s cold war era parachute spin facility; 2) to provide HABS/HAER documentation of the Yeager loading pit and eligible WWII aircraft revetments; and 3) to critically review the EAFB building management program and

provide recommendations for future work. EAFB-30 was determined not eligible.

Consultant - Jones and Stokes. Study products include draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**MANAGEMENT REGION 5 T&E
PART 1 (MR5T&E1) (2000-U)**

Project Manager - Richard Norwood
(661) 277-7077
rick.norwood@edwards.af.mil

This is a phase II evaluation of a portion of the sample of prehistoric archaeological sites being assessed for NRHP eligibility under the management region sample evaluation program. It is expected that up to 6 sites will be determined eligible.

Consultant - Foster Wheeler. Study products include draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**MANAGEMENT REGION 5 T&E
PART 2 (MR5T&E2) (2000-V)**

Project Manager - Richard Norwood
(661) 277-7077
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The project is part of a 4-part effort to evaluate (for NRHP eligibility) a 25% sample of sites in Management Region 5 (PIRA). Work is in accordance with the ICRMP and the National Historic Preservation Act. The investigation is a phase II evaluation encompassing 11 prehistoric sites. A total of 10 sites were determined "not eligible". One large site, CA-LAN-1189 was determined eligible to the National Register. It also would qualify as a "sacred site" because it contains human remains.

Consultant - EDAW. Study products include draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVALUATION,
ARCHAEOLOGICAL SITE
(E/ROADS2) (2001-J)**

Project Manager - Richard Norwood
(661) 277-7077
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This is a phase II evaluation for most sites within or adjacent to major paved and dirt road rights-of-way base wide. The substantial effort will allow clearance for future construction relating to roads. The project also contributes to the base wide management region sample evaluation program.

Consultant - Earth Tech. Study products include draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVALUATION, ARCHAEOLOGICAL
SITE (HOMESTEAD-THEMATIC)
(2002-K)**

Project Manager - Richard Norwood
(661) 277-7077,
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This project evaluates a sample of late 19th-early 20th century home sites and other historic deposits along the southern base boundary. A large number of incidents relating to fence-cutting, looting, trespass, car stripping, drug manufacture and use, arson and illicit dumping of refuse, and occasionally hazardous waste, is concentrated along the southwestern base boundary. The objective of this project is to evaluate a 50% sample of home sites and associated refuse deposit sites located along the southwest base boundary. This will allow identification of those sites that warrant protective efforts and those that do not.

Consultant – Tetra Tech. Study products include draft technical report, final technical report, site record forms, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03

**Evaluation, Archaeological Site
(C/MA1) (2002-L)**

Project Manager - Richard Norwood

(661) 277-7077,
rick.norwood@edwards.af.mil.

This is a phase II evaluation of archaeological sites to determine eligibility to the National Register of Historic Places. The base currently has over 2000 sites that have not been evaluated. The project calls for the systematic testing and evaluation of key sites and site concentrations in accordance with the Edwards AFB cultural resource management plan and the results of base-wide sample survey. This project provides for evaluation of 65 sites in Management Region 1.

Consultant - Earth Tech. Study products include draft technical report, final technical report, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**EVALUATION,
ARCHAEOLOGICAL SITE (C/MA2)
(2002-M)**

Project Manager - Richard Norwood
(661) 277-7077,
rick.norwood@edwards.af.mil.

This is a phase II evaluation of archaeological sites to determine eligibility to the National Register of Historic Places. The base currently has over 2000 sites that have not been evaluated. The project calls for the systematic testing and evaluation of key sites and site concentrations in accordance with the Edwards AFB cultural resource management plan and the results of base-wide sample survey.

This project provides for evaluation of 85 sites in Management Region 2.

Consultant - Tetra Tech. Study products include raft technical report, final technical report, photographs, site record forms, and catalogued artifacts.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

**PROPOSED PHASE II/III FORMER
HOMESTEAD WATER WELL SITES
EAFB (2002-R)**

Project Manager - Richard Norwood
(661) 277-7077,
rick.norwood@edwards.af.mil.

This project is part of the homestead well closure program. The effort is designed to mitigate the adverse effects of well closure on homestead sites where potentially significant deposits or features are present.

Consultant - Earth Tech. Study products include catalogued artifacts, draft technical report, final technical report, and photographs.

Current Status - Catalogued artifacts and draft technical report due on 30 Jul 03, final technical report, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Damage Assessments

None.

Monitoring Reports

None.

Research Studies

EVALUATION, ARCHAEOLOGICAL SITE (PROJECTILE POINT TYPOLOGY) (2002-P)

Project Manager - Richard Norwood
(661) 277-7077,
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The purpose of this project is to develop a powerful tool for supporting accurate site interpretation and facilitating evaluation of prehistoric archaeological sites. The tool is a comprehensive projectile point typology and temporal sequence. Projectile points are one of the few time-sensitive artifacts found at Edwards AFB sites that allow for assessment of the age of the sites. Site age is directly related to significance and eligibility to the National Register. Many sites may not now be correctly assessed in terms of age since there is no satisfactory typology and temporal sequence for local projectile points. Development of the typology will encompass all projectile points collected or recorded on base since the early 1970s and will involve comprehensive lithic analysis, obsidian hydration measurement, stratigraphic and context relationship studies, and comparative studies involving point types found within dated contexts throughout the western Mohave desert. A technical report and projectile point identification manual will be produced. Application of this tool will prevent errors in the assessment of site eligibility and will ensure that significant sites are properly recognized and protected.

Consultant - Tetra Tech. Study products include catalogued artifacts, draft

technical report, final technical report, and photographs.

Current Status - Draft technical report due on 30 Jul 03, final technical report, photographs, catalogued artifacts, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Plans

None.

Operations and Maintenance

PROTECT, HISTORIC PROPERTY (RANGE SUPPORT) (2002-O)

Project Manager - Richard Norwood
(661) 277-7077,
rick.norwood@edwards.af.mil.

The purpose of this project is to provide supplemental aid in protecting cultural and natural resources from looting and vandalism by establishing a "Range Rider" program that puts trained specialists in the field to observe, document, and report violations. Within the last year looting and vandalism has markedly increased. This is evidenced by fence cuts, and an increase in off-road vehicle use and "fresh" looter pits at archaeological sites. The increased demands on Security Forces following 9/11 has resulted in decreased availability to patrol resources in remote field settings where most of the Base's cultural and natural resources are located. This protection gap needs to be filled to prevent irretrievable loss of significant natural and cultural resources. The Range Rider program increases protection to cultural resources and significant natural resources by providing enhanced protection against illegal collection of desert tortoise, and

disturbance of desert tortoise habitat and natural areas (such as yardangs) from off road vehicle use.

Consultant - CH2MHILL. Study products include draft technical report, final technical report, draft management report, final management report, and site record forms.

Current Status - Draft technical and management reports due on 30 Jul 03, final and management technical reports, photographs, and site record forms due on 30 Sep 03.

Completion date – 30 Sep 03.

Environmental Impact Analysis Process

Environmental Impact Statements

None.

Environmental Assessments

Low-Level Routes Environmental Assessment

Project Manager – Robert Shirley
(661) 277-1473
robert.shirley@edwards.af.mil

This project includes the completion of an Environmental Assessment covering the low-level test and training routes controlled by the AFFTC. The routes include the Colored Routes, IR/VR

Routes, Military Training Routes and low-level supersonic routes.

Consultant - URS. Study products include a preliminary, draft and final environmental assessment and GIS update.

Current status – Agency review draft EA under formal review by HQ AFMC, HQ AF/JACE, and SAF/GCN. Initial comments received from HQ AFMC/JA have been incorporated.

Completion date – To be determined (TBD) based on input from HQ AFMC and HQ AF/JACE.

Orbital Reentry Corridor for Generic Lifting Entry Vehicle Landing Environmental Assessment

Project Manager – Robert Shirley
(661) 277-1473
robert.shirley@edwards.af.mil

This Environmental Assessment (EA) evaluates the potential environmental impacts associated with the proposed establishment of an orbital reentry corridor into Edwards Air Force Base (AFB), California, for generic, medium size, unmanned lifting entry vehicles (LEVs).

Consultant - Tetra Tech. Study products include a risk assessment, preliminary draft, draft and final environmental assessment and Finding of No Significant Impact (FONSI).

Current status - Draft EA 30 day public completed. The FONSI is signed and has completed public notification.

Completion date – Completed Feb 03.

Environmental Assessment for AFFTC Hypersonic Corridors

Project Manager – Robert Shirley
(661) 277-1473
robert.shirley@edwards.af.mil

This project includes a risk assessment/quantitative risk assessment and completion of a Hypersonic Corridor EA for test flights into Edwards AFB from the North East.

Consultant - Tetra Tech. Study products include preliminary, draft and final risk and environmental assessments and GIS data.

Current status – The final exposure analysis has been completed. Currently awaiting contract modifications and award for quantitative risk analysis, and EA.

Completion date – Dec 03.

Update of the R-2515 Environmental Assessment

Project Manager – Robert Shirley
(661) 277-1473
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The project includes the update of the 1998 R-2515 Environmental Assessment to incorporate updated usage data and cover use of chaff and flares. This environmental assessment covers the R-2515 Complex airspace controlled and used by EAFB.

Consultant - URS. Study products include a preliminary draft, draft and final environmental assessment and GIS update.

Current status - The EM review of the preliminary Description of the Proposed

Project and Alternatives (DOPPA) has been completed. Spreadsheets showing the proposed profiles were approved by the Air Force. The contractor is finalizing the noise analysis sections of the document. Receipt of the preliminary draft EA is anticipated in May 03.

Completion date – Dec 03.

Saline Valley Radar Environmental Assessment

Project Manager – Robert Shirley
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POC – Danny Reinke, (661) 277- 9080
danny.reinke@edwards.af.mil

The project includes the construction of a radar and repeater site in the Saline Valley.

Consultant- TYBRIN. Study products include a preliminary, draft and final EA.

Current status – Recently completed flood plain studies for the radar and repeater alternative sites. The Air Force received comments on the Agency Draft EA from the Bureau of Land Management, Federal Aviation Administration, and Timbisha Tribe. Formal comments from National Park Service (NPS) were received on 28 Apr and indicate non-concurrence with the document and non-support of project. The Air Force is ready to submit the document for public review. Reluctance on the part of the NPS to participate in project is delaying public review.

Completion date – TBD.

Environmental Assessment for Construction of Phase II of the Dormitory Project

Project Manager – Keith Dyas

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POC – Susan Theiss
(661) 277-5368
susan.theiss@edwards.af.mil

The construction of a new 128-person dormitory as proposed by the 95th Civil Engineer Group, Comprehensive Planning Branch, was addressed in a previous environmental document titled *Abbreviated Environmental Assessment for the Construction and Demolition of Dormitories and the Construction of Airman’s Drive, Edwards Air Force Base, California* (Air Force Flight Test Center [AFFTC] 1995). This EA addresses the revised project to construct 128 new dormitory units in a second phase.

Consultant – JT3/CH2M HILL. Study products include a preliminary draft, draft, and final EA and FONSI.
Completion Date – Final EA submitted to EM Dec 02.

Current status – FONSI signed Jan 03.

Completion date – Jan 03.

Environmental Assessment for Road Curve and Intersection Realignment

Project Manager – Keith Dyas
(661) 277-1413
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POC – Susan Theiss
(661) 277-5368
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This project proposes to modify ten road intersections and three road curves on Edwards AFB. Project activities would be located in Military Family Housing, Main Base, South Base, and North Base.

Existing roadways would be removed and new pavement would be laid to form the new intersection or curve alignment. These activities would eliminate driver confusion at intersections, which are not at 90-degree angles or 4-way stops, and would improve visibility along road curves.

Consultant – JT3/CH2M HILL. Study products include a preliminary draft, draft, final EA and FONSI.

Current status – FONSI signed Jan 03.

Completion date – Final EA submitted to EM Jan 03.

Environmental Assessment for the Renovation and Construction of a Modern Flight Test Complex

Project Manager – Keith Dyas
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POC – Susan Theiss
(661) 277-5368
susan.theiss@edwards.af.mil

This project proposes to renovate existing buildings and construct support facilities to accommodate additional flight test missions planned at Edwards AFB.

Consultant – JT3/CH2M HILL. Study products include a working copy, preliminary draft, draft, final EA and FONSI.

Current status – Working copy of the EA for submitted to EM Apr 03.

Completion date – Final EA to be completed Jun 03.

Environmental Assessment for the Repair or Replacement of the Main Base Runway

Project Manager – Keith Dyas
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POC – Susan Theiss
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The 412th Logistics Group at Edwards AFB proposes the repair or replacement of the existing Main Base runway (Runway 04/22). Runway 04/22 was originally built in the 1950s to support aircraft flight test activities and is beginning to fail. The analysis addresses the impacts of repair or construction of a serviceable runway or combination of runways to meet the AFFTC's current and long-term flight test requirements.

Consultant – JT3/CH2M HILL. Study products include a working copy, preliminary draft, draft, and final EA and FONSI.

Current status – Preparing working copy of the EA for re-submittal to EM May 03.

Completion date – Final EA to be completed Jul 03.

Environmental Assessment for the Construction of a Propulsion Energetics Laboratory

Project Manager – Keith Dyas
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POC – Susan Theiss
(661) 277-5368
susan.theiss@edwards.af.mil

The purpose of this project is to construct a new 36,000 square foot propulsion sciences laboratory in the triangular vacant lot bordered by Mercury Blvd., Saturn Blvd., and Antares Road. The existing chemistry laboratory is at full capacity and is unable to support increased activities in polymer synthesis and energetic propellant research.

Consultant – JT3/CH2M HILL. Study products include a preliminary draft, draft, and final EA and FONSI.

Current status – Preparing preliminary draft of the EA for submittal to EM Jun 03.

Completion date – Final EA to be completed Sep 03.

Upgrade Munitions Complex Environmental Assessment

Project Manager – Keith Dyas
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POC – Susan Theiss
(661) 277-5368
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The purpose of this project is to upgrade the existing munitions complex in order to safely and efficiently accommodate present and future munitions test projects. Ten igloo storage buildings are slated for demolition. Two new butler buildings, each measuring 50 by 100 feet are proposed. A 16-bay multi-cube, aboveground explosives storage magazine will be constructed. Three new storage igloos and a drive through igloo are also proposed. The existing munitions build-up pad will be replaced. A new concrete munitions holding area will be sited. New access roads to connect proposed storage structures with munitions areas will be

constructed. The existing perimeter fence will be reconfigured to enclose the entire munitions complex.

Consultant – JT3/CH2M HILL. Study products include a preliminary draft, draft, and final EA and FONSI.

Current status – Preparing preliminary draft of the EA for submittal to EM Aug 03.

Completion date – Final EA to be completed Oct 03.

Environmental Assessment to Update Main Base Landfill

Project Manager – Keith Dyas
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POC – Susan Theiss

(661) 277-5368

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This project proposes to upgrade the existing Main Base Landfill EA to incorporate the assessment of potential changes to existing operations as well as potential permit changes affecting the landfill.

Consultant – JT3/CH2M HILL. Study products include a working copy, preliminary draft, draft and final EA and FONSI.

Current status – Beginning data collection phase.

Completion date – TBD.

Testing and Development of Directed Energy Systems Using Laser Technology

Project Manager – Robert Shirley
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This EA evaluates the potential environmental impacts associated with the testing and development of laser technologies utilizing both low-energy and high-energy (HEL) laser systems at Edwards AFB.

Consultant – JT3/CH2M HILL. Study products include a working copy, preliminary draft, draft, and final EA and FONSI.

Current status – Preparing working copy of the EA.

Completion date – Feb 04.

Best Management Practices

Best Management Practices (BMP) for Routine and Recurring Activities at Air Force Research Laboratory (AFRL)

Project Manager – Keith Dyas

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The purpose of this project is to develop BMPs for routine and recurring activities at the AFRL. The BMP is based on formerly conducted reviews of routine and recurring projects. The BMP presents information collected from completed AF Forms 813, 332, and 103 related to routine and recurring activities at the AFRL. Information provided in the BMP includes

a collection of previously determined impacts and mitigation/minimization measures, by project area, presented in a concise document for use by the project proponent and AFFTC/EM EIAP staff. This information is to be used in conjunction with submittal and approval of AF Forms 813, 332, and 103. When completed, the BMP will be supplied to those proponents that historically generate projects at AFRL. When future AFRL projects/activities develop, the proponent, in conjunction with AFFTC/EM EIAP, will determine and document the BMP category of activity on an AF Form 813, 332, and/or 103. Environmental review will then refer to the mitigation/minimization measures described in the BMP that applies to the activity being reviewed and will document the applicable measures on a checklist when returned to the proponent. The BMP process allows the proponent to become more knowledgeable regarding potential project issues and associated mitigation/minimization measures prior to environmental review occurring.

Consultant – JT3/CH2M HILL. Study products include a working draft, draft and final document.

Current status – Preparing working draft of the BMP for submittal to EM Apr 03.

Completion date – Jul 03.

Best Management Practices (BMPs) for Road Surface Activities

Project Manager – Keith Dyas
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The purpose of this project is to develop Best Management Practices for routine and recurring activities on road surfaces at Edwards AFB. The road surfaces this document refers to include primary roads, secondary roads, tertiary roads, unpaved roads, and jogging trails. Other surfaces the BMP addresses include road shoulders, sidewalks, parking lots, road cuts, surface lighting, drainage channels and culverts, runways and lakebeds. The BMP is based on formerly conducted reviews of routine and recurring projects. The BMP presents information collected from completed AF Forms 813, 332, and 103 as related to routine and recurring road surface activities. Information provided in the BMP includes a collection of previously determined impacts and mitigation/minimization measures, by project area, presented in a concise document for use by the project proponent and AFFTC/EM EIAP. This information is to be used in conjunction with submittal and approval of AF Forms 813, 332, and 103. When completed, the BMP will be supplied to those proponents that historically generate these types of projects. When future projects/activities develop, the proponent, in conjunction with AFFTC/EM EIAP, will determine and document the BMP category of activity on an AF Form 813, 332, and/or 103. Environmental review will then refer to the mitigation/minimization measures described in the BMP that apply to the activity being reviewed and will document the applicable measures on a checklist when returned to the proponent. The BMP process allows the proponent to become more knowledgeable regarding potential project issues and associated mitigation/minimization measures prior to environmental review occurring.

Consultant – JT3/CH2M HILL. Study products include a working draft, draft and final document.

Current status –Draft of the BMP submitted to EM Mar 03.

Completion date – May 03.

Categorical Exclusions (CATEX)

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EIAP completed 312 CATEXs during the quarterly monitoring period.

Consultant – JT3/CH2M HILL.

Environmental Baseline Surveys

Amendment to the Adopt-A-Pet Real Estate License Environmental Baseline Survey

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The Adopt-A-Pet organization at Edwards AFB propose to amend the initial EBS to add outdoor areas to the assessment that include a socialization area and outdoor pens. The initial EBS proposed to operate an adoption facility for lost, abandoned, and stray pets at Edwards AFB. The Adopt-A-Pet

volunteers proposed to operate the kennel in the old “vet clinic” in Bldg. 5550. They proposed to use Bldg. 5550 to house and maintain pets on a temporary basis until new owners were found. The animals were to be fed and groomed within the facility. The average number of pets boarded at the facility was approximated at 10 dogs and/or cats. The pets are housed in portable kennels indoors.

Consultant – JT3/CH2M HILL. Study product included a final EBS Waiver.

Current status – Amendment to EBS was submitted to EM Mar 03.

Completion date – Mar 03.

813s, 332s and 103s

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EIAP completed the following during the quarterly monitoring period.

- 813s – 90
- 332s – 272
- 103s - 70

Consultant – JT3/CH2M HILL.

Engineering Design Reviews (EDR)

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EIAP completed four EDRs during the quarterly monitoring period.

- POV Car Wash 95% EDR
- POV Car Wash 65% EDR
- Repair Various Cathodic Protection Systems 100% EDR
- Construct Telemetry Maintenance Facility 80% EDR

Consultant – JT3/CH2M HILL.

EIS/EIR/EA Reviews (Outside Agencies)

None.

Airspace Analysis Studies

R-2508 Environmental Baseline Study

Project Manager – Robert Shirley
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This project includes updates to the 1997 Environmental Baseline Study. This documentation provides baseline environmental information for the R-2508 Complex airspace and underlying lands. The current update includes revision of the document and updates to airspace usage information, and GIS information. The update also includes making the document available in electronic format.

Consultant - URS. Study products include a preliminary, draft and final electronic document, revised GIS files and conversion of the document to electronic format.

Current status - The revised airspace usage tables and document revisions

have been approved by the Air Force. An updated Chapter 2 is expected in May 03.

Completion date - Dec 03.