

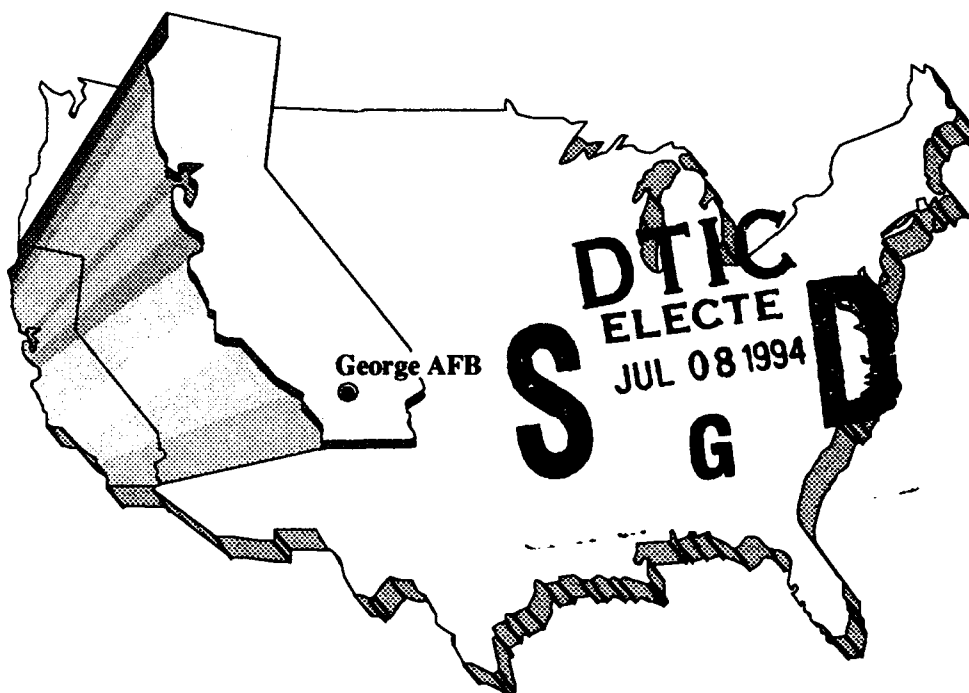
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FINAL  
ENVIRONMENTAL IMPACT STATEMENT  
March 1992

VOLUME II  
Public Comments and Responses, Appendices



DISPOSAL AND REUSE OF  
GEORGE AIR FORCE BASE, CALIFORNIA

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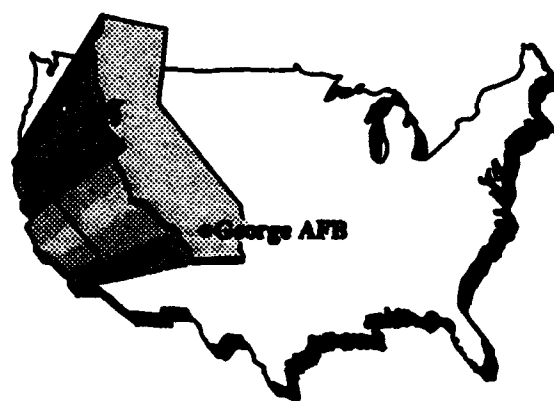
**ENVIRONMENTAL IMPACT STATEMENT**

**DISPOSAL AND REUSE OF  
GEORGE AIR FORCE BASE,  
CALIFORNIA**

**Volume II**

**March 1992**

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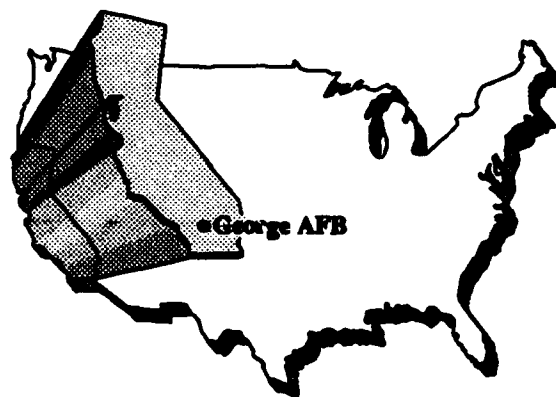
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## **PUBLIC COMMENTS and RESPONSES**

## **PUBLIC COMMENTS AND RESPONSES**

### **INTRODUCTION**

The Air Force has complied with the National Environmental Policy Act (NEPA) mandate of public participation in the environmental impact analysis process primarily in two ways:

- A public hearing was held in Victorville, California, on October 17, 1991, at which the Air Force presented the findings of the Draft Environmental Impact Statement (DEIS) for disposal and reuse of George Air Force Base (AFB) and invited public comments.
- The subject DEIS was made available for public review and comment in October-November 1991.

Public comments received both verbally at the public meeting and in writing during the response period have been reviewed and are addressed by the Air Force in this section.

### **ORGANIZATION**

This Public Comment and Response section is organized into several subsections, as follows:

- This Introduction, which describes the process, organization, and approach taken in addressing public comments
- A consolidated comment-response document
- An Index of commentors
- A transcript of the public hearing
- Photocopies of all written comments received.

These sections are described below.

Comments received that are similar in nature or address similar concerns have been consolidated to focus on the issue of concern, and a response is provided that addresses all of the similar comments. Some comments simply state a fact or an opinion, for example, "the DEIS adequately assesses the impacts on [a resource area]." Such comments, although appreciated, do not require a specific response and are not called out herein. The comments and responses are grouped by area of concern, as follows:

- 1.0 Air Force Policy
- 2.0 Purpose and Need for Action
- 3.0 Alternatives Including the Proposed Action
- 4.0 Land Transfer/Disposal
- 5.0 Local Community
- 6.0 Land Use/Aesthetics
- 7.0 Transportation
- 8.0 Airspace
- 9.0 Utilities
- 10.0 Hazardous Materials/Waste Management
- 11.0 Soils and Geology
- 12.0 Water Resources
- 13.0 Air Quality

14.0	Noise
15.0	Biological Resources
16.0	Cultural Resources
17.0	Socioeconomic Impact Analysis Study

Within each area, each consolidated comment-response is numbered sequentially. For example, under 9.0 Utilities, individual comments-responses are numbered 9.1, 9.2, etc. At the end of each numbered comment is a set of numbers that refer to the specific comment in the documents received that were combined into that consolidated comment. The numbers of the individual comments are indicated in parentheses, e.g. (6-8, 11-13, 15-6, 15-22). Comment 6-8, for example, refers to document 6, comment number 8. A reader who wishes to read the specific comment(s) received may turn to the photocopies of the documents included in this section. Below each comment number is the number of the consolidated comment in which the specific comment has been encompassed, e.g. 7.5. Thus, the reader may reference back and forth between the consolidated comments-responses and the specific comment documents as they were received.

It should be further noted that some comments in the documents received are not included in the consolidated comment-response document. These comments fall into two categories:

- Comments to which no response is required, as explained above
- Comments regarding the *Socioeconomic Impact Analysis Study* (SIAS).

Effects upon the physical or natural environment that may result from projected changes in certain socioeconomic factors that are associated with or caused by the disposal or reuse of the base are addressed within this EIS. Other socioeconomic issues, such as the region's employment base, school budgets, municipal/state tax revenues, municipal land planning, medical care for military retirees and dependents, local governments and services, real estate, and economic effects on utility systems and specific businesses are beyond the scope of NEPA and Council on Environmental Quality (CEQ) requirements. Analysis of impacts associated with these issues is provided in the SIAS; that public document will also support the base reuse decision-making process. All comments pertaining solely to issues addressed in the SIAS were considered beyond the scope of this EIS, and so are not addressed in this comment and response section. However, those comments have been reviewed and responses have been provided to each commentor. Comments concerning socioeconomic issues addressed in the SIAS only are indicated with an S on the photocopies of the comment documents. Comments related to socioeconomic factors that are addressed in this EIS (e.g., population, employment) have been included in this comment-response section.

Finally, it should be emphasized that not only have responses to EIS comments been addressed in this comment-response section, as explained, but the text of the EIS itself has also been revised, as appropriate, to reflect the concerns expressed in the public comments.

The list of commentors includes the name of the commentor, the identifying document number that has been assigned to it, and the page number in this section on which the photocopy of the document is presented.

**George AFB Disposal and Reuse EIS**  
**Public Comments and Responses**

**1.0 POLICY**

- 1.1** Comment: The Proposed Action as presented by the Air Force in the EIS has been given preferential treatment and an unfair bias has been used in the formation of the document. The EIS is slanted to project that the VVEDA plan is the most logical and fails to present viable alternatives for the reuse of George AFB. (1-7, 2-1, 2-3, 6-6, 20-1, 20-2, 20-4, 20-5)

Response: In consideration of alternatives (which includes the Proposed Action), the Air Force has evaluated each alternative in the EIS consistently, on an equal basis, and without prejudgment as to which alternative action is best. In addition to the three redevelopment plans submitted by the local communities, the Air Force developed two more alternatives. As described in Section 2.1 of the EIS, these two additional alternatives were developed in order to provide analysis of a wider range of potential reuse options.

- 1.2** Comment: The EIS's use of a "Proposed Action" is inconsistent with the intent of the Base Closure and Realignment Act (BCRA) and the laws of the U.S. Government. (2-10, 6-16)

Response: BCRA requires that before any action may be taken with respect to the disposal of any surplus property or facility located at a military installation to be closed, the Secretary of Defense shall consult with the Governor of the State and heads of local governments concerned for the purpose of considering any plan for the use of such property by the local community concerned. Air Force policy is to adopt the "community's" reuse and development plan as the Proposed Action. In regards to the closure and disposal of George AFB, the community that is expected to experience the greatest job and population effects from the disposal of the installation is the Victor Valley community. Within the Victor Valley community, the local government of Adelanto and the coalition of Victorville, Apple Valley, and Hesperia have developed competing reuse and development plans for George AFB and certain lands in proximity to the base. The coalition of Victorville, Apple Valley, and Hesperia joined with the county of San Bernardino to form a joint powers agency (JPA) known as the Victor Valley Economic Development Authority (VVEDA). The JPA was formed pursuant to Section 33320.5 (Health and Safety Code) of the California Community Redevelopment Law. This provision allows local governments having territory within, adjacent to, or in proximity of a military installation slated to close under BCRA within San Bernardino County to form a JPA. The JPA serves as the central redevelopment agency, legislative body, and planning commission for redevelopment of any lands within an approved project within the JPA's jurisdiction. The Air Force elected to adopt VVEDA's reuse and development plan as the Proposed Action for purposes of environmental impact analysis in the EIS. The Air Force also included the reuse plan provided by the city of Adelanto as one of the alternatives for environmental analysis. All alternatives analyzed in the EIS, including the Proposed Action, have received equal consideration during the environmental analysis process.

- 1.3** Comment: It should be noted that the city of Adelanto's reuse plan for George AFB was submitted in its entirety to the Air Force by the November 30, 1990 deadline. VVEDA did not produce their reuse document until after the DEIS was published. Therefore, it would be difficult to accept that plan as the Proposed Action. (1-1, 2-14, 6-20)

Response: The Adelanto and VVEDA conceptual plans were both received prior to the publishing of the DEIS, and in both instances the Air Force had to supplement them through general assumptions to achieve the level of analysis accomplished. Both the Proposed Action and the

International Airport Alternative were analyzed based on roughly the same qualitative and quantitative input.

- 1.4 **Comment:** The summary tables in the Executive Summary and Section 2.6 of project-related influencing factors present an inaccurate comparison of the alternatives. The land area required for each alternative varies, and the cumulative impacts of other peripheral land uses are not considered. In order to fairly compare the alternatives, the same physical land area should be analyzed for each concept. (1-19, 2-52, 6-58)

**Response:** The comparison of project-related influencing factors is based on properties directly developed in each proposal and the indirect development due to the in-migration of industry and population within the Victor Valley. The international airport may result in less utility consumption per acre of development within the boundaries shown, 13,426 acres, versus the Proposed Action alternative, 7,425 acres. However, the greater secondary employment, housing and commercial/industrial activity generated by the international airport outside the confines of the alternative's boundaries will drive overall consumption above the Proposed Action levels. The influencing factors are based on the affected areas and not necessarily on comparable land areas of the same physical size.

- 1.5 **Comment:** The Air Force should further coordinate the EIS with the Federal Aviation Administration (FAA) so that it may serve as the essential environmental record reuse document for the FAA as well. (1-17, 4-3)

**Response:** The Air Force will continue to work closely with the FAA in their current role as a cooperating agency to ensure a coordinated and timely decision regarding the airport. In a formal role, known officially as a cooperative agency, the FAA was concerned with the impact of the airport-related reuse alternatives to ensure that the EIS meets their environmental analysis requirements.

- 1.6 **Comment:** The EIS for the most part is comprised of conclusory statements with limited analysis and does not disclose the methodology and supporting data for its conclusions. (1-2, 6-1)

**Response:** NEPA and CEQ regulations only require that the EIS contain a presentation and documentation of the scientific analysis for significant environmental issues and how they may be affected by the various alternatives' actions. However, for clarification and ease of reading, the methodology used in these analyses has been included. Sections of Chapter 4 and Appendix F provide the methods of analysis for each environmental resource. In addition, Appendices J and L give methodologies for analysis of noise impacts and air quality impacts, respectively.

- 1.7 **Comment:** The EIS does not present the environmental impacts of the alternatives in a form which sharply defines issues and provides a clear basis for the decision maker. (1-3, 6-2)

**Response:** Comparison of impacts by alternative is presented in matrix form in the Executive Summary and Section 2.6.

- 1.8 **Comment:** The EIS does not identify the significance of impacts of each alternative. (1-4, 6-3)

**Response:** The EIS identifies environmental impacts and addresses the intensity of each impact anticipated as a result of base reuse. A context or background is provided, when appropriate, to allow the reader or the decisionmaker to determine significance from an informed point of reference. For example, air quality is described in terms of emissions from George AFB in 1988

and the entire Southeast Desert Air Basin in 1987. The reader can, therefore, use these data to compare impacts of air emissions projected for each of the alternatives.

- 1.9 **Comment:** The EIS does not identify and analyze the significant effects and conflicts of the reuse alternatives on the city of Adelanto and other individual cities and communities. (1-5, 6-4)

**Response:** The EIS does identify and analyze effects of each of the reuse alternatives on the region of influence including the city of Adelanto and the rest of the Victor Valley communities with the specificity that the conceptual plans submitted allow.

- 1.10 **Comment:** The EIS does not adequately identify cumulative impacts associated with the reuse alternatives. (1-6, 6-5, 28-33, 28-35)

**Response:** Cumulative impacts are discussed for each environmental resource under each reuse alternative in Chapter 4. Section 2.5 outlines known future actions in the region that were considered potentially able to contribute to cumulative impacts of the disposal and reuse of George AFB. After examination, these projects were found to have minimal impact on base reuse. For example, the closure of Norton AFB was examined to ascertain the cumulative impact on population and employment. However, the anticipated population and employment impacts for the existing region of influence (ROI) were found to be so small (i.e., approximately 50 people) that the cumulative impact from Norton AFB's closure was considered negligible.

- 1.11 **Comment:** The EIS is a mere post-hoc justification of the Air Force's decision, apparently already made, to transfer George AFB to VVEDA for development and reuse. (1-28, 6-7, 20-3)

**Response:** The Air Force has not made any prejudgement on which alternative will be chosen. The decision as to how the Air Force will dispose of the property will be made only after the environmental impact analysis process has been completed and after consideration of applicable federal property disposal laws. The Air Force's adoption of VVEDA's reuse plan as the Air Force Proposed Action does not mean that the Air Force has already made its decision as to how to dispose of the property. Also see response to Comment 1.2.

- 1.12 **Comment:** The EIS's approach of comparing environmental impacts of each alternative to post-closure conditions as the baseline is confusing. To fully evaluate the impacts of alternatives, it is necessary that comparisons be provided with conditions existing today. (6-8)

**Response:** Generally, the baseline for comparative purposes is at closure. However, for certain resource categories such as air quality, noise, and transportation, a preclosure reference is used for meaningful comparative analyses of those resources. References to preclosure conditions also provide context to people familiar with those conditions in specific areas described as the affected environment. These preclosure references are clearly discussed in Chapter 3 for each applicable category and are identified in Chapter 4.

- 1.13 **Comment:** The decision to choose VVEDA's reuse plan as the Proposed Action, based on the Air Force's interpretation of California Health and Safety Code Section 33320.5 is incorrect and prejudicial to the city of Adelanto. (1-20, 1-29, 9-3)

**Response:** Since the Proposed Action and other alternatives will receive equal consideration for purposes of environmental analysis, it is incorrect to assume that the city of Adelanto's reuse plan is "prejudiced" by its treatment as an alternative and not as the Proposed Action. The decision to adopt VVEDA's reuse plan as the Proposed Action was a matter of Air Force policy and not solely

dependent on California Health and Safety Code Section 33320.5. The fact that VVEDA represents a significant portion of the geographical area and community that will be affected by the disposal of George AFB and that VVEDA is a state-recognized JPA with county representation were significant factors in making this determination.

- 1.14 **Comment:** The EIS lacks specificity with regard to the ultimate development of George AFB. (18-10)

**Response:** The amount of information used in the analysis of reuse alternatives is sufficient for the Air Force decision, which is disposal of the property. Parcels were delineated by a preponderance of similar land-use activities in certain areas. The level and intensity of development will only be defined after the transfer of property has taken place and the new owner presents development plans. The requirement for additional environmental analysis at that time will be a local government issue.

- 1.15 **Comment:** Under what federal authority is VVEDA recognized as the reuse authority for George AFB? (1-21, 2-13, 6-19)

**Response:** See response to Comment 1.2.

- 1.16 **Comment:** In many instances, the EIS has relied solely on data and analyses included in the VVEDA proposal to analyze other alternatives. (20-6)

**Response:** The Air Force used data furnished by each proponent, as applicable, to analyze each alternative. When data were not available, the Air Force generated assumptions based on data from many other sources to supplement details needed to effectively analyze the alternatives. These assumptions are listed in each alternative's description in Chapter 2. Included in Appendix F is a discussion of methods of analysis for each resource area, which include assumptions generated.

- 1.17 **Comment:** The EIS fails to disclose why the Adelanto proposal and other alternatives were rejected. (20-7)

**Response:** The only alternatives eliminated from consideration in the EIS are those listed in Section 2.4. The International Airport Alternative and other alternatives are evaluated to the same degree as the Proposed Action.

- 1.18 **Comment:** The EIS has minimal discussion of mitigation measures. NEPA requires discussion of cumulative effects and appropriate mitigation measures not already included in the alternatives (24 CFR Section 1502.14(f), 1502.16(b), 1508.7). Mitigation is the heart and sole (sic) and the sine qua non of the EIS, without which the EIS is nothing more than a punch-list of impacts without identification of the attendant costs, ramifications and short/long term impacts (sic) necessary to correct the problems. (20-20, 28-9, 28-36)

**Response:** Mitigation measures to be contemplated during development are discussed for each environmental resource. The extent of any mitigation will be dependent on the actual construction plans related to a parcel of land. As all planning relating to reuse of George AFB is presently conceptual and the Air Force will not be carrying out any project on any parcel of property, mitigations will have to be carried out by the developer in concert with the applicable regulatory agencies. Based on the limited information currently available on how the conceptual redevelopment plans will be implemented on each specific site or parcel, the EIS's discussion of

mitigation is adequate for a meaningful analysis of projected environmental impacts for each alternative.

- 1.19 **Comment:** The EIS does not meet the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 et seq.) (20-30)

**Response:** Although the CEQA does not apply to federal agencies, the depth of analysis conducted by the Air Force fulfills the substantive requirements of CEQA.

- 1.20 **Comment:** The EIS does not analyze impacts of or the national interests for developing ground support for the National Aerospace Plane (NASP). The potential for suitable sites for such an important project must be very limited in the Southern California area. (1-25)

**Response:** The NASP is outside the scope of this EIS.

- 1.21 **Comment:** The Air Force should revise the DEIS and reissue it in draft for public review. (28-13)

**Response:** The Air Force will not issue a revised DEIS for public comment. Because the changes made to the DEIS resulting from public and agency comment were minor, NEPA and the Council for Environmental Quality regulations do not require reissuance of the DEIS for public comment. Many of the environmental concerns raised by the U.S. Environmental Protection Agency (EPA) Region IX and the public have been addressed in the final EIS. Several of the administrative and environmental concerns raised by EPA Region IX regarding IRP issues will be addressed in the IRP process, with ample opportunity for public involvement. Some comments to the DEIS addressed issues beyond the scope of environmental analysis required by NEPA and should be addressed by EPA Region IX, agencies of the state of California, and local authorities, as post-closure redevelopment and reuse activities of George AFB are implemented. The Air Force is available to provide assistance as required, to those authorities through the Disposal Management Team (DMT) at George AFB.

- 1.22 **Comment:** The EIS should include detailed discussion of mitigation measures that demonstrate that the measures will be reasonably effective; describe the schedule, funding, and responsible parties; demonstrate enforceability of mitigation implementation. (28-37, 28-43, 28-44)

**Response:** It is important to reemphasize that the actual Air Force action is disposal of the property, which has few, if any, environmental impacts. Impacts and potential mitigation measures associated with proposed reuse alternatives have been identified. The actual implementation, including scheduling and funding, of these measures will be the responsibility of the reuse proponent, and is beyond the Air Force's scope of analysis.

Various regulatory agencies have the responsibility of enforcing certain mitigation measures (e.g., hazardous waste practices, air quality controls, etc.). These agencies are listed in Table 1.5-1, which cites applicable statutes and regulations.

A discussion of the effectiveness of mitigation measures is sometimes applicable, as in the case of replacement of wildlife habitat, for example. Where appropriate, an addition to the text regarding the probability of success associated with a particular mitigation has been made within the Chapter 4 analysis.

## **2.0 PURPOSE AND NEED FOR ACTION**

- 2.1** Comment: The No-Action Alternative has tremendous socioeconomic impacts. If nothing is installed to replace the jobs that are eliminated once the Air Force leaves, there will be significant negative economic and cultural impacts. (2-8, 6-15)

Response: The No-Action Alternative is included as required by the Council on Environmental Quality's implementing regulations to NEPA. The Air Force is committed to working with affected communities to ease the transition of closure bases from military to civilian use. Socioeconomic impacts have been addressed in the EIS to the extent that they could affect the biophysical environment. A separate document, although not required under NEPA, was developed to expand the analysis of socioeconomic affects.

- 2.2** Comment: The International Airport has been designed to ultimately serve upwards of 50 million annual passengers (MAP), not 60 MAP, as stated in Section 1.3.1. (2-11, 6-17)

Response: A text change has been incorporated to clarify the 50 MAP figure.

- 2.3** Comment: In Section 1.3.1, under Housing, Lillie Ruff's Inc. disagrees that the "retention of the 1,641 single and multi family housing units is incompatible with effective planning for the reuse of George AFB as a potential airport/airfield." (8-4)

Response: This statement was received during the Scoping Comment Period of September 28 through November 30, 1990. Issues that arose during scoping are listed for informational purposes. They do not reflect Air Force opinion or policy and are not necessarily carried forward into the analysis. A text change in this section has been made to more clearly differentiate between scoping comments and data and assumptions incorporated into the analysis.

- 2.4** Comment: The statement "It was suggested that support for the homeless be considered in the reuse of George AFB," should be revised to read, "The Lillie Ruff's Inc. Homeless Program has submitted a proposal which recommends that support for the homeless be considered in the reuse of George AFB." (8-5)

Response: The Alaska Circle reuse proposal, a Lillie Ruff's proposal, was not received until March 1991, and was, therefore, not included in the Scoping Comments. However, the proposal is included as an Other Land Use Concept in the EIS.

### **3.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION**

- 3.1** Comment: It should be noted that the city of Adelanto has offered the Federal Bureau of Prisons an alternative site than that on George AFB. (2-12, 2-46, 2-68, 6-18, 6-51, 6-74)

Response: The offer by the city of Adelanto is outside the scope of this document and will be subject to separate environmental analysis by that agency before any decision is made to accept an offer.

- 3.2** Comment: If the results of technical studies are being compiled, how has the Air Force been able to analyze, with any degree of accuracy, the Proposed Action? (2-15, 6-21)

Response: The city of Adelanto and VVEDA conceptual plans were both received prior to the publishing of the DEIS and in both instances the Air Force had to supplement them through general assumptions to achieve the level of analysis required. Both the Proposed Action and the International Airport alternatives were analyzed based on roughly the same quantitative and qualitative input.

- 3.3** Comment: Did the other alternatives analyzed by VVEDA get eliminated for environmental, economic, or political reasons? Should those alternatives be evaluated for merit by the Air Force? (2-16, 6-54)

Response: The other two alternatives considered by VVEDA were both dropped by VVEDA due to concerns over limiting future expansion and capacity of aviation options. The Air Force did not consider them, as the other aviation alternatives better fulfilled the desires of the local communities for the reuse of George AFB. In addition, as stated in Section 2.4 of the EIS, the conditions presented in these alternatives are already covered in the range of options reflected within the Proposed Action and alternatives.

- 3.4** Comment: Due to wind constraints present at the George AFB facility, it is unlikely that a 50/50 split of operations is possible between north/south (17/35) and crosswind (03/21) runways. The wind constraint should have been more thoroughly investigated. (2-18, 2-36, 6-23, 6-41)

Response: The 50/50 split of operations for the Proposed Action is based on the larger aircraft predominately using 17/35 except during high cross-wind conditions and general aviation using 03/21. This scenario is reasonable based on the mix of aircraft and the proportionally larger number of smaller aircraft using the airfield under the alternatives. The split of operations for the International Airport Alternative would be 80/20 based on the mix of aircraft and wind constraints.

- 3.5** Comment: Has VVEDA been chartered to be or become an airport authority? Is the FAA concerned that VVEDA may lack the required expertise in the operation of an airport facility, especially at the 15 MAP level? (2-19, 6-24)

Response: VVEDA has not been chartered as an airport authority. The FAA will regulate or administer in concert with Caltrans Department of Aeronautics the operation of an airport or airport district in accordance with both sets of policies.

- 3.6 **Comment:** Section 2.3.1 describes the International Airport Alternative as being designed to accommodate 60 MAP. This figure should be 50 MAP. (2-26, 6-31)

**Response:** The 60 MAP figure was given to the Air Force by city of Adelanto representatives in their oral comments at the scoping meeting for this EIS. The figure was later revised by the proponent to 50 MAP and a text change in Section 2.3.1 has been made to reflect this. The 50 MAP refers to demand projected after the 20-year analysis; 25 MAP is the figure used in the EIS, and reflects anticipated passenger volume during the actual 20-year study period.

- 3.7 **Comment:** In Section 2.3.1, the phrase "...according to the plan" should read: "...based on regional aviation studies and reports." (2-27, 6-32)

**Response:** A text change has been incorporated in the document to reflect the comment.

- 3.8 **Comment:** The International Airport has been designed to service southern California's projected long-term shortfall in passenger and cargo demand. (2-28, 6-33)

**Response:** A text change has been incorporated in the document to reflect the comment.

- 3.9 **Comment:** The crosswind parallel runways for the International Airport Alternative should portray a 2,500 foot separation from centerline. They appear to be shown too close together. (2-30, 6-35)

**Response:** The graphical representations are meant to be conceptual, and may not be true to scale; however, for purposes of the figure the detail is sufficient.

- 3.10 **Comment:** Items that were part of the reuse plan for the International Airport included: airspace analysis/recommendations, environmental/socioeconomic impact, comparative analysis of reuse alternatives, impact of future technology, financial component for acquisition, and proposed airport authority. (2-31, 6-36)

**Response:** The only items listed in the EIS are those that contributed to the environmental analysis undertaken in the document.

- 3.11 **Comment:** It should be noted that the International Airport's terminal complex and airfield have been designed to accommodate the 25 MAP level. (2-32, 6-37)

**Response:** The document does reflect that both the terminal and airfield are designed to accommodate the 25 MAP level; see Section 2.3.1.1 in its entirety.

- 3.12 **Comment:** The crosswind runways in the International Airport Alternative would be used not only for severe wind conditions, but also for normal operating conditions. This will allow for simultaneous take-off and landing from both sets of runways. The north-south runways would be the main landing facility, whereas the crosswinds runways would primarily be used for takeoffs. (2-33, 6-38)

**Response:** Section 2.3.1.1 states that the crosswind runways will be used for 20 percent of commercial flights and all general aviation operations.

- 3.13 **Comment:** The plan for the International Airport is conceptual. To specify the number of buildings for terminals is premature until development plans are prepared. (2-34, 6-39)

**Response:** The number of terminal buildings was derived from the estimated 70 gate positions necessary to accommodate 25 MAP. Adelanto's Airport Master Plan suggests 30 to 40 aircraft gate positions per terminal building.

- 3.14 **Comment:** It will not take until buildout for the International Airport to accommodate wide-body aircraft. The existing runways can actually handle a widebody. The new runways to be constructed by 1998 will be designed to the specifications for all wide-body aircraft, as well as hypersonic and suborbital craft. (2-35, 6-40)

**Response:** The statement in the EIS does not preclude operation of some wide-body aircraft on the existing airfield, or the operation of widebody, hypersonic, and suborbital aircraft on the new or renovated runways.

- 3.15 **Comment:** The projected flight operations shown for the International Airport Alternative contain information that was derived from the VVEDA report and are inappropriate to be analyzed as the city of Adelanto's proposal. (2-37, 2-72, 6-42, 6-78)

**Response:** As stated in the document, planning for all alternatives was conceptual and general assumptions were made by the Air Force to allow the analysis to be conducted if data gaps in any plan existed.

- 3.16 **Comment:** Source information for the International Airport Alternative's projected flight operations shown in Table 2.3-2 came from Don Cortright and was based on fleet mix (not passenger estimates). (2-38, 6-43)

**Response:** A text change has been made to accurately reflect the source of information and basis of discussion.

- 3.17 **Comment:** As an international airport, more than 5 percent of operations will occur between 10:00 p.m. and 7:00 a.m. An 80/20 split is more likely. (2-39, 6-44)

**Response:** Based on activity at international airports of size comparable to the one in the proposal, the 5 percent or approximately 100 flights per night occurring between 10:00 p.m. and 7:00 a.m. appears reasonable.

- 3.18 **Comment:** It seems inappropriate to utilize VVEDA data for the analysis of the Commercial Airport with Residential Alternative. (2-45, 6-50)

**Response:** The data from VVEDA was applicable to this alternative as it is modeled after the Proposed Action alternative with the retention of a residential component.

- 3.19 **Comment:** The Expandable Airport described in Section 2.4.3 as one of the alternatives eliminated from further consideration corresponds to the Proposed Action and was presented by the city of Adelanto as an alternative scenario in comparing various reuse options. Does the Air Force believe the Proposed Action should be eliminated from further consideration? (2-49, 6-55)

**Response:** A text change has been made to Section 2.4 to clarify that, although the city of Adelanto did not develop further the plan for the Expandable Airport, this alternative is generally encompassed in the Proposed Action. Therefore, the activities under this alternative are already covered under the range of options analyzed for the Proposed Action and alternatives.

- 3.20 **Comment:** The Non-Airport Alternative described in Section 2.4.4 is perfectly acceptable to the city of Adelanto and is stated clearly in their reuse plan. The alternative stresses residential development, not industrial, for the majority of the land area. (2-50, 6-56)

**Response:** A text change has been made to Section 2.4.4 to reflect the comment.

- 3.21 **Comment:** The EIS should show the conveyance of the recreational facilities to the city of Victorville as part of the Proposed Action in land use maps. (The city of Victorville also included a map showing more detail of the desired recreational facilities) (1-11, 3-1)

**Response:** Conveyance of recreational facilities is considered as one of the Other Land Use Concepts which may be overlaid onto any of the alternatives, including the Proposed Action. (See Section 2.3.5). Unfortunately, scale of the map in the EIS precludes much greater detail than what is shown currently.

- 3.22 **Comment:** It should be noted that the Department of Education's interest in the school sites and certain recreational facilities may not conflict with the city of Victorville's proposal for conveyance of recreational facilities. Victorville has a joint-use agreement with Adelanto School District for a different site and it is anticipated that similar arrangements could be entered into for facilities at George AFB. (1-14, 3-4)

**Response:** Comment noted.

- 3.23 **Comment:** WEDA requested that additional documents be incorporated into the References Section of the EIS. (1-15, 4-1)

**Response:** Additional documents have been incorporated in the References Section (Chapter 7) of the EIS, if they provided information relied upon during the environmental analysis.

- 3.24 **Comment:** The Proposed Action may use a portion of the existing family housing area, which is currently planned for industrial offices/business park, for low and moderate income housing. (1-16, 4-2)

**Response:** Use of existing housing on George AFB has been considered in the document under Other Land Use Concepts.

- 3.25 **Comment:** The EIS makes scant mention of the educational possibilities for the reuse of George AFB. (1-26, 5-1, 16-1)

**Response:** Institutional educational reuse falls within the range of activities analyzed in two of the alternatives in this EIS.

- 3.26 **Comment:** Victor Valley Community College desires to create a second campus at George AFB using certain base facilities, and requests that the EIS include its proposal for reuse of George AFB. (1-27, 5-2, 16-2)

**Response:** Institutional educational reuse falls within the range of activities analyzed in two of the alternatives in this EIS.

- 3.27 **Comment:** The EIS should be amended to state that the Alaska Circle Community is a specific proposal developed by the Lillie Ruff's Inc. Homeless Program. (8-1)

**Response:** The text of the document has been changed to reflect the comment in Other Land Use Concepts, Section 2.3.5.

- 3.28 **Comment:** Section 2.1 should include Lillie Ruff's Inc. interest in the base property and lease application to Health and Human Services (HHS). (8-6)

**Response:** The text of the document in Section 2.3.5 has been changed to reflect Lillie Ruff's Inc. interest.

- 3.29 **Comment:** Section 2.3.5 should reflect that the Department of Housing and Urban Development (HUD) identified all of the base housing units and most of the other base buildings as being suitable for homeless use. Of the 1,641 residential units identified as suitable, Lillie Ruff's Inc. has expressed interest in 60 of those units. (8-7)

**Response:** The text of the document in Section 2.3.5 has been changed to reflect Lillie Ruff's Inc. interest in the 60 units. However, the Air Force is unaware of any formal HUD identification of specific housing units at this time.

#### **4.0 LAND TRANSFER/DISPOSAL**

- 4.1 Comment:** The city of Adelanto has applied for Public Benefit Transfer of all of the aviation related portions of George AFB. The remainder of the base is still to be obtained through negotiated purchase. (2-40, 6-45)

**Response:** A text change has been made to reflect the application for public benefit transfer.

## **5.0 LOCAL COMMUNITY**

- 5.1** Comment: An airport will not drastically increase the current population trends of the Victor Valley or the ROI. Rather, it will provide jobs for residents who are already expected. (2-2, 2-4, 6-11)

Response: Population in the Victor Valley and the ROI will increase naturally based on current trends in the High Desert. However, the development of an airport serving the numbers of passengers shown in the International Airport Alternative or the Proposed Action will drive additional in-migration due to additional employment opportunities.

- 5.2** Comment: The number of jobs per flight operation is not consistent for each alternative. For example, the International Airport Alternative would generate 80,000 jobs with 670,000 flight operations, which is equivalent to 0.12 jobs per operation. The Proposed Action would generate 40,000 jobs with 76,000 operations, which equals 0.526 jobs per operation. (2-9, 6-10)

Response: The number of jobs created by the reuse of George AFB is not solely attributable to flight operations within the aviation alternatives. Jobs are related to land use variations and the job opportunities related to those land uses and resultant development. More intense employment-generating uses of the available land can mean a rather small parcel of property could create more jobs than the rather open expanse of property needed to support an airfield.

- 5.3** Comment: Table 2.2-4 needs to reference the source data for the population and employment projections. It appears that the EIS used different assumptions than those presented by VVEDA. (2-23, 6-28)

Response: Population and employment figures shown in the table are from computer modeling done for this study, rather than VVEDA assumptions. Employment projections in the EIS are based on a study produced by the Southern California Association of Governments (SCAG), adjusted for the closure of George and Norton AFBs. The U.S. Bureau of Economic Analysis (BEA) Regional Interindustry Multiplier System (RIMS II) model was also used to project employment impacts in specific industries.

Interdisciplinary multipliers were prepared by the BEA using the most recent information describing the relationship of the Riverside-San Bernardino primary metropolitan statistical area (PMSA) economy to the national economy. The magnitude of output, income, and employment impacts was estimated by multiplying the changes for each industry by the RIMS II coefficients. This methodology was used to develop quantitative projections for the closure baseline, the Proposed Action, and the other reuse alternatives. These employment forecasts then became inputs to the population spreadsheet model.

Population changes consisted of three key components: (1) baseline growth, (2) relocation of workers and their dependents, and (3) natural increase of population (births minus deaths) over the long term. Baseline population trends for the ROI and the Victor Valley area of concentrated study (ACS) were prepared by SCAG and then adjusted to reflect the impacts of base closure by subtracting the estimated population loss expected with the closure of the base.

The relocation of workers in response to closure and subsequent reuse was determined using relocation parameter values initially developed for a study of the closure of Chanute AFB in Rantoul, Illinois. These values were adjusted to reflect the more urbanized ROI for George AFB and were specific to each type of employment (direct and indirect), by category.

Average household sizes were assumed to correspond, for most categories, with the average size of state-to-state migrating families between 1980 and 1985. For out-migrating military families, the household size was based on George AFB personnel records. For students and retired military, the average household sizes were assumed to be 1.00 and 2.00, respectively.

Finally, natural increase of population relocating to the area was calculated using demographic data developed for San Bernardino County by the California Department of Finance (CDF). The CDF data indicated a natural increase of 9.1 percent between 1980 and 1989. For the EIS it was assumed the in-migrating population would exhibit a similar natural increase throughout the 20-year study period.

- 5.4 Comment: In Table 2.3-11, employment and population effects of the prison on the Proposed Action and International Airport Alternatives should remain constant if they are based on the same land use acreage ratios. (2-47, 6-52)

Response: Employment figures are the same in both cases. A text change has been made to show the employment level rounded to the nearest ten jobs.

- 5.5 Comment: The majority of other land use concepts will not significantly impact employment and population of the International Airport Alternative. In fact, most of these uses will be able to be absorbed into the overall plan. (2-48, 6-53)

Response: The Other Land Use Concepts are not part of any integrated reuse plan, but could be initiated on an individual basis with any alternative. The document is presented to allow the reader make the assessment of the effects of Other Land Use Concepts on any or all of the alternatives.

- 5.6 Comment: The ROI should include Los Angeles County, since the Lancaster/Palmdale area is located near George AFB. In addition, Orange County has been excluded which has a dramatic impact on the region, in that many residents of the Victor Valley commute to jobs in that area. (2-53, 6-59)

Response: The potential effects of reuse of George AFB which may occur outside the ROI in Los Angeles and Orange counties are expected to be minimal due to the size of that economic region. With the redevelopment of George AFB, the Victor Valley should become much less dependent on job opportunities outside the ROI. This is a basic theme in existing development plans which speak to an existing labor force in the High Desert taking jobs there rather than commuting to south coast areas.

- 5.7 Comment: Adelanto's city limits are inaccurately portrayed due to fairly recent incorporated areas in the planning area. The map should be updated. (2-55, 6-61)

Response: The changes requested have been incorporated.

- 5.8 Comment: The term "indirect disposition" in Section 4.2.1.1 needs to be explained. (2-60, 6-66)

Response: Appearance of the term "indirect" was due to a typographical error. The text has been revised accordingly.

- 5.9 **Comment:** Section 4.2.1.6, which states that five direct jobs would be generated by the conveyance of recreational facilities, is inconsistent with Section 4.2.3.1, which indicates fifty jobs (golf course, parks, and open space). (1-12, 3-2)

**Response:** The five jobs associated with conveyance of the recreational facilities represent staffing needed by the Department of the Interior to administer the conveyance program. Under the reuse plan in Section 4.2.3.1, staffing of the recreational facilities themselves was estimated to generate fifty jobs.

- 5.10 **Comment:** Table S-7 says that the HUD Other Land Use Concept is projected to increase the Victor Valley population by 150 homeless individuals. The vast majority of the homeless individuals served by the Alaska Circle Community will be from the Victor Valley area. (8-2)

**Response:** Table S-7 and the accompanying text have been changed to reflect the comment.

- 5.11 **Comment:** Table S-7 says that the Alaska Circle proposal will result in a net decrease of 677 jobs for the Proposed Action. Since the Proposed Action will only utilize 202 total off-base acres, there will be ample acreage within the vicinity of George AFB. Therefore, the Alaska Circle Community will only displace 677 jobs to a location near the base. The Alaska Circle Community's projected staff employment will actually result in a net increase of 36 jobs for the Victor Valley. (8-3)

**Response:** Under the Proposed Action, the Alaska Circle housing units would be replaced with a commercial area. The Alaska Circle proposal's implementation in the project area would result in a reduction of the Proposed Action's commercial area. Since employment figures are uniformly based on a set ratio of jobs per land use area, the reduced size of the commercial area would result in a net employment decrease to the alternative. This is consistent with similar analyses for the other alternatives, and as commented, does not preclude development outside the confines of the project area.

- 5.12 **Comment:** The Bureau of Prisons Other Land Use Concept will generate approximately 1,000 jobs rather than 650 jobs. (26-1)

**Response:** A text change has been incorporated into the EIS to reflect the revised employment figure.

## **6.0 LAND USE/AESTHETICS**

- 6.1** **Comment:** The Adelanto Reuse Plan for George AFB is incorporated into the General Plan/Zoning for the City. Preliminary plans for relocation of incompatible uses are being prepared. (2-5, 6-12)

**Response:** Comment noted.

- 6.2** **Comment:** Much of the 1,605 acre parcel proposed for acquisition under the Proposed Action for airfield land use is comprised of rugged terrain and may not be suitable for airport-related facilities. Expansion in that area will be difficult and pose negative environmental impacts. (2-21, 6-26)

**Response:** Expansion or construction in any area on or around George AFB will result in ground disturbance and may have some environmental impacts. As stated in Section 2.2.2 of the EIS, the 1,605 acre parcel is intended to act as a protective buffer between the airfield and future, possibly incompatible uses. It also provides room for expansion if the current capacity is exceeded.

- 6.3** **Comment:** The EIS fails to adequately identify and resolve conflicts with local plans of the city of Adelanto. The land use map for the Proposed Action shows part of the airfield land use category being within the city of Adelanto. Has an agreement been reached between VVEDA and the city of Adelanto? If not, the map should be adjusted. (2-25, 6-30, 20-18, 20-19)

**Response:** The plan is conceptual and represents the layout of the alternative as analyzed. Adjustments to the map will occur as authorities and public and private entities go about the reuse of George AFB. In Chapter 4, land use conflicts of all the alternatives are discussed. The Air Force will not resolve the potential local conflicts over land use as the actions pertaining to land use in the alternatives will not be carried out by the Air Force and will be under the control of local governments.

- 6.4** **Comment:** The International Airport Alternative's Commercial land use designation should be categorized as Hotel/Park. This more accurately depicts the intended use for this area. Uses that are allowed within the Hotel/Park district include hotels, golf courses, parks, service commercial, open space, recreational facilities, etc. (2-29, 2-41, 6-34, 6-46)

**Response:** The designation used is standardized for like uses within the document. The hotel/park concept is highlighted in the description of the area in Section 2.3.1.3.

- 6.5** **Comment:** It should be pointed out that the City of Adelanto's reuse plan calls for the retention of the significant stand of mature trees located in the current residential areas on base. (2-42, 6-47)

**Response:** A text change in the document has been made to show mature trees will be retained under the International Airport Alternative.

- 6.6** **Comment:** Under the International Airport Alternative, business park zones should not be classified as industrial. These uses are intended to buffer the Hotel/Park and other areas from the more intensive general industrial and aviation industrial uses. (2-43, 6-48)

**Response:** The industrial classification is consistent throughout the document as a general category that includes a mixture of industrial, commercial, and office. This is supported by the International Airport Alternative in that this business park zone includes light industrial and the previously mentioned uses. Other alternatives' business park uses are also classified as industrial.

- 6.7 **Comment:** The city of Adelanto has adopted the land use plan, not the entire General Plan, as the interim policy direction the city means to implement. The land use plan incorporates the Airport Development District as part of the General Plan Update. (2-56, 6-62)

**Response:** A text change has been made to reflect the comment.

- 6.8 **Comment:** Part of the Aviation Support delineated in Figure 4.2-2 is located within the city of Adelanto and has a zoning conflict with a Manufacturing/Industrial district according to current zoning. There are also some residential conflicts north of the primary runway, as depicted according to Figure 3.2-5. (2-61, 6-67)

**Response:** The text and graphic presentation have been revised to reflect the comment.

- 6.9 **Comment:** Section 4.2.2.1 implies that an approved airport layout plan for the Proposed Action has been selected for implementation. The sentence should read, "...been approved for the Selected Reuse Alternative...", to more objectively compare the options. (2-63, 6-69)

**Response:** The discussion in Section 4.2.2.1 refers to impacts that are specific to the Proposed Action and mitigation that may be required if the Proposed Action were implemented.

- 6.10 **Comment:** An expandable airport was to be eliminated from further consideration according to Section 2.4, making it unnecessary to rezone areas to the north of the base for the Proposed Action. (2-64, 6-70)

**Response:** As discussed in the response to Comment 3.19, the Expandable Airport is generally encompassed in the Proposed Action, and was therefore not studied as an additional alternative. Rezoning of areas north of the base would be required to accommodate the Proposed Action as planned.

- 6.11 **Comment:** Since the fleet mix for the International Airport Alternative is not a true representation of the actual fleet mix, it is impossible to calculate how many residences and businesses must be relocated to insure airport compatibility. A new model must be generated according to a more realistic fleet mix. (2-65, 6-71)

**Response:** Due to the speculative nature of the aviation alternatives, the fleet mix chosen for analysis is believed representative of the type of aircraft operations for the alternatives analyzed.

- 6.12 **Comment:** The land use conflicts figures for the International Airport Alternative do not reflect the incorporation of the Airport Development District land use category as established on the city of Adelanto's Interim Land Use Plan. No land use conflicts exist at the policy level. (1-10, 2-66, 6-72)

**Response:** Land use conflicts presented in these figures are based on current zoning to show where compatibilities and conflicts would occur if the alternative were implemented. As stated in the text, zoning may be revised for airport development so that conflicts are eliminated.

- 6.13 **Comment:** For the International Airport Alternative, it is difficult to understand where conflicts would arise on base between the proposed Business Park and Hotel/Park (Commercial) land uses. (2-67, 6-73)

**Response:** A text change has been made to reflect the comment.

- 6.14 **Comment:** The Commercial Airport with Residential Alternative does not address the impact of additional housing being added within the proximity of the active runway. (25-3)

**Response:** Potential conflicts of the Commercial Airport with Residential Alternative in noise, land use, and other environmental considerations are discussed in Chapter 4 of the EIS.

## **7.0 TRANSPORTATION**

- 7.1** Comment: VVEDA's proposal, based on the P & D Technologies Projected Flight Operations, shows a total of 23,100 passenger operations per year. This number of operations corresponds to a 1 MAP level by 2013, not 15 MAP. (1-8, 2-17, 2-20, 2-80, 6-22, 6-25, 6-86)

Response: The present airfield and area reserved for a terminal facility can accommodate 15 MAP, with expansion of the terminal facility feasible to accommodate up to 25 MAP. Flight operations, however, shown for the Proposed Action are based on only 1 MAP at 2013, the VVEDA anticipated passenger load at that time based on their current projections. The analysis for the Proposed Action was based on 1 MAP.

- 7.2** Comment: Section 2.2.6 leads one to believe that the security fences are to remain around the "Base Facility." Won't the fences be removed after base closure? (2-22, 6-27)

Response: The Air Force has no intention at this time to remove the current base security fencing after base closure. The Air Force will maintain a security presence on the installation for some period after closure to protect facilities under its control prior to transfer to others. With subsequent reuse and new access (other than existing gates) to the George AFB desired, the new owner(s) of parcels may remove the fence in sections. However, the security fence is a valuable resource to the aviation alternatives and reuse will most likely dictate the future of the fence.

- 7.3** Comment: AADT figures for the International Airport Alternative are much too high. In addition, since the airport terminals are being located off of the base property, these numbers will be insignificant. Being an international/regional hub type airport, fewer travelers will be coming via private automobile. It is estimated that approximately 25 percent of travelers will arrive/depart from the airport via super speed train and/or other mass transit systems. (2-44, 2-71, 6-49, 6-77)

Response: It was assumed that 20 percent of travelers would arrive/depart from the airport as connecting passengers, Super Speed Train passengers are discussed in Section 4.2.3.2. This results in an overall traffic reduction of approximately 7 percent.

- 7.4** Comment: The map portraying the conceptual realignment of Highway 395 is inaccurate and is shown further east than what is planned. The realignment of 395 includes interchanges at Desert Flower Road, El Mirage Road, Air Base Road, Holly Road, Palmdale Road, Duncan Road, and Phelan Road. The conceptual realignment of 395 has not been approved by Caltrans, but a feasible "consensus" alignment has been identified. (2-51, 6-57, 27-1)

Response: The graphic presentation and text have been revised to show the consensus alignment.

- 7.5** Comment: A two hour drive time to LAX from George AFB is only possible under ideal traffic conditions. (2-57, 6-63)

Response: A text change has been made to reflect the comment.

- 7.6 **Comment:** The Southern California Aviation System Study Update information, mentioned in Section 4.2.3, regarding the 24.7 MAP shortfall in the SCAG region indicates that George AFB will play a major role in providing air passenger service. This information be highlighted in the Executive Summary of the EIS. (1-9, 2-69, 6-75)

**Response:** As described in CEQ regulations, the Executive Summary of an EIS is written to provide an overview of the major conclusions of the study, the areas of controversy, and the issues to be resolved. Based on these criteria, an in-depth discussion of air transportation is beyond the level of detail required for the Executive Summary.

- 7.7 **Comment:** The utilization of AMTRAK is a good idea, but it does not adequately serve the commuter and/or international travel market. High-speed ground access systems are the only solution and should be mentioned in the Transportation section. (2-70, 2-74, 6-76, 6-80)

**Response:** The beneficial effects of high-speed ground access are mentioned in Section 2.5 and Section 4.2.3.2.

- 7.8 **Comment:** The international airport has been designed to allow for a fifth runway, which will be constructed when demand for it is anticipated, resulting in greater operational capacity. (2-73, 6-79)

**Response:** The inclusion of a fifth runway could reduce the ground delays of aircraft using the airport. It is expected that the fifth runway would most likely be built after 20 years of operation, beyond the scope of this EIS.

- 7.9 **Comment:** In Appendix E, "Norton AFB" should be replaced by "George AFB." (2-81, 6-87)

**Response:** A text change has been made to reflect the comment.

- 7.10 **Comment:** In Section 4.2.3.1, Amethyst/Cobalt Road is identified as a major arterial with 100 feet of right-of-way. Since this street could be expected to carry a significant proportion of traffic traveling to the airport or other facilities from Victorville, perhaps it should be included as a Key Community Road. (1-13, 3-3)

**Response:** Cobalt/Amethyst Road is not currently a major arterial, but proposed to be improved to that status. Disturbance of lands to provide roadway upgrades is considered in the EIS based on reasonable planning factors and with as few specific references as practical due to the conceptual nature of all the existing plans for the reuse of the installation. Land disturbance is then assessed against the possible environmental impacts.

- 7.11 **Comment:** The EIS fails to adequately study factors relating to traffic impacts or to discuss the impacts of traffic or other transportation components generated by the reuse alternatives on the city of Adelanto. (20-13, 20-15, 20-17)

**Response:** The Air Force conducted a comprehensive study to analyze projected traffic effects from each alternative on key community roads within the Victor Valley. The results of this study are discussed in Chapter 4 of the EIS. The roadways which will require upgrade under all alternatives to maintain a level of service (LOS) E or better are identified. The inclusion of modeling efforts to arrive at the conclusions on traffic effects as well as other supporting information for the EIS is not included in the document to minimize the bulk of an already large document. The EIS suggests

improvements to existing roads to maintain LOS E or better service which is not an environmental mitigation as the level of service degradation is not an environmental impact, rather an annoyance of modern life.

- 7.12 **Comment:** The EIS should not merely list the possible traffic problems for each alternative, but should make suggestions for treatment of these problems. (20-14)

**Response:** As discussed in Section 4.2.3, the EIS assumes that roads would be widened to avoid degradation to LOS F.

- 7.13 **Comment:** The EIS fails to adequately address and analyze cumulative impacts other than growth features of the Victor Valley. (20-16)

**Response:** See response to Comment 1.10.

- 7.14 **Comment:** Please identify Topaz Road on Figure 2.3-4. This would properly identify the new north-south road extending from Topaz Road south to Amethyst Road. (27-2)

**Response:** Figure 2.3-4 has been revised to include Emerald (Topaz) Road.

- 7.15 **Comment:** The EIS should address traffic impacts on State Route 395/Air Base Road Intersection, and Interstate 15/Air Base Road Interchange. (30-1)

**Response:** The EIS does address traffic impacts on 395 and Air Base Road, but excludes I-15 because it is not considered to be a key community road. Traffic analysis for individual intersections is considered to be beyond the level of detail required for the EIS.

- 7.16 **Comment:** The EIS should address roadbed impacts caused in transporting heavy oversized military equipment. (30-2)

**Response:** The issue of roadbed impacts caused by realignment of military equipment and forces has been addressed in the *Final Environmental Impact Statement for Closure of George AFB, California*.

## **8.0 AIRSPACE**

- 8.1** Comment: The study to determine how airspace in the region is aligned, which is mentioned under Cumulative Impacts in Section 4.2.3.2, needs to be undertaken now, as the projections for airport capacity are nearing the overflow level. (2-75, 6-81)

Response: The issue is beyond the scope of this EIS.

- 8.2** Comment: Based upon current expressions of interest by aviation prospects, WVEDA requested analysis be done in the EIS of the strong interest by airlines and others in heavy and tactical aircraft aircrew training. (1-18, 4-4)

Response: Aircrew training is a part of the Proposed Action. The extent of the analysis in the EIS is sufficient based on the information made available to the Air Force.

- 8.3** Comment: The EIS does not discuss impacts on present airspace usage, private and sport. (25-2)

Response: Airspace usage and congestion is discussed in Section 4.2.3.

- 8.4** Comment: The mailing list does not list other Department of Defense (DOD) agencies that may be affected by the potential reuse of DOD airspace. (28-51)

Response: DOD officers are assigned to the FAA Regional offices to review effects to military airspace from civilian development of airfields. The Air Force representative to FAA, Pacific-Western Region was contacted regarding the proposal and the military units controlling airspace in the ROI have received copies of the EIS; please see mailing list, Appendix D.

## **9.0 UTILITIES**

- 9.1** Comment: Utility demands are higher under the International Airport Alternative due to the larger land area that it encompasses. If the same land area with logical adjacent land uses is evaluated for each alternative, the numbers would be higher for the other alternatives. (2-6, 2-76, 6-13, 6-82)

Response: The comparison of utility demands is based on properties directly developed in each proposal and the indirect development due to the in-migration of industry and population within the Victor Valley. The International Airport Alternative may result in less utility consumption per acre of development within the boundaries shown, 13,426 acres, versus the Proposed Action, 7,425 acres. However, the greater indirect employment, housing and commercial/industrial activity generated by the international airport outside the confines of the alternative's boundaries will drive overall consumption above the other alternatives' levels.

- 9.2** Comment: The EIS states that water will be provided by local water purveyors. It should be specified who the water purveyor will be/is. (2-24, 6-29, 6-101, 7-15, 19-2)

Response: The issue of who will purvey water to any of the proposed alternative uses of George AFB or future parcel owners is not an environmental issue and is beyond the scope of this document. However, the Air Force will continue to use its existing water distribution system beyond the closure date to ensure firefighting and maintenance.

- 9.3** Comment: Contrary to the statement in Section 3.2.5.1 regarding the water supply at George AFB, Interties do exist between the Air Force and the city of Adelanto (Adelanto Water District). The Air Force operates wells on land owned by the city of Adelanto and a state water well permit is held jointly by George AFB and the city of Adelanto. (1-22, 2-58, 6-64)

Response: The text has been reworded to clarify the status of water supply at George AFB.

- 9.4** Comment: The EIS does not adequately address water supply and water rights, and downplays the significance of water supply and water rights by lumping them with other utilities. (1-23, 1-30, 6-88, 7-1)

Response: The EIS provides extensive discussion of water supply and demand in Section 3.2.5.1 (Water Supply), Section 3.4.2.3 (Groundwater), and corresponding sections in Chapter 4.

- 9.5** Comment: The assumption that local purveyors have or will obtain the 6,833 acre-feet/year of water or to rationalize that it is appropriate to increase the overdraft another four to five percent is fallacious. (1-32, 6-90, 6-97, 7-3, 7-10)

Response: The EIS does not mention a regional demand for 6,833 af/yr of water. The EIS does mention that the water production demand for the Proposed Action in year 2013 is expected to range from 5,365 to 7,660 af/yr. Under the conservative assumption that 50 percent of this water production is returned to the groundwater basin through deep percolation from wastewater treatment plants, irrigation, lakes, etc., the actual loss (or consumption) equates to 2,682 to 3,830 af/yr, or a 4 to 5 percent contribution to the groundwater overdraft in the Upper Mojave Basin in year 2013. This also assumes that all of the water production demand will be taken from groundwater in the regional aquifer. The effect on groundwater overdraft will be less if alternate sources of water, such as the State Water Project (SWP), are used in addition to the groundwater supply. The Mojave Water Agency (MWA) currently has a maximum allocation of 50,800 af/yr of SWP water for all regions under its jurisdiction. The MWA Master Plan analyzed three options for

the delivery of up to 87.0 million gallons/day of water from the SWP via the California Aqueduct to accommodate expected growth through the year 2010.

- 9.6 **Comment:** The EIS wrongly infers that George AFB is co-owner with the city of Adelanto of 3.34 cfs of appropriative water rights contained in State License No. 10342. (1-31, 6-89, 6-89, 7-2, 7-12, 7-13)

**Response:** The EIS correctly refers to Permit 6121, License 6506, "License for Diversion and Use of Water," issued on March 21, 1962, by the California Water Resources Control Board to George AFB and the Adelanto Community Services District. The license allows a total diversion of 3.34 cubic feet/second.

- 9.7 **Comment:** The EIS wrongly assumes that the city of Adelanto will transfer water rights to another local or regional agency. (1-33, 6-91, 7-4)

**Response:** No assumption has been made that the city of Adelanto will transfer water rights to another local or regional agency.

- 9.8 **Comment:** The EIS should address impacts to groundwater resources at the local scale. (6-92, 7-5)

**Response:** The EIS adequately discusses the impacts to groundwater resources within the ROI resulting from the Proposed Action and other alternatives analyzed in Chapter 4.

- 9.9 **Comment:** The EIS should address impacts concerning the economic development of cities and communities which may have limited water resources. (6-93, 7-6)

**Response:** Issues concerning limitations on the economic development of surrounding cities and communities due to the region's limited water resources are beyond the scope of the EIS.

- 9.10 **Comment:** The EIS should address potential impacts to Mojave River flow and underflow. (6-94, 7-7)

**Response:** The potential impacts to the Mojave River flow and underflow within the ROI resulting from the Proposed Action and other alternatives are discussed under the heading of "Water Resources" in Chapter 4.

- 9.11 **Comment:** The EIS should address potential impacts on the water supply of present users. (6-95, 7-8)

**Response:** The potential impacts on the water supply of present users are discussed under the heading of "Water Supply" in Chapter 4. The impacts are explained in terms of increased water demand on a regional scale.

- 9.12 **Comment:** The EIS should address potential impacts on existing water rights owners. (6-96, 7-9)

**Response:** Although not discussed in terms of water rights, the impacts to water supplies and water resources are provided in Chapter 4. Analysis of effects on property rights, such as water rights, is beyond the scope of the EIS.

- 9.13 **Comment:** The EIS incorrectly assumes in Section 3.4.2.3 that the MWA is guaranteed 50,800 af/yr with which to serve the region and has the ability to provide even more in the future. (6-98, 7-11)

**Response:** The EIS states that MWA has a maximum allocation of up to 50,800 af/yr and that expected demand in the future will mean that MWA and other agencies will have to identify additional water sources.

- 9.14 **Comment:** The EIS ignores relevant information concerning the George AFB and Adelanto area's local water resources. There are various reports prepared for George AFB by private consultants which provide important information concerning this area and should be incorporated into the EIS discussion on water resource development. (6-100, 7-14, 9-1)

**Response:** In preparation of the EIS, the Air Force used available data and studies for analysis of impacts to each resource. The Air Force did not ignore relevant information concerning any resource category. Much of the information contained in the numerous studies prepared for the U.S. Government is derived from published reports and past studies. Several studies, some of which resulted in only preliminary reports, were conducted in the past to analyze issues not relevant to the EIS and therefore were not incorporated by reference in the EIS. Some of the references cited in the EIS (such as *Report on Water Supply Improvements, George AFB*, prepared by Lee and Ro Consulting Engineers, 1984) are in fact reports prepared for George AFB by private consultants.

- 9.15 **Comment:** It may be more accurate and precise to compare George AFB's current consumptive water use with future project consumptive uses. (19-1)

**Response:** MWA projections are broken down by district. These consumptive use values were used to extrapolate projected use to 2013.

- 9.16 **Comment:** The EIS should identify specific water quantity used for George AFB and volumes that are projected for the reuse alternatives. For realistic comparison of water usage, the terms should be consumptive use per capita and total consumptive use. (19-3)

**Response:** The current utility demand tables in Chapter 4 display water demand (consumptive use) for post-closure conditions (no reuse of George AFB, only normal anticipated development) and each alternative in million gallons per day. Per capita consumptive use would remain relatively constant for all alternatives based on planning information available.

- 9.17 **Comment:** The EIS should state that reuse plans will comply with requirements of the National Pollution Discharge Elimination System (NPDES) Permit program, as administered by the U.S. EPA's representative. (19-4)

**Response:** Section 4.2.4 states that new users would also be required to be in accordance with Victor Valley Wastewater Reclamation Authority (VWRA) requirements. In addition, Section 4.4.2 states that new property users would be subject to NPDES permitting.

- 9.18 **Comment:** The EIS should note any existing "Cease and Desist" orders for desert landfills issued by the Lahontan Regional Water Quality Control Board and the Local Enforcement Agency for San Bernardino County, the Department of Environmental Health. (19-5)

**Response:** The cleanup and abatement order received from Lahontan was rescinded approximately one year ago. These issues are covered under the FFA. Section 3.2.5.2 provides a discussion of the VVWRA Corrective Action Order.

- 9.19 **Comment:** Any reuse plans for George AFB should evaluate solid waste disposal methods with regard to the impact on groundwater resources. (19-6)

**Response:** Solid waste disposal methods will be in compliance with federal, state, and local regulations. Specific methods will be incorporated into redevelopment plans.

- 9.20 **Comment:** The EIS is deficient in its treatment of water rights and completely ignores the existing jurisdictional dispute over water rights. (20-8)

**Response:** Water rights and current legal disputes concerning water rights are beyond the scope of the EIS. The relevant issues are the water supply and demand within the region and environmental impacts to water resources.

- 9.21 **Comment:** The EIS does not provide for solid waste disposal or identify impacts on the city of Adelanto. (20-21)

**Response:** Solid waste disposal for each alternative is discussed in Chapter 4. The EIS does state that each alternative would not substantially alter the county's short- and long-term plans for landfill capacity expansion in the Victor Valley. Community-specific effects were not addressed, as the new users of landfills generated by the conceptual reuse of George AFB cannot at this time be identified as affecting one landfill over another.

- 9.22 **Comment:** The EIS does not adequately discuss the impact of wastewater treatment on the city of Adelanto. (20-22, 20-24)

**Response:** Wastewater treatment for each alternative is discussed in Chapter 4. The effect on the VVWRA for all alternatives is that existing capacity will be exceeded. Community specific effects were not addressed as several communities are members of the authority and will need to deal with any contemplated reuse of George AFB collectively.

- 9.23 **Comment:** The EIS should identify specific mitigation measures necessary to correct existing and future wastewater treatment. (20-23)

**Response:** As discussed in Section 4.2.4 under Mitigation Measures, the type(s) and extent of mitigations cannot at present be specified, because they would depend on the specific operating procedures established for the new users, the specific products used, and the equipment used on site. Additionally, the EIS does state that increased wastewater demand would require VVWRA and other wastewater collection agencies to accelerate current plans for infrastructural improvement.

- 9.24 **Comment:** Water demand, groundwater overdraft estimates, and sewage generation are based upon population estimates. Therefore, projections for these resource impacts are comparable only with post-closure conditions and cannot be compared with present conditions. (6-9)

**Response:** Water demand, groundwater overdraft estimates, and sewage generation projections are compared to post-closure conditions in the EIS.

- 9.25 **Comment:** The EIS should describe the short- and long-term water supply plans of the MWA and individual water districts in Victor Valley. The implementation schedules and feasibility of these plans should be briefly discussed. (28-47, 28-48)

**Response:** The EIS adequately discusses the water supply plans of the MWA and individual water districts in the Victor Valley. It also adequately discusses how the Proposed Action and alternatives would affect those plans. In Section 4.2.4, the EIS mentions that the MWA and individual water purveyors in the Victor Valley are presently planning both short- and long-term infrastructure improvements in anticipation of substantial rates of population growth within the Victor Valley. The EIS also mentions that the MWA Master Plan contains an analysis of three options for the delivery of up to 87.0 million gallons per day of water from the SWP via the California Aqueduct. The range of capital costs and annual operating costs for these options are also presented. Section 4.2.4 also indicates the number of years these plans must be accelerated to accommodate the projected water demand from the Proposed Action and alternatives. Evaluation of the feasibility of the water supplement plans would involve speculation about utility funding and political considerations and decisions which are beyond the scope of this environmental analysis.

## **10.0 HAZARDOUS MATERIALS/WASTE MANAGEMENT**

- 10.1** Comment: It should be identified, even in preliminary form, which 40 percent of base facilities contained asbestos containing material (ACM). In order to determine which facilities are "habitable," the respective agencies need this information to appropriately assign structures, especially housing units. (2-59, 6-65)

Response: As stated in Section 3.3.5, a base-wide asbestos survey is currently underway. Once the survey is completed, the results will provide further information on the extent of ACM within George AFB facilities.

- 10.2** Comment: The EIS should be more specific in addressing where, when, and how the Installation Restoration Program (IRP) activities will affect reuse. It should specify that reuse would only be delayed for investigative and cleanup purposes. (14-1, 23-1)

Response: To the extent possible future IRP activities and their effects on the "conceptual" plans available for analysis have been addressed in the document; however, some text changes have been made in Chapters 1 and 3 to respond to the comment. See also response to Comment 10.8.

- 10.3** Comment: The EIS should consider the Federal Facilities Agreement (FFA) and should include information regarding public involvement in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process through the Technical Review Committee (TRC) mechanism. (14-2, 23-2)

Response: Text changes have been incorporated to reflect the comment.

- 10.4** Comment: The FFA schedule with applicable revisions should be made as an appendix to the subject document. (14-3, 23-3)

Response: The FFA schedule has been added to the EIS in Section 3.3.

- 10.5** Comment: The EIS is deficient in its discussion of contamination, hazardous materials and hazardous waste and fails to identify the impacts on the adjacent city of Adelanto. (20-9, 20-12)

Response: The cleanup of hazardous substances released to the environment by Air Force activities at George AFB is being conducted under the FFA among the Air Force, the state of California, and U.S. EPA Region IX and as indicated in Section 1.3.2, is beyond the scope of this EIS. The EIS discusses the issue of future hazardous substances usage related to each alternative analyzed in Section 4.3.

- 10.6** Comment: The EIS should present a detailed description of mitigation measures and an analysis of their effectiveness. (20-10, 20-11)

Response: See response to Comment 1.18.

- 10.7 **Comment:** The EIS should clearly demonstrate compliance with the land transfer requirements of the Superfund Program [Section 120(h) of CERCLA]. (28-1, 28-28)

**Response:** The EIS is not intended to demonstrate compliance with federal land transfer requirements. This EIS was produced to provide the public and the Air Force decision maker with an understanding of potential environmental effects from an array of possible alternative uses resulting from the property disposal process. The Air Force, however, is fully aware of its requirement to include covenants in transfer documentation warranting that all remedial action necessary to protect human health and the environment have been taken.

The Air Force's IRP and real property transfer procedures and policies will satisfy CERCLA Section 120 applicable requirements. The appropriate documentation and guarantees that are required at transfer will be provided as transfers are processed.

The deed itself will provide the guarantees; that document is executed contemporaneously with the actual physical transfer of the property. The guarantees will be provided to the transferee on the deed, not to any other party, and no prior agreements are required.

Under the FFA, prior to transfer of any portion of either an area within which any release of hazardous substance has come to be located, or any other property which is necessary for performance of remedial action, the Air Force shall give written notice of that condition to the recipient of the property. In addition, at least 30 days prior to any transfer subject to CERCLA 120(h), the Air Force shall notify all parties of the transfer and the provisions made for any additional remedial actions, if required.

- 10.8 **Comment:** The EIS should discuss how the reuse alternatives would be compatible with specific contaminated sites. (28-2, 28-16, 28-17, 28-27)

**Response:** Measurement of the degree and extent of contamination at suspected waste sites is not complete. Therefore, a detailed discussion of how specific reuse alternatives would be compatible with specific contaminated sites is not possible at this time. The EIS does provide the reader with summary information regarding suspected waste sites and points out that general limitations on land use or delays to redevelopment may be encountered in areas overlying or adjacent to contaminated sites (Section 4.3). Further, the EIS has been revised to include a list of IRP documents available for review which may give additional insight into the scope of the Air Force's CERCLA program.

In regard to future, more focused planning, the Air Force's DMT at George AFB is charged with the conduct of the IRP and the administrative actions resultant from property transfer negotiations, etc. The coordination and integration of waste site characterization and remediation actions with possible future land uses will be under one office. The DMT will be able to discuss land use limitations on portions of property overlying or adjacent to IRP sites as redevelopment is pursued by other entities at George AFB.

Additionally, the Air Force expects local zoning and other appropriate regulatory authorities to inquire into the suitability of properties at George AFB for future use. The Air Force stands ready to assist these authorities in their determination as to what are suitable uses as it, unlike the local authorities, has few means to regulate redevelopment of property parcels once transferred.

- 10.9 **Comment:** The EIS should present time frames for redevelopment that are consistent with schedules for investigation and cleanup of contaminated sites. The status and schedule of remedial actions at the sites will greatly influence the feasibility, timing, and configuration of redevelopment and must be fully integrated with reuse plans. The EIS should present the potential effects and consequences of each proposed land use and reuse alternative on cleanup actions. Discussions should include, but not be limited to, potential impacts on remediation decisions, implementation schedules for remediation actions and reuse plans, access, and site security. (28-3, 28-5, 28-29)

**Response:** Redevelopment is not solely dependent on the cleanup of contaminated sites. Not all George AFB properties are contaminated. As conceptual plans mature, based on the realities of the development market, a number of the land uses under consideration may be adapted to lands not contaminated. The Air Force not being the developer does not have that insight. The policing powers of the zoning and regulatory authorities, market conditions, and the public's desire for redevelopment will work to set overall time frames for development. Any Air Force redevelopment time frames would, at best, be poor estimates, based on the information available at this time.

The status and schedule of remedial actions as pointed out may influence redevelopment and future developers of George AFB properties. To assist readers in comprehending the potential for delay from IRP site activities, the FFA schedule has been included in the EIS as suggested. The future developers of George AFB must integrate their reuse plans with realities of future remedial activities. The parties to the FFA will all be sources of information for potential developers in addition to information already available at local libraries.

The Air Force, through the IRP will assess the feasibility of land use at contaminated sites under the CERCLA process and will make that information available to the public. The DMT, charged with cleanup and transfer of properties, will make decisions regarding contaminated site access and security as required. In accordance with Sections 28 and 37 of the FFA, the parties to that agreement will also be kept informed of actions concerning reuse of property which is subject to, or which affects, remedial activities.

- 10.10 **Comment:** The EIS overstates the hazardous waste characterization effort presenting several sites as having final cleanup decisions. (28-4, 28-21, 28-24, 28-31)

**Response:** The text of Chapter 3 of the EIS has been changed to clarify status of IRP activities at certain sites.

- 10.11 **Comment:** The DEIS does not contain sufficient information pertaining to hazardous waste sites to fully assess environmental impacts that should be avoided to fully protect public health and the environment. (28-6)

**Response:** The EIS contains sufficient information on the IRP program to support the Air Force decision, which concerns property disposal. If an individual wants to know more about the IRP investigations to date than is included in the EIS, the locations of Public Information Files are given in Section 3.3.3. The quantity of literature available is just too extensive to include in this EIS or append to it.

- 10.12 **Comment:** Current and future cleanup goals may be significantly affected by reuse decisions and must be an integral part of the evaluation of reuse alternatives. (28-7, 28-18, 28-19)

**Response:** Cleanup goals may be affected by reuse decisions, and the converse is also true, that reuse decisions may be affected by cleanup goals. These planning issues will continue to come to the attention of the Air Force decision maker, developers, and the public during evaluation of ways to receive maximum dollar return on future property redevelopment or to best make use of public lands, negotiations on potential transfers, and the IRP process.

As the IRP progresses, proposed cleanups and their rationales will be presented to the Air Force decision maker and the public in time to accomplish costs, feasibility, and anticipated outcome under CERCLA procedures. The information provided in this EIS is a cursory summary of a process already established under CERCLA. Future knowledge about contaminated parcels will no doubt become a more integral part of the evaluation of reuse options among developers and the public. However, it is not crucial at this early stage of the planning process to have more than a basic understanding of potential delays to redevelopment and environmental effects that may result if one action is pursued over another in the future. The EIS provides the basic information for that understanding as early as possible in the affected decision-making and planning processes.

The information provided in the EIS is a summary of a process already established under CERCLA procedures at George AFB, and, therefore, is not addressed beyond the summary review in this document.

- 10.13 **Comment:** A full disclosure of the process for integrating reuse plans and remedial actions is essential. A mechanism for resolving reuse and cleanup conflicts should be presented. (28-8, 28-30)

**Response:** The mechanism for resolving reuse and cleanup conflicts and involving EPA Region IX and the state of California is the FFA. A text change within the EIS has been incorporated to clearly point this out.

Section 28 of the George AFB FFA requires that the Air Force comply with Section 120 (h) of CERCLA in all transfers of property. It also requires that at least 30 days notice of the transfer(s) be given to the parties of the FFA, along with notice regarding provisions made for any remedial action.

- 10.14 **Comment:** The implementation of the FFA will ensure that the environmental impacts associated with past waste activities at George AFB are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health and the environment. The Air Force must develop and submit a schedule for Remedial Design and Remedial Action after each Record of Decision (ROD) and Remedial Action could take up to 30 years for full implementation. (28-14, 28-15)

**Response:** The FFA provides a framework under which the coordination of the cleanup at George AFB will take place. The protection of the public's health by the Air Force and EPA Region IX is mandated under CERCLA and applicable regulations. Remedial design and cleanup could take a number of years on parcels of George AFB. Parcels that may require cleanup are under investigation at this time and as data becomes available the full extent of cleanup required and its effect on short and long-term land use will be more evident. The IRP will provide the public information on future events concerning the waste clean up efforts at George AFB. It should also be noted that the Final ROD will be issued in July 1995, not July 1996 as stated in the comment.

- 10.15 **Comment:** The EIS does not present mitigation measures for potential impacts to cleanup actions. (28-20)

**Response:** The Air Force will not transfer from federal control properties requiring cleanup prior to satisfaction of CERCLA Section 120(h). Also, leasing of properties will not be considered for contaminated parcels or adjacent parcels if such a lease would in anyway interfere with the timeliness or effectiveness of a required site cleanup. If the Air Force may need easements or access to transferred or leased properties then the appropriate caveats will be included in the transfer or lease documents before any reuse begins.

- 10.16 **Comment:** The EIS needs to specify which of the hazardous waste sites cannot be developed due to remediation requirements. (28-22)

**Response:** The Air Force cannot specify at this time which of the waste sites cannot be developed due to remediation requirements, as not enough is known about them. With additional information from the IRP process, such specifics may become known and subject to decisions under the CERCLA process, which has a full public disclosure program.

In the interim, property may be deeded out of federal ownership after all necessary remedial actions have been taken, if necessary. In addition, it is possible to lease property for private use prior to complete remediation, so long as the Air Force ensures that the lease does not interfere with its obligations for remediation under CERCLA. Therefore, any portion of George AFB, including presently contaminated property, may eventually be brought into condition for development, either through transfer of title after remedial action is taken or through lease pending remedial action.

- 10.17 **Comment:** Section 3.3.3 states that the type of hazardous wastes found are solvents, petroleum products and various solid wastes when current information indicates other types of contaminants, such as radioactive material, munitions, paints may be present. (28-23)

**Response:** Table 3.3-2 describes in greater detail the type of wastes found or thought to be in existence at each site. The wording of Section 3.3.3 has been changed to reflect the small amounts of radioactive, munitions, paints, acids, and medical wastes that are present at George AFB IRP sites.

- 10.18 **Comment:** Section 3.3.3.1, Northeast Disposal Area, inaccurately states that the contamination is confined to the Upper Aquifer, and contains a conflicting statement about the presence of benzene in the groundwater. (28-25)

**Response:** The text of Section 3.3.3.1 has been changed to correct the conflicting statement and clarify the extent of contamination.

- 10.19 **Comment:** The EIS indicates that the levels of radioactivity found in the Southeast Disposal Area near the radioactive disposal site are equivalent to "background" levels even though this has not been substantiated with validated data. (28-26)

**Response:** As stated in Section 3.3.3.3, the levels of radioactivity are "likely the result of natural occurrences in the area". This conclusion is drawn from the best available data. The Air Force will be doing additional testing in the area and the data from that testing will go through the "validation" process as required to ensure all statistical review and equipment calibration requirements are met.

- 10.20 **Comment:** Tiered site- and project-specific environmental analyses and documentation should be seriously considered for future development actions. (28-32)

**Response:** The Air Force will conduct analyses under the CERCLA process in its IRP activities at contaminated sites. Future development plans and actions of the transferee may be subject to requirements for environmental analyses by the transferee under CEQA. However, such development plans generally would not be subject to further Air Force environmental analyses under NEPA.

- 10.21 **Comment:** The IRP is vital for groundwater protection for the area. California law allows redevelopment agencies to be exempt from the cost of hazardous material cleanup activities. This exemption should not allow the Air Force to be absolved of responsibility for hazardous material cleanup which might be discovered subsequent to conclusion of the George AFB Restoration Program. (19-7)

**Response:** As discussed in Section 3.3.3, the Air Force has a continuing responsibility under CERCLA 120h for all cleanup activities associated with past practices of the Air Force at George AFB.

## **11.0 SOILS AND GEOLOGY**

- 11.1 Comment:** The EIS fails to include a detailed, site-specific seismic hazard analysis and earthquake ground motion expected. (6-102, 20-25)

**Response:** Section 3.4.1.2 describes the seismic conditions of the region, the ROI, and the base specifically, thus alerting the reader to potential seismic hazards in the vicinity.

A site-specific risk analysis is not required for the Air Force action of property disposal. The conforming guidelines followed by the high desert region of San Bernardino County do not go beyond those of the Uniform Building Code (UBC). Upgrade to meet current seismic codes are required only for major additions or alterations and do not extend to the existing building, as long as the addition or alternative does not cause the existing building or structure to be in violation of any of the provisions of the UBC.

In addition, buildings in existence at the time of the adoption of the UBC have their existing use or occupancy continued, if such use or occupancy was legal at the time of the adoption of the UBC. A revision has been made to the text in Section 4.4.1.1 to reflect the extent to which UBC provisions would apply to the Proposed Action and alternatives.

## **12.0 WATER RESOURCES**

- 12.1** Comment: Contrary to Section 4.4.2.2, less than 50 percent of the International Airport Alternative's airfield area will be overlain by asphalt, concrete, or other hardscape. The majority will be left in as a natural state as possible, depending on drainage flow requirements. (2-77, 6-83)

Response: The EIS presents a probable case based on design of airfields in arid climates where turf establishment is not a viable alternative for erosion control.

- 12.2** Comment: The EIS should review the effect of the berm that has been constructed to protect George AFB from floods and which is presently constricting the Mojave River to a much narrower channel east of the former channel. (9-2)

Response: The berm in question was examined in the field and appears to be a structure constructed in the mid-1970s by the San Bernardino County Flood Control District (FCD) on land owned by the FCD off the base. A barrier to vehicles traveling along the top of the berm appears to have been installed recently. Since the main flow channel of the Mojave River (indicated by a line of cottonwoods lining the streambed) is approximately 250 yards to the east of the berm, the berm does not appear to affect any flows. Only an extremely high flow would reach this berm, and no evidence of any erosion or stream flow redirection is present.

- 12.3** Comment: The EIS does not adequately address impacts on Mojave River system water supplies, especially impacts on downstream users, including the city of Barstow. (18-1)

Response: The EIS does contain information on the use of water under the alternatives analyzed.

- 12.4** Comment: Due to the potential impacts from water useage, the ROI should be increased to include the entire Mojave River System. (18-2)

Response: The ROI chosen for this analyses was the Upper Mojave Basin because 95 percent of the population in the ROI resides in this area. A text change has been made in Section 4.4.2 to discuss impacts in the entire Mojave River System.

- 12.5** Comment: The EIS states in Section 3.4.2.3, "Based on Pirnie (1990), water budget calculations estimated that the Upper Mojave Basin will have to import approximately 56,000 af/yr by the year 2010." The EIS should explain how the reuse alternatives will meet this demand and still allow adequate water supplies to the remainder of the system. (18-3)

Response: As discussed in Section 1.2, the focus of this EIS is property disposal. Section 3.4.2.3 states that for the alternatives analyzed to be supportable, utilities (including water) will have to be obtained from some source. This is an issue (or issues) which will need to be worked by the developer after Air Force transfer of the property.

- 12.6** Comment: The EIS should address the quantity of potential runoff increases for a 50, 100, 500 year flood for the length of the Mojave River. (18-5)

Response: Text changes have been incorporated to reflect the comment.

12.7 **Comment:** The EIS should address the downstream impacts of increased runoff on erosion. (18-6)

**Response:** Text changes have been incorporated to reflect the comment.

12.8 **Comment:** The EIS should address the water quality implications of increased runoff on both surface and groundwater downstream. (18-7)

**Response:** Text changes have been incorporated to reflect the comment.

12.9 **Comment:** The EIS must analyze the cumulative effects of further urbanization in the Upper Mojave River water basin, and the effect this will have on water supplies in the region. (18-8)

**Response:** Increased demand associated with the rapid regional growth has been taken into account in the analysis.

12.10 **Comment:** Section 3.4.2.3 of the EIS indicates that "...some of the groundwater withdrawn from the basin is returned through deep percolation due to irrigation, wastewater filtration plants, and lakes, the actual loss of groundwater from the basin is assumed to be about 45 percent of production." Please provide studies to support this statement. (18-9)

**Response:** The text has been revised to include a reference to the 1990 Mojave Water Agency Master Plan. Studies supporting this statement are now cited as reference documents and referred to in the text.

## **13.0 AIR QUALITY**

- 13.1** Comment: The pollutant emission figures in Section 4.4.3 indicate that the International Airport Alternative will generate substantially greater amounts of emissions. However, the other alternatives do not account for the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emissions source in the region. (2-78, 6-84)

Response: The pollutant emission figures in Section 4.4.3 reflect emission increases associated with all aspects of potential reuse, including growth in residential, commercial, and industrial land use areas. Information on the breakdown of increased emissions for each alternative by source category is contained in Appendix L. The reuse alternative inventories were developed from existing inventory information and may not reflect the specifics of the eventual reuse scenario. However, given the present conceptual stage of reuse alternative development, the inventory information is considered to be adequately representative of the expected emission increases.

- 13.2** Comment: The EIS does not discuss air quality impacts on the city of Adelanto or other incremental air quality impacts. (20-26, 21-6, 21-8)

Response: The EIS includes a comprehensive analysis of air quality impacts from individual sources in Section 4.4.3. It also discusses air quality impacts from each alternative on the Southeast Desert Air Basin. Community specific impacts are not included as the analysis is based on conceptual planning. As development occurs local regulatory authorities will be able to predict with resolution not possible at this time what the effects may be for different sectors of the Victor Valley. This resolution is not possible at this time due to the speculative nature of all alternatives.

- 13.3** Comment: The EIS does not adequately address all potential air quality impacts resulting from the reuse alternatives, which have the potential to create substantial direct and indirect criteria pollutants, particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and toxic emissions from several air pollution sources. (21-1, 21-3, 21-4, 21-7)

Response: Unfortunately, the level of detail requested pertaining to emission sources is not available and will not be available until reuse plans are more established. Such plans will only become available after entities other than the Air Force control the properties that comprise George AFB. As this EIS is a part of that evolutionary process, data requested will not be forthcoming in this document. The EIS does attempt, based on the limited data available from the conceptual planning done for the alternatives, to quantify the impact of anticipated air sources by air modeling and add that to existing air quality data. The models use statistical information from like land uses to predict the case in the Victor Valley with redevelopment of George AFB. The models use the precursors of PM<sub>10</sub>, reactive organic gases (ROG), and nitrogen oxides (NO<sub>x</sub>) to other criteria pollutants as that is the accepted state of air modeling for such a large ROI based on the data available on which to do the analysis. More specifics than what is presented within the EIS prior to any preliminary design of facilities by a developer having obtained use of a land parcel is difficult.

- 13.4** Comment: The alternatives should include a discussion of emissions from stationary equipment such as internal combustion (IC) engines and distillate fuel generators for aircraft operations, National Guard activities, and fire protection operations. (21-2)

Response: Stationary emissions from aircraft using the airfield are accounted for in the modeling. The steep slope of the graph for the International Airport's ROG emissions in Figure 4.4-2 starting

In 2003 is due to increased ground queue times by civilian aircraft operating on a crowded airfield. Currently, there is no active military or California Air Guard traffic anticipated in George AFB reuse.

- 13.5 **Comment:** The EIS does not address cumulative air quality effects associated with the reuse alternatives. The alternatives are growth inducing, which will result in increased population and employment in the Victor Valley and ROI. Therefore ensuing population and employment growth will result in substantial increases of mobile, area, indirect, and stationary source emissions in the District. (21-5)

**Response:** Air quality models used in the preparation of the EIS accounted for growth induced emissions occurring as a result of population, peripheral development, and utility useage growth associated with all the alternatives beyond normal predictions for growth.

- 13.6 **Comment:** Ground disturbances resulting from implementation of the any of the reuse alternatives will generate significantly higher levels of fugitive dust emissions from all construction and operation activities associated with the proposed development (e.g. residential, commercial, and industrial). Additionally improvements to existing infrastructure will further exacerbate fugitive dust emissions. (21-9)

**Response:** The effects of each of the proposed reuse alternatives on fugitive dust emissions is discussed in Section 4.4.3 of the EIS.

- 13.7 **Comment:** To adequately address the level of significance of air quality impacts that may result from the reuse alternatives, all potential sources of air pollution should be identified, and such emissions quantified using a worst case scenario. Furthermore, the intensity of the impact after the above determination will depend on, but not be limited to, the type and number of construction equipment, hours of construction and aircraft operations, the number of construction and airport employees, types of fuel and fuel consumption rates for mobile sources, patron and employee vehicle miles traveled, and vehicle trips. (21-10)

**Response:** The impact on air quality in the Southeast Desert Air Basin could be significant under all alternatives except the No-Action Alternative without a coordinated and aggressive executable action plan for air quality among all levels of government overseeing reuse of George AFB. The analysis in the EIS contains sufficient data to indicate the magnitude of the potential problem and provide the decision maker with needed information.

- 13.8 **Comment:** The recommended mitigation measures do not adequately mitigate all the potential air quality impacts to insignificance. (21-11)

**Response:** Based on information available to the Air Force at this juncture, Section 4.4.3 of the EIS sufficiently addresses mitigation measures to lessen the extent of air quality impacts. There is no legal requirement to mitigate impacts to "nonsignificance."

- 13.9 **Comment:** The EIS should assess cumulative impacts relative to the nonattainment air pollutants that may affect the District's attainment demonstration as outlined in San Bernardino County Air Pollution Control District's (SBCAPCD's) Air Quality Attainment Plan. (21-12)

**Response:** Data presented is best available and provides ability to assess potential nonattainment or attainment based on conceptual planning done to date.

- 13.10 **Comment:** Additional measures will be needed beyond available emission offsets for the various alternatives to adequately mitigate significant air quality impacts. Therefore, specific air quality mitigation measures for all air pollutant sources should be developed. It is recommended that George AFB and SBCAPCD staff initiate and establish a working group for the purpose of identifying potential air quality impacts and appropriate mitigation measures. (21-13, 12-15)

**Response:** The Air Force endorses the formation of a working group for the purpose of identifying potential air quality impacts and appropriate mitigation measures among the local governmental agencies that will oversee the civilian development of George AFB. The Air Force, however, should not be looked at to be a founder of such a group. The affected community may wish to encourage such a group's formation and agenda. The Air Force will provide information as requested.

- 13.11 **Comment:** Unavoidable air quality impacts should be fully discussed and justified to demonstrate and disclose adverse air quality effects from the alternatives. (21-14)

**Response:** See response to Comment 13-10.

- 13.12 **Comment:** The EIS does not discuss air quality impacts to the Los Angeles (L.A.) Basin. The Santa Ana winds cleanse the L.A. Basin. If the air quality decreases in the Victor Valley area the Santa Ana winds will draw this air into the L.A. Basin, decreasing its air quality. (25-1)

**Response:** The California Air Resources Board (ARB) has published a document titled *Proposed Identification of Districts Affected by Transported Air Pollutants which Contribute to Violations of the State Ambient Air Quality Standard for Ozone* (1989). In the document the ARB states that no research has been conducted to date on the potential for adverse transport from the Southeast Desert Air Basin. The ARB concluded that this question should be looked into further when more data are available.

- 13.13 **Comment:** The EIS does not discuss air quality impacts resulting from the additional air passenger and traffic in the South Coast Air Basin should the International airport not be built, requiring passengers to use already overcrowded airports. (1-24)

**Response:** These impacts are discussed in the document as part of the closure baseline.

- 13.14 **Comment:** The EPA does not believe the EIS has demonstrated compliance with Section 176(c) of the Clean Air Act, which requires federal agencies to assure that actions conform to an approved implementation plan and will not cause or contribute to any new violation of any standard, increase the frequency or severity of any existing violation, or delay timely attainment of standards. (28-10, 28-38)

**Response:** To what extent the conformity provision in Section 176(c) apply to base closure and associated property disposal actions is unclear. It is also premature to state that disposal of George AFB and potential indirect effects of reuse would not conform to an approved implementation plan. The Air Quality Attainment Plan for the San Bernardino County portion of the Southeast Desert Air Basin has not yet been approved. Except for ensuring the Air Force's IRP responsibilities are fulfilled, the environmental impacts associated with reuse activities are beyond the Air Force's supervisory control and thus not reasonably quantifiable for purposes of a conformity determination. Potential mitigation measures that may be implemented by the reusers to lessen air quality impacts pursuant to regulations and permit conditions issued by the air pollution control district or EPA are also beyond the Air Force's supervisory control.

- 13.15 **Comment:** A commitment to mitigate for potential air quality impacts is required in advance of project initiation. (28-11)

**Response:** The Air Force is not required to make air quality mitigation commitments concerning the reuse and development projects after property disposal. The reuse and development of George AFB after disposal is not an Air Force project nor subject to Air Force supervisory control. Requiring any necessary mitigation measures for potential air quality impacts is within the jurisdiction of the state and federal agencies with regulatory authority over the post-disposal reuse and development of George AFB.

- 13.16 **Comment:** An interagency agreement or Memorandum of Understanding (MOU) should be developed to ensure compliance with the Clean Air Act and timely state of California submittal to EPA of adequate attainment plans similar to the one for Pease AFB, New Hampshire. (28-12, 28-42)

**Response:** The Air Force encourages EPA Region IX, the state of California and a redevelopment agency or agencies for George AFB to develop an understanding of how local redevelopment of George AFB can best meet environmental objectives. EPA Region IX and the state of California may desire to take on negotiations similar to those conducted between the state of New Hampshire and EPA Region I.

- 13.17 **Comment:** The increase in traffic combined with increased traffic generated by other regional reuse actions could generate a significant cumulative impact to air quality. (28-34)

**Response:** The California Clean Air Act requires severe nonattainment areas to have no net increase in vehicle emissions after 1997 (Health and Safety Code 40920(a)(2)). The primary control strategies currently being developed and implemented by the state and local air districts to reduce mobile source emissions include measures to reduce tailpipe emissions, the use of clean, less-polluting fuels, and reducing the number and length of vehicle trips. These strategies, in combination with programs such as ridesharing, work week reductions and flextime, parking management, transit improvements, and growth management, are expected to be successful in counteracting the effects of increased mobile source activity associated with economic and population growth, including increased vehicle activity associated with reuse actions.

- 13.18 **Comment:** EPA requests additional information on the Air Force's Emissions and Dispersion Modeling System (EDMS) in order to compare it to their approved models. (28-39)

**Response:** Information on the EDMS model has been provided to EPA Region IX.

- 13.19 **Comment:** Any ozone analysis should be of projected emissions. (28-40)

**Response:** Ozone was analyzed in terms of the projected amounts of ROG and NO<sub>x</sub> which would be generated by the reuse alternatives (Section 4.4.3). ROG and NO<sub>x</sub> are considered to be the primary precursors to ozone formation.

- 13.20 **Comment:** The EIS should address the consistency of projected emissions with the California Clean Air Act attainment plan and provide a full description of modelling assumptions. (28-41)

**Response:** Consistency of project emissions with the attainment plans of the San Bernardino County Air Pollution Control District is fully described in Section 4.4.3 of the EIS. Descriptions of the assumptions used for the EDMS modeling are also provided in Section 4.4.3.

- 13.21 **Comment:** The EIS should describe existing George AFB emission credits and address the issue of credit transfer. (28-45)

**Response:** The SBCAPCD does not have any rules or regulations governing the creation or banking of Emission Reduction Credits (ERCs). The district is currently preparing such rules to govern the calculation and banking procedures; these rules are expected to be approved by EPA in 1992. In discussing the proposed rules, the district has stated that it may be possible to transfer ERCs when the source of the ERCs is sold or transferred.

- 13.22 **Comment:** The air quality cumulative impacts analysis should consider the effects of road improvements plus the shifting patterns of land use which could adversely impact local air quality characteristics. (28-46)

**Response:** The Air Force is aware of a widening of U.S. 395 in the ROI; however, no planning for widening of I-15 is currently being worked by Caltrans. Potential impacts of road projects which are in planning have been addressed by the EIS. The EIS also considers the effect of the accelerated development of the High Desert due to reuse of the George AFB properties.

## **14.0 NOISE**

- 14.1** Comment: Figure 4.2-2 shows a 65dB noise contour. What fleet mix and activity level has been utilized? (2-62, 6-68)

Response: This information is included in Appendix J.

- 14.2** Comment: Table 4.4-18 does not reflect city of Adelanto policy regarding land use, zoning, or compatibility with the International Airport. (2-79, 6-85)

Response: The population affected is based on current residential patterns without in-migration due to zoning or out-migration due to future actual land use changes.

- 14.3** Comment: Once an airport layout plan has been approved for the Proposed Action, a study will need to be conducted to implement portions of Title I of the Aviation Safety and Noise Abatement Act of 1979. It would be helpful to reviewers if this information could be summarized in the Final EIS. (17-1)

Response: As discussed in Section 1.2, the FAA will determine the necessity of the FAR Part 150 study during the ALP review process.

- 14.4** Comment: The EIS does not examine the extent and magnitude of noise levels generated by the reuse alternatives on the city of Adelanto. (20-27)

Response: Chapter 4 provides sound exposure levels at noise-sensitive receptors in the Victor Valley.

- 14.5** Comment: Measures for mitigating aircraft generated noise may be of use in mitigating traffic generated noise, such as sound attenuation built into structures and modification of traffic patterns. (28-50)

Response: Text changes have been incorporated into the document to address the comment.

## **15.0 BIOLOGICAL RESOURCES**

- 15.1** Comment: "Degradation" of wetlands and other resources need to be further defined. (2-7, 6-14)

Response: Degradation could mean a range of effect from complete loss of a resource to minimal impact based on the environmental attribute affected for the alternative under review.

- 15.2** Comment: The EIS fails to analyze the alternatives' impacts on flora and fauna in the area or provide detailed mitigation measures to reduce these potential impacts of significance. (6-103, 20-28, 28-49)

Response: The EIS analyzes impacts to federally listed threatened and endangered species and other species of concern occurring on or near George AFB (see Appendix K) as well as sensitive habitats in Section 4.4.5, Biological Resources. Mitigations are included, where possible, in Section 4.4.5.

- 15.3** Comment: The Department of Fish and Game and U.S. Fish and Wildlife Service (USFWS) have indicated that underflow of the Mojave River is essential to the support of downstream aquatic and riparian flora and fauna. The EIS does not address impacts upon downstream habitat or species, such as the officially listed endangered Mojave tui chub. (18-4)

Response: The EIS/EIR for the future use of the property is the most appropriate document for analyzing specific impacts of this nature.

## **16.0 CULTURAL RESOURCES**

- 16.1** Comment: The EIS does not consider non-renewable paleontologic resources. Prior to new development within the base, a qualified vertebrate paleontologist must conduct a field assessment to determine if excavation will impact non-renewable paleontologic resources. (12-1)

Response: Section 3.4.6.4 states, "No significant paleontological resources have been identified or recorded in the George AFB environs."

## **17.0 SOCIOECONOMIC IMPACT ANALYSIS STUDY**

- 17.1** Comment: If the Socioeconomic Impact Analysis Study (SIAS) has been referenced in the EIS, a copy (appendix) should be made available to the public and affected agencies. (2-54, 6-60)

Response: Copies of the SIAS were made available to the public and affected agencies. Copies were also sent to libraries in the affected area.

- 17.2** Comment: The EIS fails to adequately address the socioeconomic impacts of closure and reuse of George AFB on the city of Adelanto. (20-29)

Response: As stated in Section 1.2, the EIS analyzes socioeconomic impacts of disposal and reuse of George AFB only to the extent the those impacts affect the natural or physical environment. The SIAS presents a more detailed analysis of socioeconomic impacts.

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UNITED STATES AIR FORCE  
PUBLIC HEARING  
ON  
DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR  
DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE

Held

Thursday,  
October 17, 1991

At

Victorville, California

7:00 p.m.

HEARING OFFICER  
Col. WILLIAM THOMPSON

Reporter: Ralph Cogswell  
For: Audrey Johnson, Reporter

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PROCEEDINGS

COL. THOMPSON: I would like to begin the hearing. Good evening. This is the public hearing on the Draft Environmental Impact Statement for the disposal and reuse of George Air Force Base, California. I am Col. William Thompson. I will be the Presiding Officer for tonight's meeting.

This hearing is being held in accordance with the provisions of the National Environmental Policy Act and implementing regulations. The Act requires that Federal agencies analyze potential environmental impacts of certain proposed actions and alternatives, and also requires those Federal agencies to consider the findings of those analyses in deciding how to proceed.

On the 29th of October of 1990, a scoping meeting was held at the Holiday Inn here in Victorville, to receive input on the scope of the Environmental Impact Statement or "EIS." Since that meeting, the Air Force has studied the identified environmental concerns and has prepared and distributed a draft of the Environmental Impact Statement.

The purpose of tonight's hearing is to receive your comments, your suggestions, and your criticisms of that Draft Environmental Impact Statement. For those of you who have not had an opportunity to review the Draft EIS, you may want to read the summary of the major findings of the EIS that is

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available in the handout that's available immediately outside in the hallway. Those findings will also be addressed by the panel members tonight in their presentations to you.

Now before I introducing the other members of the panel who are before you, I'd like to explain to you a little bit about what my role is going to be in this particular hearing. I am a Military Judge. I serve full time as the Chief Circuit Trial Judge of the Air Force Judiciary for the western United States; and my normal duties involve presiding in criminal cases. Therefore, it's sort of a nice change for me to be able to preside in a non-criminal, public proceeding.

I would like for you to understand that I am not here as an expert on the Draft Environmental Impact Statement. I have not had any connection with the development of that document. I am not here to act as the legal advisor to the Air Force representatives who will address the proposals. My purpose is to preside as I would in any other type of judicial proceeding, to insure that we have a fair and orderly hearing, and to insure that all of those people who wish to speak will have an opportunity to be heard.

I would like to introduce to you now the members of the Public Hearing Panel. To my immediate right is Mr. John Smith, who is representing the Air Force Base Closure Office at the Pentagon. He will describe the Air Force Base

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1 disposal process. Seated to Mr. Smith's right is Maj. Mary  
2 Vroman. Maj. Vroman is the Deputy Director of the  
3 Environmental Division of the Air Force Regional Civil  
4 Engineer's Office at Norton Air Force Base, California. She  
5 will brief you on the environmental impact analysis process,  
6 and she'll also summarize the results that are reported in  
7 the Draft EIS.

8 This informal meeting is intended to provide a  
9 continuing public forum for two-way communication about the  
10 Draft EIS, with a view to improving the overall decision-  
11 making process.

12 Now, you'll notice that I have referred to two-way  
13 communication. In the first part of the hearing process, our  
14 most knowledgeable individuals will brief you on the details  
15 of the actions and the anticipated environmental impacts.  
16 The second part of the process will give you an opportunity  
17 to provide information, and to make statements for the  
18 record. Your input ensures that the decision makers may  
19 benefit from your knowledge of the local area and any adverse  
20 environmental effects that you think may result from the  
21 proposed action or alternatives.

22 Let me also indicate to you what this hearing is not  
23 going to be. It will not be a debate, nor will it be a  
24 referendum, nor will it be a vote on the alternative actions  
25 that are analyzed in the Environmental Impact statement.

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1 These things don't add anything to the hearing, and they  
2 simply waste your time that's available to you for your  
3 making your personal input in to the decision-making process.  
4 Comments on non-environmental issues should not be raised at  
5 the hearing.

6 Now, when you came in tonight, you were provided with  
7 an attendance card; and you were asked to indicate on that  
8 card if you wish to speak tonight. After Maj. Smith, I'm  
9 sorry, Mr. Smith and Maj. Vroman have finished their  
10 presentations, I'm going to recognize the elected officials;  
11 give them an opportunity to speak. When that presentation  
12 by the elected officials has been completed, then I will  
13 declare a recess. Now, during that recess, I'm going to  
14 collect the other requests to speak and then I will take  
15 those requests to speak in a random order. I will recognize  
16 individuals from the audience to speak based on that random  
17 order.

18 Now, for those of you who have not filled out a card  
19 and indicated that you wish to speak but you decide that you  
20 want to do that later on, please fill out a card and make  
21 sure that you give it to the Air Force representatives who  
22 are outside. They will get those cards to me, and I will be  
23 interested in recognizing as many people who want to speak  
24 as I possibly can.

25 If you don't feel like standing up tonight and making

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1 a statement orally, you do have until the 11th of November  
2 of this year to submit a copy of your statement for the Air  
3 Force's consideration prior to publishing the final  
4 Environmental Impact Statement. The Air Force will continue  
5 to accept comments after the 11th of November, but the Air  
6 Force cannot guarantee that late comments will be included  
7 in the final Environmental Impact Statement. Special sheets  
8 are provided for you at the entrance for your use in  
9 providing those comments. Even if you make comments tonight,  
10 remember that you still have until the 11th of November to  
11 submit additional written comments to the address that is  
12 shown on the slide that you see in front of you and also  
13 shown on the comment sheets.

14 Now, whether your statement is made verbally, or  
15 submitted in writing either tonight or later, the statement  
16 will have the same impact and will be considered to the same  
17 extent; so if you don't feel like speaking tonight, you can  
18 be assured that your comment will carry equal weight and be  
19 given equal consideration regardless of whether you speak  
20 tonight or you submit your comment in writing.

21 Don't be shy or hesitant to make a statement. I want  
22 to ensure that everyone who wants to speak tonight has a fair  
23 and equal chance to be heard. You may have noticed that to  
24 your right, we have a table with a Court Reporter. We have  
25 two Court Reporters tonight, Ralph Cogswell and Judy Smith.

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1 It's going to be their responsibility to take down verbatim  
2 everything that's said tonight. Their verbatim record will  
3 become a part of the final Environmental Impact Statement.  
4 They will be able to make that complete record only if they  
5 can hear you and understand what you say. Now, with that in  
6 mind, let me set forth for you some ground rules; and I'll  
7 ask for your cooperation in enforcing those ground rules so  
8 that we can ensure that everybody has an equal opportunity  
9 to be heard and so that we can be sure that everything that  
10 is presented tonight is adequately and accurately reflected  
11 in the final transcript of the proceeding.

12 Speak only after I recognize you. Please address your  
13 remarks to me. If you do have a written statement, you may  
14 place it in the wooden box that's at the end of this table  
15 in front of Maj. Vroman.

16 You may read that statement within the time limit that  
17 I'm going to describe to you in just a moment, or you may  
18 read it and also deposit it in the box; and it will be  
19 considered in both areas.

20 Please speak slowly and clearly and use the microphone  
21 that has been provided to the podium to your left. I would  
22 ask that when you start speaking, you state your name,  
23 address, and the capacity in which you are speaking. If you  
24 are a public official, designated a representative of a group  
25 or you are just speaking as a concerned citizen, that will

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1 help our Court Reporter prepare a professional transcript of  
2 the hearing tonight.

3 Each person is going to be recognized for five minutes;  
4 that includes everyone who speaks tonight. I have asked that  
5 Sergeant Carlos assist us in timekeeping. Now, he's going  
6 to be present down in the front row; and your time is going  
7 to begin to run from the time that you begin to speak.  
8 You're going to have five minutes to speak. He's going to  
9 have a couple of cards. He'll have a yellow card that he  
10 will raise at four and a half minutes; and that's your  
11 indication to wind up your remarks. He will also at the  
12 five-minute point, raise a red card; and that's your signal  
13 to stop. I'll give you a reasonable time to finish and  
14 that's not going to be very long because, again, I want to  
15 make sure that as many people as possible have an opportunity  
16 to make their input.

17 Please honor any request that I make for you to stop  
18 speaking. If you have more comments than you will be able  
19 to present in your five minutes that are allocated to you,  
20 please prioritize your comments and ensure that your most  
21 important comments are addressed first.

22 I would ask of you that you be courteous to other  
23 people; that when someone else is speaking, please don't  
24 speak yourself. Give them an opportunity to be heard. I am  
25 only going to recognize one person at a time. And there is

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1 no smoking here in the hearing room.

2 I would appreciate your cooperation in abiding by all  
3 these rules. We're going to monitor the times, and we're  
4 going to do everything within my power and with the power of  
5 the others here to make sure that everyone who wants to make  
6 a comment will have an opportunity to be heard.

7 Again, the objective of this hearing is to give you a  
8 reasonable opportunity to be heard.

9 One thing I can't stress enough to you is that you may  
10 have information about the environmental impacts which are  
11 unknown to us. We are very interested in having and  
12 analyzing all the potential environmental impacts of the  
13 proposed action as well as the alternatives. You have  
14 experience that comes from living in an area, so the second  
15 part, your opportunity to participate, is an important part;  
16 and the information that you give us is important. Again,  
17 encourage you to be a part of the proceedings.

18 Again, you may speak tonight, you may also submit a  
19 statement in writing either tonight or at any time prior to  
20 the 11th of November. The statement should be mailed to the  
21 address shown in the booklet and comment sheets, the address  
22 that has already been shown to you on the screen. Regardless  
23 of whether you make your statement tonight for the record,  
24 or you mail it in, or you hand it in tonight, all of the  
25 statements and all the information that you give us is going

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1 to be carefully considered. It's going to have equal weight,  
2 and it will be given the same degree of careful  
3 consideration.

4 I do thank you for coming tonight. Your presence is  
5 commendable in that it reflects an interest in your community  
6 and the actions that affect your community. I assure you  
7 that your interest is the primary purpose in our being here.  
8 It's now my pleasure to introduce Mr. John Smith. And, Mr.  
9 Smith will describe for you the Air Force Base Disposal  
10 Process.

11 MR. SMITH: Thank you Col. Thompson. Good evening.  
12 My name is John Smith. I'm from an office in the Pentagon  
13 created to manage the disposal of Air Force bases closed  
14 under the authorities the two Base Closure and Realignment  
15 Acts. In discussing the Air Force's proposed action of  
16 disposing of George Air Force Base, I'd like to cover four  
17 general topics.

18 First is the disposal planning; second, is the  
19 objective used by the Air Force to guide its planning; third,  
20 is the disposal considerations the Air Force will use to  
21 arrive at a decision; and finally, the decision itself. That  
22 decision is what actions the Air Force will take based on the  
23 findings of the EIS and other considerations.

24 The Secretary of the Air Force has been delegated  
25 authority to act as the Federal Disposal Agent under the 1988

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1 Base Closure and Realignment Act and will be delegated  
2 similar authority under the Defense Base Closure and Realignment  
3 Act of 1990. That authority is to utilize or dispose  
4 of Federal property which makes up the Air Force's closing  
5 bases. Usually, this responsibility rests with the  
6 Administrator of General Services. Despite this change,  
7 however, the traditional disposal statutes for disposal of  
8 Federal property are still in force, and the Air Force must  
9 adhere to the laws and the GSA Regulations that are in place  
10 at the time of the passage of the Closure Acts.

11 Additionally, the Air Force has issued additional  
12 policy and procedures required to implement our delegated  
13 authority.

14 Another provision of both acts requires us to consult  
15 with the State Governor and the heads of local Governments  
16 for the purpose of considering any plan for the use of such  
17 property by the local community concerned. We are meeting  
18 part of that consultation requirement by working with the  
19 Victor Valley Economic Development Authority and the City of  
20 Adelanto. However, at other closure bases, we work with only  
21 one entity empowered to act on behalf of the State. We would  
22 prefer that arrangement.

23 Working with a single entity's comprehensive plan  
24 ensures better overall efficiency and cooperation which we  
25 believe leads to quicker economic regeneration of the area

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1 affected by the closure of the installation. Otherwise the  
2 Federal Government may be placed in a position of making  
3 important disposal decisions with significant local consequences by choosing between competing community interests.  
4 Therefore, we encourage VVEDA and the City of Adelanto to  
5 consider the benefits of reconciling their plans, and we urge  
6 you to continue a dialogue that -- to that end for the  
7 communities' benefit.

8 Finally, our planning process recognizes that the  
9 Secretary of the Air Force has full discretion in determining  
10 how the Air Force will dispose of the property.

11 The Air Force recognizes the significant economic  
12 impact the closure will have the local communities. It's the  
13 Air Force's goal to complete the closures as quickly and  
14 efficiently as possible as mentioned during the previous  
15 slide. We are in the process of developing a comprehensive  
16 plan which attempts to balance the needs of the community  
17 with the needs of the Air Force.

18 The Air Force is committed to assisting the communities  
19 in their efforts to replace the departing military activities  
20 with viable public and private enterprises; however, Congress  
21 only provided start-up capital for the implementation of the  
22 realignments and closure of the military installations; and  
23 revenues from property sales of the installations is needed  
24 to offset the funding shortfall.

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1 The disposal of property is accomplished in a three-  
2 part planning process which includes the Air Force's preparation  
3 of the Environmental Impact Statements which we are  
4 discussing tonight, that analyzes the various reasonable  
5 disposal and Reuse Alternatives for the base, the community's  
6 plan or plans for the future use of the property, and the Air  
7 Force's disposal plan which analyzes the various disposal  
8 options.

9 The disposal plan is based on a thorough real estate  
10 analysis of the base and the region, information from the  
11 EIS, interest shown by other Federal agencies, and inputs  
12 from the community reuse organizations. The EIS process  
13 culminates with the issuance of a record of decision, which  
14 documents the disposal decisions for the real property and  
15 specifies what environmental mitigation may be needed to  
16 protect human health and environment as a result of the  
17 disposal and reuse decisions selected.

18 Under current law, other Federal agencies and homeless  
19 assistance providers must be given priority consideration in  
20 the use and acquisition of excess base real property. It is  
21 the Air Force policy to inform the local community representatives of any expressed interest from Federal agencies or  
22 homeless assistance providers. We encourage all parties to  
23 communicate openly with each other during the disposal planning process.

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1 Some typical examples of Federal agency transfers  
2 include use of facilities to meet agency mission requirements  
3 such as a regional office of the U. S. Department of  
4 Transportation or the Department of Interior. It should be  
5 noted that Federal agencies generally work with the community  
6 to solicit support for their proposal to acquire property;  
7 moreover, it has been the Air Force's experience that such  
8 uses for a portion of the property and facilities can be  
9 accommodated within the overall community planned future uses  
10 for the entire base.

11 In general, the disposal options are: Federal Agency  
12 transfers; public benefit conveyance to states, their political subdivisions and eligible non-profit institutions;  
13 negotiated sales to public agencies; and competitive sales  
14 to the general public. The law and regulation governing  
15 disposal do not establish rigid priority for disposal but  
16 provides the Federal Disposal Agent with the broad discretion  
17 necessary to insure that all Federal real property interests  
18 are disposed of in an efficient and effective manner; therefore, the Secretary of the Air Force will decide on the  
19 actual disposal plan. The final disposal decisions will be  
20 documented in a record of decision.

21 Thank you for the opportunity to meet with you this  
22 evening. I'd like to turn the meeting back to Col. Thompson.

23 COL. THOMPSON: Thank you, Mr. Smith. I now present

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1 Maj. Mary Vroman who will brief us on the environmental  
2 process.

3 MAJ. VROMAN: Thank you Col. Thompson. Good evening.  
4 I'm Maj. Mary Vroman from the Air Force Regional Civil Engineers Office at Norton Air Force Base, California. Our  
5 organization is conducting the environmental impact analysis  
6 process for the disposal and reuse of George Air Force Base,  
7 as well as for the other four installations mandated to close  
8 during Round 1 under the Base Closure and Realignment Act.

9 Tonight I will present the schedule for this  
10 environmental impact analysis process, and show how the  
11 public comment period fits into this schedule. I'll also  
12 discuss the scope of the study and the relationship between  
13 the Environmental Impact Statement and the socioeconomic  
14 study. Last, I will present the results of our analysis by  
15 resource category.

16 This environmental effort was initiated on February 8,  
17 1989, with the publication in the Federal Register of a  
18 Notice of Intent to prepare an Environmental Impact Statement  
19 for base closure. The notice indicated that George Air Force  
20 Base, California, was being studied for closure and disposal  
21 as required under the Base Closure and Realignment Act.

22 Following this, a scoping meeting was held in March of  
23 1989. An Environmental Impact Statement was completed in  
24 May of 1990, and the closure record of decision was published

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in June of that same year. On September 28, 1990, the Notice of Intent to prepare an Environmental Impact Statement for disposal and reuse was published in the Federal Register.

A scoping meeting was held on October 29, 1990, to receive public input on the scope of issues to be addressed in the Environmental Impact Statement and to identify Reuse Alternatives and significant issues related to disposal. During the scoping process, our office received reuse proposals for the establishment of a commercial airport, an international airport, and a general aviation center. As a result of this input, the Federal Aviation Administration, Western Pacific Region, was invited, and subsequently agreed, to become a cooperating agency in the preparation of this Environmental Impact Statement. The Air Force has worked with the Federal Aviation Administration to include their environmental requirements in the Environmental Impact Statement.

Following the scoping period, during which we received input and reuse plans from the public and from the Victor Valley Economic Development Authority and the City of Adelanto, we collected the necessary data and conducted the analysis. The Draft Environmental Impact Statement was filed with the Environmental Protection Agency on September 30 of this year.

In addition to tonight's hearing, written comments on the Draft Environmental Impact Statement will continue to be

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accepted at the address shown on the slide until November 11, 1991. After the comment period is over, we will evaluate all comments, both written and oral, and perform additional analysis or change the Environmental Impact Statement where necessary.

Again, as in the scoping process, equal consideration will be given to all comments, whether they are presented here tonight or received by mail prior to November 11th. Once the review process is complete, we will produce a final Environmental Impact Statement scheduled for completion in March of 1992 and mail it to all those on the original Draft Environmental Impact Statement distribution list. If you are not on our mailing list, you can request a copy by writing to this address. The final Environmental Impact Statement will include comments received during the public review period and our responses to those comments.

If appropriate, we will group comments into categories and respond accordingly. Depending on the number and diversity of comments or the need to conduct additional analysis, the final Environmental Impact Statement may consist of a separate volume as a companion to the Draft or a cover letter and errata sheets. The document will serve as input for the record of decision, which will document the decision made by the Air Force. As you just heard from Mr. Smith, other studies and consideration of other issues besides those

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addressed in the EIS will enter into the final disposal decision. We expect to accomplish the record of decision in late April of 1992.

The Draft Environmental Impact Statement was prepared to comply with the National Environmental Policy Act or NEPA, and the Council on Environmental Quality Regulations. Efforts were made to reduce needless bulk, write in plain language, focus only on those issues that are clearly related to the environment, and to integrate with other documents required as part of the decision-making process. Reuse alternatives that were developed during the scoping process were individually analyzed.

The analysis focused on impacts to the natural environment that may occur as a direct result of Base Disposal and Reuse, or indirectly through changes in the community. Resources evaluated are geology and soils; water, both surface and groundwater; air quality; noise; biological resources, and cultural resources. Indirect changes to the community that provided measures against which environmental impacts could be analyzed included changes to the local population, land use and aesthetics, transportation, and community utility services. In addition, the following issues related to current and future management of hazardous materials and waste clean-up are discussed in the document: hazardous material management, the installation restoration

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program, asbestos, pesticide and herbicide usage, polychlorinated biphenyls or PCBs, radon and medical or biohazardous waste management.

If, as a result of our analysis, it was determined that substantial adverse environmental impacts would occur through implementation of a specific reuse alternative, potential mitigation measures were identified and included in the document.

As I mentioned earlier, this Draft Environmental Impact Statement focuses on the impacts to the natural environment that would occur, either directly or indirectly, from the disposal and reuse of George Air Force Base. The document does not address socioeconomic factors unless there is a relationship between base disposal and changes to socioeconomic conditions that would result in impacts to the natural environment.

Our organization has recently produced a separate socioeconomic study that is not required by NEPA. It describes in greater detail how disposal and reuse of George Air Force Base may economically affect surrounding communities. Specifically, the socioeconomic study addresses the following factors for each of the reuse alternatives: population, employment, housing, public finance, education, government, police and fire, medical, recreation, transportation, and utilities.

Copies of this document were recently provided to key Federal, state and local officials and to libraries in the surrounding communities. This document will also be forwarded to the decision maker.

I would like to discuss the results reported in the Draft Environmental Impact Statement. In general, the document concluded that there would be changes to the base and surrounding communities that could cause both positive and negative impacts to the natural environment. In addition, generally positive effects would be realized in the areas of hazardous materials and waste management.

I would first like to present an overview of the proposed action and alternatives that have been analyzed. Second, I will present a synopsis of the results of our analysis by resource category.

(COLOR SLIDE #1 - PROPOSED ACTION)

This figure shows the land uses for the proposed action. The focus of the proposed action is the reuse and expansion of existing aviation-related facilities to establish a commercial airport and aviation-related industries. Major components of the proposed action include an expanded airfield, aviation maintenance and support areas, and nonaviation related areas to include a commercial office/business park, an industrial/business park, and recreational facilities. Expansion of the aviation-related

facilities would include the acquisition of 2,217 acres off base. Another 135 acres would be acquired for industrial land use. Aviation-related land use areas are indicated in blue on the chart. The commercial area is shown in red. Brown areas identify industrial areas and green areas indicate recreational areas.

(COLOR SLIDE #2 - INTERNATIONAL AIRPORT)

This figure shows the land uses for the International Airport Alternative. This alternative is similar to the proposed action in that it combines similar types of aviation and non-aviation land uses. The difference is the larger size of the airport and related operations. Development of the airport and aviation support facilities would include the acquisition of 8,088 acres of off-base property. Proposed aviation industrial land use would require the acquisition of another 265 acres.

Major components of this alternative include an airfield, aviation support areas, and non-aviation related areas including commercial, general industrial, business park industrial, and aviation industrial facilities. Again, aviation-related land use zones are indicated in blue. The commercial area is indicated in red, and industrial areas are in brown.

(COLOR SLIDE #3 - COMMERCIAL W/RESIDENTIAL)

This figure shows the land uses for the commercial

airport with residential alternative. This alternative is similar to the proposed action in that it would center around a commercial airport. The major differences are the large residential and industrial areas surrounding the airfield and the lack of land acquisition in this alternative.

Major components of this alternative include an airfield, aviation support areas, commercial and industrial areas, medical and educational facilities, and recreation and residential areas. Aviation-related land use areas are indicated in blue. The commercial area is shown in red and industrial areas in brown. Educational facilities are indicated in pink, medical facilities in orange. Recreation areas are indicated in green and residential areas in yellow.

(COLOR SLIDE #4 - GENERAL AVIATION)

This figure shows the land uses for the general aviation center alternative. This alternative focuses upon a variety of private aviation activities all contained within present base boundaries.

Major components of this alternative include an airfield, aviation support areas, a large commercial area, medical and educational facilities, and residential and recreational areas. Aviation-related land use areas are indicated in blue. The commercial area is indicated in red, educational facilities in pink, and medical facilities in orange. Recreational areas are shown in green and

residential areas in yellow.

(Tape Change)

(On the record.)

(COLOR SLIDE #5 - NON-AVIATION)

This figure shows the Non-Aviation Alternative land uses. The focus of the Non-Aviation Alternative is residential, industrial and educational/training land uses. The existing airfield would be reused as surface storage areas, parking, and new development sites. The commercial area is indicated in red, the industrial area in brown, the educational/training area is shown in pink, and the medical facility is in orange. Green areas identify recreational sites, while residential districts are shown in yellow.

(B & W SLIDE #6 - OTHER LAND USE CONCEPTS)

Other land use concepts have been proposed, which are not part of any specific reuse plan, but could be initiated on an individual basis. These land use concepts include Federal transfers and conveyances to non-Federal agencies and private parties. Briefly, these concepts consist of the following:

A request from the Bureau of Prisons, through the U. S. Department of Justice, for 840 acres to be used as a Federal correctional complex. This is shown in Area 1. In Areas Marked 2, transfer of base recreational facilities to the National Park Service for subsequent reuse by a local

jurisdiction. The National Park Service would administer this Public Benefit Program and is not interested in acquiring any of the facilities or property for its own use.

The U. S. Department of Housing and Urban Development, as part of the McKinney Act of 1967, has identified 60 residential units in the Alaska Circle Community as suitable housing for low-income families and individuals and for the homeless. These areas are shown in Area 3.

The Federal Aviation Administration, through the U. S. Department of Transportation, is interested in obtaining the Base Automotive Hobby Shop for use as a garage shown in Area 4.

The U. S. Department of Education has expressed interest in some of the facilities and property on the base on behalf of San Bernardino County and the Adelanto School District. These are shown in Area 5.

San Bernardino County is interested in obtaining one or more of the existing base facilities to house inmates as part of their work Furlough Program. These are shown in Area 6.

Several private medical facilities in the Victor Valley are interested in acquiring the base hospital which is shown in Area 7.

(SLIDE #7 - NO-ACTION)

As required by the National Environmental Policy Act,

the No-Action Alternative was also evaluated. The No-Action Alternative would result in the Air Force retaining control of base property after closure. The property would be closed and maintained in a condition to prevent deterioration. A disposal management team would be provided to ensure base security and maintain the grounds and physical assets, including existing utilities and structures. No other military activities would be performed on this property.

I would now like to present the results of our analysis. The proposed action and all alternatives were analyzed to the same level of detail. The baseline used was George Air Force Base at closure. The following slides show the comparative impacts among the Reuse Alternatives, excluding the No-Action Alternative.

(SLIDE #8 - EMPLOYMENT)

Redevelopment of the base will be beneficial to the regional economy. In addition to the direct jobs on site, a substantial number of indirect jobs will be created throughout the region. These additional jobs will increase regional earnings, income and spending. Employment would be phased over the 20-year redevelopment period.

This graph shows total project employment levels in the Victor Valley through the year 2013. The solid line represents employment trends resulting without any of the redevelopment alternatives occurring. The other lines

represent employment levels resulting from the different alternatives. Total employment increases in the Victor Valley in the year 2013 would range from approximately 12,000 under the Non-Aviation Alternative to approximately 66,000 under the International Airport Alternative.

(SLIDE #9 - POPULATION)

The total population loss, or out-migration, due to closure is estimated to be as high as 16,500 people. It is estimated that the redevelopment activities will lead to population in-migration to the region. The largest number of people are expected to locate in the Victor Valley. Communities likely to experience the largest increases in population include Victorville, Adelanto, Hesperia, and Apple Valley.

This graph shows projected population levels for the Victor Valley through the year 2013. Again, the solid line represents the population trends resulting without any of the redevelopment alternatives occurring.

Total population increases in the Victor Valley in the year 2013 would range from approximately 8,500 under the General Aviation Center Alternative to approximately 57,000 under the International Airport Alternative.

Population increases would be less than employment increases associated with the alternatives. For example, the proposed action would cause an employment increase of 40,000

jobs but would result in a population increase of approximately 27,000 people. This is due to the fact that in the Victor Valley, most residents commute outside the area to work. It was assumed that many of these same commuters would be available to take jobs generated by the various Reuse Alternatives.

(SLIDE #10 - LAND USE & AESTHETICS)

Land use plans for the Commercial Airport with Residential, General Aviation Center, and Non-Aviation Alternatives are generally compatible with existing land uses in the cities of Adelanto and Victorville. However, both the proposed action and the International Airport Alternative entail off-base land acquisition which in some areas will be incompatible with existing land uses in Adelanto. The proposed action involves acquisition of approximately 2,300 acres off base, which would require one residence to be relocated. The International Airport Alternative involves the acquisition of 8,350 off-base acres, which would require the relocation of 490 residences.

The No-Action Alternative would cause no change in on-base and off-base land use. The Federal Government would retain ownership of the property and, therefore, the jurisdiction of Victor Valley Communities' zoning ordinance would not apply to the base lands.

None of the proposed redevelopment alternatives is

expected to have a major impact on areas of high or medium visual sensitivity. The proposed action and the International Airport Alternative would have some off-base visual effects due to new development. All other redevelopment alternatives have low or no visual impacts because of the limited amount of new construction activities.

## (SLIDE #11 - VEHICLE TRAFFIC)

The redevelopment of George Air Force Base will affect local and regional transportation networks. Reuse of the site will increase traffic on major roads, especially U.S. 193 and Air Base Road.

This graph shows the estimated number of annual average daily trips, projected to the year 2013, generated under each of the alternatives for the major roadways accessing George Air Force Base. For comparison purposes, the broken line before the year 1993 represents the number of daily trips, which was roughly 46,000 in 1990, generated prior to closure to George Air Force Base. The number of daily trips to and from the site would range from 99,700 under the proposed action to approximately 310,000 under the International Airport Alternative by the year 2013.

Depending upon the redevelopment alternative implemented, additions and upgrades to the transportation network may be required. A major concern will be providing proper access to the site. Expansion of some off-base roads

will improve traffic circulation.

## (SLIDE #12 - FLIGHT OPERATIONS)

The runway and accompanying facilities are incorporated into four of the prospective redevelopment alternatives. These aviation-related facilities could become a foundation for major or minor aircraft maintenance operations.

This graph shows the level of annual air operations projected through the year 2013 under the four redevelopment plans utilizing the airfield. As a reference, the graph shows that approximately 49,000 flight operations occurred at George Air Force Base in 1990. The number of annual air operations would range from approximately 54,000 under the General Aviation Center Alternative, to 670,000 under the International Airport Alternative in 2013. These operations could place additional demands on airspace use that may not be able to be fully accommodated.

Air operations for these alternatives would include a mix of general aviation, airline training, and air passenger operations. Under the Non-Aviation and No-Action Alternatives, there would be no aviation operations.

## (SLIDE #13 - UTILITIES)

Redevelopment of George Air Force Base will place demands on local utility systems including: water, wastewater, solid waste, and electricity and natural gas.

This table shows the projected utility demand increases for water, wastewater, and solid waste in the Victor Valley for each of the Reuse Alternatives. As a reference, the first line shows the total Victor Valley demands, projected to the year 2013, resulting from post-closure conditions if none of the Reuse Alternatives were implemented. For example, total water demand in the Victor Valley is projected to be 77.5 million gallons per day.

The bottom portion of the table shows the increases above post-closure utility demands for each alternative in the year 2013. For example, under the proposed action, the total Victor Valley water demand is projected to increase by 6.1 million gallons per day. For all of the utilities, the General Aviation Center Alternative would cause the least amount of increases over post-closure conditions, whereas the International Airport Alternative would produce the greatest utility demand increases.

## (SLIDE #14 - UTILITIES (CONT'D))

This table shows the Victor Valley utility demands for electricity and natural gas. Again, for reference purposes, the first line shows total Victor Valley utility demands resulting from post-closure conditions, if there were no implementation of any Reuse Alternative.

Infrastructural changes would be required ahead of schedule to meet the projected demand under all alternatives.

Redesign or reconfiguration may be necessary for some utilities to accommodate particular user-related demands. Individual metering would need to be installed at most locations.

## (SLIDE #15 - HAZARDOUS MATERIALS/WASTE)

The Air Force is conducting investigations to identify, characterize, and remediate environmental contamination on George Air Force Base that has resulted from past actions. This comprehensive effort is called the Installation Restoration Program or IRP.

Clean-up activities will be accomplished in accordance with applicable Federal and State laws and regulations. Some initial remedial actions will be completed by 1993 with monitoring to continue after base closure. Monitoring of the groundwater is usually a long-term requirement to assure the success of the clean-up.

The Air Force will take all necessary actions for environmental clean-up of the base to protect public health and the environment. Deeds of property transfer will contain this assurance, and all property transfers will be conducted in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act, otherwise known as CERCLA.

An asbestos survey was initiated on base and completion is anticipated in December of 1991. Following completion of the survey, an asbestos abatement plan will be developed. Implementation of effective asbestos management

would preclude any reuse problems associated with exposure to friable asbestos.

Polychlorinated biphenyl compounds, called PCBs, were once used extensively in electrical equipment. Recent legislation has put stringent regulations on the manufacture, distribution, and use of PCBs. Prior to base closure, the Air Force will remove from service and properly dispose of all equipment that is not PCB-free or not in compliance with EPA Standards.

An initial sampling survey was performed at George Air Force Base in 1988 as part of the Radon Assessment and Mitigation Program. All survey results were below EPA's recommended mitigation level, thus, no further action is necessary.

#### (SLIDE #16 - GEOLOGY AND SOILS)

Impacts to the geologic resources underlying George Air Force Base are not expected from any of the Reuse Alternatives. We do expect minor and localized increases in soil erosion and surface runoff during construction activities associated with the various Reuse Alternatives in proportion to the amount of ground disturbance.

The General Aviation Center would cause the least amount of ground disturbance, 220 acres, while the greatest amount of ground disturbance would be a little over 7,000 acres under the International Airport Alternative.

#### (SLIDE #17 - WATER RESOURCES)

An analysis of water samples from base wells shows evidence of trichloroethylene contamination within the upper aquifer. This aquifer is not a source of drinking water for the area. In order to clean up the contamination and prevent it from spreading, a pump and treat remediation system is currently in place and awaiting EPA approval to begin operations.

Demands on groundwater resources generated by all alternatives would add to the already existing overdraft condition in the Victor Valley. Alternative sources of groundwater are being studied and would need to be made available under a more rapid schedule.

The increases to groundwater overdraft would range from 1.5 percent for the General Aviation Center and Non-Aviation Alternatives to a 9.9 percent increase for the International Airport Alternative.

#### (SLIDE #18 - AIR QUALITY: POLLUTANTS ANALYZED)

Air Pollutant emissions due to or related to reuse of the base would include carbon monoxide; nitrogen di-oxide; sulfur di-oxide; particulate matter less than 10 microns in diameter, which is also referred to as  $PM_{10}$ ; and ozone, which is formed by the reaction of nitrogen oxides and reactive organic gases.

The Southeast Desert Air Basin currently does not meet

State air quality standards for  $PM_{10}$  and ozone. Because of this, nitrogen oxides and reactive organic gases, which are the pollutants that react to form ozone, and  $PM_{10}$  are considered the most significant pollutants that would be emitted during reuse activities; and increased emissions of these pollutants under each of the Reuse Alternatives could interfere with attainment of these air quality standards.

#### (SLIDE #19 - NITROGEN OXIDES)

This graph depicts nitrogen oxide emissions for the various alternatives projected through the year 2013. Nitrogen oxide emissions would range from approximately 1.7 tons per day under the General Aviation Center Alternative, to 447.7 tons per day under the International Airport Alternative. As a reference, the arrow on the lower left side of the graph represents the preclosure emissions from George Air Force Base in 1988, which was 1.9 tons per day. The upper arrow represents the total nitrogen oxide emissions in the Southeast Desert Air Basin in 1987, which was 134 tons per day.

#### (SLIDE #20 - REACTIVE ORGANIC GASES)

This graph illustrates emissions of reactive organic gases, which are also referred to as R.O.G., for the various alternatives projected through 2013. R.O.G. emissions would range from .5 tons per day under the General Aviation Center Alternative to 52.5 tons per day under the International

Airport Alternative. Again, the arrows represent George Air Force Base preclosure emissions of 4 tons per day and 1987 Southeast Desert Air Basin total emissions of 50 tons per day.

#### (SLIDE #21 - $PM_{10}$ )

$PM_{10}$  emissions would range from 3.6 tons per day for the General Aviation Center Alternative to 26 tons per day for the International Airport Alternative. George Air Force Base preclosure emissions were .2 tons per day, and 1987 Southeast Desert Air Basin emissions were 100 tons per day.

Air quality impacts during construction would occur due to dust emissions from ground-disturbing activities and combusive emissions from construction equipment. These impacts would be temporary, and dust emissions could be partially mitigated with water application.

#### (SLIDE #22 - NOISE EXPOSURE)

This chart illustrates the approximate number of people who would be exposed to DNL noise levels of 65 decibels or more from aircraft and vehicle traffic activity under the Reuse Alternatives. DNL is the day-night average sound level expressed in decibels, with a penalty added to account for increased annoyance from noise during the night. 65 decibels is equivalent to normal speech at 3 feet. The number of acres in this decibel range would decrease from 1993 to 2013 as newer and quieter aircraft are introduced.

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Aircraft activity from the International Airport Alternative would expose approximately 1100 people to 65 DNL or greater. Aircraft activity from the other alternatives would not expose any people living in the region to 65 DNL or greater.

The number of people exposed to 65 DNL or greater due to vehicle traffic would range from 105 people in the proposed action, to 230 people under the Non-Aviation Alternative.

## (SLIDE #23 - BIOLOGICAL RESOURCES)

Three wetland areas, each less than one acre in size, occur on base and total 1.3 acres. Implementation of any of the Reuse Alternatives is expected to have minor to no effect on wetland areas. Minor effects could be easily mitigated.

The Air Force has initiated consultation with the U. S. Fish and Wildlife Service to verify the presence of any listed threatened and endangered species in the vicinity of George Air Force Base. U. S. Fish and Wildlife Service has indicated that the only Federally listed threatened and endangered species in the vicinity of the Base is the desert tortoise. Implementation of any of the Reuse Alternatives could result in disturbance or loss of known desert tortoise habitat, ranging from 9 acres under the General Aviation Center Alternative to approximately 5,000 acres under the International Airport Alternative.

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If the new owners of the base will impact desert tortoise habitat in their redevelopment activities, they will be responsible for further consultation with the Fish and Wildlife Service. If the new owner is a Federal agency, it will be responsible to prepare and submit to U. S. Fish and Wildlife, a biological assessment that describes potential effects of its action on threatened and endangered species. Private parties will be required to obtain a permit under section 10A of the Endangered Species Act for actions that could impact threatened and endangered species.

## (SLIDE #24 - CULTURAL RESOURCES)

Previous studies had identified four potentially significant historic structures. However, further consultation with the State Office of Historic Preservation has revealed that while documentation is recommended to record the significance of these structures, they are not eligible for inclusion on the National Register of Historic Places.

No impact is projected for archaeological or Native American or paleontological resources due to the lack of significant findings in these areas.

Off-base parcels identified for acquisition under the proposed action and International Airport Alternatives may require new users to conduct further consultation to determine the existence of any cultural resources off base.

In closing, I remind you the study is in a draft stage.

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Our goal is to provide Air Force decision-makers with accurate information on the environmental consequences of this proposal. To do this, we are soliciting your comments on the Draft Environmental Impact Statement. This information will support informed Air Force decision making.

I'd now like to turn the meeting back to Col. Thompson.

COL. THOMPSON: Thank you Maj. Vroman. I would now like to recognize elected officials, and I will be doing that by means of cards that you have given us indicating that you do desire to speak. I'll first recognize Mayor Terry E. Caldwell of the City of Victorville.

MAYOR TERRY E. CALDWELL,

MAYOR CALDWELL: Good evening, and thank you for the opportunity to address you. I'm speaking in my capacity as the Mayor of the City of Victorville, although I am also the Vice-Chairman of VVEDA. My comments tonight, though unless indicated otherwise, will be restricted to my comments in behalf of the City of Victorville.

First, it is the City of Victorville's opinion that the draft environmental document that has been prepared does, in fact, adequately address all of the environmental consequences of all of the various actions, and we are satisfied that no stone has been left unturned and that the document does do the job required by Federal statutes.

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The proposed action is the action that the City of Victorville feels is most appropriate for the Victor Valley for a lot of reasons, not the least of which is the fact that the Victor Valley is finite in terms of its capacity to carry ultimate growth load whether you talk about water; whether you talk about air; whether you talk about transportation capabilities.

And while on the one hand, somebody might argue for the No-Action Alternative as being the least disruptive of the environment, the fact is that we also have to consider that the Victor Valley is dynamic. It is growing and that that George Air Force Base asset is an asset that belongs to this community in its totality and needs to be utilized to the extent that it can, in terms of the economic opportunities, with the least disruption to the environment. We feel that the proposed action is that balance between economic considerations, which are important, as well as the environmental considerations which are also important.

We have no challenge; we have no disagreement with the contents of your study. We believe the proposed action is best for the City of Victorville and for the Victor Valley. Although, I am not sure that it is relevant to the issue of this Draft Environmental Statement, I would say that in response to a comment made about VVEDA and Adelante trying to reconcile; and this comment I will make as the Vice-

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Chairman of VVEDA; that that too is VVEDA's wish and hope, VVEDA's official position today as it has been forever, is that we would hope that at some point Adelanto and VVEDA will find a way to reconcile.

The door is open. We hope that VVEDA and Adelanto through continual dialogue will find a way to reconcile their differences and get together. If that cannot happen, we are still satisfied that the Draft Environmental Impact Statement and its proposed action is the right way to go for the Victor Valley; and we support it.

I'll answer any questions the hearing panel they may have.

COL. THOMPSON: I'll next recognize Mayor Edward Dondelinger.

MR. SMITH: Dondelinger.

MR. DONDELINGER: That's close, thank you.

COL. THOMPSON: Sorry, that probably will not be the last time I will butcher somebody's name tonight.

MAYOR EDWARD DONDELINGER,

MAYOR DONDELINGER: For those of you that don't know me, I'm Ed Dondelinger, Mayor of the City of Adelanto. I have just a few brief comments to make. I'm probably not going to be as nice as Terry was about the DEIS.

I found it really insulting that this group that originated the DEIS chose a non-existent VVEDA base reuse

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plan as its base line for this discussion. I'd also like to comment that I feel when a plan of one sort or another is adopted prior to the environmental study or the environmental input then when one does this study, one tends to make the data supporting that study supportive of the base line that was predetermined. Okay.

I also might comment that in the conclusion of the DEIS, that VVEDA now has a completed Base Reuse Study thanks to the Air Force. Okay.

The next thing I would like to make is the DEIS itself. I feel, complies with neither the requirements of the National Environmental Policy Act, NEPA, nor the California Environmental Quality Act, CEQA; and there is numerous reasons for this.

I would say the conclusionary nature of the DEIS and for the most part, the analysis is limited. The DEIS generally does not disclose mythology or supporting data and information representing the basis of conclusion reached by the Air Force. It doesn't list alternatives; it does not represent -- it does not present the environmental impacts of the selected proposed action and other alternatives and forms would sharply define issues, and provide a clear basis for your choice. The significant effects that DEIS does not identify the effects of alternatives or their significance. This will be short.

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Effects on the City of Adelanto: The DEIS does not identify and analyze the significant effects and conflicts of the proposed action on the City of Adelanto and other individual cities and communities; and the cumulative impact is that DEIS does not identify adequately the cumulative impacts associated with the proposed actions and other alternatives you cite within your report.

Now, there will be tonight entered into the record about 120 areas that we would like looked at for discussion. Now, if I could, Colonel, I would like to kind of address these to John Smith. John made the comment that he normally likes to deal with one entity, and I agree with John wholeheartedly. He should deal with one entity.

It seems funny to me that the base -- that the land that the base come off of come from the City of Adelanto; the water come from the City of Adelanto; the school district is the City of Adelanto; the base is almost entirely surrounded by the City of Adelanto. It kind of is like my owning my own home and having the neighbors tell me what I'm going to do there. And so, John, I suggest that if you want to deal with one person, you deal with the people that have the most to gain or the most to lose. Thank you.

COL. THOMPSON: Thank you, sir. I'll next recognize Mayor Pro Tem, Mary L. Scarpa, of the City of Adelanto.

MAYOR MARY L. SCARPA,

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MAYOR SCARPA: Thank you, sir. My remarks are going to be very brief. My name is Mary Scarpa. I am, indeed, Mayor Pro Tem of the City of Adelanto. I am a 28-year resident. My husband spent 30 years in the Air Force, and I have lived most of my adult life and raised my children on the end of one runway or another. I understand, to a certain extent, airports and airplanes. I understand 65 decibel noise because we have lived with it for a lot of years.

Speaking to the DEIS, I think had I been doing this document, I would have included some of the historical background that applies to George Air Force Base. First of all, as Mayor Dondelinger said, George is located on property that was originally part of the Community of Adelanto. When the Government came in in 1939 and '40 and began to buy property, they walked up to the door, knocked on it, and said, "Fine, don't worry about your property. We just bought it for \$7 an acre, and we have moved on to it. Here is your check." I think one of the reasons it was located where it is was, one, because, according to the historical records from the City of Victorville, those residents did not want airplanes flying over them; so they were very happy to move it 10 miles away from Victorville, which at that time was a small community on Route 66.

One of the -- Another one of the reasons it was established there was because of the availability of water. And

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the availability of water included the Adelanto irrigation systems which covered the areas of what is now George Air Force Base; and the State Quality Control License that is issued to the City of Adelanto. That water supply and that license is still issued to the City of Adelanto; and we've retained that right and hope to retain it for a long, long time.

In addition, Adelanto shares a 6 1/2-mile contiguous boundary with George. We surround it on three sides. And, when I say we surround it, we have a contiguous fence line. Your runway ends less than 1,000 feet from some of the homes in our city. We also have about 400 acres of George Air Force Base that are presently within the City of Adelanto, an incorporated area.

In addition to that, the City of Adelanto has the land use planning capabilities. I do not understand how another organization of any type can move in and establish anything that goes off the boundaries of George without dealing with the City of Adelanto.

We have the financial capability of purchase. We have not asked for money from any of your organizations or any Federal agency. We have done our studies on our own. We have paid for them on our own. We are not using taxpayers' money to do so. We have the ability to provide public services. We are a full service city; we do not have special

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districts; we have a very active redevelopment agency, and we know how to make it work.

In addition, there is the fact that the Federal Government by its own \$1.2 million study could not provide adequate water on George without the capability of using the water license issued to the City of Adelanto. And, for those of you in the audience who wonder why George was closed, put that in your memory bank.

The citizens of Adelanto have been impacted by noise. As I said, we have all lived under 65 decibel ranges for years. We have learned to live with that. We have been impacted by regulations that inhibit financing for independent development because we are in a high-noise impact district. We are used to dealing with that.

The citizens of Adelanto understand that if there is an international airport there, we are not going to get away from that noise, but we are going to, for the first time in many years, maybe be able to profit and commercially grow through the use of some of the property at George that has been restricted for financing for a number of years.

In my opinion your DEIS has not adequately or accurately addressed any of these concerns because your DEIS was preconceived to speak to the plan submitted by VVEDA. We understand that the Government would love to deal with one entity. I suggest you try Adelanto. Thank you.

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COL. THOMPSON: Are there any other elected officials whom I have not recognized who have a desire to speak? Apparently there are not.

In just a moment I'm going to take a recess of about 15 minutes. For those of you who have not yet submitted a comment card requesting to speak, I would suggest to you that this is your opportunity to do that and those cards will be given to me along with all the other cards. Again, I will be using those attendance cards indicating a desire to speak as my sole means of recognizing those who will be recognized to speak.

We'll be in recess until 8:20.

(Off the record.)

COL. THOMPSON: Before I begin to recognize individuals for their comments, I would like to reiterate a couple of things that I have mentioned to you earlier. First, please do limit your comments to five minutes so that everyone can be heard; and I do have a number of people who have asked to speak. Please do state your name, address, and capacity very clearly when you begin to make your statement.

The Air Force representatives who are gathered before you are not the decision makers regarding the proposed action or the alternatives. They have provided information and that they are prepared to provide clarification if they can do that; however, they are not going to enter into a debate on

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the pros and cons of the actions. They are not going to discuss the issues which are irrelevant to the Environmental Impact Statement process.

Please do limit your comments to the environmental issues associated with the actions described in the Draft Environmental Impact Statement.

To ensure that everybody does have an opportunity to speak and that we recess at a reasonable hour, I'll ask you that you please avoid repetitive comments. If you agree with the comments that have been made by a previous speaker, I think it would be to everyone's benefit if you'll just say that; that you agree with those comments.

Now, as I have indicated, I am going to recognize folks in a random order. The first person to be recognized will be Kathryn Gray. Kathryn Gray will be followed by James W. Beebe, so he should be prepared to speak when Ms. Gray has finished.

KATHRYN GRAY,

Sorry. I am Kathryn Gray. I'm a consulting planner for the City of Adelanto. My address is 16925 Main Street, Mesperia.

I -- we have several pages of comments about the EIS that really refer to specific technical concerns that we have with the data. I'll enter those -- I'll provide those into the written record.

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There are just several key points, five actually, that I would like to make that I think illustrate our concerns or issues with the DEIS.

The first point that needs to be made is that it appears that the DEIS uses both one million annual passenger data and 15 million annual passenger data interchangeably when it's referring to the proposed action which it has described as being the same as VVEDA's plan. And, I just want to show one example of that.

I am quite familiar with environmental impact data because I have been working for the past five years on airport studies throughout the Southern California Region. I just want to point out that the traffic volumes that are cited in there for environmental impacts of the proposed action are for a one million annual passenger airport; whereas the jobs growth impacts are cited for 15 million annual passenger airport. So, I think that's, you know, an inconsistency that doesn't help in the accuracy of our ability or the public's ability to understand the impacts.

One other point that we would like to make is under the general nature of the failure of the DEIS to adequately address the regional aviation shortfall. There is a tremendous amount of data available to the Federal Government regarding projected aviation demand in the Southern California Region of which we are a part, the aviation region

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of which we are a part.

The DEIS refers to the region of influence of George Air Force Base just to San Bernardino and Riverside Counties, and we think that certainly doesn't reflect all the rest of the studies that are going on including Cal Trans Aviation Evaluation and the Southern California Aviation Study that was sponsored by the FAA. The only study that has been identified in the DEIS is the Shapp Study. It was produced this year which reinforces the position that we have presented that there will be a 24 million annual passenger shortfall by the year 2000.

I think that it must be noted that the proposed action contained in the DEIS fails to address the critical nature of this demand shortfall; fails to address the uniqueness of this particular facility to meet that long-term demand; and it does not provide mitigations for the eventuality that that kind of facility is very much a possibility.

The point -- the third point the I would like to make regards Adelanto's comprehensive general plan and reuse planning program. The DEIS does not accurately recognize mitigations incorporated into the current planning efforts of the City of Adelanto. Adelanto has already planned for the entire city around what is obviously the highest and best use scenario for the reuse of George Air Force Base. All conflicting land uses that currently exist in the plan are

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carefully documented on a reuse that they will be relocated, and plans are provided for that. Both planning efforts have wide public support because the residents of Adelanto feel that for once and for all they will have control over their future.

And the third point that I would like to make is illustrated by a couple of slides here. Even though the Air Force is leaving, the fact remains that this facility will be used as an airport, either 1 nap, 15 nap, or 25 nap, depending on the plan; and Adelanto will still be the community most effected by that activity.

And the final comment that I would like to make is that, and I think this is very relevant to the DEIS, Adelanto is willing to make -- is not only willing to make the commitments associated with the development of the Airport, but is the only community that can ultimately plan for the mitigations necessary for the airport facility that is most needed by the region.

Cal Trans identifies George as a major air carrier airport and is recognized as the highest priority in their long-range plan for airport facilities in the region. Only Adelanto's plan can be considered as a true representative of this type of facility, and has planned for the mitigations that will be necessary to accommodate that.

COL. THOMPSON: Thank you. Mr. Beebe; and Mr. Beebe

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will be followed by Mike Perton.

JAMES W. BEEBE,

MR. BEEBE: My name is James Warren Beebe. I live in Los Angeles, California. I am an attorney, and I represent the City of Adelanto; and I have a statement which I'll -- which when I can get untangled from the cord, I will drop in the box.

It's fairly simple. All it does is point out some of the reports and documents which we think should be included in the discussion in the Draft Environmental Impact Statement; some that are currently -- that have been done in the past; some that are coming; and some that are currently being done. It also discusses very briefly the telephone call that I had yesterday from a member of the staff regarding the way that the DEIS was structured.

That is all there is to it. Thank you very much. I'll now put this in the box, and try not to stumble.

COL. THOMPSON: Thank you, Mr. Beebe. Mr. Perton, and Mr. Perton will be followed by Jeannette Hook.

MIKE PERTON,

MR. PERTON: My name is Mike Perton. I live at 13874 Chico in Apple Valley. I am here tonight to speak for a group known as the High Desert Action Committee for the International Airport.

We believe several things that we would like to pass

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on to the group tonight. One is that simply Adelanto, in our opinion, has a superior plan to VVEDA in many respects. The most significant respect is that the Adelanto plan is longer term in nature. It recognizes a long-term need for an international facility. It commits substantial land and public resources towards that goal early on in the planning phase, and we think that that makes much more sense than the other plans.

Secondly, that the highest and best use of the base is as an international airport. One needs only as a traveler to look at the congestion at the other airports in Southern California, LAX, Ontario, Palmdale, and San Diego to recognize that the capacity of those other airports to accommodate the truly explosive demand in air travel is marginal. And we think this is a wonderful opportunity for the High Desert area and for the Victor Valley.

Further, we think that it is disappointing that the political leadership of the Victor Valley has not found a way to bury the political hatchet, to smooth over the egos and to come up with a solution that will be good for all the communities of the Valley. And we, using this forum, would like to ask and -- that those political leaders in the Valley address this very significant opportunity and not miss it.

It is reasonable, for example, that because of the nature of Adelanto, because of the fact that it surrounds the

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base, we think it is reasonable for Adelanto to suggest that they have a major role in the long-term planning of the reuse of the base. We also believe that it is reasonable for the other communities to participate in the reuse plan and that these are solvable problems that were, again as I said, we're very disappointed that these problems have not to this point been solved.

We think the central issue here that you are hearing both from VVEDA and Adelanto, and we maybe be losing a little focus on the environmental impact here, but the central issue is really control. And, we think that also can be solved if the political leadership of the Valley will collectively get together and play a role in solving the problem and addressing, as you said, the need to have a single voice that speaks for the Victor Valley.

This is a wonderful opportunity. It's just, in my experience as a developer, I have never seen a community have an opportunity as great as this one is. And, we would just like to say that it's time to make the best of it, and it's time for everyone to get together and come up with a workable compromise to get on with the base reuse plan. Thank you.

COL. THOMPSON: Ms. Hook, and she will be followed by Peter D'Errico.

JEANNETTE HOOK,

MS. HOOK: Thank you Col. Thompson. My name is

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Jeannette Hook and I'm representing the Department of Parks Recreation and Community Services tonight for the City of Victorville. We have prepared a letter, which I will be submitting to you. I'd like to summarize that briefly for you.

In 1989, December, this department was contacted by the Department of the Interior for a Letter of Preliminary Intent. At that time, we requested a public conveyance or public benefit transfer of certain recreational facilities located on the base.

Since that application was made through the National Park Service, a number of other agencies have expressed interest in similar, or overlapping, facilities, if you will. Through discussion with some of those other agencies, we have developed cooperative efforts and cooperative plans to be able to maximize the use of the existing facilities on the base.

We've reviewed this -- the Draft Environmental Impact Report from the perspective of being a potential conveyance agency at the end of this process. My comments are related specifically to the recreational facilities.

3.21 In the very beginning of the Draft Environmental Impact Statement on Section 131, it is identified that those recreational facilities are -- that the conveyance of those facilities is supported by the National Park Service and by VVEDA.

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11 cont'd 1 Our request is that be reflected in the proposed action, and 2 I have enclosed a map with my written comments to show you 3 better what we're looking at.

4 We have -- also have a comment on Section 4216 which 5 indicates that conveyance of those recreational facilities 6 would decrease the space available for commercial activities. 7 We would like to point out that that is not necessarily 8 incompatible with recreational use, and in some cases can be 9 very complimentary.

12 10 We also had a question as to a possible inconsistency 11 between Pages 45 and 426, which indicates on Page 45 that 12 five direct jobs would be generated through a recreational, 13 the recreational portion of the reuse; and on Page 426, which 14 indicates 50 jobs would be generated. We're curious about 15 that. We'd like some more clarification.

13 16 Also, on Page 426, Amethyst and Cobalt Roads are 17 identified as major arterials with 100 feet of right of way. 18 Since these streets could be expected to carry a significant 19 amount of traffic both to the airport and other facilities, 20 we would like that to be identified on the maps and perhaps 21 the environmental impacts be examined for that.

14 22 On Page 239, the Department of Education has expressed 3.22 23 interest in school sites and certain recreational facilities 24 on behalf of the Adelanto School District and the Community 25 College's Services District. We would like to note that that

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14 1 would not necessarily present a conflict in uses that the  
conf'd 2 City of Victorville and the Department of Parks and  
3 Recreation can accommodate any other agencies wishing to use  
4 recreational facilities. And, we have had preliminary  
5 discussions with these two other agencies to that effect.  
6 Thank you.

7 COL. THOMPSON: Mr. D'Errico, and he will be followed  
8 by Mr. Joseph Chu.

9 PETER D'ERRICO,

10 MR. D'ERRICO: Thank you, Col. Thompson. I would like  
11 to read a brief statement into these proceedings. It is a  
12 summary of a document that I will put in the box.

13 My name is Peter D'Errico, and I am the Director of  
14 the Victor Valley Economic Development Authority, which is  
15 a joint powers authority whose members are the town of Apple  
16 Valley, the Cities of Hesperia and Victorville, and the  
17 County of San Bernardino. We thank you for the opportunity  
18 to present comments on the DEIS.

19 The Victor Valley Economic Development Authority has  
20 appreciated the opportunities to provide inputs to the DEIS  
21 Alternatives and to participate in the process during the  
22 program schedule from last October of 1990 to the present.

23 A substantial number of documents, studies, plans,  
24 programs and other materials have been provided by VVEDA to  
25 the United States Air Force and its consultant groups during

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1 the course of the development of the Draft Environmental  
2 Impact Study.

3 We have several observations about the study which we  
4 would like to make at this time. We also understand that we  
15 5 have until November 11th to file additional comments. We  
6 submit for your review the following documents between VVEDA  
7 and the Federal Agencies. The first document is a  
8 Preliminary Application for Public Benefit Transfer submitted  
9 by VVEDA to the FAA in June of 1991; the Application for  
10 Public Benefit Transfer submitted by VVEDA to the Air Force  
11 in July of 1991; a Revised Application for Public Benefit  
12 Transfer submitted by VVEDA to the United States Air Force  
13 in September of 1991; the Draft Overall Reuse Plan for George  
14 Air Force Base prepared by VVEDA and distributed to its  
15 members on October 9th.

16 The proposed draft VVEDA Redevelopment Project Area  
17 Boundary Map was accepted by VVEDA and will be also included,  
18 which it was accepted by VVEDA on October 9th. It may be  
19 appropriate to cite these documents in the final  
20 Environmental Impact Statement. VVEDA will have to -- will  
21 have a requirement to provide funds for the development of  
22 low and moderate income housing in the community if it is  
23 successful in adopting a tax increment generating re-  
24 development plan ordinance for George under California  
25 Redevelopment Law.

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16 1 Accordingly, a portion of the existing family housing  
2 inventory may be reused for such low and moderate income  
3 housing in compliance with State statutes. This will entail  
3.24 4 an alternative residential land use designation over a  
5 portion of the existing family housing area which is now  
6 planned for industrial offices business park in VVEDA's plan.

7 VVEDA notes the interrelationship between the DEIS and  
8 the companion socioeconomic analysis document. VVEDA has  
9 studied the socioeconomic analysis document and finds it  
10 to be a very ambitious and articulate assessment of the  
11 effects of each alternative on the effective communities.  
12 This document indicates the true relationship and driving  
13 numbers behind many conclusions reached in the DEIS.

14 Recognizing that this was not required by law, the Air  
15 Force has made an important contribution to the entire  
16 community by preparing this study. VVEDA has described the  
17 reuse of George as an evolving program of development. The  
18 Environmental Impact Study in effect acknowledges this  
19 dynamic evolution.

20 Overall, we are impressed by the general clarity of  
21 methodology contained in the DEIS. We again welcome the many  
17 22 invitations to be involved in the process. May we recommend  
3.5 23 that the Draft Environmental Impact Study be further coordin-  
24 ated with the FAA so that it may serve as an essential envi-  
25 ronmental record reuse document for that agency as well. We

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1 have been advised by both Air Force and FAA that this is  
2 possible.

18 3 Based on current expression of interest by aviation  
4 prospects, VVEDA requests an analysis increment included in  
5 the DEIS of a strong -- of the strong interest played by air-  
6 lines and other air crew training of heavy and tactical  
7 aircraft.

8 We thank you for the opportunity to provide comments  
9 upon this study and are available for any additional informa-  
10 tion that you may require. Thank you very much.

11 COL. THOMPSON: Mr. Chu, and Mr. Chu will be followed  
12 by Mr. Ernest A. Scott.

13 JOSEPH CHU,

14 MR. CHU: Thank you for recognizing me. My name is  
15 Joseph Chu. I am a resident of Victorville, and I have an  
16 office in Adelanto.

17 While I was listening to your statement, I found  
18 several points that I would like to raise issue. First of  
19 all, you mentioned the Department of the Air Force would like  
20 to deal with one organization. I think that's a very good  
21 idea. If the organization represents the majority of the  
22 community, I think that would be a very good idea; but I  
23 don't think it is true in this case. I feel that VVEDA is  
24 not the majority organization. It is a majority organization  
25 in the sense that there are more cities involved; but in

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terms of the desire of the people in the community, they are the minority representation.

We have surveyed, we have had some public surveys, and we have talked to a lot of people; and it seems that more than 50 percent of the people surveyed, favor Adelanto reuse plan. So, I would like to point out that if you like to deal with the majority of the community people, I think that's the wrong approach.

Of course, I understand the history of the organization. Initially, the organization wanted to involve all the cities in the community; but Adelanto separated itself from the organization.

Now, Adelanto, as the previous people mentioned, it has suffered all these years from the noise of the jet airplane from the George Air Force Base; and look at -- I would like to refer you to Page 419. That's where it shows all the flight paths. If you look at the flight path, all these airplanes fly all over Adelanto City.

And, as it has been brought out, indicated repeatedly, 75 percent of the border is touching Adelanto. Only 25 percent touches Victorville. And the Apple Valley, Mesperia, they don't even share the border line of the particular property and that they don't share in equal amount all the sufferings that we have had in the past years and all the impacts that we'll be receiving from the future airport.

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So, I would like to ask you to reassess your position as far as your dealings are concerned with the VVEDA and Adelanto. And, under the circumstances, I would like to ask also the county to separate itself from VVEDA and put itself in a clear position and try to bring the two organizations together. Not working with the VVEDA side, that will increase the hostility, and it would create more problem. I am particularly speaking to the Supervisor, Marsha Turoci; and I don't think it's her role to side with one organization. She should be working for the desire of the majority of the people in this community.

And the last point is the international airport and regional airport. Reviewing the document, it seems that there is no difference. Now, one point that I would like to make is that reviewing the result of the impact study, it seems that you didn't really study very thoroughly. Now, I say that in the sense that international airport is a bigger airport and it will occupy more land; and regional airport is going to occupy smaller land; so therefore, the impact will be smaller. That is not true. What about the land that there is left?

Now, in the future we will have industrial park, we'll have way stations. It's going to be all developed; so, if you consider that, the impact with the regional airport will be much larger in terms of water usage, all the other impacts

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are concerned. So, I think I would like to -- I would like to strongly ask you to review that result.

I also noticed that VVEDA suggested as one of the alternatives, one is the proposed action and one of the other alternatives is expanded in phases so that the flights will also fly to Pacific rim countries. What is the difference between international airport and an airport that will fly to Asian countries? We are talking about the same thing.

I think that VVEDA does not have all the land under their control so that they cannot say but they feel that they should start out with a regional airport. But I think we are talking about the same thing. International airport will have to start with the regional airport, smaller scale. But we should have enough room for the future to expand into an international airport.

We are going to -- it is definitely going to be an international airport in the future. We need it. And this is the time that we should decide on an international airport and should have enough land so that we can expand in the future. Noise problem or the impacts, you know, all these experts are studying about decreasing noise so that we will have a smaller impact from the pollution and things like that. So I think it's what we studied today and what it will be in the future, it may be quite different. So I would like to get your support for international airport. Thank you.

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COL. THOMPSON: Mr. Scott. Mr. Scott will be followed by Don Bradach.

MR. SCOTT: Excuse me, Colonel. I'm Ernie Scott, one of the members of the Governmental Affairs Committee of the Board of Realtors of the High Desert Construction Association. (not at microphone) I would defer my comments to those comments already submitted.

COL. THOMPSON: Okay thank you, Mr. Scott. Mr. Bradach. Okay, apparently not here. Mike Wagner, and he will be followed by James M. Willison.

MIKE WAGNER,

MR. WAGNER: My name is Mike Wagner. I reside in Fullerton, California. I am a redevelopment consultant and a financial consultant to the City of Adelanto. On behalf of Adelanto we would like to comment on some of the major problems and deficiencies that we found in the DEIS dated September, 1991.

We believe that the DEIS sort of biases the entire report by on Page 2-3, by recognizing VVEDA as the recognized reuse authority. We think this bias is further demonstrated when the authors refer to the City of Adelanto as another jurisdiction within the overall George Air Force Base environs. On over 50 percent of the city directly abuts the base itself; we think that that's a far cry from directly in the environs of the authority. We also would like to request

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under what Federal authority VVEDA is recognized as the reuse authority who made this decision and when was this made.

On Page 344 of the DEIS, it states that George Air Force Base maintains its own wells and no inter-ties exist with the surrounding water utility agency. This statement seems to conflict with the last sentence of Page 345 and also seems to conflict with the recently filed water law suit. The DEIS is deficient in that there is no analysis of existing water rights and the related impacts on the land use alternatives.

Under the Air Quality Section beginning on Page 4-121, extensive analysis is devoted to estimating air quality impacts to the Victor Valley, but no analysis is given to evaluate the impact of this -- the additional passenger traffic on the South Coast Air Basin should the international airport not be built and those passengers are required to fly from already overcrowded airports and already polluted, I guess, air areas.

The DEIS does not review either the impact of or the national interests for developing ground support for the National Aerospace Plane. The potential for suitable sites for such an important project must be very limited in the Southern California area. Thank you very much.

COL. THOMPSON: Mr. Willison. Mr. Willison will be followed by Mr. William A. Collins.

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JAMES M. WILLISON,

MR. WILLISON: Thank you. Attorney James Willison, 9919 Topaz, Hesperia, California; and I'm speaking with the Action Committee of Adelanto. I'm just a local attorney in Adelanto and not affiliated with any organization, merely a resident and business proprietor. There has been a number of issues raised here today, and I am not going to expound on them.

But, I will say this. I grew up in this Valley. A lot of the people out here I recognize. Some of them were my teachers. When I left Hesperia it was 3,000 people. Now it's 60,000 people. We've seen what Victorville has done to Hesperia golden triangle. We're very curious what interest Hesperia and Apple Valley have in a contiguous area that is 6.7 acres abutted by Adelanto. We're curious what Hesperia and Apple Valley have as far as easement rights. We're curious what Hesperia and Apple Valley have as far as any environmental impact, and we're curious about Hesperia and Apple Valley what standing they have to assert anything.

Basically a suit was brought over water rights, and I think the reason it was brought was the fact that Hesperia and Apple Valley and the other areas had no standing; and that's why they didn't bring the suit. We've tried to negotiate with VVEDA on a number of occasions. And, those things need to be made public to the people so that they can

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really see a big picture what's going on.

Like I say, we put up with the noise; we put up with the congestion; and put up with all the other things that have been associated with this airport; and like I say, for 25 years, myself and the other residents here and the Chamber of Commerce, to me, Victorville has not given an adequate plan on the base's reuse. The only alternative that is worth even mentioning for the commuters in this area would be the Adelanto International Airport.

We would like to thank you today for allowing us the opportunity to speak; but we would also like to, in a conciliatory way, keep the door open for the county because we would like to not spar with VVEDA, but get along with them as much as possible; and hopefully we could come to some agreement on this thing before maybe the Federal Government takes that opportunity away from us. But thank you today for allowing us to speak on behalf of the Action Committee.

COL. THOMPSON: Mr. Collins. And, Mr. Collins will be followed by Mr. R. Isiden Corrado.

WILLIAM A. COLLINS,

MR. COLLINS: Col. Thompson, ladies and gentlemen. My name is William A. Collins. I reside at 14205 Cree Road, Apple Valley, California; and I represent Victor Valley Community College.

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We have reviewed the Draft Environmental Impact Statement dated September, '91. Victor Valley Community College is concerned that the Draft EIS makes scant mention of the educational possibilities for the reuse of George Air Force Base.

Victor Valley Community College presented its proposal for reuse at the VVEDA Commission Hearing on 7 August '91; and a copy of that proposal was sent to the Air Force Regional Civil Engineer at Norton Air Force Base on 6 August 1991. Subsequently requests for facilities was sent Mr. George E. Hoops, Director, Department of Education, Federal Real Property Assistance Program. Additionally a detailed briefing which outlined the VVC proposal for the creation of a second campus was presented to VVEDA officials on 30 September 1991. Victor Valley College desires to create a second campus at George Air Force Base. It is important to note that our proposal for an educational center is compatible, in fact, compliments any of the alternatives identified in the Draft EIS. This proposed campus would radiate outward from Buildings 283 and 285. It will include buildings 183, 470, 389, and 290 at its extreme ends. Also included would be the base hospital and surrounding grounds. This entire area would also include those grounds and facilities desired by the Parks and Recreation Department of the City of Victorville and requested by the United States

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1 Department of the Interior for transferral to a local  
2 jurisdiction to the Public Benefit Program.

3 The facilities and grounds desired for recreational  
4 purposes, along with those desired for educational purposes  
5 would create a community-serving area of great public  
6 benefit. The facilities were designed by the Air Force with  
7 training in mind. And a minimum of modification would be  
8 necessary to convert them to our proposed educational uses.

9 The sharing of resources and facilities to serve the  
10 community would be practical, economical, and cooperative.  
11 The gymnasium and theatre could be owned and operated by the  
12 City of Victorville with Victor Valley College becoming one  
13 of the scheduled users. The present fire department could  
14 provide fire protection to the entire developed area while  
15 also providing the professionals and the practicum to train  
16 students to existing Victor Valley College curriculum.

17 The firing range and the legal facilities in Building  
18 321 would provide an ideal classroom and practicum  
19 environment for city, county and State Law Enforcement  
20 agencies to again take advantage of existing educational  
21 programs at Victor Valley College.

22 The present base hospital could become a combination  
23 care giving and training facility with licensed professionals  
24 enhancing the existing Victor Valley College curriculum and  
25 enlarging the curriculum to include dental hygienist,

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1 technicians, and assistants.

2 The Command Post and the present Headquarters Building  
3 could become a disaster preparedness and hazardous material  
4 training area while acting as a central control center for  
5 direct support of local agencies in the event of a real  
6 emergency affecting the entire community.

7 The concept of a community-serving area deals with the  
8 existing programs and the existing needs of the community at  
9 large. In addition, the job opportunities created by any  
10 degree of development and those created by predicted popula-  
11 tion increases are not job opportunities if the educational  
12 delivery system to provide job skills is not available.  
13 Victor Valley Community College is an established institution  
14 capable of expanding and rapidly changing its curriculum in  
15 order to provide what industry demands and to close the  
16 skills gap between labor and economic redevelopment. The  
17 cooperation and support pledged by California State  
18 University, San Bernadino, will strengthen the ties between  
19 educational institutions, provide a more varied curriculum  
20 base, and support the concept of shared resources.

21 The Victor Valley College Proposal for the estab-  
22 lishment of a campus on a closing military base is not a new  
23 one. Between 1961 and 1990, 37 former bases became the seat  
24 of a number of four-year colleges and post-secondary voca-  
25 tional technical programs. These schools presently

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1 accommodate 75,000 college students, 25,000 secondary  
2 vocational technical students, and 62,000 trainees.

3 The Draft EIS refers to the creation 40,400 jobs in  
4 the Victor Valley alone if the proposed action is adopted.  
5 There will be a need for skills training from the time George  
6 Air Force Base closes until the end of the transition period  
7 which, according to the U. S. Department of Defense, Office  
8 of Economic Adjustment, could last from three to five years.

9 The problems we will all experience in the next decade  
10 concerning language, computer skills, and our changing  
11 environment dictate that education be given the strongest  
12 possible support to grow with the community and to be  
13 specifically included in any proposal for the reuse of George  
14 Air Force Base.

15 Let's let it be entered in the record that Victor  
16 Valley College desires to create a second campus at George  
17 Air Force Base with the appropriate aforementioned boundaries  
18 to serve the community and the public interest and to secure  
19 such facilities and land as a public benefit transfer. Thank  
20 you.

21 (tape change.)

22 COL. THOMPSON: Mr. Corrado. Mr. Corrado followed by  
23 Mr. Bruce Tepper.

24 R. ZAIDEN CORRADO,

25 MR. CORRADO: Members of the Board, my name is

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1 Robert Corrado; and I appreciate this opportunity to address  
2 you. I am an attorney. I am a principal in the law firm of  
3 Corrado and Newton which is a law firm that represents  
4 personally several public officials, including such  
5 representative clients as the Attorney General of the State  
6 of California, Dan Lundgren, several past members and  
7 chairmans of the Fair Political Practices Commission, and  
8 some 60 other local officials, including the Central  
9 Committee's Republican Central Committees of several counties  
10 in the State. Additionally we represent such developers as  
11 Commerce and Majestic and all the Coast and Al businesses.

12 I am here on behalf of the City of Adelanto. I read  
13 the DEIS, and it caused me some concern. And, there are some  
14 points that I would like to make with you because I think  
15 they deserve some study and some consideration. Recently I,  
16 along with my co-counsel, filed a law suit by way of a  
17 declaratory relief against the members of VVEDA, and VVEDA,  
18 and the U. S. Government; it's no secret; and the Air Force.  
19 I want you know that it's not a hokus-pokus law suit. I  
20 would like you to know that you have a copy of it.

21 It's a very unusual way for a lawyer to file a law suit  
22 because we included in the law suit the documents that the  
23 City of Adelanto depends on to assert what is really a  
24 reversionary right in the water once the Air Force leaves  
25 George Air Force Base.

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My problem is is that your proposed action doesn't take that into account. If Adelanto needs the water; and it certainly does, it would be very difficult to proceed with your proposed action without the ability to get water to the base. Additionally, as I read it, I was reminded of a Supreme Court Case that I read early on several year's ago, Strick v. Carlin; and it stands for the proposition that an adverse environmental impact can only be overridden by reasons that are more superior and more important in a social and economic and welfare reasons.

Your proposed course of action in your DEIS, you seek to override the adverse impact, environmental impact, with your proposed course of action which is to give the base to VVEDA. My problem with that is two-fold. Lt. Col. Bartel came to the City of Adelanto last week, and they gave us a little preview; and I am sure you guys gave it to the other cities, and we appreciated it.

But, what I am bothered by is Lt. Col. Bartel told me that the decision to transfer to VVEDA was made by headquarters Air Force prior to the DEIS. He assured me that no word would be different. I believe him because I perceive him as an honest man. But how is it that you can write a DEIS in a post-hoc fashion to decide this question afterwards? It's obviously a justification; and I urge you to look at, perhaps, another way of looking at it.

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I was very interested in what Mr. D'Errico said who preceded me. Basically, what he said was is we're VVEDA and we want the Air Force and everybody to give it to us and the money to do it. In these times of over burdened taxpayers, the City of Adelanto is prepared to buy it at fair market value. Privatize it and do it. We don't need Federal money. We can do it. We have the wherewithal.

And, nowhere is that mentioned. And I would think that in these times one of the most important social and economic and welfare reasons that you could consider is the tax load of the American taxpayer, especially the taxpayers of the various cities and the county involved. Because the Savings bill aside, they have to do it by redevelopment; and they have to have it given to them; or they have to assess a special tax. That's the way California law works. We don't need that.

The next point that I'd like to make is a little reminiscence, if you will. I've only represented the City of Adelanto for 1 1/2 months, but I remember the first day that I was there, and I got out of my car; and I was remarking clear skies, beautiful temperature. Gosh, I love the high desert. And then I was almost, I mean, I just couldn't believe the sound of this jet as it came almost right over City Hall at low altitude.

Then later as I got involved, I ran across a document

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written by the Air Force, an AQ study in 1972 in which the Air Force said that they had to have control of some 13,000 acres including most of the City of Adelanto because they were, in effect, adversely condemning it at that time. Adelanto has not bothered with the Air Force on that reason because they're patriotic folks, most of whom are connected with the Air Force.

But, your proposed action amounts to an inverse condemnation of every square inch of private property in the City of Adelanto. Let me say this in last. The City wants to resolve this matter amicably with VVEDA and the members of VVEDA and the Air Force. We want to talk; we want to reach a solution; however, those solutions must address the very special concerns of the City of Adelanto.

Members of the Board, I thank you very much.

COL. THOMPSON: Mr. Tepper, and he will be followed by Roy C. Hanson.

BRUCE TEPPER,

MR. TEPPER: Members of the Panel, Air Force staff in the audience, elected representatives, and members of the general public, good evening. My name is Bruce Tepper. I'm a Principal and Chief Litigation Chair for the law firm of Kane, Ballner and Berkman, a law firm which represents some 30 public entities, cities and counties in the State of California, from the City of Santa Clara in Northern

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California, to the City of San Diego in Southern California in matters such as environmental review, redevelopment and land use.

We have been retained by the Redevelopment Agency of the City of Adelanto to examine the environmental review conducted apparently by the Air Force in connection with its proposed disposition of George Air Force Base. My firm has been doing this work for some 35 years. Our record in litigation is extraordinary. In the past five years, we have tried some 50 environmental review cases. I can count on three fingers how many we have lost. I can count on one finger how many we have lost in trial.

As I said, we have reviewed this Environmental Impact Statement, and we are cognizant of the desires of Lt. Col. Bartel and in his request that we help him prepare the best possible Environmental Impact Statement for the proposed disposition of George. We are here to help you; and we have in my possession, and I will deliver it to you, 112 suggestions which we think will help you prepare an Environmental Impact Report and Statement that might withstand Federal judicial scrutiny.

I am not going to regurgitate some of the words I've heard co-counsel utter, but I will focus on one phrase that we heard last Wednesday from Lt. Col. Bartel in his request to help in preparing this EIS. And those words are

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the words, "recognized reuse authority."

Now, we didn't know what these words meant at the time; and Mr. Corrado at the time asked the Lieutenant Colonel what he meant. And Mr. Corrado this evening attempted to describe something to the effect that the Lieutenant Colonel had received orders as to what the recognized reuse authority was supposed to be.

Now, that didn't just end there because I had the sense that people were concerned about a law suit; and I had no idea why they would have drawn that conclusion. But, be that as it may, our panel of experts in the City of Adelanto received a call today from another Air Force individual or someone representing himself as an Air Force individual engaged in the preparation of the CIS, who indicated that the basis for the "recognized reuse authority" was grounded in the community redevelopment law and its relationship with the Victor Valley Economic Development Authority.

Now, we looked at that law pretty carefully. In fact, some 30 year's ago, my firm was the principal author of the Community Redevelopment Law as it's presently codified, so we think we have some understanding about what that law means. And we could not find any statute which generated the term, "recognized reuse authority." So, we submit to you this evening that there is no such term; that there is no such authority in the Community Redevelopment Law; and that

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the original premise for your EIS is illegally founded.

Again, we are not here to threaten. We are here to help you prepare the best possible document that you can for your proposed disposition of George. With that in mind, I am submitting our comments, 112, which contemplate or which constitute our initial review of your EIS and urge you to re-examine not only your original premise but also the subdocumentation that flows from that original premise. Thank you.

COL. THOMPSON: Mr. Hampson; and Mr. Hampson will be followed by Jane MacDonald.

ROY C. HAMPSON,

MR. HAMPSON: Thank you, Mr. Chairman for the opportunity of commenting on your Draft Environmental Impact Statement. My name is Roy C. Hampson. I am a professional civil engineer in the State of California. I reside at 2368 Wyoming Avenue in South Lake Tahoe, California.

From June, 1973, to April, 1986, I was the Executive Officer of the California Regional Water Quality Control Board, Lahontan Region. This is the State regulatory agency responsible for water quality control of surface and groundwater associated with the Mojave River. Tonight I represent the City of Adelanto as their Water Resources Consultant.

I have reviewed the Draft Environmental Impact Statement and find that water supply and water rights are not

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adequately addressed. A satisfactory Environmental Impact Statement and/or Environmental Impact Report must fully disclose all reasonable and viable alternatives; identify adverse impacts associated with these alternatives; and provide mitigation for the adverse impacts.

The Draft EIS down plays the significance of water quality and water rights by lumping them with other utilities. The Draft EIS states that supply for the proposed project will be furnished by water purveyors; reports that 4,833 acre-feet per year of water will be needed regionally, and thence concludes that this will add only four to five percent to the groundwater overdraft. The Draft EIS also wrongly infers that George Air Force Base is co-owner with the City of Adelanto of 3.34 cfs of appropriative water rights contained in State License No. 10342.

Since its origin in 1941, George Air Force Base has been haunted by the need to acquire an adequate and legal water supply. To meet their water supply needs, George Air Force Base has depended on the community of Adelanto for legal water rights.

In 1984, George Air Force made a substantial effort to obtain an independent and legal water supply. They contracted with four water resources consulting firms and hired legal counsel expert in water rights to address these issues.

In June, 1985, George Air Force Base applied for a

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permit from the State Water Resources Control Board to divert and use 5.4 cfs from the Mojave River Underflow. This is approximately 3900 acre-feet of water. Hearings were held in April, 1987, and ten protests were filed against the application. Three of them; those by the Mojave Water Agency, the City of Barstow and the Desert Citizens for Better Planning, were based on overdraft in the Mojave River Basin and the potential adverse effect on the water supply of downstream users.

Six protestants which included the U. S. Fish and Wildlife Service, the U. S. Bureau of Land Management, the American Fisheries Society, Friends of Wildlife, California Native Plant Society and the Desert Fishes Council, alleged that the reduction in the flow of the proposed appropriation will adversely impact the Mojave Tui-Chub habitat. The Mojave Tui-Chub is a state and federally listed endangered species. They further alleged that riparian vegetation and the wildlife supported by this habitat would be adversely impacted by flow reductions. The California Department of Fish and Game protested for both reasons; overdraft and environmental concerns.

Based on the findings of overdraft and that George Air Force Base had not complied with the California Environmental Quality Act, the State Board concluded there was no water available in the Mojave River system for appropriation and

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1 the application of George Air Force Base was denied. I  
2 repeat, the George Air Force Base attempted to obtain an  
3 independent and legal water supply; and they were denied by  
4 the State of California.

32 5 The assumption that local water purveyors have or will  
6 obtain 8,833 acre-feet per year of water to serve the  
9.5 7 proposed reuse project or to rationalize that it is appropriate to increase the overdraft another four to five percent  
8 is wrong. In addition, to assume that the City of Adelanto  
33 9 will transfer their water rights to another local or regional  
9.7 10 governmental agency is equally wrong.  
11

12 The City of Adelanto must use their water rights to  
13 serve present and future development within City boundaries.  
14 To do otherwise, the City would be remiss and derelict in  
15 their duty.

16 Mr. Chairman, I have some comments which are specific  
17 to your Draft Environmental Impact Statement. I would like  
18 to rattle off three or four of them which I think are the  
19 most important with your permission.

20 COL. THOMPSON: You've already exceeded your time, Mr.  
21 Hampeon.

22 MR. HAMPEON: Okay.

23 COL. THOMPSON: If you would like to submit those for  
24 the record, you should feel free to do that, please.

25 MR. HAMPEON: Okay, I will. Thank you for the

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1 opportunity to comment on the Draft Environmental Impact  
2 Statement; and I will, at this time, submit into evidence and  
3 the record my comments for your consideration. Thank you.

4 COL. THOMPSON: Mr. Mac Donald.

5 JANE UN MAC DONALD,

6 MR. MAC DONALD: I would like to thank you for the  
7 opportunity to speak. My name is Jane Un Mac Donald, and I'm  
8 with East Valley Pavilion, Inc. My movement dates back to  
9 1987 with City of Adelanto. I would like to congratulate  
10 City of Adelanto for their positive government.

11 I have listened to your presentation tonight, and I  
12 have been following all the discussions about the airport  
13 issue and the closure of George Air Force Base for some time.  
14 And, with everything that we have seen, I am in support of  
15 the international airport for the following reasons:

16 I think the most important factor here that a lot of  
17 people are missing is the number of jobs the international  
18 airport is going to create. With the way the economy is  
19 going in the State of California and with the amount of  
20 businesses that are closing down, moving out of the state;  
21 with the amount of banks that are going under or merging  
22 together; the number of people that is going to be  
23 unemployed; and with the bases that are closing; the number  
24 of people who are going to be in need of jobs, I think the  
25 creation of the international airport is very, very

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1 important.

2 The number 44,000 is just phenomenal; it is mind  
3 boggling. And, 44,000 jobs I think is really a very low  
4 estimate. The real number is around 54,000; and I think this  
5 is just one very important factor that we should very carefully  
6 look into.

7 Besides this, I think this is a chance that an airport  
8 can be planned and designed very carefully. With LAX, San  
9 Diego, and Orange County Airports not having enough space for  
10 expansion, and all the public input that they have because  
11 the public is against the airports because of noise and  
12 pollution, here is a town who says we want the airport. I  
13 just cannot imagine all the cities who are fighting City of  
14 Adelanto.

15 I think this is for the betterment of the whole state  
16 that here is a town who is welcoming and saying we have the  
17 land available. We can zone it right; we can develop it  
18 right; and they are not even asking for the land. They are  
19 not even asking any money from the Federal Government. They  
20 are saying that we do have the money; we do have the  
21 financial whereabouts; and we do have the knowledge; and we  
22 can go ahead and develop the international airport.

23 And another point is I am seeing a lot of cities in  
24 the desert community who are putting their political  
25 ambitions in front and they are not thinking the betterment

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1 of the community and the public. And if people are thinking  
2 the betterment of the public and the future, maybe not our  
3 generation, but the next generation, I think everybody should  
4 get together and look at this more carefully; and the option  
5 of the international airport is the best option I think.  
6 Thank you for your time.

7 COL. THOMPSON: Thank you. Ladies and gentlemen, that  
8 exhausts the comment cards that I have been given indicating  
9 that persons desired to speak. Is there anyone who turned  
10 in a card whom I have not recognized? Apparently not. Is  
11 there anyone who would desire to speak? I will recognize you  
12 now. Apparently not.

13 Thank you for your courtesy and your cooperation. I  
14 think that through your cooperation and through your assistance  
15 to each other and to us that we have had a productive  
16 meeting and one that has allowed us to consider those  
17 environmental concerns.

18 Again, if you did not make a comment tonight and desire  
19 to do so, you should feel free to do so in writing using the  
20 comment sheets, providing them to the address indicated on  
21 those comment sheets, not later than the 11th of November.

22 This hearing is adjourned.

23 (Whereupon, at 9:23 p.m., the Hearing in the above-entitled  
24 matter was adjourned.)

25 ooo

## UNITED STATES AIR FORCE PUBLIC HEARING

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## Certificate of Transcriber and Proofreader

United States Air Force Public Hearing on the Draft  
Environmental Impact Statement of Disposal and Reuse of  
George Air Force Base.

We, the undersigned, do hereby certify that the foregoing pages, numbers 1 through 85, inclusive, are the true, accurate and complete transcript prepared from the tape made by electronic recording by Ralph Cogswell, on October 17, 1991, before the United States Air Force Public Hearing Team at its session at George Air Force Base.

Ralph Cogswell, Reporter

For: Audrey Johnson, Reporter

# Responses to the Draft Environmental Impact Statement for the Disposal of George AFB, California

on behalf of:

## The City of Adelanto

Prepared by:

The Planning Center  
16925 Main Street, Suite B  
Hesperia, California 92345

### Executive

These comments contained herein represent major issues regarding the content, format, and evaluation methods of the Draft Environmental Impact Statement for the disposal of George Air Force Base. They have been prepared as a formal response to the DEIS and as the basis for declaring the document to be inconsistent and biased.

- 1.1 The "Proposed Action", which represents the VVEDA proposal has been given tremendous preferential treatment and the DEIS is obviously slanted to project that the VVEDA plan is the most logical. Several studies have been completed in the region that prove an international/inter-regional facility is greatly needed. In fact, a SCAO study, which is mentioned near the end of the report, indicates the need for new airports in the region capable of meeting a 55 MAP shortfall in the year 2010. The VVEDA plan, as shown, will accommodate 1 MAP.

The federal government needs to share some of the responsibility in helping solve this, and other, major issues in the region. The opportunity is now.

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
5.1	S-4 1	Do not agree that the airport will so drastically increase the current population trends. Rather, it will provide jobs for residents who are already expected.
1.1	S-3 2	The report should evaluate each alternative, including the VVEDA "plan" on an equal basis. The VVEDA "plan" is only one of the alternatives. Unfair bias has been used in the formation of this document and may be subject to litigation.
5.1	S-15,16 3	The increase in population in the ROI will increase naturally due to current trends. The inclusion of HDIA will have minimal impact on the increase of residents moving to the ROI. Jobs/housing ratio projected to be .5 jobs per household without HDIA. Will only be .8 jobs/housing ratio with airport.
6.1	S-16 4	The Adelanto Reuse Plan for GAFB is incorporated into the General Plan/Zoning for the City. Preliminary plans for re-location of incompatible uses are being prepared.
9.1	S-15 5	The consumption of water of the "Proposed Action" will be much higher than that of the international airport if you compare the same land area. To clarify, if you take the Airport district land area (20,000 acres) and place the Proposed Action "alternative" and surrounding industry and residential uses within it, the cumulative impacts are more than double that of the HDIA alternative.
15.1	S-16 6	"Degradation" needs to be further defined.
2.1	S-20 7	The No Action alternative has tremendous socio-economic impacts. If nothing is installed to replace the jobs that are eliminated once the AF leaves, there will be significant negative economic and cultural impacts.
5.2	S-8 8	The number of operations related to employment, for each scenario does not correspond to the number of flight operations at 2013.  HDIA: 80,000 jobs = .12 jobs/operations 670,000 operations VVEDA: 40,000 jobs = .526 jobs/operation 76,000 operations

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COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
1-1	9	<p>The EIS states that "The George AFB property will be disposed of in compliance with the Defense Authorization Amendments, BCRA (Base Closure and Realignment Act), the Federal Property and Administrative Services Act of 1949, and the Surplus Property Act of 1944."</p> <p>All of these legislative pieces indicate that the intent of disposal of the military installations is to reduce the level of federal expenditures and if possible to sell the properties to recover dollars to inject into the defense budget.</p> <p>They also recognize any political subdivision as a legal entity and any such entity may prepare a reuse plan for an adjacent military facility. Such plans shall be considered equally in terms of evaluative purposes. No individual project/proposal shall take precedence.</p> <p>Therefore, it is our opinion, that the EIS, using a "Proposed Action", is inconsistent with the intent of the act and perhaps the laws of the United States government.</p>
1-4	10	The City of Adelanto has prepared a reuse plan for George AFB and the adjacent land which incorporates an inter-regional/international airport capable of accommodating southern California's long range aviation needs. The airport has been designed to ultimately serve upwards of 50 million annual passengers (MAP) not 60 MAP.
1-4	11	It should be noted that the City of Adelanto has offered the Federal Bureau of Prisons an alternative site than that on George AFB.
1-7	12	The VVWRA requires a unanimous vote to restructure the members of VVWRA. It is unlikely that the City of Adelanto will consent to VVEDA or any other agency the ability to be served by the plant, unless Adelanto has ultimate control of the base property.
1-8	13	Who encouraged the DOD to solely recognize VVEDA as the reuse authority? As stated earlier, the BCRA and other legislative actions allow all entities to prepare plans for reuse and that such plans shall be evaluated on a non-partial basis. This recognition is inconsistent with governmental policies.

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COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
2-2	14	It should be noted that the City of Adelanto's reuse plan for George AFB was submitted in its entirety to the Air Force by the Nov. 30 deadline. VVEDA did not produce their reuse document until after the DEIS was published. It therefore, would be difficult to accept that plan as the Proposed Action.
2-3	15	If the results of these technical studies are being completed, how has the Air Force been able to analyze, with any degree of accuracy, the "Proposed Action" (VVEDA's proposal)?
2-3	16	The alternatives analyzed by VVEDA: Did these alternatives get dropped for environmental, economic, or political reasons? Should these alternatives be evaluated for merit by the Air Force?
2-7	17	VVEDA's proposal, based on the P & D Technologies Projected Flight Operations, shows a total of 23,100 passenger operations per year. This number of operations does not correspond to a 15 MAP level at 2013.
2-8	18	Due to environmental constraints present at the GAFFB facility, it is unlikely that a 50/50 split of operations is possible between the north/south (17/35) and crosswind (03/21) runways. The wind constraint should have been more thoroughly investigated.
2-8	19	Has the VVEDA been chartered to be/become an airport authority? Is the FAA concerned that the VVEDA may lack the required expertise in the operation of an airport facility, especially at the "15 MAP" level. Also, it is probable that taking the responsibility for operation of the airport, redevelopment agency, property management, and marketing is far beyond the original intent in the formation of the JPA.
2-10	20	Who "predicted" the 15 MAP capacity level? VVEDA's plan describes a 1 MAP facility, not a 15 MAP airport. It would be useful if that report was made available to the public. Who completed the study? The Air Force?
2-11	21	Much of the 1,605 acre "parcel" is comprised of rugged terrain and may not be suitable for airport - related facilities. Expansion in that area will be difficult and pose negative environmental impacts.
2-11	22	This paragraph leads one to believe that the security fences are to remain around the "Base Facility". Won't the fences be removed after base closure?

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COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
2-12	23	This table needs to reference the source data for the projections. Based on the operational figures listed in Table 2.23, 25,400 jobs is extremely high. It appears that the Air Force EIS Consultants used different assumptions than those presented by the VVEDA. If so, why?
2-13	24	It should be specified who the water purveyor will be/for. Under an agreement with the Air Force, all water rights will revert to the Adelanto Water District upon the closure date of GAFFB.
2-5	25	VVEDA's master plan shows, as part of the airfield land use category, land within the City of Adelanto. Has an agreement been reached between the VVEDA and the City of Adelanto? If not, the map should be adjusted.
2-13	26	It should be noted that if a new entity is given control of the George AFB property, a new agreement must be reached with the VVWRA members. This agreement must be in the form of a unanimous vote. VVEDA, as a JPA, is not a member of VVWRA.
2-13	27	This paragraph reads quite well, except that the Adelanto's Reuse Plan for George AFB states that the airport has been designed to accommodate 50 MAP, not 60 MAP.
2-13	28	The sentence which reads, "According to the plan" should read: <u>based on regional aviation studies and reports.</u>
2-14	29	The proposed super-hub facility has been designed to service southern California's projected long-term shortfall in passenger and cargo demand.
2-14	30	The Commercial designation for the 530 acre area of the Base should be categorized as Hotel/Park as shown on the reuse plan maps. This more accurately depicts the intended use for this area. Uses that are allowed within the Hotel/Park district include hotels, golf courses, parks, service commercial, open space, recreational facilities, etc.
2-15	31	The crosswind parallel runways shows should portray a 2500 foot separation from centerlines. They appear to be shown too close together.

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COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
2-16	32	Items that were part of the reuse plan for HDIA included: <ul style="list-style-type: none"> <li>Airspace analysis/recommendations</li> <li>Environmental/socioeconomic impact</li> <li>Comparative analysis of reuse alternatives</li> <li>Impact of future technology</li> <li>Financial component for acquisition</li> <li>Proposed airport authority</li> </ul>
2-16	33	It should be noted that the terminal complex and airfield have been designed to accommodate the 25 MAP level. Terminal Reserve areas and the Airport Development reserve area allow adequate expansion to accommodate the 50 MAP service level. Also, it should be noted that the crosswind runways would be used not only for adverse wind conditions, but also for normal operating conditions. This will allow for simultaneous take-off and landing from both sets of runways. The north/south runways would be the main landing facility, whereas the crosswind runways would be primarily dedicated for take-offs.
2-17	34	The plan for HDIA is conceptual. To specify the number of buildings for terminals is premature until development plans are prepared. The design of the entire Airport Development District will entail the preparation of a Master Development Plan, which will incorporate both airfield and airport related activity. This plan will be prepared subsequent to the Record of Decision.
2-17	35	It will not take until build-out to accommodate wide body aircraft. The existing runways can actually handle a wide-body. However, the new runways to be constructed between closure and 1998 will be designed to the specifications for all wide-body aircraft, as well as hypersonic and suborbital craft.
2-17	36	This paragraph makes no sense. As stated on page 2-16 par. 5, the wind constraint only occurs 20 percent of the time, not 50 percent. All runways will be utilized to facilitate maximum operational levels.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
37 3.15 38 3.16 39 3.17 40 4.1 41 6.4 42 6.5	2-18 37	Table 2.3-2 contains information that was derived from the VVEDA report and are inappropriate to be analyzed as the City of Adelanto's proposal. The information lacks bases, specifically: <ul style="list-style-type: none"> <li>It is anticipated that there will not be such a large usage from general aviation users in the long term. It is pointed out in the Adelanto Reuse Plan the general aviation users will be discouraged from HDIA, and recommended to locate at Apple Valley Airport and others.</li> <li>Air cargo fleet mix is too restrictive and is not realistic. Many other aircraft types area and will be used for cargo operations.</li> <li>Aircraft maintenance facilities typically accommodate the type of aircraft normally being utilized at a particular facility, except in a few cases. In other words, the air passenger/cargo fleet mix should be representative of the maintenance facilities incorporated at the airport.</li> <li>Source information came from Don Corright, Corright/Seibold, and was based on fleet mix (not passenger estimates) for HDIA.</li> <li>Source material should not be derived from the "Proposed Action". Who authorized this usage?</li> </ul>
	2-19 38	As an international airport, more than 5% of operations will occur between 10:00pm and 7:00am. An 80/20 split is more likely.
	2-19 39	The City of Adelanto, since submitting the reuse plan, has applied for Public Benefit Transfer of all of the aviation related portions of the Base. The remainder of the Base is still to be obtained through negotiated purchase. Adelanto submitted the request for Public Benefit Transfer to appose Federal, State, and local officials that Adelanto intends to maintain the George AFB aviation facilities as a civilian airport.
	2-19 40	The "Commercial" land use zone should be changed to Home/Park district to more accurately describe the intended uses. Also, it should be pointed out that the plan calls for the retention of the significant stand of mature trees located in the residential areas on-base.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
43 6.6	2-19 41	Business park zones should not be classified as industrial. These uses are intended to buffer the Home/Park and other areas from the more intensive general industrial and aviation industrial uses.
44 7.3	2-21 42	310,000 daily trips to and from the base property is much too high. In addition, since the airport terminals are being located off of the base property, this number will be insignificant. Most of the trips, projected at just over 190,000 ADT, will emanate from the airport complex and the associated airport district area. These needs to be a formula (source) for the 310,000 ADT projection. From discussion with Earth Tech, we were informed that the numbers were based on Ontario Airport's traffic generation. Being an international/regional hub type airport, fewer travelers will be coming via private automobile. It is estimated that approximately 25% of travelers will arrive/depart from the airport via super speed train and/or other mass transit systems.
45 3.16	2-21 43	It seems inappropriate to utilize VVEDA data for the federal government's analysis of any other alternative.
46 3.1	2-36 44	Part of the City of Adelanto's proposal for George AFB is an offer to the Bureau of Prisons of a comparable site in a more remote area for the location of a new prison facility.
	2-36 45	The location of housing for the homeless within the base housing area may/may not be in the best interest of the adjacent communities.
47 5.4	2.3-11 table 46	The net reduction of jobs, if based on the same FAR ratios for the same acreage, should remain constant. Why do the numbers not match? In addition, if Adelanto's proposal is accepted, an appreciable gain of 2,800 jobs will be achieved.
48 5.5	2.3-11 Table 47	The majority of other land use concepts will not significantly impact the HDIA alternative. In fact, most of these uses will be able to be absorbed into the overall plan. It appears that these uses will have significantly less impact to the HDIA plan than under the "Proposed Action".

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
49 3.19 50 3.20 51 7.4 52 1.4 53 5.6	2-41 48*	This concept corresponds to the "Proposed Action" and was presented as an alternative scenario in comparing various reuse options. The intent of this alternative was to emphasize that VVEDA's reuse plan fails to allow sufficient expansion and does not provide the up-front commitment to meet the projected long range aviation needs of southern California. From the documentation in this DEIS, it still appears that the "Proposed Action" actually is this alternative! Does the Air Force believe the "Proposed Action" should be eliminated from further consideration?
	2-41 49	The No Airport alternative is perfectly acceptable to the City of Adelanto and is stated clearly in the reuse plan. The alternative stresses residential development, not industrial, for the majority of the land area. It appears that a more thorough analysis of Adelanto's reuse plan should be completed prior to the issuance of the Final EIS.
	Fig. 2.5-1 50	The map portraying the proposed Highway 395 alignment is inaccurate. The alignment is planned much further west than is shown. In addition, the east-west roadway has been adjusted slightly to reflect the input from the City of Adelanto.
	Table 2.6-1 51	This table presents an inaccurate comparison of the alternatives. The land area required for each alternative varies, and the cumulative impacts of other peripheral land uses are not considered. It should be pointed out that as an airport (of any scale) develops, adjacent properties will develop at an accelerated pace. In order to fairly compare the alternatives, the same physical land area should be analyzed for each concept. The comparison should be based utilizing comparable land areas, incorporating anticipated land uses. Adelanto's reuse plan evaluates three scenarios in this manner (international airport, regional airport, and no airport).
	Table 2.6-2 52	SAME COMMENT AS # 51
	Table 2.6-3 53	SAME COMMENT AS # 51
	3-2 54	It appears that the ROI should include Los Angeles County, since the Lancaster/Palmdale area is located near George AFB. In addition, Orange County has been excluded which has a dramatic impact on the region, in that many residents of the Victor Valley commute to jobs in that area.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
54 17.1	3-4 55	If the Socioeconomic Impact Analysis Study has been referenced in this DEIS, a copy (appendix) should be made available to the public and affected public agencies.
55 5.7	fig. 3.2-3 56	Adelanto's City Limits are inaccurately portrayed due to fairly recent incorporated areas in the planning area. The map should be updated.
56 6.7	3-15 57	The City of Adelanto has adopted the land use plan, not the entire General Plan, as the interim policy direction the City means to implement. The land use plan incorporates the Airport Development District as part of the General Plan Update.
57 7.5	3-42 58	A two hour drive time to LAX from George AFB is only possible under ideal traffic conditions.
58 9.3	3-44 59	Contrary to the statement (3.2.5.1) regarding the water supply at George AFB, estimates do exist between the Air Force and the City of Adelanto (Adelanto Water District). The Air Force operates wells on land owned by the City of Adelanto and a State water well permit is held jointly by George AFB and the City of Adelanto.
59 10.1	3-76 60	It should be identified, even in preliminary form, which 40% of base facilities contained ACM. In order to determine which facilities are "habitable", the respective agencies need this information to appropriately assign structures, especially housing units.
60 5.8	4-3 61	The term "indirect disposition" needs to be explained.
61 6.8	4-7 62	Part of the Aviation Support delineated on Figure 4.2-2 is located within the City of Adelanto and has a zoning conflict with a Manufacturing/Industrial district according to current zoning. There are also some residential conflicts north of the primary runway, as depicted according to Figure 3.2-5.
62 14.1	4-7 63	Figure 4.2-2 shows a 65dB noise contour. What fleet mix and activity level (# of operations) has been utilized?
63 6.9	4-8 64	The paragraph implies that an approved airport layout plan for the "Proposed Action" has been selected for implementation. The sentence should read, "...been approved for the Selected Reuse Alternative...", to more objectively compare the options.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
64 6.10	4-8 65	An expendable airport was to be eliminated from further consideration, according to Section 2.4, making it unnecessary to rumen areas to the north of the Base.
	4-9 66*	The interim land use plan is intended to accommodate an aviation facility controlled by the City of Adelanto and/or an airport authority of which it is in support of and is a member. The "Proposed Action" facility is not supported by the City of Adelanto and therefore is inconsistent with their goals, policies, and objectives.
	4-11 69	The implementation of development standards, Zoning code, and design guidelines are all part of the General Plan. The aesthetic environment will be substantially improved in relation to the existing conditions.
65 6.11	4-11 70	Since the fleet mix evaluated in Table 2.3-2 is not a true representation of the actual fleet mix, it is impossible to calculate how many residences and businesses must be relocated to insure airport compatibility. A new model must be generated according to a more realistic fleet mix.
66 6.12	4-12 71	Table 4.2-3 does not reflect the incorporation of the Airport Development District (ADD) land use category as established on the City of Adelanto's Interim Land-Use Plan. No land use conflicts exist at the policy level. In addition, it is difficult to understand where conflicts would arise on-base between the proposed Business Park and Hotel/Parl (Commercial) land uses.
67 5.13	4-13 72	SAME AS COMMENT TO FIGURE 4.2-4
	4-14 73	SAME AS COMMENT TO FIGURE 4.2-5
68 3.1	4-21 74	The prison location south of Air Base Road may not be in conflict with land use/zoning plans, but does conflict with the general goal, policies, and objectives of the General Plan to locate a prison facility elsewhere in the City. In addition, the prison would have a negative psychological, socioeconomic, and aesthetic impact in that location to an aviation facility of any kind, as well as creating a negative marketing perspective. To restate, the City of Adelanto maintains its offer to provide an equivalent prison site to the BOP in cooperation with the acquisition of George AFB.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
69 7.6 8 70 7.7	4-25 75*	The Southern California Aviation System Study Update(SCAG, 1991) information regarding the 24.7 MAP shortfall in the SCAG region indicates that George AFB will play a major role in providing air passenger service. This information should have been highlighted in the summary chapter of this document. It also substantiates Adelanto's database regarding projected regional shortfalls. This data must be incorporated into the socioeconomic study to determine the economic impacts of the entire southern California region if adequate aviation facilities are not provided.
	4-25 76	The utilization of AMTRAK is a good idea, but it does not adequately serve the commuter and/or international travel market. High Speed ground access systems are the only solution and should be mentioned in this section.
	4-35 77	A long-term capacity of 1 MAP does not meet the needs of the region and should be considered unacceptable by the FAA as playing a significant role in the National Aviation Systems Plan.
71 7.3	4-37 78	These ADT figures are much higher overall than those projected by the City of Adelanto's Circulation Element. As discussed with the Air Force commission, the source data utilized was from Ontario Airport, a commuter/regional aviation facility. An international/inter-regional airport will have significantly less vehicle trips per passenger. Coupled with this and the prospect of a superhigh ground access link, the EIS figures are much too high. A "modest split" of nearly 25% will be required in order for the vehicle circulation systems (region-wide) to accommodate increased usage.
	4-37 79	The Circulation Element of Adelanto's General Plan designates the roadway mentioned as either Freeway, super arterial, expressway, or major arterial. The system has been designed to ultimately accommodate "build-out" conditions of the General Plan, as well as incorporating the international airport facility.
	4-41 80	The General Plan for the City of Adelanto calls for the preparation of a Master Development Plan, which will specifically locate all uses, roadways, and infrastructure. A detailed traffic analysis will be conducted at that time.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
72 3.15 73 7.6	4-41 81	The projected annual operations area based on VVEDA's fleet mix, which has a high percentage of general aviation operations. Adelanto's plan discourages general aviation uses and will reduce to total number of operations significantly. Also, the airport has been designed to allow for a fifth (95) runway, which will be constructed when demand for it is anticipated, resulting in greater operational capacity.
	4-44 82	Rejuvenation of the existing rail spur and possible extension into Adelanto's industrial district is part of Adelanto's planning efforts.
74 7.7	4-44 83	Mention of the proposed high speed ground access system should be included.
75 8.1	4-44 84*	This study to determine how airspace in the region is aligned needs to be undertaken now, as the projections for airport capacity are nearing the overflow level. The FAA should play a proactive role in defining this scope of the analysis.
76 9.1	4-68 85	Water Demand- International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses is evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
	4-69 86	WASTEWATER- SAME COMMENT AS #85
	4-71 87	SOLID WASTE - SAME COMMENT AS # 85
	4-72 88	ELECTRICITY - SAME COMMENT AS # 85
	4-74 89	NATURAL GAS - SAME COMMENT AS # 85
	4-75 90	Major water planning on a regional basis should already be taking place. Southern California is growing steadily and new sources of water, as well as airports, need to be determined NOW.
77 12.1	4-116 91	Less than 50 percent of the airfield area will be overlain by asphalt, concrete, or other hardscape. The majority will be left in as a natural state as possible, depending on drainage flow requirements.
	4-116 92	Storm water runoff systems will be incorporated into the Master Development Plan, including potential pretreatment facilities and/or policies.

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## DOCUMENT 2

COMMENTS TO DEIS		
PAGE #	COMMENT #	RESPONSE
76 13.1	4-125 93	Figure 4.4-1 indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
	4-126 94	SAME COMMENT AS # 93
	4-128 95	SAME COMMENT FOR FIGURE 4.4-3 AS # 93
	4-130 96	FIGURE 4.4-4: SAME AS COMMENT # 93
	4-131 97	FIGURE 4.4-5: SAME AS COMMENT # 93
79 14.2	4-152 98	Table 4.4-18 does not reflect City of Adelanto policy regarding land use, zoning, or compatibility with HDIA.
80 7.1	4-152 99	The operational level (MAP) should be defined for each alternative. It appears that a 1 MAP service level has been utilized for analysis of the "Proposed Action", whereas capability of up to 15 MAP were discussed earlier.
81 7.9	E-4.2 100	It appears that this section is boilerplate since Norton AFB is used in this section. Norton AFB should be replaced in the text by George AFB.

ASL-ACCOMMODATIONS

14

October 17, 1991

619-245-3411  
FAX 619-245-724314343 Civic Drive  
Victorville, California 92380-1580

Lt. Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRCI-BMS/DEV  
Norton AFB, CA 92409-6448

## RE: COMMENTS ON GAFB ENVIRONMENTAL IMPACT STATEMENT

In January 1989 the Air Force announced that George Air Force Base (GAFB) would be closed by December 1992. This department was contacted in December 1989 by the United States Department of the Interior (National Parks Service) requesting a "Letter of Preliminary Intent" for the recreational facilities at George Air Force Base. Correspondence was returned by the City indicating an interest in the transfer of certain recreational facilities at GAFB under the Public Benefit Program.

The Parks, Recreation and Community Services Department has continued to express interest in these facilities and that any conveyance be made in conjunction with the reuse plans of the Victor Valley Economic Development Authority (VVEDA). Since Victorville's application for the recreational facilities was made, other agencies have expressed interest in some of the same facilities. Through discussion with these other public agencies, cooperative efforts to maximize the reuse of certain facilities have been outlined. These joint plans minimize changes to the existing structures, which helps to minimize negative environmental impacts. Since the City of Victorville is a potential conveyance agency, the Draft Environmental Impact Statement was reviewed from this perspective by the Department of Parks, Recreation and Community Services. Comments are as follows:

- 3.21 1. In Section 1.3.1, page 1-6, it states that the National Park Service and VVEDA support conveyance of the recreational facilities to the City of Victorville. However, this action is not identified or considered as a component of the "Proposed Action" (a VVEDA proposal). It is recommended that the "Proposed Action" accurately reflect what the City of Victorville has expressed an interest in as shown on the attached map.

2. Section 4.2.1.6, page 4-5: While conveyance of the Recreation Facilities may decrease the space available for commercial activities, the availability of recreation facilities complements and is compatible with commercial activity and all other land uses being considered. In many cases businesses are attracted to areas that have leisure opportunities and facilities for their employees.



Areas of Interest at George Air Force Base

Victor Valley Community College

City of Victorville - Parks and Recreation

Adelante School District

George Air Force Base EIS

October 17, 1991

Page 2

- 5.9 3. There is a statement on page 4-5 that five direct jobs would be generated, yet on page 4-26 fifty jobs are indicated (golf, parks, and open space). Is this a misprint or an inconsistency?
- 7.10 4. On page 4-26, it is identified that Amethyst/Cobalt Road is a major arterial with 100 feet of right-of-way. Since this street could be expected to carry a significant proportion of traffic traveling to the airport or other facilities from Victorville, perhaps it should be included on the reuse option maps and environmental impacts considered for it.
- 3.22 5. On page 2-39, the U.S. Department of Education has expressed interest in the school sites and certain recreation facilities on behalf of the Adelante School District and the Community College Services District. It should be noted that this may not present a conflict in uses with the City of Victorville. The City has a joint-use agreement with Adelante School District for a different site and it is anticipated that similar arrangements could be entered into for facilities at GAFB.

Should you have any questions regarding these concerns, please contact me at (619)245-3411 extension 302.

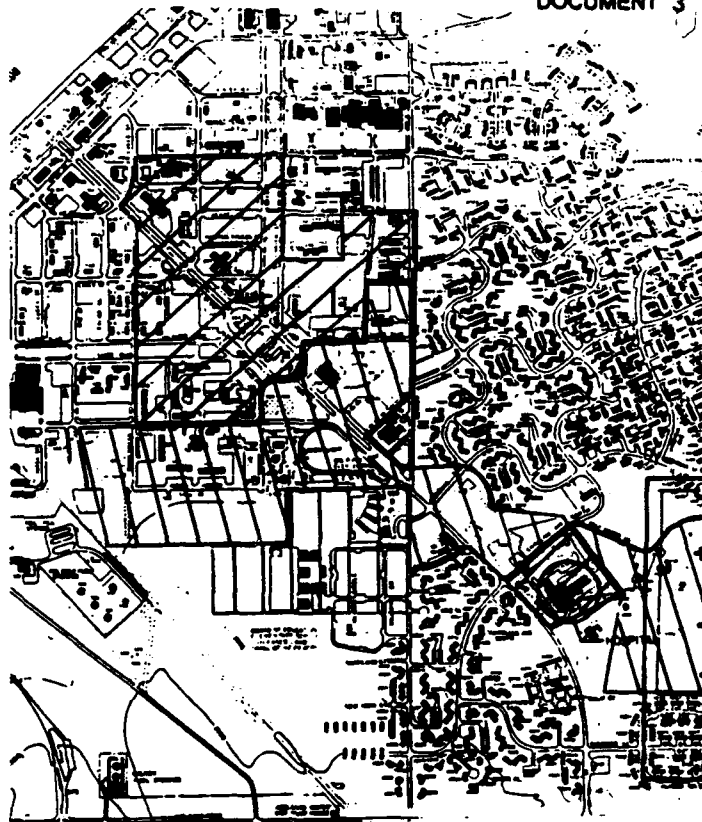
Sincerely,

*Richard W. Bunnell*  
Richard W. Bunnell  
Director of Parks, Recreation and Community Services

RWB/JH/gb

cc: Peter Sly, Western Division - National Park Service  
Peter D'Errico, Victor Valley Economic Development Authority  
Ken Hobbs, Assistant City Manager, City of Victorville

VICTORVILLE



Areas of Interest at George Air Force Base

City of Victorville - Parks and Recreation

Adelante School District

Victor Valley Community College

October 17, 1991

Lt. Col. Thomas J. Bartol, USAF  
Director of Environmental Division  
AFMCE - HNS/DSV  
Morton AFB, CA 92409-6448

RE: DRAFT ENVIRONMENTAL IMPACT  
STATEMENT DISPOSAL AND REUSE OF  
GEORGE AIR FORCE BASE,  
CALIFORNIA SEPTEMBER, 1991

Dear Colonel Bartol:

Thank you for the opportunity to present comments on the Draft Environmental Impact Statement (DEIS) for the reuse of George Air Force Base (GAFB). The Victor Valley Economic Development Authority (VVEDA) has appreciated the opportunities to provide inputs to the DEIS alternatives, and to participate in the process during the programmed schedule from October 1990 to the present. A substantial number of documents, studies, program plans, and other materials have been provided by the VVEDA to the United States Air Force and its consultant groups during the course of the development of the DEIS.

We have several observations about the DEIS which we would like to make at this time. We also understand that we have until November 11, 1991 to file additional comments.

1. We will submit for your review the following documents between VVEDA and several Federal agencies:

- A. The preliminary Application for Public Benefit Transfer submitted by VVEDA to the FAA on June, 1991.

2. Accordingly, a portion of the existing GAFB family housing inventory may be reused for such low and moderate income housing - in compliance with the State statute. This will entail an alternative residential land use designation over a portion of the existing family housing area - which is now planned for industrial offices/business park in the VVEDA plan.

3. VVEDA notes the interrelationship between the DEIS and its companion Socioeconomic Analysis document. VVEDA has studied the Socioeconomic Analysis document and finds it to be a very ambitious and articulate assessment of the effects of each alternative on the affected communities. This document indicates the true relationship and driving numbers behind many conclusions reached in the DEIS.

Recognizing this was not required by law, the Air Force has made an important contribution to the entire community by preparing this study.

4. VVEDA has described the reuse of GAFB as an evolving program of development. The DEIS, in effect, acknowledges that dynamic evolution.

Overall, we are impressed by the general clarity of methodology contained in the DEIS. We, again, welcome the many invitations to be involved in the process.

Page 2

October 17, 1991

- B. The application for Public Benefit Transfer submitted by VVEDA to USAF in July, 1991.
- C. A revised application for Public Benefit Transfer submitted by VVEDA to USAF in September, 1991.
- D. The Draft Overall Reuse Plan for GAFB prepared for VVEDA, and distributed to its members on October 9, 1991.
- E. The proposed draft VVEDA Redevelopment Project Area boundary map, as accepted for consideration by VVEDA on October 9, 1991.

3.23 IT MAY BE APPROPRIATE TO CITE THESE DOCUMENTS IN THE FINAL EIS.

2. VVEDA will have a requirement to provide funds for the development of low and moderate income housing in the community if it is successful in adopting a tax increment generating Redevelopment Plan ordinance for GAFB, under California Redevelopment Law.

Page 3

October 17, 1991

2. Accordingly, a portion of the existing GAFB family housing inventory may be reused for such low and moderate income housing - in compliance with the State statute. This will entail an alternative residential land use designation over a portion of the existing family housing area - which is now planned for industrial offices/business park in the VVEDA plan.

3. VVEDA notes the interrelationship between the DEIS and its companion Socioeconomic Analysis document. VVEDA has studied the Socioeconomic Analysis document and finds it to be a very ambitious and articulate assessment of the effects of each alternative on the affected communities. This document indicates the true relationship and driving numbers behind many conclusions reached in the DEIS.

Recognizing this was not required by law, the Air Force has made an important contribution to the entire community by preparing this study.

4. VVEDA has described the reuse of GAFB as an evolving program of development. The DEIS, in effect, acknowledges that dynamic evolution.

Overall, we are impressed by the general clarity of methodology contained in the DEIS. We, again, welcome the many invitations to be involved in the process.

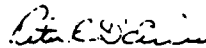
Page 4

October 17, 1991

3. VVEDA recommends that this DEIS be further coordinated with the FAA so that it may serve as the essential environmental record reuse document for that agency as well. We have been advised by both USAF and FAA that this is possible.
4. Based upon current expressions of interest by aviation prospects, VVEDA requests an analysis increment in the DEIS of the strong interest displayed by airlines and others in aircraft training of heavy and tactical aircraft.

Thank you for the opportunity to provide comments on the DEIS. Please let us know if you require additional information.

Sincerely,



PETER R. D'AMICO  
Executive Director

PRD:eam



16425 Hwy Valley Road  
Victorville, CA 92392-0000  
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FAX 916 948-6766

SUPERINTENDENT  
PRESIDENT  
Dr. Edward G. Gould

October 17, 1991

Lieutenant Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRCR-BMS/DEV  
Norton Air Force Base, California 92409-4448

Dear Lieutenant Colonel Bartol:

We have reviewed the Draft Environmental Impact Statement dated September, 1991. Victor Valley Community College is concerned that the draft EIS makes scant mention of the educational possibilities for the re-use of George Air Force Base. Victor Valley Community College presented its proposal for re-use at the VVEDA Commission Hearing on 7 August and a copy of that proposal was sent to the Air Force Regional Civil Engineer at Norton Air Force Base on 6 August, 1991. Subsequently, requests for facilities were sent to Mr. George E. Hoopes, Director, Department of Education, Federal Real Property Assistance Program. Additionally, a detailed briefing, which outlined the VVC proposal for the creation of a second campus was presented to VVEDA officials on 30 September, 1991.

Victor Valley College desires to create a second campus at George Air Force Base. It is important to

3.25

Victor Valley College  
October 17, 1991  
Page 2

note that our proposal for an educational center is compatible, in fact complements, any of the alternatives identified in the Draft E.I.S. This proposed campus would radiate outward from buildings #263 and #285, and would include buildings #185, #470, #289, and #290 at its extreme ends. Also included would be the Base hospital and surrounding grounds. This entire area would also include those grounds and facilities desired by the Parks and Recreation Department of the City of Victorville and requested by the United States Department of the Interior for transferal to a local jurisdiction through the public benefit program. The facilities and grounds desired for recreational purposes along with those desired for educational purposes would create a "community serving" area of great public benefit. The facilities were designed by the Air Force with training in mind and a minimum of modification would be necessary to convert them to our proposed educational uses. The sharing of resources and facilities to serve the community would be practical, economical, and cooperative.

Victor Valley College  
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The gymnasium and theater could be owned and operated by the City of Victorville with Victor Valley College becoming one of the scheduled users. The present fire department could provide fire protection to the entire developed area while also providing the professionals and the practicum to train students through existing VVC curriculum. The firing range and the legal facilities in building #321 would provide an ideal classroom and practicum environment for City, County, and State law enforcement agencies to take advantage of existing educational programs at VVC. The present Base hospital could become a combination care giving and training facility with licensed professionals enhancing the existing VVC curriculum and enlarging the curriculum to include dental hygienists, technicians and assistants. The Command Post in the present Headquarters building could become a disaster preparedness and hazardous material training area while acting as a central control center for direct support of local agencies in the event of a real emergency affecting the community.

Victor Valley College  
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The concept of a "community serving" area deals with the existing programs and the existing needs of the community at large. In addition, the job opportunities created by any degree of development and those created by predicted population increases are not job opportunities if the educational delivery system to provide job skills is not available. Victor Valley Community College is an established institution capable of expanding and rapidly changing its curriculum in order to provide what industry demands and to close the skills gap between labor and economic redevelopment. The co-operation and support pledged by California State University, San Bernardino will strengthen the ties between educational institutions, provide a more varied curriculum base, and support the concept of shared resources.

The Victor Valley College proposal for the establishment of a campus on a closing military base is not a new one. Between 1961 and 1990, fifty-seven former bases became the seat of a number of four-year colleges, and post-secondary vocational-technical programs. These schools presently accommodate 75,000

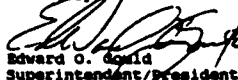
## DOCUMENT 5

Victor Valley College  
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Page 5

college students, 25,000 secondary vocational-technical students, and 62,000 trainees. The draft EIS refers to the creation of 40,400 jobs in the Victor Valley alone if the proposed action is adopted. There will be a need for skills training from the time George Air Force Base closes until the end of the transition period which, according to the U.S. Department of Defense, Office of Economic Adjustment, could last from three to five years. The problems we will all experience in the next decade concerning language, computer skills, and our changing environment dictate that education be given the strongest possible support to grow with the community and to be specifically included in any proposal for the re-use of George Air Force Base.

Thus, let it be entered in the record that Victor Valley College desires to create a second campus at George Air Force Base with the appropriate aforementioned boundaries to serve the community and the public interest and to secure such facilities and land as a public benefit transfer.

Sincerely,

  
Edward O. David  
Superintendent/President

cc: VVEDA  
City of Adelanto

## DOCUMENT 6

## KANE, BALLMER &amp; BERKMAN

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ROBERT A. BERKMAN  
COUNSEL  
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A PROFESSIONAL CORPORATION  
OF CALIFORNIA

October 17, 1991

Lt. Col. Thomas J. Bartel  
Director of Environmental Division  
AFPRC-SMS/DEV  
Norton Air Force Base, California 92340-6448

RE: COMMENTS FOR THE CITY OF ADELANTO, CALIFORNIA AND THE REDEVELOPMENT AGENCY OF THE CITY OF ADELANTO ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT, SEPTEMBER 1991, DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Lt. Col. Bartel:

These comments are submitted on behalf of the City of Adelanto, California and the Redevelopment Agency of the City of Adelanto concerning the Draft Environmental Impact Statement, September 1991 (the "DEIS") prepared by the U.S. Air Force ("USAF") for the proposed disposal and reuse of George Air Force Base ("George AFB") located in San Bernardino County, California. These comments represent major issues regarding the content, format and evaluation methods of the DEIS and may be supplemented by the City of Adelanto on or before November 11, 1991.

The DEIS complies neither with the requirements of the National Environmental Policy Act ("NEPA") nor with the California Environmental Quality Act ("CEQA") for the following reasons, *inter alia*:

#### I. COMMENTS WITH RESPECT TO THE ADEQUACY OF THE DEIS IN GENERAL

- (1.0) 1.1 Concursory Nature of DEIS. The DEIS for the most part is comprised of concursory statements with limited analysis. The DEIS generally does not disclose the methodology and supporting data and information representing the basis for the conclusions reached, as required by NEPA and CEQA.
- (1.7) 2.2 Alternatives. The DEIS does not present the environmental impacts of the selected Proposed Action and other alternatives in a form which sharply defines issues and provides a clear basis for the USAF's choice.
- (1.8) 3.3 Significant Effects. The DEIS does not identify the effects of the alternatives and their significance.

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- (1.9) 4.4 Effects on City of Adelanto. The DEIS does not identify and analyze the significant effects and conflicts of the Proposed Action on the City of Adelanto and other individual cities and communities.

- (1.10) 5.5 Cumulative Impacts. The DEIS does not adequately identify the cumulative impacts associated with the Proposed Action and other alternatives.

#### II. COMMENTS ON SPECIFIC PROVISIONS OF DEIS

6. The DEIS states that its purpose and need is to provide information on the potential environmental impacts resulting from several alternatives for reuse of George AFB property after disposal, after which the USAF will prepare decision documents stating the terms and conditions under which the disposition will be made, including the mitigation measures, if any, that may be taken by the USAF or the recipients (p. 1-11). In the DEIS the USAF selected as the environmental project (the "Proposed Action"), a reuse of George AFB pursuant to a purported plan developed by the Victor Valley Economic Development Authority ("VVEDA") and centers around a regional commercial and general aviation airport for reuse of the Base property. VVEDA is a Joint Powers Authority (the "JPA"), purportedly have been formed pursuant to the California Community Redevelopment Law (Health & Safety Code §§ 33000, et seq.) in September 1989 in order to obtain title to George AFB and its facilities. VVEDA consists of a partnership of the County of San Bernardino, the City of Victorville, the City of Hesperia and the town of Apple Valley. The City of Adelanto removed itself from VVEDA early in the planning process and pursued its own plan for the purchase and reuse of the Base (pp. 2-2, 2-3).

- (1.10) 7.6 VVEDA is the recognized reuse authority in the DEIS. The Proposed Action, the VVEDA proposal, in the DEIS has been given tremendous preferential treatment. The DEIS purportedly analyzes six other alternatives to the proposed action which includes the proposal of the City of Adelanto for the development of an international airport. However, the treatment and analysis of these alternatives are summary and conclusory. Thus, the DEIS is a mere post-hoc justification of the USAF's decision, apparently already made, to transfer George AFB to VVEDA for development and reuse. The DEIS should evaluate each alternative, including the VVEDA plan, on an equal basis. The VVEDA plan is only one of the alternatives. Unfair bias has been used in the preparation of the DEIS.

- (1.12) 8. The comparison of resource impacts among alternatives in the DEIS is accomplished using post-closure conditions as the baseline. For example, projected population increases are based upon increases beyond that which would exist after the Base is closed. Population increases therefore do not reflect population losses resulting from Base closure. The approach is confusing. To fully evaluate the impacts of alternatives, it is necessary that comparisons be provided with conditions existing today.

- 9.24 9. Water demand, groundwater overdraft estimates and sewage generation are based upon population estimates. Projections for these resource impacts are therefore comparable only with conditions existing during post-closure and can not be compared with present conditions.

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10. Table 2-3 (p. 2-3). The number of operations related to employment for each scenario does not correspond to the number of flight operations at 2013.

(5.2) 10. HDIA: 80,000 jobs = 12 jobs/operations  
670,000 operations

VVEDA: 40,000 jobs = 528 jobs/operations  
76,000 operations

- (5.9) 11. Local Community (pp. 2-15, 16). The DEIS states that the High Desert International Airport ("HDIA") will result in large increases in local community population and employment. However, the increase in population in the Region of Influence (ROI) will increase naturally due to current trends. The inclusion of the HDIA will have minimal impact on the increase of residents moving to the ROI.

- (6.9) 12. The DEIS (p. 2-16) should recognize that the Adelanto Reuse Plan for George AFB is incorporated into the General Plan/Zoning for the City. Preliminary plans for relocation of incompatible uses are being prepared.

- (9.9) 13. Water Consumption (p. 2-18). The consumption of water of the Proposed Action will be much higher than that of the international airport if one compares the same land area. To clarify, if one takes the Airport district land area (20,000 acres) and places the Proposed Action alternative and surrounding industry and residential uses within it, the cumulative impacts are more than double that of the HDIA alternative.

- 15.1 14. Natural Environment (p. 2-16). "Degradation" as used in the DEIS with respect to wetlands should be further defined.

- 2.1 15. The "No Action" alternative has tremendous socio-economic impacts. If nothing is installed to replace the jobs that are eliminated once the USAF leaves, there will be significant economic and cultural impacts. (p. 2-20)

- 1.2 16. 1.1. Purpose and Need (p. 1-1). The DEIS states that "The George AFB property will be disposed of in compliance with the Defense Authorization Amendments, Base Closure and Realignment Act, the Federal Property and Administrative Services Act of 1949, and the Surplus Property Act of 1944." All of these legislative acts indicate that the intent of disposal of the military installations is to reduce the level of federal expenditures and if possible to sell the properties to recover dollars to inject into the defense budget. They also recognize any political subdivision as a legal entity and any such entity may prepare a reuse plan for adjacent military facility. Such plans shall be considered equally in terms of evaluative purposes. No individual project/proposal shall take precedence. Thus, the DEIS selection of the VVEDA proposal is inconsistent with the laws of the U.S. government.

- 2.2 17. 1.1.1. Alternative Reuses (p. 1-5). The City of Adelanto has prepared a reuse plan for George AFB and the adjacent land which incorporates an interregional/international airport capable of accommodating southern California's long range aviation needs. The airport has been designed to ultimately served upwards of 80 million annual passengers ("MAP") not 80.

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- 3.1 18. The City of Atlanta has offered the Federal Bureau of Prisons an alternative site to one on George AFB. (p. 1-6)
18. 1.3.1. Infrastructure (a. 1-7). The Victor Valley Wastewater Reclamation Authority (the "VVWRA") requires a unanimous vote to restructure the members of VVWRA. It is unlikely that the City of Atlanta will consent to VVEDA or any other agency the ability to be served by the plant, unless Atlanta has ultimate control of the Base property.
- 1.15 20. 1.3.1. Miscellaneous (a. 1-8). Who encouraged the Department of Defense to solely recognize VVEDA as the reuse authority? As stated earlier, the BCRA and other legislative actions allow all entities to prepare plans for reuse and that such plans shall be evaluated on a non-partial basis. This recognition is consistent with governmental policies.
- 1.3 21. 2.1. Introduction (a. 2-2). It should be noted that the City of Atlanta's reuse plan for George AFB was submitted in its entirety to the USAF by the November 30 deadline. VVEDA has yet to produce their reuse document. It therefore, would be difficult to accept that plan as the Proposed Action.
- 3.2 22. 2.1 (a. 2-3). If the results of these technical studies are being completed, how has the USAF been able to analyze, with any degree of accuracy, the VVEDA's proposal.
- 7.1 23. 2.2.1. Airfield (a. 2-7). VVEDA's proposal, based on the P & D Technologies Projected Flight Operations, shows a total of 23,100 passenger operations per year. This number of operations does not correspond to a 15 Million Annual Passengers ("MAP") level at 2013.
- 3.4 24. 2.2.1 (a. 2-7). Due to environmental constraints present at the George AFB facility, it is unlikely that a 50/50 split of operations is possible between the north/south (17/35) and crosswind (03/21) runways. The wind constraint should have been more thoroughly investigated.
- 3.5 28. 2.2.1 (a. 8). Has the VVEDA been chartered to become an airport authority? Is the FAA concerned that the VVEDA may lack the required expertise in the operation of an airport facility, especially at the "15 MAP" level? Also, it is probable that taking the responsibility for operation of the airport, redevelopment agency, property management, and marketing is far beyond the original intent in the formation of the JPA.
- 7.1 28. 2.2.1 (a. 2-10). Who predicted the 15 MAP capacity level? VVEDA's plan describes 0a 1 MAP airport. It would be useful if that report were made available to the public. Who completed the study? The USAF?
- 6.2 27. 2.2.6. Industrial (a. 2-11). Much of the 1,605 acre parcel is comprised of rugged terrain and may not be suitable for airport-related facilities. Expansion in that area would be difficult.

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- 3.12 38. 50 MAP service level. Also, it should be noted that the cross wind runways would be used not only for severe wind conditions, but also for normal operating conditions. This will allow for simultaneous take-off and landing from both sets of runways. The north/south runways would be the main landing facility, whereas the crosswind runways would be primarily dedicated for take-offs.
- 3.13 39. 2.3.1.1. (a. 2-17). The plan for HDIA is conceptual. To specify the number of buildings for terminals is premature until development plans for the area are prepared. The design of the entire Airport Development District will entail the preparation of a Master Development Plan, which will incorporate both airfield and airport related activity. This plan will be prepared subsequent to the Record of Decision.
- 3.14 40. 2.3.1.1 (a. 2-17). It will not take until build-out to accommodate wide body aircraft. The existing runways can actually handle a wide-body. However, the new runways to be constructed between closure and 1998 will be designed to the specifications for all wide-body aircraft, as well as hypersonic and suborbital craft.
- 3.4 42. 2.3.1.1 (a. 2-17). This paragraph makes no sense. As stated on page 2-16, ¶ 5, the wind constraint only occurs 20 percent of the time, not 50 percent. All runways will be utilized to facilitate maximum operational levels.
43. Table 2.3.2 (a. 2-18) contains information that was derived from the VVEDA report and are inappropriate to be analyzed as the City of Atlanta's proposal. The information lacks basis, specifically:
- It is anticipated that there will not be such a large usage from general aviation users. It is pointed out in the Atlanta Reuse Plan the general aviation users will be discouraged from HDIA, and recommended to locate at Apple Valley Airport and others.
  - Air cargo fleet mix is too restrictive and is not realistic. Many other aircraft types are in the area and will be used for cargo operations.
  - Aircraft maintenance facilities typically accommodate the type of aircraft normally being utilized at a particular facility, except in a few cases. In other words, the air passenger/cargo fleet mix should be representative of the maintenance facilities incorporated at the airport.
  - Source information came from Don Corright, Corright/Selfield, and was based on fleet mix (not passenger estimates) for HDIA.
  - Source material should not be derived from the Proposed Action. Who authorized this usage?
- 3.15 42. 2.3.1.1 (a. 2-18). As an international airport, more than 5 percent of operations will occur between 10:00 p.m. and 7:00 a.m. An 80/20 split is more likely.
- 4.1 45. 2.3.1.1 (a. 2-18) 2nd ¶. The City of Atlanta, since submitting the reuse plan, has applied for Public Benefit Transfer of all of the aviation related portions of the Base. The remainder to the Base is still to be obtained through negotiated purchase. Atlanta submitted the request for Public Benefit Transfer to appease Federal, State and local officials that Atlanta intends to maintain the George AFB aviation facilities as a civilian airport.

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- 7.2 28. 2.2.6. Transportation (a. 2-11). This paragraph leads one to believe that the security fences are to remain around the Base Facility. Won't the fences be removed after Base closure?
- 5.3 28. Table 2.2-4 (a. 2-12). This table needs to reference the source data for the projections. Based on the operational figures listed in Table 2.23, 24,400 jobs is extremely high. It appears that the USAF OES consultants used different assumptions than those presented by the VVEDA. If so why?
- 9.2 30. 2.2.9. Water Supply (a. 2-13). It should be specified who the water purveyor will be. Under an agreement with the USAF, all water rights will revert to the Atlanta Water District upon the closure date of George AFB.
- 6.3 31. Figure 2.2-1 (a. 2-5). VVEDA's master plan shows, as part of the airfield land use category, land within the City of Atlanta. Has an agreement been reached between the VVEDA and the City of Atlanta? If not, the map should be adjusted.
32. 2.2.9. Wastewater (a. 2-13). It should be noted that if a new entity is given control of the George AFB property, a new agreement must be reached with the VVWRA members. This agreement must be in the form of a unanimous vote. VVEDA, as a JPA, is not a member of VVWRA. (p. 2-13)
- 3.6 33. 2.3.1. International Airport Alternative (a. 2-13). Atlanta's Reuse Plan for George AFB states that the airport has been designed to accommodate 50 MAP not 60 MAP.
- 3.7 32. 2.3.1 (a. 2-13). The sentence which reads "According to the plan" should read: based on national aviation studies and reports. (p. 2-13)
- 3.8 33. 2.3.1 (a. 2-14). The proposed super-hub facility has been designed to service southern California's projected long-term shortfall in passenger and cargo demand.
- 6.4 34. Table 2.3.1 (a. 2-14). The Commercial designation for the 630-acre area of the Base should be categorized as Hotel/Part as shown on the reuse plan maps. This more accurately depicts the intended use of this area. Uses that are allowed within the Hotel/Part district include hotels, golf courses, parks, service commercial, open space, recreational facilities, etc.
- 3.9 35. Figure 2.3-1 (a. 2-18). The crosswind parallel runways shown should portray a 2500 foot separation from centerline. They appear to be shown too close together. (p. 2-18, Map)
- 3.10 36. 2.3.1 (a. 2-18). Items that were part of the reuse plan for HDIA included: Airspace analysis/recommendations; Environmental/economic impact; Comparative analysis of reuse alternatives; Impact of future technology; Financial component for acquisition; Proposed airport authority. (p. 2-18)
- 3.11 37. 2.3.1.1. Airfield (a. 2-18). It should be noted that the terminal complex and airfield have been designed to accommodate the 25 MAP level. Terminal Reserve areas and the Airport Development reserve area allow adequate expansion to accommodate the

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- 6.4 46. 2.3.1.3. Commercial (a. 2-18). The Commercial land use zone should be changed to Hotel/Part district to more accurately describe the intended uses. Also it should be pointed out that the plan calls for the retention of the significant stand of mature trees located in the residential areas on-base.
- 6.5 47. 2.3.1.4. Industrial (a. 2-18). Business park zones should not be classified as industrial. These uses are intended to buffer the Hotel/Part and other areas from the more intensive general industrial and aviation industrial uses.
- 6.6 48. 2.3.1.7. Traffic Generation (a. 2-22). 310,000 daily trips to and from the Base property is much too high. In addition, since the airport terminals are being located off the Base property, this number will be insignificant. Most of the trips, projected at just over 180,000 average daily trips ("ADT"), will emanate from the airport complex and the associated airport district area. There needs to be a formula (source) for the 310,000 ADT projection. From discussion with Earth Tech, we were informed that the numbers were based on Ontario Airport's traffic generation. Being an international/regional hub type airport, fewer travelers will be coming via private automobile. It is estimated that approximately 28 percent of travelers will arrive/depart from the airport via super speed train and/or other mass transit systems.
- 7.3 49. 2.3.2. Commercial Airport With Residential Alternative (a. 2-21). It seems inappropriate to utilize VVEDA data for the federal government's analysis of any other alternative.
- 3.1 50. 2.3.8. U.S. Department of Justice (a. 2-38). Part of the City of Atlanta's proposal for George AFB is an offer to the Bureau of Prisons of a comparable site in a more remote area for the location of a new prison facility.
51. 2.3.8. U.S. Department of Housing and Urban Development (a. 2-38). The location of housing for the homeless within the Base housing area may/may not be in the best interests of the adjacent communities.
- 5.4 52. Table 2.3.11 (a. 2-37). The net reduction of jobs, if based on the same FAR ratios for the same acreage, should remain constant. Why do the numbers not match? In addition, if Atlanta's proposal is accepted, an appreciable gain of 2,800 jobs will be achieved.
- 5.5 53. Table 2.3.11 (a. 2-37). The majority of other land use concepts will not significantly impact the HDIA alternative. In fact, most of these uses will be able to be absorbed into the overall plan. It appears that these uses will have significantly less impact to the HDIA plan than under the Proposed Action.
- 3.3 54. 2.4. Alternatives Eliminated From Further Consideration (a. 2-41). The alternatives analyzed by VVEDA: Did these alternatives get dropped for environmental, economic or political reasons? Should these alternatives be evaluated for merit by the USAF?
- 3.19 55. 2.6. (a. 2-41). This concept corresponds to the Proposed Action and was presented as an alternative scenario in comparing various reuse options. The intent of this alternative was to emphasize that VVEDA's reuse plan fails to allow sufficient

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- 58 Cont'd expansion and does not provide the up-front commitment to meet the projected long range aviation needs of southern California. From the documentation in this DBS, it still appears that the Proposed Action actually is the alternative. Does the USAF believe the Proposed Action should be eliminated from further consideration?
- 3.20 58 2.3.8. No Action Alternative (in 2.40-41). The No Airport alternative is perfectly acceptable to the City of Adelanto and is stated clearly in the reuse plan. The alternative stresses residential development, not industrial, for the majority of the land area. It appears that a more thorough analysis of Adelanto's reuse plan should be completed prior to the issuance of the Final DBS.
- 7.4 57 Figure 2.5.1 (in 2.43). The map portraying the proposed Highway 396 alignment is inaccurate. The alignment is planned much further west than is shown. In addition, the east-west roadway has been adjusted slightly to reflect the input from the City of Adelanto. (2.5-1)
- 1.4 58 Tables 2.6.1, 2.6.2 & 2.6.3 (in 2.44, 46, 48). These Tables present inaccurate comparisons of the alternatives. The land area required for each alternative varies, and the cumulative impacts of other peripheral land uses are not considered. It should be pointed out that as an airport (of any scale) develops, adjacent properties will develop at an accelerated pace. In order to fairly compare the alternatives, the same physical land area should be analyzed for each concept. The comparison should be based utilizing comparable land areas, incorporating anticipated land uses. Adelanto's reuse plan evaluates three scenarios in this manner (international airport, regional airport and no airport).
- 5.8 59 3.2.1. Community Services (in 3.2). It appears that the ROI should include Los Angeles County, since the Lancaster/Palmdale area is located near George AFB. In addition, Orange County has been excluded which has a dramatic impact on the region. In that many residents of the Victor Valley commute to jobs in that area.
- 17.1 60 3.2.1. (in 3.4). If the Socioeconomic Impact Analysis Study has been referenced in this DBS, it should be included in the Appendix and made available to the public and affected public agencies.
- 5.7 61 Figure 3.2-3 (in 3.8). Adelanto's City limits are inaccurately portrayed due to fairly recent incorporated areas in the planning area. Figure 3.2-3 should be updated.
- 6.7 62 3.2.3.1. Land Use Plans (in 3.18). The City of Adelanto has adopted the land use plan, not the entire General Plan, as the interim policy direction the City means to implement. The land use plan incorporates the Airport Development District ("ADD") as part of the General Plan Update.
- 7.5 63 3.2.4.3. Air Transportation (in 3.42). A two-hour drive time to LAX from George AFB is only possible under ideal traffic conditions.
- 9.3 64 3.2.5.1. Water Supply (in 3.46). Contrary to the statement regarding the water supply at George AFB, ententes do exist between the USAF and the City of Adelanto (Adelanto Water District). The USAF operates wells on land owned by the City of

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- 6.13 73 addition, it is difficult to understand where conflicts would arise on-base between the proposed Business Park and Hotel/Parl (Commercial) land uses.
- 75 4.2.2.6. (in 4.21). The prison location south of Air Base Road may not be in conflict with land use/zoning plans, but does conflict with the general goal, policies, and objectives of the General Plan to locate a prison facility elsewhere in the City. In addition, the prison facility would have a negative psychological, socioeconomic and aesthetic impact in that location to an aviation facility of any kind, as well as creating a negative marketing perspective. To restate, the City of Adelanto maintains its offer to provide an equivalent prison site to the SGP in cooperation with the acquisition of George AFB.
- 3.1 74 4.2.3. Transportation (in 4.28). The Southern California Aviation System Study Update(SCAG, 1991) information regarding the 24.7 MAP shortfall in the SCAG region indicates that George AFB will play a major role in providing air passenger services. This information should have been highlighted in the summary chapter of this document. It also substantiates Adelanto's database regarding projected regional shortfalls. This data must be incorporated into the socioeconomic study to determine the economic impacts of the entire southern California region if adequate aviation facilities are not provided.
- 7.6 75 4.2.3. (in 4.28). The utilization of AMTRAK is a good idea, but it does not adequately serve the commuter and/or international travel market. High Speed ground access systems are the only solution and should be mentioned in this section.
- 7.7 76 4.2.3.1. Proposed Action (in 4.38). A long-term capacity of 1 MAP does not meet the needs of the region and should be considered unacceptable by the FAA as playing a significant role in the National Aviation Systems Plan.
- 7.3 77 4.2.3.2. International Airport Alternative (in 4.37). These ADT figures are much higher overall than those projected by the City of Adelanto's Circulation Element. As discussed with the Air Force consultants, the source data utilized was from Ontario Airport, a commuter/regional aviation facility. An international/inter-regional airport will have significantly less vehicle trips per passenger. Coupled with this and the prospect of a super-speed ground access link, the DBS figures are much too high. A "model split" of nearly 25% will be required in order for the vehicle circulation systems (region-wide) to accommodate increased usage.
- 80 4.2.3.2. (in 4.37). The Circulation Element of Adelanto's General Plan designates the roadways mentioned as either Freeway, super arterial, expressway, or major arterial. The system has been designed to ultimately accommodate "build-out" conditions of the General Plan, as well as incorporating the international airport facility.
- 81 4.2.3.2. (in 4.41). The General Plan for the City of Adelanto calls for the preparation of a Master Development Plan, which will specifically locate all uses, roadways, and infrastructure. A detailed traffic analysis will be conducted at that time.
- 3.15 78 4.2.3.2. Airport Capacity (in 4.41). The projected annual operations are based on VVEDA's fleet mix, which has a high percentage of general aviation operations.

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- 64 Cont'd Adelanto and a State water well permit is held jointly by George AFB and the City of Adelanto.
- 10.1 65 2.3.8. Aviation (in 2.78). It should be identified, even in preliminary form, which 40 percent of the Base facilities contained asbestos-containing materials. In order to determine which facilities are habitable, the respective agencies need this information to appropriately design structures, especially housing units.
- 5.8 66 4.2.1.1. Proposed Action (in 4.2). The first paragraph on this page refers to "indirect disposition of George AFB property". The term needs to be defined.
- 6.6 67 Figure 4.2-4 (in 4.7). Part of the Aviation Support delineated on Figure 4.2-2 is located within the City of Adelanto and has a zoning conflict with a Manufacturing/Industrial district according to current zoning. There are also some residential conflicts north of the primary runway, as depicted according to Figure 3.2-5.
- 14.1 68 Figure 4.2.2 shows a 68dB noise contour. What fleet mix and activity level (number of operations) have been utilized? (in 4.7)
- 6.9 69 4.2.2.1. (in 4.8). The paragraph implies that an approved airport layout plan for the Proposed Action has been selected for implementation. The sentence should read, "... has been approved for the Selected Reuse Alternative. ...", to more objectively compare the options.
- 6.10 70 4.2.2.1. Zoning (in 4.8). An expendable airport was to be eliminated from further consideration, according to Section 2.4, making it unnecessary to rezone areas to the north of the Base.
- 71 4.2.2.1. General Plans (in 4.8). The interim land use plan is intended to accommodate an aviation facility controlled by the City of Adelanto and/or an airport authority of which it is in support of and is a member. The proposed JPA facility is not supported by the City of Adelanto and therefore is inconsistent with its goals, policies and objectives.
- 72 4.2.2.2. International Airport (in 4.11). The implementation of development standards, Zoning code, and design guidelines are all part of the General Plan. The aesthetic environment will be substantially improved in relation to the existing conditions.
- 6.11 71 Attenuation Measures (in 4.11). Since the fleet mix evaluated in Table 2.3-2 is not a true representation of the actual fleet mix, it is impossible to calculate how many residences and businesses must be relocated to insure airport compatibility. A new model must be generated according to a more realistic fleet mix.
- 6.12 72 Tables 4.2-3, 4.2-4 and 4.2-5 (in 4.12, 13 & 14) do not reflect the incorporation of the Airport Development District land use category as established in the City of Adelanto's interim Land Use Plan. No land use conflicts exist at the policy level. In

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- 7.8 79 Adelanto's plan discourages general aviation users and will reduce to the total number of operations significantly. Also, the airport has been designed to allow for a fifth (5th) runway, which will be constructed when demand for it is anticipated, resulting in great operational capacity.
- 83 4.2.3.2. Railroad Transportation (in 4.44). Rejuvenation of the existing rail spur and possible extension into Adelanto's industrial district is part of Adelanto's planning efforts.
- 7.7 84 4.2.3.2. (in 4.44). Mention of the proposed high speed ground access system should be included.
- 8.1 81 4.2.3.2. Cumulative Impacts (in 4.44). This study to determine how airspace in the region is aligned needs to be undertaken now, as the projections for airport capacity are nearing the overflow level. The FAA should play a proactive role in defining this scope of the analysis.
- 86 4.2.4. Water Supply (in 4.67). International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses were evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
- 87 4.2.4. Wastewater (in 4.67). International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses were evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
- 9.1 82 4.2.4. Solid Waste (in 4.71). International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses were evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
- 89 4.2.4. Electricity (in 4.72). International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses were evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
- 90 4.2.4. Natural Gas (in 4.74). International Airport numbers are higher due to the larger land area that it encompasses. If the same land area with logical adjacent land uses were evaluated for each alternative, the numbers would be higher for the other alternatives, including the "Proposed Action".
- 91 4.2.4.2. Wastewater (in 4.78). Major water planning on a regional basis should already be taking place. Southern California is growing steadily and new sources of water, as well as airports, need to be determined now.
- 12.1 83 4.2.4.2. Surface Water (in 118). Less than 80 percent of the airfield area will be overlain by asphalt, concrete, or other hardscapes. The majority will be left in as a natural state as possible, depending on drainage flow requirements.

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93. 4.4.2.2 (p. 4-118). Storm water runoff systems will be incorporated into the Master Development Plan, including potential pre-treatment facilities and/or ponds.
94. Figure 4.4-1 (p. 4-128). This Figure indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
95. Figure 4.4-2 (p. 4-129). This Figure indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
96. Figure 4.4-3 (p. 4-129). This Figure indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
97. Figure 4.4-4 (p. 4-130). This Figure indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
98. Figure 4.4-5 (p. 4-131). This Figure indicates that the international airport alternative will generate a substantially greater amount of emissions. However, the other alternatives, as well as the "Proposed Action", do not take into account the residential and industrial land uses that will surround the respective airport facilities. This residential sector represents the most significant emission source in the region. The chart should be more reflective of comparable impacts.
99. Table 4.4-18 (p. 4-182) does not reflect City of Atlanta policy regarding land use, zoning, or compatibility with NOAA.
100. 4.4.4.1, Proposed Action (p. 4-182). The operational level (MAP) should be defined for each alternative. It appears that a 1 MAP service level has been utilized for analysis of the "Proposed Action", whereas capability of up to 15 MAP were discussed earlier.
101. App. E - 4.0 Transportation (p. E-4). It appears that this section is boilerplate since Norton AFB is used in this section. Norton AFB should be replaced in the text by George AFB.

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102. The DES does not adequately address water supplies and water rights. The DES downplays the significance of water supply and water rights by lumping them with other utilities. It states that water supply for the proposed project will be furnished by local water purveyors; reports that 6,533 acre-feet per year of water will be needed regionally, and then concludes that this will add only four to five percent to the groundwater overdraft. The DES wrongly infers that George AFB is co-owner with the City of Atlanta of 3.34 cfs of appropriate water rights contained in State License No. 10342. Since its origin in 1941, George AFB has depended on the community of Atlanta for water rights to meet their water supply needs. In June 1986, George AFB applied for a permit from the State Water Resources Control Board to divert and use 8.4 cfs (3900 acre-feet/year) from the Mojave River Underflow. Based on the findings of overdraft and that George AFB had not complied with CEQA, the State Board concluded there was no water available in the Mojave River System for appropriation and denied the application.
103. The assumption that local water purveyors have or will obtain the 6,533 acre-feet/year of water to serve the proposed route project or to redress that it is appropriate to increase the overdraft another four to five percent is fallacious. In addition, to assume that the City of Atlanta will transfer their water rights to another local or regional governmental agency is equally wrong.
104. The following water supply and water resource issues are significant and must be discussed in the DES to satisfactorily address all environmental and economic concerns:
- 9.8 92 \* Impacts to groundwater resources at the local scale, i.e., within individual cities and communities.
  - 9.9 93 \* Impacts which the project may have concerning the economic development of individual cities and communities which may have limited water resources.
  - 9.10 94 \* Potential impacts to the flow of water in the Mojave River and its underflow.
  - 9.11 95 \* Potential impacts on the supply of present water users.
  - 9.12 96 \* Potential impacts on owners of existing water rights.
105. The broad based assumption of the DES that water supply for the proposed project will be furnished by local purveyors is questionable. All local water purveyors are limited in their ability to serve existing and anticipated water consumers. The DES states: "Infrastructure changes would be required throughout the Victor Valley in the various districts that would experience direct and indirect population changes from the Proposed Project." (p. 4-57) This statement assumes that waters, ground or surface waters, are available and may economically and legally be developed. There is insufficient information presented in the DES to determine if this is feasible.
106. The DES infers that sufficient water will be made available from the Mojave Water Agency ("MWA") for anticipated increases in water demand by stating that: "The MWA, under its existing contract, has a maximum of up to 50,000 a.f.y. for all regions under its jurisdiction. However, because the projected demand in 2010 is 165,000 a.f.y., the MWA and other local water districts will have to identify additional sources of water to meet the increasing demand by the year 2010." (p. 3-87) This statement not only assumes that waters are available in the area which may be

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## DOCUMENT 6

98. Cont'd developed, but more seriously, incorrectly assumes that the MWA is guaranteed 50,000 a.f.y. with which to serve the region and has the ability to provide even more in the future.
107. The DES contains significant factual errors and relies upon information which is presently in dispute. On pp. 3-48 and 4-65, the DES states or infers that George AFB owns water rights.
- Page 3-48 states "George AFB currently derives its water from eight wells... located adjacent to the Mojave River... The City of Atlanta leases the land to the USAF, who installed, operates and maintains the wells... The state water well permit is held jointly by George AFB and the City of Atlanta." The DES provides as references for these statements, a 1980 report by the USAF entitled "Base Comprehensive Plan: Water Supply System, Tab G-1 July" and a 1984 report by Lee and Re Consulting Engineers entitled "Report on Water Supply Improvements, George Air Force Base."
- Page 4-65 of the DES again references the 1984 Lee and Re Report stating: "The report indicated that in 1980 the Base and the City of Atlanta were jointly leased water rights from the California Department of Water Resources to pump up to 3.34 cfs from the existing river wells, although both historic usage and productive capacity of the wells was and remains in excess of the water rights granted."
- 9.6 99 The inference that George AFB owns or jointly owns water rights is untrue. The City of Atlanta, pursuant to its contracts with George AFB, allows the Base to develop water from the Mojave River Underflow under legal rights owned by the City. The City has recently filed action in the San Bernardino Superior Court to provide declaratory relief concerning the issue of ownership.
108. The DES states "Specific alterations to the water supply system would be dependent on the developers requirements and the purveyors' plans to change the existing on-base supply infrastructure. Formal procedures, consisting of submission of a tariff map to the California Public Utilities Commission, as well as public review and hearings, would be required prior to annexation of the Base to the service area by or any water purveyor." The Public Utilities Commission regulates privately owned water purveyors and not public or government owned water systems.
- 9.14 100 The DES ignores relevant information concerning the George AFB and Atlanta area's local water resources. There are various reports prepared for George AFB by private consultants which provide important information concerning this area and should be incorporated into the DES discussion on water resource development.
- 9.2 101 The DES on page 4-115 states that under the Proposed Action "Water demand will be about the same as current base demands in the year 2003, and will exceed current base demand by 1 to 3 percent by the year 2013. In the year 2013 water production demand is expected to range from 4.9 to 6.9 mgd (9,365 to 12,690 a.f.y.) by the year 2013. (sic) It is assumed the water will be supplied by a local water purveyor."
- If the DES is referring to the City of Atlanta as the "local water purveyor", it should so state. The City of Atlanta owns the lands and legal water rights from which

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## DOCUMENT 6

101. Cont'd waters presently and historically have been developed and supplied to George AFB. Water production facilities supplying the Base, which include wells, storage tanks and pump facilities, are located on City property located next to the Mojave River and draw upon the river's waters. George AFB presently and historically has used water from these lands through contractual agreements with the community of Atlanta utilizing Atlanta's legal water rights.
- 11.1 102 The DES fails to include a detailed, site-specific seismic hazard analysis and earthquake ground motion expected.
- 11.2 103 The DES fails to analyze the impact of the proposed project upon flora and fauna in the area or provide detailed mitigation measures to reduce these potential impacts of significance.

Very truly yours,

KANE, BALLMER &amp; BERKMAN

R. BRUCE TEPPER, JR.

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## ROY C. HAMPSON &amp; ASSOCIATES

ENVIRONMENTAL ENGINEERING AND MANAGEMENT

2225 Wilshire Avenue  
P.O. Box 60000  
Santa Monica, CA 90406  
(310) 344-1900

October 15, 1991

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFMCE-BMS/DEV  
Morton Air Force Base, California 92409-6446Re: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) -  
DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Lt. Col. Bartol:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of George Air Force Base.

My name is Roy C. Hampson. I am a professional civil engineer in the State of California. I have twenty-nine years experience in water resources management in the State of California. From June 1973 to April 1986, I was the Executive Officer of the California Regional Water Quality Control Board, Lahontan Region. This is the state regulatory agency responsible for water quality control of surface and ground waters associated with the Mojave River.

I have reviewed the Draft Environmental Impact Statement (DEIS) and find that water supply and water rights are not adequately addressed. A satisfactory Environmental Impact Statement and/or Environmental Impact Report must fully disclose all reasonable and viable alternatives; identify adverse impacts associated with these alternatives; and provide mitigation for the adverse impacts.

- 9.4 The DEIS down plays the significance of water supply and water rights by lumping them with other utilities. The DEIS states that water supply for the proposed project will be furnished by local water purveyors; reports that 6,833 acre-feet per year of water will be needed regionally, and thence concludes that this will add only four to five percent (4% - 5%) to the groundwater overdraft.
- 9.6 The DEIS also wrongly infers that GAFB is co-owner with the City of Adelanto of 3.34 cfs of appropriative water rights contained in State License No. 6506.

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Lt. Col. Bartol  
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Page 2 of 6

Since its origin in 1941, GAFB has been haunted by the need to acquire an adequate and legal water supply. To meet their water supply needs, GAFB has depended on the community of Adelanto for water rights.

In 1984, GAFB made a substantial effort to obtain an independent and legal water supply. They contracted with four water resources consulting firms and hired legal counsel expert in water rights to address these issues.

In June 1985, GAFB applied for a permit from the State Water Resources Control Board to divert and use 5.4 cfs (3900 Acre-feet/year) from Mojave River Underflow. Hearings were held in April 1987 and ten protests were filed against the application. Three of them; those by the Mojave Water Agency, the City of Barstow and the Desert Citizens for Better Planning, were based on overdraft in the Mojave River Basin and the potential adverse effect on the water supply of downstream users. Six protestants (U.S. Fish and Wildlife Service, U.S. Bureau of Land Management, American Fisheries Society, Friends of Wildlife, California Native Plant Society and the Desert Fishes Council) alleged that the reduction in the flow of the proposed appropriation will adversely impact the Mojave Tui-Chub habitat. The Mojave Tui-Chub is a state and federally listed endangered species. They further alleged that riparian vegetation and the wildlife supported by this habitat would be adversely impacted by flow reductions. The California Department of Fish and Game protested for both reasons - overdraft and adverse environmental conditions.

Based on the findings of overdraft and that GAFB had not complied with the California Environmental Quality Act (CEQA), the State Board concluded there was no water available in the Mojave River System for appropriation and Application 28519 of George Air Force Base was denied.

- 3 The assumption that local water purveyors have or will obtain the 6,833 acre feet/year of water to serve the proposed reuse project or to rationalize that it is appropriate to increase the overdraft another four to five percent is fallacious. In addition, to assume
- 9.5 that the City of Adelanto will transfer their water rights to another local or regional governmental agency is equally wrong.

The City of Adelanto must use their water rights to serve present and future development within City boundaries. To do otherwise, the City would be remiss and derelict in their duty.

The following specific comments on the DEIS are provided.

October 15, 1991

Lt. Col. Bartol  
Comments DEIS  
Page 3 of 6Significant Water Resource Issues are not Discussed

The environmental document, in order to comply with federal and state environmental laws, must fully disclose all adverse impacts associated with the project alternatives and identify realistic measures to mitigate those impacts. The following water supply and water resource issues are significant and must be discussed in order for the document to satisfactorily address all environmental and economic concerns:

- 9.8 1). Impacts to groundwater resources at the local scale, i.e. within individual cities and communities.
- 9.9 2). Impacts which the project may have concerning the economic development of individual cities and communities which may have limited water resources.
- 9.10 3). Potential impacts to the flow of water in the Mojave River and its underflow.
- 9.11 4). Potential impacts on the supply of present water users.
- 9.12 5). Potential impacts on owners of existing water rights.

Project Alternatives Have Not Been Sufficiently Identified

In order to address the water resource issues above, the following questions must be answered first: Where will the water come from and who will provide it?

- 10 The DEIS states that water supply for the proposed project will be furnished by local water purveyors. This broad based assumption is questionable. All local water purveyors are limited in their ability to serve existing and anticipated water consumers. The DEIS states on page 4-67:

- 9.5 "Infrastructural changes would be required throughout the Victor Valley in the various districts that would experience direct and indirect population changes from the Proposed Project."

This statement assumes that waters, ground or surface waters, are available and may economically and legally be developed. There is insufficient information presented in the document to determine if this is feasible.

The DEIS infers that sufficient water will be made available from

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Lt. Col. Bartol  
Comments DEIS  
Page 4 of 6

the Mojave Water Agency (MWA) for anticipated increases in water demand by stating on page 3-87 that:

- 11 "The MWA ... under its existing contract, has a maximum of up to 50,800 a.f./y for all regions under its jurisdiction. However, because the projected demand in 2010 is 165,000 a.f./y, the MWA and other local water districts will have to identify additional sources of water to meet the increasing demand by the year 2010."

This statement not only assumes that waters are available in the area which may be developed, but more seriously, incorrectly assumes that the MWA is guaranteed 50,800 a.f./y with which to serve the region and has the ability to provide even more in the future.

At present, the State Water Project is not able to fulfill its existing water commitments let alone provide additional entitlements. Due to the drought, the MWA was only allocated 20% of their entitlement in 1991. To anticipate that the MWA and other local water entities will develop additional sources of water without specifically identifying the source and discussing the associated impacts is speculative and cavalier.

Errors of Fact and Information

- 12 The DEIS contains the following significant factual errors and relies upon information which is presently in dispute:
- On pages 3-45 and 4-45, the DEIS states or infers that GAFB owns water rights.

- 9.6 On page 3-45, the document states:

"George AFB currently derives its water from eight wells....located adjacent to the Mojave River....The City of Adelanto leases the land to the Air Force, who installed, operates, and maintains the wells....The state water well permit is held jointly by George AFB and the City of Adelanto."

The DEIS provides as references for these statements, a 1990 report by the U.S. Air Force entitled "Base Comprehensive Plan: Water Supply System, Tab G-1 July" and a 1984 report by Lee and Ro Consulting Engineers entitled "Report on Water Supply Improvements, George Air Force Base."

On page 4-45, the DEIS again references the 1984 Lee and Ro report

## DOCUMENT 7

Lt. Col. Bartol  
Comments DEIS  
Page 3 of 6

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and states:

"The report indicated that in 1960 the base and the City of Adelanto were jointly issued water rights from the California Department of Water Resources to pump up to 3.34 cfs from the existing river wells, although both historic usage and productive capacity of the wells was and remains in excess of the water rights granted."

- 9.6 13 The inference that GAFB owns or jointly owns water rights is untrue. The City of Adelanto, pursuant to its contracts with GAFB, allows the base to develop water from the Mojave River Underflow under legal rights owned by the City. The City has recently filed action in the San Bernardino Superior Court to provide declaratory relief concerning the issue of ownership.

The DEIS on page 4-67 states:

"Specific alternations to the water supply system would be dependent on the developers requirements and the purveyors' plans to change the existing on-base supply infrastructure. Formal procedures, consisting of submission of a tariff map to the California Public Utilities Commission, as well as public review and hearings, would be required prior to annexation of the base to the service area by or any water purveyor."

The Public Utilities Commission regulates privately owned water purveyors and not public or government owned water systems.

- 9.14 14 Existing Information Concerning Local Water Resources and Rights Ignored

The DEIS ignores relevant information concerning the GAFB and Adelanto area's local water resources. The following reports prepared for GAFB by private consultants provide important information concerning this area and should be incorporated into the document's discussion on water resource development:

Boyle Engineering Corporation, 1987. Altar Base Water Supply, George AFB, Victorville, CA. - Well Field Analysis. Report Prepared for the U.S. Army Corps of Engineers.

Converse Consultants, 1987. Feasibility Study for the NE Disposal Area Groundwater Hydrogeologic Characterization.

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Lt. Col. Bartol  
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October 15, 1991

- 14 Radian Corporation, 1987. Water Rights and Supply Alternatives For George Air Force Base, California. Draft Report Submitted to the U.S. Army Corps of Engineers.

Radian Corporation, 1989. Hydrological Studies in Support of Jurisdictional Determination for Application No. 29161, George Air Force Base. Report Submitted to the U.S. Army Corps of Engineers.

DEIS Assumes Water For the Reuse Project Will Be Supplied By a Local Water Purveyor

The DEIS on page 4-115 states that under the Proposed Action "Water demand will be about the same as current base demands in the year 2003, and will exceed current base demand by 1 to 3 percent by the year 2013. In the year 2013 water production demand is expected to range from 4.8 to 6.8 MGD (5,365 to 7,660 a.f./y) by the year 2013. (sic) It is assumed the water will be supplied by a local water purveyor." (Emphasis added).

- 9.2 15 If the DEIS is referring to the City of Adelanto as the "local water purveyor", it should state so. The City of Adelanto owns the lands and legal water rights from which waters presently and historically have been developed and supplied to GAFB. Water production facilities supplying the base, which include wells, storage tanks, and pump facilities, are located on City property located next to the Mojave River and draw upon the river's waters. GAFB presently and historically has used water from these lands through contractual agreements with the community of Adelanto utilizing Adelanto's legal water rights.

In conclusion, the Draft Environmental Impact Statement does not adequately address the paramount issue in reusing GAFB; that of an adequate and legal water supply. To down play this issue or pass it on to the Victor Valley EDA solves nothing and certainly doesn't comply with NEPA and CWA.

Again, thank you for the opportunity to comment on the DEIS for the Disposal and Reuse of George Air Force Base. If you have questions concerning these comments, please telephone me at the above number.

Very truly yours,

*Roy C. Hampson*  
Roy C. Hampson  
Professional Civil Engineer

## DOCUMENT 8

Little Ruff's Inc.  
11621 Lee Ave./ P.O. Box 571  
Adelanto, CA 92301  
(619) 246-3251

October 16, 1991

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFRC-E-BMS/DEV  
Norton Air Force Base, CA  
92409-6448

Dear Sir,

This George Air Force Base Draft Environment Impact Statement analysis is being submitted by the Little Ruff's Inc. Homeless Program. If there are any questions regarding this analysis, please contact Ms. Little Ruff at the above address. We appreciate your consideration of our recommendations.

Thank You,

*Little Ruff*  
Little Ruff

## DOCUMENT 8

AN ANALYSIS OF THE GEORGE AIR FORCE BASE  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

Presented By

The Little Ruff's Inc.

On February 28, 1991 the Little Ruff's Inc. Homeless Program submitted the Alaska Circle Community George AFB Reuse Proposal. The proposal is a formal request that 32 building (60 residential units) on George AFB should be reused as transitional housing.

- 3.27 1 We feel that the Draft Environmental Impact Statement (EIS) should be amended to state that the Alaska Circle Community (ACC) is a specific proposal developed by the Little Ruff's Inc. Homeless Program. In sections and tables which refer to the Alaska Circle Community Proposal, we suggest that the Little Ruff's Inc. Homeless Program be cited as its source. In other sections and tables which discuss the (ACC) proposal under the heading of the Department of Housing and Urban Development (HUD), we suggest that Little Ruff's Inc. should also be cited as its source.

2 TABLE S-7, PAGE S-21

- 5.10 Under the HUD column, the Victor Valley population is projected to increase by 150 homeless individuals. Currently, there is a significant homeless population within the Victor Valley. The vast majority of the homeless individuals served by the Alaska Circle Community will be from the Victor Valley area. Therefore, the Alaska Circle Community will not result in a net population increase of 150 individuals for the Victor Valley.

- 5.11 3 Under the HUD column, the direct employment impact of the Alaska Circle Community Proposal is stated as resulting in a net decrease 677 jobs for the Proposed Action. The Alaska Circle Community will

- 3 not result in a net decrease of 677 jobs. Since the Proposed Action will only utilize 202 total off base acres (See Table 4.4-1, DEIS), there will be ample acreage within the vicinity of George AFB. Therefore, the Alaska Circle Community will only displace 677 jobs to a location near the base. The Alaska Circle Community's projected staff employment will actually result in a net increase of 36 jobs for the Victor Valley.

4 SECTION 1.3.1, PAGE 1-7

- 2.3 Under the Housing section, we disagree that the "retention of the 1641 single and multi family housing units is incompatible with effective planning for the reuse of George AFB as a potential airport / airfield." Currently, the 1641 residential units are in compatible usage with the Air Force's full flight operations. The statement regarding the non-retention of the base housing units is in direct contradiction with Section 2.3.2 / Commercial Airport with Residential Alternative. This section demonstrates that the 1641 housing units are compatible with a commercial Airport.

- 2.4 5 Furthermore, we recommend that the second statement should be revised. Instead of stating that "It was suggested that support for the homeless be considered in the reuse of George AFB", we feel that a more accurate statement is necessary. We recommend that the statement should be as follows;

The Little Ruff's Inc. Homeless Program has submitted a proposal which recommends that support for the homeless be considered in the reuse of George AFB.

SECTION 2.1, PAGE 2-2

- 3.28 6 On page 2-2, the top paragraph states the Health and Human Services (HHS) lease application procedures. The Little Ruff's Inc. has expressed interest in the base property and has subsequently received a lease application. On October 3, 1991, the Little Ruff's Inc. submitted a lease application to HHS. We recommend that these recent steps, taken by the Little Ruff's Inc., should be inserted directly below the above mentioned paragraph.

7 SECTION 2.3.5, PAGE 2-38

- 3.29 The paragraph labeled U.S. Department of Housing and Urban Development is incomplete. In the June 21, 1991, Federal Register, HUD identified all of the base housing units and most of the other base buildings as being suitable for homeless use. Of the 1641 residential units identified by HUD as suitable for the homeless, the Little Ruff's Inc. has expressed interest in 60 of those units. As currently written in the Draft EIS, this paragraph implies that HUD has only identified the 60 units which the Little Ruff's Inc. has applied for.

SECTION 4.2.2.6, PAGE 4-22

The Proposed Action for George AFB will result in the present residential area being set aside for office / business park use. The Alaska Circle Community will be able to co-exist with an adjacent office / business park setting. The Alaska Circle Community is surrounded on two sides by a 77 acre golf course. The Alaska Circle Community is also "surrounded on all sides by approximately 400 feet of vacant land" (Draft EIS p. 2-39). Contemporary planning ideas try

to incorporate some mixed use scenarios. The buffers surrounding the Alaska Circle Community will ensure a smooth transition between uses.

This section also states that the "demolition of the residential units is proposed under each of these reuse alternatives." However, the Stewart B. McKinney Act requires that "in deciding the disposition of surplus property, a priority of consideration will be given to uses which assist the homeless" (Draft EIS p. 2-2).

October 16, 1991

REFER TO FILE NO.

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFRC-EM/DEV  
Morton Air Force Base, California 92409-6448

Re: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT  
STATEMENT (DEIS) - DISPOSAL AND REFUSE  
OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Col. Bartol:

Thank you for the opportunity to comment on the  
Draft Environmental Impact Statement ("DEIS") for the  
Disposal and Refuse of George Air Force Base. Other members  
of the City of Adelanto's development team will be filing  
comments as to various parts of the DEIS. In addition to  
these comments, the following are offered:

1. We believe that on the issue of water supply  
the following should be considered:

a. Report entitled "Water Rights and Supply  
Alternatives for George Air Force Base California  
Draft Report," U.S. Army Contract No.  
DACA45-84-D-0052, Delivery Order No. 9008,  
DCM87-269-001-06-01, Submitted to U.S. Army Corps  
of Engineers, Omaha District, Attn: MROED-ES (Mr.  
Robert Seari) 215 North 17th Street, Omaha,  
Nebraska 68102-4916, prepared by L.L. Zimmerman,  
L.W. French, R.C. Wallace, L.E. Barrow, Radian  
Corporation, Austin, Texas 78766, June 11, 1987.

b. Report entitled "Hydrological Studies in  
Support of Jurisdictional Determination for  
Application No. 29163 George Air Force Base," U.S.  
Army Contract No. DACA45-84-D-0052, Delivery Order  
No. 9008, Mod. 4, Submitted to U.S. Army Corps of  
Engineers, Omaha District, Attention: CHMCO-ED-ES

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Col. Thomas J. Bartol  
October 16, 1991  
Page Two

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cont'd

(Mr. Robert Seari), Executive Building, 1624  
Douglas, Room 608, Omaha, Nebraska 68102-4978,  
prepared by Radian Corporation, Austin, Texas, May  
29, 1989. (AF)

c. Report entitled "Master Plan for Deliv-  
ery of Imported Water, Final Report" prepared for  
the Mojave Water Agency, Apple Valley, California,  
Malcom Pirnie, Project No. 0881-07-01.

d. Report entitled "Mojave Water Agency  
Inventory of Ground Water Stored in the Mojave  
River Basins," Surface Surveys Inc., Solana Beach,  
California.

e. Pleadings and other documents in the  
case entitled City of Barstow, et. al. v. City of  
Adelanto, et. al., Riverside Superior Court Case  
No. 208382.

f. Pleadings and other documents in the  
case of City of Adelanto, et. al. v. The United  
States of America, et. al., San Bernardino  
Superior Court Case No. CV9018289.

2. Also, on the same issue, we believe that the  
DEIS should examine the documentation submitted by George  
AFB to the Water Resources Contract Board in Application No.  
29163, which was ultimately denied.

3. Also, on the same issue, we suggest that the  
DEIS should consider the possible effect of the following  
two studies:

a. Mojave Water Agency, study for the Water  
Adjudication Suit - Barstow, et al. v. Adelanto,  
et al. (SUD93).

b. U. S. Geological Survey, Regional  
Aquifer System Analysis (RASA) Program, Mojave  
River Basin is one of the areas - Santa  
Clara/Colleguas is another.

12.2 2  
the DEIS should review the effect of the berm (dike or  
whatever) that has been constructed to protect George AFB

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Col. Thomas J. Bartol  
October 16, 1991  
Page Three

2  
cont'd  
from floods and which is presently constricting the Mojave  
River to a much narrower channel east of the former channel.

3  
1.13  
5. Yesterday, I received a call from one of your  
assistants who informed me that the decision to chose the  
plan developed by the Victor Valley Economic Development  
Authority ("VVEDA") was a decision made by the office of the  
Secretary of the Air Force which, in turn, was based on the  
Air Force's interpretation of California law, in particular,  
California Health & Safety Code Section 33320.5. We believe  
the conclusion as to California law is incorrect and  
prejudicial to the City of Adelanto and we suggest that it  
be reviewed again.

There may be additional comments from Adelanto's  
development team which will be filed with you prior to the  
deadline.

Thank you for your consideration.

Respectfully,

JAMES WARREN BEERS,  
A LAW CORPORATION

*James Warren Beers*  
James Warren Beers

JWB:jw

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United States Soil  
Department of Conservation  
Agriculture Service

2121-C 2nd Street, #102  
Davis, CA. 95616-5475  
Phone (916) 449-2800

October 3, 1991

Lieutenant Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRC-EM/DEV  
Morton Air Force Base, CA. 92409-6448

Dear Lt. Col. Bartol:

We acknowledge receipt of the Draft Program Environmental Impact  
Statement for the Disposal and Refuse of George Air Force Base,  
California, in San Bernardino County, that was addressed to the  
Apple Valley Field Office on September 23, 1991, for review and  
comment.

We have reviewed the above environmental statement and find that  
there are no controversial items in the document within the  
realm of the Soil Conservation Service's expertise and  
responsibilities. We find no conflict with any SCS on-going or  
planned programs or projects.

The environmental statement did adequately address alternatives  
to the use of prime agricultural lands or no prime lands are  
involved in the proposed action.

We appreciate the opportunity to review and comment on this  
proposed action. Should you have any questions regarding this  
response please contact Rick Aguayo, District Conservationist at  
our Apple Valley Office. He can be reached at (919) 242-2906.

Sincerely,

*Thomas A. Weber*  
Pearlie S. Reed  
State Conservationist

cc: Luana E. Kiger, SCS, Davis  
Timothy D. Catron, SCS, Escondido  
Jesse R. Aguayo, SCS, Apple Valley

Written Comment Sheet  
Disposal and Reuse  
Draft Environmental Impact Statement  
George AFB, CA

Thank you for attending this Public Hearing. Please use this sheet to provide us your written comments on our Draft Environmental Impact Statement.

Date: 10-18-91

I wish to make a statement that is not based on political or environmental considerations. All of the figures presented about water, population, pollution and so forth are going to occur with or without the airport. As to the economic influx of people to the area, I wish to express that we have an opportunity here to do something right for a change. For decades Southern California has been playing "Catch-Up" to the increasing population explosion of the region. Whenever a freeway, airport, or some other project is undertaken, it only encompasses

Name: Douglas E. Tucker

Address: 8577 JVL Ave VICTORVILLE, CA 92392  
Street Address City/State/Zip Code

Please hand this form in or mail to:  
AFRCF-BMS/DEV  
Attn: Lt Col Tom Bartol  
Norton Air Force Base, CA 92409-6448

the present need of the region. There is proven many times over with inadequate freeway systems and airports that become overcrowded in a matter of just a few years. The City of Culbath proposal for an International Airport facility looks ahead to encompass the inevitable dynamic growth of the High Desert Region, coupled with the present and future need for a masterplanned facility that can grow with the region and accommodate all present and future needs of industry, aircraft design, and the people. Add to this the possibility of the High Speed Train to the terminal allowing the airport to process passengers with little to no use of automobiles and you have a concept that projects for the need of the region and prepares for the future.

Culbath's proposal, all politics aside, provides an answer for the future needs of the public, where do the other alternatives including WCON's smaller airport simply continue to create facilities that will soon become obsolete as so many other projects become. Let the public prepare for the future for a change.

Thank you  
Douglas E. Tucker

SAN BERNARDINO COUNTY MUSEUM

2834 Orange Tree Lane • Redlands, CA 92374 • (714) 798-0570 • 422-1010

October 14, 1991

Thomas J. Bartol, Lt Col, USAF  
Director of Environmental Division  
AFRCF-BMS/DEV  
Norton AFB, CA 92409-6448

re: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR DISPOSAL AND REUSE  
OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Mr. Bartol:

- 1 The draft document mentioned above does not consider non-renewable paleontologic resources. Although no paleontologic sites are recorded within George AFB, many sites are located along its eastern flanks. These sites are on Pleistocene sediments that extend into the eastern half of the base.
- 16.1 Prior to new development within the base, a qualified vertebrate paleontologist must conduct a field assessment to determine if excavation will impact non-renewable paleontologic resources. If impacts will occur the qualified vertebrate paleontologist must develop a paleontologic resource impact mitigation program along the guidelines of the Society of Vertebrate Paleontology. This program must include but not be limited to:
1. Monitoring of excavation in areas as likely to contain paleontologic resources by a qualified paleontologic monitor. The monitor should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments which are likely to contain the remains of small fossil vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow the removal of abundant or large specimens.
  2. Preparation of recovered specimens to a point of identification, including washing of sediments to recover small vertebrates.
  3. Identification and curation of specimens into a museum repository with retrievable storage.
  4. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency, signifies completion of the program to mitigate impacts to paleontologic resources.

Sincerely,

Scott Springer  
Scott Springer  
Site Records Manager, Earth Sciences

DOCUMENT 12

COUNTY OF SAN BERNARDINO  
GENERAL SERVICES AGENCY

DR. ALLAN D. GROSSMAN  
Director

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

WILLIAMSON, Governor

DEPARTMENT OF TRANSPORTATION

10 SOUTH MAIN STREET  
SACRAMENTO, CA 95814

(619) 872-0693

October 28, 1991

SBD-195-Various  
SCH #91094007

Department of the Air Force  
AFRCF-BMS/DEV  
Norton Air Force Base  
San Bernardino, CA 92409-6448

Attention Lt. Col. Thomas Bartol

Draft Socioeconomic Impact Analysis Study  
Draft Environmental Impact Statement  
Disposal and Reuse of George Air Force Base, California  
SCH #91094007

We have reviewed the above referenced documents and have no comments.

Very truly yours,

ANDREW J. ZEILMAN, Chief  
Transportation Planning  
Branch 2

## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 4  
345 WEST BROADWAY, SUITE 200  
LONG BEACH, CA 90802



October 29, 1991

Lieutenant Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRC - SMS/DEV  
Morton Air Force Base, California 92409-6448

Dear Lieutenant Colonel Bartol:

DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS), DISPOSAL AND REUSE  
OF GEORGE AIR FORCE BASE, SAN BERNARDINO COUNTY, CALIFORNIA

The purpose of this letter is to comment and make recommendations on the disposal and reuse of George Air Force Base (GAFB) and to improve and expedite environmental response actions at GAFB.

The State involvement in cleanup of military bases slated for closure, such as GAFB, is motivated by several factors. First, the State has legal responsibility to ensure that State environmental cleanup and management laws are obeyed. Second, the State has a sovereign duty to ensure that cleanup plans and actions will result in sites that will no longer threaten water quality, the health and safety of the public and/or the environment. Finally, we have an economic incentive to ensure that appropriate cleanup actions are promptly taken. GAFB, which is slated for closure, will eventually be transferred for civilian use. Therefore, it is important that we oversee cleanup and compliance actions at the base so that the State and local communities do not inherit polluted property. It is also important for the cleanup to take place in a timely manner, to minimize economic dislocation in the community.

We believe that both the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) provide opportunities for the State to establish strong roles in overseeing cleanup activities at GAFB.

Pursuant to CERCLA Section 120, the State of California entered into a Federal Facility Agreement (FFA) with the United States Environmental Protection Agency (EPA) and the Department of Defense (DOD) for the cleanup of military bases which are on the National Priorities List. The FFA provides an

Lieutenant Colonel Thomas J. Bartol  
October 29, 1991  
Page 2

effective mechanism to ensure cooperation among the DOD facilities, EPA, and the state and local regulatory agencies.

The State recognizes that there is an interest, both within the Air Force and within the local communities, to promptly make land and facilities on GAFB available to the private sector for interim use and post-closure use. We need to make sure that activities associated with base reuse are indeed in the best interest of the public and do not conflict with or impede the cleanup work as required by the FFA, federal and state laws. It is not in the public interest to reuse property that has not been cleaned up.

1 This subject document indicates that reuse and development of some properties may be delayed as a result of Installation Restoration Program (IRP) activities. This document should be more specific in addressing where, when and how the IRP activities will affect reuse. The document should specify that reuse would only be delayed for investigative and clean up purposes.

2 The Air Force should notify and involve the State as soon as possible regarding any proposed base reuse or changes in its cleanup policies or priorities. Many areas of the base have yet to be characterized. Additionally, under the current FFA schedule most of the base will not be characterized until 1994 or later. The DEIS must consider the FFA and should include information regarding public involvement in the CERCLA process through the Technical Review Committee (TRC) mechanism.

3 The FFA schedule with applicable revisions should be made as an appendix to the subject document. We need to know, at the earliest stage possible, any plans for parcelization or reuse schedule for GAFB. If base reuse affects the FFA schedule, please be aware that according to Section 29 of the FFA, all parties must agree to any changes in the schedule or FFA.

We believe that the key to successful and expeditious cleanup at GAFB is communication and cooperation. The Department of Defense, federal and state regulatory agencies and local communities need to work together to come to a consensus on issues relating to the cleanup and reuse of this closing base. Additionally, reuse authority and potential developers need to be aware that most of GAFB may not be immediately available for reuse at the closure date of December 1992.

Lieutenant Colonel Thomas J. Bartol  
October 29, 1991  
Page 3

If you have any questions, please contact Mr. Ebad Yemut of the Department of Toxic Substances Control at (213) 590-4909 or Mr. Brad Hicks of the California Regional Water Quality Control Board, Lahontan Region at (619) 241-6583.

Sincerely,

John E. Scandura, Chief  
Site Mitigation Branch

cc: Mr. Terry Vonkers  
Department of the Air Force  
Environmental Program Management Office  
HQ AFSDA/BDV  
Washington, D.C. 20330

Captain Charlie Attabery  
Department of the Air Force  
AFCEE-ESG/KRT  
Brooks Air Force Base, Texas 78235

Mr. Bob Moore  
Department of the Air Force  
HQ TAC/DEVR  
Langley Air Force Base, Virginia 23665

Captain Gregory Walters  
Department of the Air Force  
15 CES/DEV  
George Air Force Base, California 92394

Ms. Katherine L. Moore  
Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, California 94105

Mr. Brad Hicks  
California Water Quality  
Control Board  
Lahontan Region/ Victorville  
Branch Office  
19428 Civic Drive, Suite 100  
Victorville, California 92392

Lieutenant Colonel Thomas J. Bartol  
October 29, 1991  
Page 4

cc: Ms. Denise Caron  
Disposal Management Team  
OLC/AFSDA  
George Air Force Base, California 92394-5000



Mojave Desert Resource Conservation District  
10404 Highway 10, Suite 105 - Apple Valley, CA 92307 - Phone (619) 242-2000

October 2, 1991

Lieutenant Colonel Thomas J. Bartel  
Director of Environmental Division  
AFRCO-SWS/DEV  
Norton Air Force Base, CA. 92409-6448

Dear Lt. Col. Bartel:

We acknowledge receipt of the Draft Program Environmental Impact Statement for the Disposal and Reuse of George Air Force Base, California, in San Bernardino County, that was addressed to the Mojave Desert Resource Conservation District Office on September 23, 1991, for review and comment.

We have reviewed the above environmental statement and find that there are no controversial issues in the document within the realm of the District's expertise and responsibilities. We find no conflict with any District on-going or planned programs or projects.

The environmental statement did adequately address alternatives to the use of prime agricultural lands or no prime lands are involved in the proposed action.

We appreciate the opportunity to review and comment on this proposed action. Should you have any questions regarding this response please contact Kathy Esler, District Manager. She can be reached at (619) 242-2906.

Sincerely,

*Wayne A. Soppeland*  
Wayne Soppeland  
President, Mojave Desert RCD



18422 River Valley Road  
Victorville, CA 92393-0000  
915 255-0771  
FAX 915 255-0766

SUPERINTENDENT  
PRESIDENT  
Dr. Edward G. Gould

November 1, 1991

Lieutenant Colonel Thomas J. Bartel  
Director of Environmental Division  
AFRCO-SWS/DEV  
Norton Air Force Base, California 92409-6448

Subject: Draft Environmental Impact Study (DEIS)  
on the Mopanel and Reuse of  
George Air Force Base, CA

Dear Lt. Col. Bartel:

On 17 October 1991 we presented our initial written and verbal responses to the DEIS. Additional information is necessary to give you a clearer picture of what we want.

The boundaries we stated in our 17 October 1991 response to the DEIS were general in nature. The exact boundaries of what we desire at George Air Force Base are included as attachment #1. The buildings we desire are all of those buildings included within the boundaries of attachment one with the exception of those scheduled for demolition (we understand that funds may be available for demolition). We desire the land and the facilities as a public benefit transfer.

As we stated on 17 October 1991, we feel that education has not received the attention it deserves in the DEIS. We realize that our entry into the process was later than some others and this fact could have contributed to the perceived lack of support for education. However, education still presents one of the strongest arguments in terms of public benefit.

Education serves the community. Education complements and supports all of the re-use alternatives listed in the DEIS. Victor Valley Community College has served the Victor Valley for thirty years and we have been providing classes for military and civilian personnel at George Air Force Base since 1972. We now provide classes for 10,000 students. Our enrollment increased 112% in the last six years and, based on the latest population projections, our student body will reach 20,000 in the next ten years.

In your presentation on 17 October, 1991, Dr. John Smith stated that we needed a comprehensive plan which "balances" the needs of the community. We agree totally with that statement and we have developed a "community serving" plan which is balanced and comprehensive. We have worked closely with the City of Victorville Parks and Recreation Department to insure the presentation of a coordinated response encompassing recreation and education. You can see the results in attachment one where education and recreation are side by side in serving the community. This partnership continues to provide us with fresh ideas to serve the community.

November 1, 1991  
Page 2

We have taken the concept of "community serving" one step farther in developing our plan to "joint use" facilities. For example, we could share the present fire-fighting facilities to expand our curriculum in fire fighting and fire protection. This same concept could be applied to our curriculum for law enforcement. Students from city, county, and state law enforcement agencies could come to our campus for short and long range training. They could use the dormitories operated by our hotel and restaurant management classes and the existing firing range. This concept of joint use of facilities provides training essential to community service, reduces operating expenditures, insures optimum usage of valuable facilities and in the case of the fire station provides an essential support service to the developing area. The dual public benefit concept will be applied to other facilities.

The hospital could become a combination care-giving and training facility. Victor Valley Community College has an extensive Health Services Program which provides training for the Red Cross, CNA, paramedics, nurses and others. Our nurse trainees now receive a portion of their practicals at George Air Force Base Hospital. That practicals would be enhanced at the same facility and we would expand health care training to include dental hygienists, technicians, and assistants. There is a very real need in the community right now for training services for aspiring medical professionals.

The community is also served when skilled labor is readily available and when training can match the ever changing skills of industry. Victor Valley College is an active participant in the economic development of the area and offers its assistance in attracting and serving industries that will be moving to the GAFB site as it is converted to civilian uses. The customized training that we can offer, especially with the unique facilities at the base, can be of considerable assistance to new companies moving to this area as well as to existing businesses that are looking to expand their workforce and services. The college's experience in such training includes working with AFE Industries (cited by the Chancellor's Office and the State Department of Commerce as a model for business and community college cooperation), Alta Health Systems (also cited as an exemplary program), Northwest Pipe and the Adelanto prison. These services will be very important to the Victor Valley area as it looks for private sector alternatives to the military that has contributed billions of dollars to the economy of the area each year.

Many of the uses that VVC is proposing for this campus will be possible because there are facilities available for classrooms, large group meetings, food service and housing. Some of the activities that would be accommodated by such a combination of facilities are: a conference center; a location for seminars; educational programs; an emergency services training center; seminars for correctional officers, and fire and hazardous materials specialists; an international education center; and small business incubators.

The combination of facilities that VVC is requesting will make it possible to provide a seminar site and conference center utilizing any owned by a public agency in Southern California. With housing for over 400, meeting and classroom accommodations from 10 to 500, dining facilities, and recreational facilities (including a golf course, tennis courts, swimming pools and gym) on site, the possibilities are nearly endless. Further enhancing the attractiveness of this site will be the ready access provided by the planned airport that will be within walking distance of the campus with Interstate 15 a mile away. Public conferences, seminars and short term training, could be well served in a

November 1, 1991  
Page 3

convenient and attractive setting designed for the special needs of each group. Such activities would provide a significant infusion of dollars into the local economy. We foresee 400 additional jobs created by our campus with a budget of \$15 million dollars per year.

In our concept of a campus at George AFB we have developed a "community serving" area which provides education, job skills, performing arts, medical services, and child care. In addition we have considered the environmental impact in a different mode than most. That we envision is an unlimited opportunity to educate the community about our environment and we are in a position to do that.

The greater Victor Valley area provides a setting for the seminars that would attract participants from throughout California and the rest of the United States. Some subjects that would have this wide attraction include studying biological and geological systems that are found nowhere else in the world. The Mojave desert, the high Sierras, and the Pacific Ocean are all within easy commuting distance. In addition, three of the most promising alternate energy generation programs (wind power, solar — both state generation and photovoltaic, and coal conversion) are operating within 50 miles of our proposed campus.

Our vision for the re-use of George Air Force Base complements and supports any and all re-use alternatives now listed in the DEIS. Our need for land and facilities is justified by the services that we want provide to the community. Our concept of "community serving" benefits the public. Our concept of dual use of facilities and land benefits the user and the taxpayer. The concept of education speaks for itself and deserves the strongest consideration.

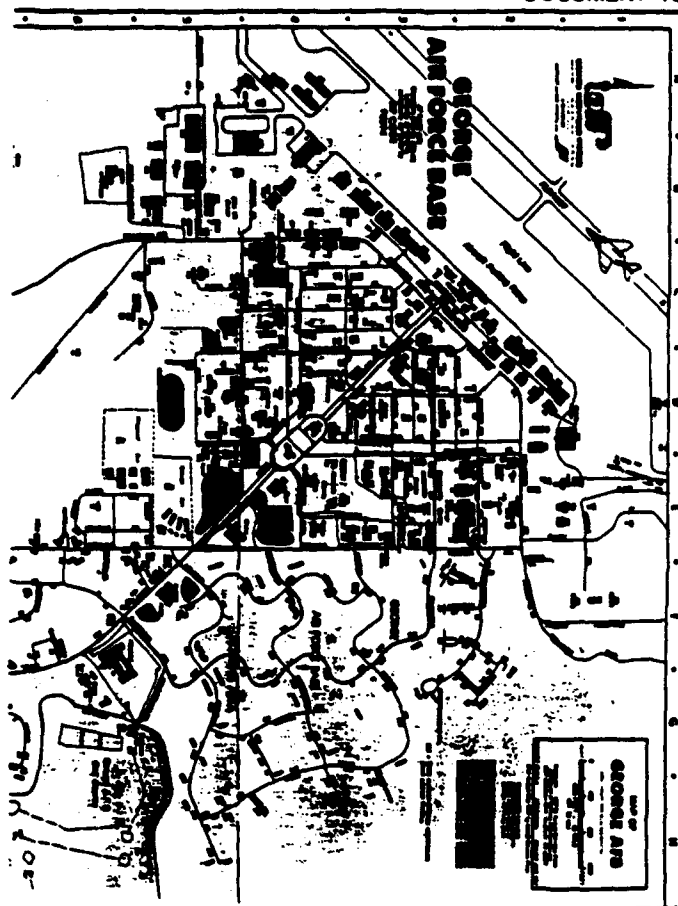
3.25 We formally request that the final Environmental Impact Statement include our proposal for the re-use of George AFB as indicated on the attached map and for the reasons we have stated. The space and facilities we desire can be easily accommodated by any of the alternatives now listed in the DEIS.

Sincerely,

*Edward G. Gould*  
Dr. Edward G. Gould  
Superintendent/President  
Attachment

cc: Peter P. Erwin, VCHA  
George E. Shupe, Regional Director,  
U.S. Department of Education  
Jennette Shupe,  
City of Victorville, Parks & Recreation  
Ed Bunkhiller, Mayor, City of Adelanto  
John Smith, Department of Defense, The Postage

## DOCUMENT 16



## DOCUMENT 17

DEPARTMENT OF HEALTH &amp; HUMAN SERVICES

Public Health Service

Center for Disease Control  
Atlanta, GA 30333  
November 4, 1992

Lieutenant Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRC-EMS/DEV  
Morton Air Force Base, California 92409-6448

Dear Lieutenant Colonel Bartol:

We have completed our review of the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of George Air Force Base. We are responding on behalf of the U.S. Public Health Service.

- 14.3 We have reviewed the Draft EIS for potential adverse impacts on human health. We note that once an airport layout plan has been approved for the Proposed Action (page 4-8), a study will need to be conducted to implement portions of Title I of the Aviation Safety and Noise Abatement Act of 1979. It is stated that the impacts identified in this study may require mitigation to reduce adverse effects of airfield operations on surrounding land uses or protect future land uses from conflicts. It would be helpful to reviewers if this information could be summarized in the Final EIS, but it was unclear if the results of that study would be available at that time. With the exception to the above comment, we believe public health issues, including hazardous waste management and expected noise impacts, have been adequately addressed in this DEIS.

Thank you for the opportunity to review and comment on this document. Please ensure that we are included on your mailing list to receive a copy of the Final EIS, and future EIS's which may indicate potential public health impact and are developed under the National Environmental Policy Act (NEPA).

Sincerely yours,

*Kenneth W. Molt*

Kenneth W. Molt, M.S.E.H.  
Special Programs Group (F29)  
National Center for Environmental  
Health and Injury Control

DOCUMENT 18  
The City of  
**BARSTOW**  
California

November 7, 1991

Director of Environmental Division  
AFRC-EMS/DEV  
Morton AFB, Ca. 92409-6448  
Attn: Thomas J. Bartol, Lt Col. USAF  
Re: Comments Draft EIS/Disposal and Reuse of George Air  
Force Base, California

Dear Colonel Bartol:

The City of Barstow has reviewed the Draft Environmental Impact Statement ("DEIS") for the proposed Disposal and Reuse of George Air Force Base. The DEIS does not adequately address the impacts that the project will have on water resources. Our specific comments are as follows:

- 12.3 1. The DEIS does not adequately address the impacts on Mojave River system water supplies, especially in regard to impacts upon downstream users, including the City of Barstow. The groundwater levels in the Barstow area are now at an all time low. The only significant source of replenishment water to the Barstow area is the flow of the Mojave River. The Mojave River system is suffering from a critical condition of overdraft. Increased uses of water from the Upper Mojave River Basin will result in less Mojave River water reaching the downstream basins.
2. Under Section 3.4.2 on page 3-83 of the DEIS, the Region of Influence (ROI) is defined as extending beyond the base boundary but is limited to the Upper Mojave River Basin from Holendale south to the San Bernardino Mountains.
- 12.4 2. The DEIS does not address the impacts on downstream water users for a proposed increase of water consumption of up to 12.9 million gallons of water per day by the year 2013, an increase in consumption from within the Mojave River system from 8 to 11 percent. This projection is taken from the International Airport Alternative, which appears to be the most water consumptive land use proposal. Please note this

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The City of  
**BARSTOW**  
California

- 2  
cont'd protection does not account for the normal growth rates of existing communities or approved projects not yet constructed along the Mojave River system which rely on this aquifer as their only means of water. Due to the potential impacts from water usage, the ROI should be increased to include the entire Mojave River system.

- 3 Contamination of our drinking water is of great concern to the City of Barstow. It has been noted on page 1-5 Section 1.3.1 "Summary of Scoping Issues and Concerns" that trichloroethylene (TCE) has contaminated groundwater emanating from the Installation Restoration Program (IRP) Northeast Disposal Area. We are in agreement with the Victor Valley Wastewater Reclamation Authority demands that contamination must be effectively and efficiently eliminated and further contamination must be prevented and that assurances must be included in the EIS.

4. Overdrafting of the ground water basin was recognized as a potential problem a number of years ago and was the primary reason for the formation of the Mojave Water Agency, of which the City of Barstow is a Part.

- 3 For the three basins along the Mojave River, Upper, Middle and Lower, the overdraft was estimated to exceed 70,000 acre-feet per year. This exceeds by 40% the maximum annual entitlement of the agency to SWP water. The annual overdraft increased from about 38,000 acre feet under 1971 conditions to 71,000 acre-feet under 1981 conditions. In addition, there are severe overdrafts in several other groundwater basins within the Agency. "Based on Pirnie (1990) water budget calculations estimated that the Upper Mojave Basin will have to import approximately 56,000 a.f./y by the year 2010." This equates to 8,000 acre-feet of water which the Mojave Water Agency does not have access to. Please explain how this project or alternative projects will meet this demand and still allow adequate water supplies to the remainder of the system.

5. Section 3.4.2.3 (Groundwater) page 3-88 of the DEIS indicates that "although overdraft is certain, the

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DOCUMENT 18  
The City of  
**BARSTOW**  
California

degree of overdraft throughout the basin has not been fully established. In the Department of Water Resources Bulletin 132-87, Management of the California State Water Project, September, 1987, it states that "Past and current studies indicate that the Upper, Middle and Lower basins are being overdrafted in an amount in excess of HWA's maximum entitlement of 50,000 acre-feet per year. This being the case, mitigation measures, or disapproval of this project or alternative projects is warranted. Without mitigation to ensure an adequate future water supply for all users of the Mojave Valley, the 'No Project' alternative is a very real option."

- 4.6 The Department of Fish and Game and the U.S. Fish and Wildlife Service have indicated that underflow of the Mojave River is essential to the support of downstream aquatic and riparian flora and fauna. There must be a restoration of the historic sharing of the Mojave River system among the Upper, Middle and Lower Basins in order to preserve the endangered or threatened species. This can only be done by allowing more water to be distributed downstream. The DEIS does not address impacts upon downstream habitat or species.
- 15.3 7. The impact of a proposed project on surface water in the Mojave River needs to be fully evaluated. There is rising water (surface flow) at places along the Mojave River, especially between the several ground water basins, which need detailed biological evaluation. At the far end of the river in the springs of Soda Lake, there is an officially listed "endangered species" of fish, the Mojave tui chub (*Gila bicolor mohavensis*). There may be other species of fish, wildlife and vegetation that must be considered.
- 5.6 The DEIS must address the downstream impacts of increased runoff. Specific areas of concern include:
- 12.6 a. Quantity of potential runoff increases for a 50, 100, 500 year flood for the length of the Mojave River.

page 3

220 East Mountain View Street • Barstow, California 92311 • Phone (619) 256-3531

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The City of  
**BARSTOW**  
California

- 12.7 5. Impacts of increased runoff on erosion.
- 12.8 6. Water quality implications of increased runoff on both surface and groundwater.
- 8 9. These proposals and alternatives are the forerunner of many other such projects within the Upper Mojave River water basin. Such projects could use virtually all of the SWP water in the Upper Basin and leave no supplemental water for the Middle and Lower Basins, as well as other areas of the Mojave Water Agency. Imported water should not be dedicated to new development (new uses) before taking care of the existing overdraft on water supplies to meet existing uses. The DEIS must analyze the cumulative effects of further urbanization in the area, and the effect this will have on water supplies in the region.
- 12.9 10. We question the statement on page 3-87 regarding the amount of water which is returned to the system through deep percolation due to irrigation, wastewater filtration plants and lakes. Your calculations indicate this amount at 90,500 acre-feet by the year 2010. Please provide studies to support this statement.
- 12.10 11. The DEIS describes a number of projects for which the George Air Force Base facility could be reused for. The document also contains generic information on the proposal and alternatives, however it lacks specificity with regard to the ultimate development of the property. We recommend that an Environmental Impact Report be completed for any future specific use of this property.
- 1.14

The City of Barstow appreciates the opportunity to review and respond to the information contained in this DEIS. We look forward to receiving a copy of the final EIS. Please also inform us of any future public hearings on this project or alternative projects.

Please feel free to contact us at any time if you need clarification on any of these comments, or desire additional information.

page 4

220 East Mountain View Street • Barstow, California 92311 • Phone (619) 256-3531

DOCUMENT 18  
The City of  
**BARSTOW**  
California

Sincerely,

*Duane Greenfield*  
Duane Greenfield  
Deputy City Manager

cc: Eric Ziegler  
Henry Kraft

Letreus

page 5

220 East Mountain View Street • Barstow, California 92311 • Phone (619) 256-3531

DOCUMENT 19

**MOJAVE WATER AGENCY**

22450 Headquarters Drive  
P.O. Box 1009  
Apple Valley, California 92307

Office (619) 240-9201  
Fax (619) 240-2642

November 7, 1991

Lieutenant Colonel Thomas J. Barstow  
Director of Environmental Division  
AFRCI-WWS/DEV  
Norton Air Force Base, California 92409-6448

Dear Sir:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for Disposal and Reuse of George Air Force Base, California. Mojave Water Agency is responsible for water management within the Agency's area. The proposed project is within these boundaries.

On April 1, 1991, the Agency Board of Directors sent local elected and appointed officials a summary of current regional water supply issues which may impact the availability of a long-term regional water supply. One of the issues referenced in that communication is litigation (city of Barstow et al., vs City of Adelanto, et al.) regarding water rights along the Mojave River upstream of Barstow. In addition, the Agency recently filed a cross-complaint which expands the litigation to include the areas tributary to the Mojave River and downstream from Barstow. George Air Force Base is included within the area subject to the cross-complaint. This general stream adjudication may result in a stipulated judgment acceptable to the Court. The judgment will likely establish quantities of water available to the parties to the cross-complaint.

Any proposed use of George Air Force Base will require a significant quantity of water allocated to support the use or reuse of the base. It is possible that if a stipulated judgment is accepted by the Court, the quantity of water available to the proposed project or its alternatives may be limited, eventually requiring adjustment to the amount of water available to maintain the selected project.

The Mojave Water Agency asks the following comments to be included and considered during the process period for the Draft Environmental Impact Statement. The comments provided clarify assumptions used in the analysis of the proposed action and all alternatives. The section and title of the Draft Environmental Impact Statement precedes comments on that portion of the document.

3.2.3.1 Water Supply

The DEIS uses the Master Plan for the Delivery of Imported Water, (Malcom Pirney, Inc.) as the baseline for analysis. This report was accepted in July, 1990; however, many changes have occurred within the Agency area regarding water use and reuse. The projected future uses in the Master Plan report may not reflect the water use and consumptive use for the area. It may be more accurate and precise to compare George Air Force Base's current consumptive use with future project consumptive uses.

9.15

Lieutenant Colonel Thomas J. Barstol  
November 7, 1991  
Page 2

The Agency is framing a Water Management Plan for the entire Agency area. The Water Management Plan will develop water usage figures on a more accurate level. At the completion of this process the Plan will be submitted for formal public review as specified in the California Environmental Quality Act (CEQA).

The Mojave Water Agency Interim Sales Policy for State Project Water is undergoing review for adoption as the final policy for SWP water sales. The policy designates an application process for water purchase, and sale is limited to annual contracts. The policy also clarifies that the sale of water does not create a vested right to that water, and cautions customers in the issuance of "can" or "will serve" letters for specific entitlements based upon State Project Water (SWP) supply and delivery. Under this policy, uses other than municipal and industrial will be limited.

The potable water system proposed for Base reuse is described as the current system. The DEIS states that specific alternatives to the water supply system would be dependent on the developer's requirements and the purveyor's plans to change the existing on-base supply infrastructure. It is appropriate to identify the water purveyor for the proposed project and/or alternatives since the Department of Water Resources requires each water purveyor to submit an Urban Water Management Plan. This plan and purveyor identification contributes to the direct effect on the environment through water management planning.

It is also appropriate to identify specific water quantity used for George Air Force Base and volumes that are projected for the proposed project and alternatives. The DEIS currently describes water usage as percent increase in total water use for the Victor Valley. The comparison makes it difficult to compare water use between projects on equivalent terms. For realistic comparison the terms should be consumptive use per capita and total consumptive use.

**J.2.5.2 Wastewater**  
The Victor Valley Wastewater Reclamation Authority (VWRA) currently treats the discharge from George Air Force Base. The DEIS acknowledges that industrial pre-treatment programs were cancelled when base closure was confirmed. VWRA notified the Air Force future discharges by base occupants other than the Air Force must comply with VWRA requirements if the new user is served by the VWRA. Unmonitored industrial discharges have the potential to contaminate and diminish the only water source for the area, the Mojave River System. Mixing of residential and industrial wastewater is unacceptable for future uses.

The DEIS should state the mitigation for this continued practice. The DEIS should state that the reuse plan will comply with requirements of the National Pollution Discharge Elimination Permit program, as administered by the U.S. Environmental Protection Agency's representative. This program requires industrial pre-treatment programs for designated dischargers into sewerage facilities. If discharges will not be conveyed to a navigable waterway, the Lahontan Regional Water Quality Control Board should designate the pre-treatment standards for industries and residences.

Lieutenant Colonel Thomas J. Barstol  
November 7, 1991  
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### 5 J.2.5.3 Solid Waste

The report should note any existing "Cease and Desist" orders for desert landfills issued by the Lahontan Regional Water Quality Control Board and the Local Enforcement Agency for San Bernardino County, the Department of Environmental Health. Proper landfilling of solid waste is an integral segment of groundwater protection. Any reuse plans for George Air Force Base should evaluate solid waste disposal methods with regard to the impact on groundwater resources.

### 7 J.3 Hazardous Material/Hazardous Waste Management

The Installation Restoration Program (IRP) is vital for groundwater protection for the area. California law allows redevelopment agencies to be exempt from the cost of hazardous material clean-up activities. This exemption should not allow the Air Force to be absolved of responsibility for hazardous material cleanup which might be discovered subsequent to conclusion of the George Air Force Base Restoration Program. This action will ensure water sources will be protected by remediation of any additional hazardous material sources discovered after the IRP is completed.

These comments address assumptions made in Chapter 3, Affected Environment, of the draft DEIS. Please apply this information in analysis of the proposed project and the alternative projects. Application of this information to the examination of the proposed action and alternative actions may result in extensive changes in DEIR evaluations of impact.

Thank you for the opportunity to comment. If you have any questions, please call Nora Casquette or Jo Ann Auerwald at (619) 240-9201.

Sincerely,

*Jo Ann Auerwald*  
Jo Ann Auerwald  
Water Resources Program Manager  
Mojave Water Agency

Attachments: MWA Sales Policy for State Project Water  
Summary of Regional Water Supply Issues

# MOJAVE WATER AGENCY

22450 Headquarters Drive  
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Apple Valley, California 92307

Office (619) 240-9201  
Fax (619) 240-2642  
920-021175-71

April 1, 1991

RE: Regional Water Supply Issues

Dear

As you may be aware, events currently underway may significantly impact water resources production and availability within the High Desert communities of San Bernardino County, including your area of land use jurisdiction. The activities referred to include a general stream adjudication affecting water rights along the Mojave River, a facilitator process designed to develop a consensus on water use and rights to resolve the basis of litigation, and the development of an Agency-wide Water Management Plan.

In May of 1990, the City of Barstow and the Southern California Water Company filed a lawsuit (City of Barstow and the Southern California Water Company v. City of Adelanto, et al.) naming essentially all entities producing water in excess of 10 acre feet upstream from Barstow on the Mojave River. The suit alleges that the cumulative water production upstream of Barstow has overdrafted the Mojave River System to the detriment of the City of Barstow and the Water Company. The plaintiffs seek to correct this alleged condition by asking the Court to guarantee an average annual flow of 30,000 acre feet of water to the Barstow area. For reference, an acre foot is equal to 325,851 gallons and is approximately the amount of water used by a family of five in one year.

Due to the filing of the legal action, an Agreement was entered into between the City of Barstow and several water purveyors representing City, County and private water users named in the

Regional Water Supply  
April 1, 1991  
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suit, and the Mojave Water Agency, to fund and obtain the services of an Independent Facilitator. The Facilitator has been contracted to assist in development of a negotiated solution to water supply problems in the Mojave River area. Regular meetings are occurring and information regarding water availability, production, and use practices is being quantified to assess the nature of water supply and demand along the Mojave River. One of the key aspects of this effort will be the estimation of the "safe yield" of the Mojave River Basin, or the amount of water which may be extracted from the Basin with relative assurance that the same amount will be replenished each year.

The Facilitator process is intended to result in a negotiated solution to the physical, institutional and financial issues key to the litigation in progress. The negotiated solution would be signed by the parties to the Agreement and submitted to the Court of Jurisdiction for the case. The terms of the solution would also become part of water management plans prepared by any of the signatories.

Current participants in the facilitator process include Apple Valley Ranches Water Company, Apple Valley Water District, Apple Valley Pothill County Water District, Apple Valley Heights County Water District, Southern California Water Company, Victor Valley Water District, County Service Areas 42, 64, 70 and Improvement Zones C and J, City of Barstow, Mojave Water Agency, Mojave River County Water District, Silver Lakes Association, Baldy Mesa Water District, Mariana Ranches County Water District, Newberry Community Services District, Spring Valley Lake Association, and the Jess Ranch Water Company. The California Department of Fish and Game and the Farm Bureau are also involved in the planning and information gathering aspects of the process. Additional parties may be added to the process with concurrence of the current signatories to the Agreement. It may be appropriate for the water purveyor(s) which serve your area of jurisdiction to participate in the process. You are encouraged to contact Agency Staff regarding these arrangements if you are not currently participating. The Facilitator process is expected to be completed within one year.

The third activity currently underway is the development of an Agency-wide Water Management Plan. The Mojave Water Agency is in the preliminary stages of preparing this document, which will quantify available water supply, develop a strategy for enhancing water supply and providing necessary facilities, and develop an implementation and financing strategy. The Plan will capitalize on previously completed studies and reports and, as noted, incorporate the terms of any negotiated settlement resulting from the Facilitator process and approved by the Court. Although the Plan is Agency-wide, the Mojave River area will be "fast-tracked" for solution of immediate issues. Plan preparation is expected to take

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April 1, 1991  
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approximately 18-24 months to complete, including public comment and environmental review.

The Agency contracts with the State of California for a maximum allotment of 50,000 acre feet of State Project Water. One of the objectives of the Water Management Plan will be development of a permanent policy for the best use of this limited resource, and financing mechanisms for the purchase of the maximum amounts of water possible. Until then, an Interim Water Sales Policy has been adopted (copy attached). The Interim Policy will be subjected to public and environmental review before a permanent Policy is adopted by the Agency. Please note that the Interim Policy acknowledges that the water supply available to the Agency from the State Water Project is interruptible and subject to shortages. The Policy also limits the sale of water to annual contracts, clarifies that the sale of water does not create a vested right to that water, and cautions customers in the issuance of "can" or "will serve" letters for specific land use entitlements based upon State Project Water supply and delivery.

Preliminary data available to the Agency demonstrates that a condition of overdraft exists for the Mojave River Basin, to the extent that the full Agency entitlement to State Project Water may not be sufficient to replenish groundwater resources necessary to assure long-term water service to existing and proposed new developments. As noted, the data is preliminary and will be subject to review and refinement as part of the Facilitator and Water Management Plan processes. Until the Agency has completed preparation of the Water Management Plan, and pending litigation has been settled by negotiation or Court decree, it cannot be known with certainty what the future availability of a long-term assured water supply to current and proposed development will be for the region, or what specific measures will be necessary to best utilize the available water resources.

As you can see, events underway will significantly affect the future of water resources in the High Desert, and the ability to provide water to specific development projects which may be proposed within your jurisdiction. These factors should be given careful consideration when contemplating significant commitments of water to new development projects.

Expectations that a regional solution to water supply needs currently exists are premature. The development and implementation of regional solutions will require cooperation and involvement at the local level. Land use and development activities within your jurisdiction should reconcile the limited availability of water. Conservation efforts (both interior and exterior) and retrofit programs, should be pursued whenever feasible. The availability of a long-term water supply should be given careful consideration

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Regional Water Supply  
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before approval of additional development projects which will result in further demand on diminishing water supplies.

Sincerely,



John W. Russell  
President

## DOCUMENT 19

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**RULES AND REGULATIONS FOR SALE AND DELIVERY  
OF STATE OF CALIFORNIA PROJECT WATER  
BY THE MOJAVE WATER AGENCY ON AN ANNUAL BASIS**

## ARTICLE I

## SECTION 1.01 DEFINITIONS

As used herein the terms set forth below shall be defined as follows and shall have such meaning unless the context indicates otherwise.

- (a) Applicant: Any person or entity applying to Agency for water service.
- (b) Water Purveyor: Any person or entity providing direct retail service to consumers.
- (c) Board: The Board of Directors of the Agency
- (d) Customer: An applicant for service, an approved applicant, or any person or entity receiving water service from the Agency.
- (e) Agency: The Mojave Water Agency.
- (f) General Manager: The General Manager of the Agency.
- (g) Project Water: Water obtained from the State Water Project.

Any customer requesting the sale and delivery of state Project Water shall be subject to the Agency's State Water Contract. The water available to the agency is subject to the limitation that the supply of water is interruptible.

The Agency makes no representation to the customer as to the quantity or quality of water delivered to the customer. No vested rights are obtained or inferred to the Customer upon the sale and delivery of any water. Customers should use caution in the issuance of "Can Serve" or "Will Serve" letters for specific land use entitlements based upon State Water Project Water supply and delivery.

Improvement District M of Division 2 shall be exempt from Section 2.02 of these rules and regulations for the term of the bonds of the Improvement District M pipeline except as may be dictated by the agency's state contract and conditions affecting the state's source of supply.

## ARTICLE II QUALIFICATION FOR SERVICE

## SECTION 2.01 APPLICATION FOR SERVICE

Any applicant seeking to purchase water from the Agency shall make application therefor in such form as may be prescribed by the General Manager. All applications for water submitted to the Agency pursuant to these Rules and Regulations shall be deemed a "Project" by the Agency and shall be subject to environmental review pursuant to the California Environmental Quality Act and its implementing guidelines. The General Manager shall investigate each such application and may require the submission of additional information. The application and additional information as may be required, together with the General Manager's recommendations thereon, shall be submitted to the Board for action thereon.

## SECTION 2.02 TERM OF SERVICE

Service granted pursuant to an application for Service shall be for a period of one year and shall be subject to annual renewal. For the purpose of annual renewals, existing customers shall be required to submit new applications to the Agency. Renewal of the sale of any water is for the period of one year and is temporary in nature. No vested rights may be obtained or are inferred by the yearly renewal of water sales.

## SECTION 2.03 IDENTIFICATION OF APPLICANT AND INTENDED USE

Each application for water service shall contain the information as listed. The General Manager may require the submission of additional information. The application shall contain such information as may be required by the General Manager to show that the plan of use is in the public interest and in accordance with best water resources management requirements as required by Section 9.01. No use of water shall be permitted for recreational uses, including but not limited to, golf courses, recreational lakes, or other recreational uses of water nor shall the Agency provide water to replace water from other sources, including groundwater, used for such purposes. Service may be refused if the Board determines it is not in the public interest or will not result in best water resources management.

- (a) Each application for service shall state the legal capacity of the applicant which shall be identified as one of the following:

- (1) Public agency, indicating type of agency and the law under which it was formed;
- (2) Corporation, indicating state of incorporation and other pertinent information;
- (3) Partnership, indicating partners involved;
- (4) Individual
- (b) Each applicant shall state whether it is a public utility or mutual water company.
- (c) Each applicant shall state the nature or intended use or uses of the water being sought:
  - (1) Municipal
  - (2) Industrial
  - (3) Agricultural
  - (4) Domestic
  - (5) Ground Water Recharge
  - (6) Other as described by the applicant.
- (d) Each applicant shall state the general geographic area of service.
- (e) Each applicant shall submit an estimate of the amounts of water requested for delivery by the Agency before June 1 of each year. The estimates will be used for planning operations as described in Section 4.09. The estimate shall constitute the member public agency's request for deliveries for the first of the five years covered in the estimate requested. Each estimate shall contain, as a minimum for each service connection for each month of the year succeeding July 1, for the entire Customer's Client Base for each month of the succeeding four years, the following information:
  - (1) The quantity of water requested to be delivered by the Agency to the Customer.
  - (2) The quantity of water to be used for:
    - (a) Municipal, Industrial, and Domestic purposes, exclusive of ground water replenishment by spreading or injection;

- (b) Ground water replenishment by spreading or injection;
- (c) Agricultural purposes.

## SECTION 2.04 SERVICES TO BE WHOLESALE IN NATURE

Each application shall contain such information as is necessary to assure the Board that the application is for service of a wholesale nature and that the Agency will not thereby become subject to the obligations of a Water Purveyor. In event the Applicant seeks a variance of such requirements, the application shall so state and there shall be attached thereto a statement of the reasons for seeking a variance and any documentary evidence in support thereof.

## SECTION 2.05 BACKUP CAPACITY OF APPLICANT

Each application shall contain information indicating that the Applicant is capable of sustaining its service requirements from independent sources during the period of any interruption or curtailment of service from the Agency. In no instance shall the Agency be the sole source of water supply to any water purveyor for any development within the purveyor's service area.

## SECTION 2.06 TREATMENT FACILITIES

Each application shall contain information indicating the Applicant has or will install such treatment facilities as may be required for the use or uses to which the Applicant intends to put the water.

## SECTION 2.07 POWER GENERATION RIGHTS

Each application for service shall contain an assignment to the Agency of all rights to the generation of power from the use of the water supplied. Said Rights shall extend to the generation of power as the water flows through Agency facilities and as it flows through such of the Applicant's facilities and as it flows through such of the Applicant's facilities as are reasonably adapted for such purposes or can be reasonably adapted for such purposes. It shall be the responsibility of the Agency to pay its expenses for any exercise of its right to generation of power pursuant hereto, and the Applicant shall not be subjected to extra expense in connection therewith. In appropriate cases, the Agency and the Applicant may install joint facilities for power recovery purposes. In the event the Agency determines not to exercise its rights, the Applicant may undertake to install power recovery facilities for its own account.

**SECTION 2.08 RIGHT TO RECAPTURE RETURN FLOWS**

Each application shall contain the agreement of the Applicant that the Agency shall have the prior right to recapture and claim any return flow from the water supplied by the Agency to the Applicant or others, directly or indirectly, which reaches any ground water basins within the Agency, including without limitation any waste water flows.

Applicants conducting direct ground water replenishment operations with Project water as specified in Section 2.10 shall have the paramount right for recapture and initial use of the deposited volume of water less losses computed in accordance with standard engineering practice.

**SECTION 2.09 INDEMNITY FOR GROUNDWATER RECHARGE**

Each application shall contain the agreement of the Applicant to provide the Agency with indemnity for damages to lessees of the Applicant arising out of ground water spreading operations of the Agency, or performed by others for it, in all circumstances in which the lease between the Applicant and the Applicant's lessee protects the Applicant against such damages.

**SECTION 2.10 APPLICATION FOR GROUNDWATER REPLENISHMENT**

Except in cases in which the Agency undertakes to conduct ground water replenishment operations on its own motion, an application shall be required whenever request is made that the Agency engage in ground water replenishment operations, whether delivery is to be made to a customer, or such ground water replenishment is to be conducted by or at the direction of the Agency without delivery to a customer.

**SECTION 2.11 SHORTAGE IN WATER SUPPLY**

In any year in which there may occur a shortage in available supply of Project Water the Agency shall reduce the delivery of Project Water proportionately to all parties to which the Agency supplies water, including Improvement District M of Division 3. It is provided that the Agency may apportion available Project Water on some other basis if such is required to meet minimum demands for domestic supply, fire protection or sanitation to a specific area of the Agency during the year. No vested rights are obtained by the Customer upon the sale and delivery of water apportioned by this Section nor are any such rights inferred by virtue of an Agency decision to provide water to a Customer in a specific year.

**SECTION 2.12 METERING BY END USER**

All customers of the Agency shall be required to meter the use of water by retail accounts (and users) served.

**ARTICLE III INSTALLATION AND CONNECTION OF FACILITIES****SECTION 3.01 GENERAL AUTHORIZATION**

All service connections, including valves, pipe meters and other equipment required, shall be installed at the expense of the Customer after authorization by the Board.

**SECTION 3.02 PROCEDURE**

The Agency shall cause a service connection to be constructed pursuant to a written request by a customer in accordance with plans and specifications approved by the General Manager and by an authorized representative of the Agency. All equipment and materials required for constructing the service connection shall be acquired by the Agency as specified in the Agency's purchasing policy, or the Agency may utilize therefor suitable equipment and materials on hand.

**SECTION 3.03 FACILITIES INCLUDED: OWNERSHIP BY THE AGENCY**

The service connection shall include the facilities for diversion of water from the Agency's system and for delivery of such water into the pipeline distribution system as specified by the Customer. The service connection up to and including the fittings connecting with the pipeline delivering water through the service connection, including any metering instruments and cabinets therefor, shall be and remain the property of the Agency and shall be operated, maintained and controlled by the Agency.

**SECTION 3.04 BACKFLOW PREVENTION**

The customer shall be required to install adequate back-flow or back-siphonage equipment approved by the Agency or demonstrate adequate facilities exist to prevent backflow into Agency facilities. The Agency solely shall determine when backflow facilities are required and the type of device required. The device(s), when required, shall be installed at the service connection point and shall be maintained by means satisfactory to the Agency.

**SECTION 3.05 PRESSURE SURGES (WATER HAMMER)**

All service connection applications shall include data showing that any operation (gravity or pumping from pipeline if required) will not damage any Agency facility. Such data shall include, but is not limited to, surge analysis, structural calculation and hydraulic analysis for any pumping or delivery condition requested.

**SECTION 3.06 DEPOSIT OF ESTIMATED COSTS**

The costs of constructing the service connection shall be estimated by the General Manager, who shall cause a written estimate to be prepared and who shall inform the Customer's representative regarding the amount of such estimate. The total amount of such estimate shall be deposited by the Customer in advance of any action toward construction of the service connection, including all items peculiar only to a given service connection, or it may be deposited in stages, upon approval of the Board. Costs shall include reasonable allowance for costs of design, supervision and overhead, in addition to direct costs of labor, equipment and materials.

**SECTION 3.07 USE OF DEPOSIT**

Such deposit or deposits shall be held and used to defray the costs of constructing the service connection, and the Agency shall not be required to proceed with construction of the service connection in the absence of sufficient funds deposited therefor.

**SECTION 3.08 EASEMENT FOR SERVICE CONNECTION**

The Customer shall cause to be granted to the Agency or the Agency shall acquire at the Customer's expense, directly from the owner of the affected land, such easement as may be necessary in the opinion of the General Manager for the construction, operation, maintenance and repair of the service connection. Said easement and the grant thereof shall be approved by the Agency; provided, however, that the title to the property required for such service connection may be acquired in the same manner as an easement and in lieu of an easement if the General Manager and Customer agree that it would be advantageous to do so. Customer shall provide, or the Agency may obtain, at Customer's sole cost and expense, a policy of title insurance insuring that clear title to the easement or fee is vested in the Agency, subject to any encumbrances that have been approved in writing by the General Manager. The amount of title insurance shall be determined by the acquisition costs, unless the acquisition is made without costs or for less than the amount of the coverage which will be provided for the price paid for the title report, in which case the title

policy shall be in the amount of such coverage or such amount as may be reasonably determine by the General Manager.

**SECTION 3.10 MAINTENANCE OF SERVICE CONNECTION**

Upon completion of the service connection, the Agency shall be responsible for any subsequent maintenance, alteration, reconstruction or relocation of such service connection with the exception of all changes which are requested by the Customer, which shall be handled as a new service connection. However, prior to the release of water by the Agency into the pipeline distribution system as specified by Customer, the Agency and Customer shall each install its own flow control device or devices as a means of maintaining uniform flow.

**SECTION 3.11 ENVIRONMENTAL REQUIREMENTS**

Public Agency customers are responsible for ensuring that the obligations of lead agencies as described in the California Environmental Quality Act and its implementing guidelines are fulfilled for the construction of the service connection. The Agency shall fulfill all other private obligations that may arise from its involvement in construction of the service connection and shall provide such information as it has available which is necessary to insure compliance with the Act and its implementing guidelines. The Agency shall be the lead agency in for CEQA compliance in implementing or authorizing the use of State Project Water for a specific project or purpose.

**SECTION 3.12 FAIR VALUE OF OUTLET**

The fair value of an outlet installed during pipeline construction will be established by the General Manager at the time a service connection is constructed at the outlet and the charge to a Customer for such an outlet will be based on this fair value.

**ARTICLE IV WATER SERVICE AND OPERATIONS****SECTION 4.01 LIMITATIONS OF STATE CONTRACT SERVICE**

All water service made pursuant to the Agency's State Contract shall be subject to all of the terms and conditions of the said State Contract and to any conditions affecting the State's source of supply or the availability of supply.

**SECTION 4.02 INTERRUPTIBLE SERVICE**

All water supplied by the Agency shall be served upon an interruptible basis. Interruption may be occasioned due to the terms of the Agency's State Contract by reason of the Agency's requirements for maintenance and operation of its facilities, including the design and operating criteria established pursuant to Section 3.03 or demand by Agency's customers in excess of State Water Project Water Entitlement pursuant to Section 6. The Agency shall notify its customers in advance of any nonstandard interruption to the extent reasonably feasible. Due to the nature of the Agency's facilities and the potential modes of service required, the Agency cannot guarantee any specific level of pressure or rate of flow.

**SECTION 4.03 QUALITY**

Except as otherwise specifically agreed, all water served by the Agency is raw untreated water and shall not be supplied for domestic purposes by any customer without such treatment as may be required to comply with all applicable laws and regulations. The Agency makes no representation as to the quality of water the Agency supplies as to its suitability for any particular purpose. Reference is hereby made to Article 19 of the Agency's State Contract, but the Agency does not undertake to monitor the extent of the State's compliance or noncompliance with such standards, but only to transport said supply available to the Agency. The Agency shall be responsible only to exercise ordinary care in transporting and safeguarding said supply and shall not be responsible for the quality of such water as it is received by the Agency. The Agency may, however, reject any supply which is unsuitable for reason of contamination or pollution which render it impractical for the Agency Customers to treat and use the same.

**SECTION 4.04 SPECIAL CLASSES OF SERVICE**

The Agency may from time to time establish special classes of service reflecting the special conditions applicable to such service. Such classes may include, but shall not be limited to the following:

- (a) Service outside the Agency.
- (b) Service to property not subject to Agency taxes.
- (c) Service with a special rate in accordance with the terms of annexation to the Agency.
- (d) Service pursuant to special contractual arrangements with the Agency.

data can be fixed. In the latter case, the overcharge shall be computed back to and not beyond such time. Any undercharge determined upon the basis of the test may be billed to the Customer on a similar basis. Requests for a test within 12 months of a prior test will be at the Customer's expense unless the meter is determined to be over registering deliveries as determined in this section.

**SECTION 4.09 ESTIMATES OF WATER REQUIREMENTS AND SCHEDULES OF DELIVERIES**

Before June 1 of each year, each Customer shall furnish the Agency in a form provided by the Agency, with an estimate of the amounts of water to be furnished to such customer by the Agency. These estimates will be used by the Agency in planning the construction needed to complete the Agency's ultimate distribution system; in planning the future operation of such system; and in preparing notices for submission to the State Department of Water Resources which will be used by the State to order power for pumping on the State Water Project.

**SECTION 4.10 CONTENTS OF ESTIMATES**

Each estimate furnished by the customer shall contain, at minimum, the information requested in section 3.03.

**SECTION 4.11 REVISION OF ESTIMATES**

The Customer may make revisions to any of its estimates upon reasonable notice to the Agency.

**SECTION 4.12 ORDER FOR WATER**

Any Customer requesting delivery of water from the Agency shall place such order in writing. The General Manager may prescribe a suitable form for use in placement of water orders and may revise the same from time to time. Any customer water order shall be accompanied by a copy of the ordinance, resolution, minute order, or other action of the board or other governing body of the Customer which authorizes the placement of the order.

**SECTION 4.13 OUTSIDE SALES**

Water may be sold for use outside the Agency only when the Board finds there is a surplus above that required by consumers within the Agency, as authorized by Water Code Section 71613. The Board shall also find there is no overdraft of groundwater in all basins served by the Agency before the sale of surplus water outside the Agency. All such sales shall be limited to the period of surplus and shall terminate when the water available is required for use within the Agency. Any sales for delivery within or without

Water supplied for delivery to property not subject to Agency taxes shall be subject to a special outside rate as authorized by Water Code Section 71613. The outside rate may be applicable to any Agency delivery, wherever made, which makes water available for use on property not subject to Agency taxes, including (1) direct delivery to such property, (2) delivery to water within the Agency by exchange (e.g., delivery of Agency water within the Agency to make other water supplies otherwise used within the Agency available for use on property outside the Agency, and (3) any delivery ordered to make water available for use outside the Agency.

**SECTION 4.05 WATER RATES**

All water rates for water service made by the Agency shall be established from time to time by resolution of the Board of Directors of the Agency. Such rates may differ for various classes of use water use.

**SECTION 4.06 PRESSURE AND FLOW CONDITIONS**

All Applicants and Customers are required to accept such conditions of pressure and service as are provided by the distributing system the location of the proposed connection, and shall agree to hold the Agency harmless from any damages arising out of low pressure or high pressure conditions or interruptions of service. The Agency will not make deliveries at flows less than one cubic foot per second or for a period of less than 24 hours. Orders for water must be placed one week in advance of actual delivery.

**SECTION 4.07 PAYMENT OF WATER CHARGES**

Water charges are due and payable at the office of the Agency on date of mailing bill to the Customer or his agent as designated in the application and shall be delinquent 21 days thereafter. Service may be discontinued without further notice if payment of the water charge is not made prior to the date such charge becomes delinquent.

**SECTION 4.08 METER TESTING**

When the accuracy of a water meter is questioned, the Agency upon request will cause an official test to be made at its own expense. The Customer shall be duly notified of the time and place of such test and may be present when any such test is made by the Agency. The meter will be tested on variable rates of delivery and if the average registration is more than two percent in excess of the actual quantity of water passing through the meter, the Agency shall refund to the Customer the overcharge based upon the test for the prior twelve months, unless it can be shown that the error was due to some cause for which the

the Agency which makes water available for use on property outside the Agency shall be treated as an outside sale for such purposes, including (1) direct delivery to property outside the Agency, (2) delivery to property outside the Agency by exchange (e.g. delivery of Agency water within the Agency available to use on property outside the Agency), and (3) any delivery ordered to make water available for use outside the Agency.

**ARTICLE V GENERAL****SECTION 5.01 LIABILITY AND INDEMNIFICATION**

Neither the Agency nor any of its officers, agents, or employees shall be liable for the control, carriage, handling, use, disposal or distribution water supplied by the Agency to a customer after such water has been delivered to such Customer; nor for claim of damage of any nature whatsoever, including but not limited to property damage, personal injury or death, arising out of connection with the control, carriage handling use, disposal, or distribution of such water beyond the point of such deliver; and the Customer shall indemnify and hold harmless the Agency and its officers, agents, and employees from any such damages or claims of damages. Neither the Customer nor any of its officers, agents or employees shall be liable for the control, carriage, handling, use disposal, or distribution of water prior to such water being delivered to the Customer; nor for claim of damage of any nature whatsoever, including but not limited to property damage, personal injury or death, arising out of or connected with the control, carriage, handling, use disposal or distribution of such water prior to its delivery to such Customer, and the Agency shall indemnify and hold harmless the Customer and its officers, agents, and employees from any such damages or claims of damages.

**SECTION 5.02 RETURN FLOWS**

All water sold and delivered by the Agency is subject to the right of the Agency to recapture and reclaim any return flow reaching any groundwater basin within the Agency, including without limitation, any waste water.

**SECTION 5.03 WATER RESOURCES MANAGEMENT REQUIREMENTS**

In order to promote good water resources management and prevent waste of water resources, undesirable ground water conditions, and unnecessary expense to the inhabitants and taxpayers of the Agency, the Agency shall have the right to require the use of alternate supplies where such use

prevents waste or undesirable ground water conditions and/or prevents unnecessary expense to the Agency's inhabitants and taxpayers. The Agency may also encourage the use of special conservation facilities or devices where appropriate.

#### SECTION 5.04 POWER GENERATION RIGHTS

It is the policy of the agency to retain the power generation rights from the use of the water which it supplies, without thereby imposing extra expense upon its Customers, and to cooperate with its Customers in installing power recovery facilities where appropriate.

#### SECTION 5.05 DESIGN AND OPERATING CRITERIA

The Agency's facilities have been designed and planned within the limits of available funding to meet water service and other needs within the Agency to maximum extent feasible and to allow for maximum flexibility for use of facilities for different purposes and in different modes of operation. Such a system necessarily makes it impossible to always respond automatically to service demands when facilities are needed for conflicting demands or modes of service. It is the applicant's responsibility to consult with Agency staff to obtain information as to the Agency's requirements for connection and the capabilities of the Agency system before designing facilities for connection to the Agency system.

#### SECTION 5.06 INDEMNIFICATION FOR WATER SPREADING

The Agency shall require execution of an agreement indemnifying the Agency and its officers, agents, and employees against liability for damages of any nature whatsoever, including but not limited to property damage, personal injury or death, arising out of or resulting from or connected with, groundwater replenishment by spreading or injecting which is conducted by or at the direction of the Agency pursuant to the application or request of a Customer or Water Purveyor or in which water is to be delivered by the Agency to a Customer or Water Purveyor for such use.

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November 8, 1991

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OF COUNSEL

VIA TELECOPIER

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFRC-EM/DEV  
Norton Air Force Base, California 92409-6448

RE: SUPPLEMENTAL COMMENTS FOR THE CITY OF ADELANTO, CALIFORNIA AND THE REDEVELOPMENT AGENCY OF THE CITY OF ADELANTO ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT, SEPTEMBER 1991, DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Lt. Col. Bartol:

These comments are submitted on behalf of the City of Adelanto, California, its residents and taxpayers, and the Redevelopment Agency of the City of Adelanto concerning the Draft Environmental Impact Statement, September 1991 (the "DEIS") prepared by the U.S. Air Force ("USAF") for the proposed disposal and reuse of George Air Force Base ("George AFB") located in San Bernardino County, California. These comments supplement and incorporate by reference prior comments dated October 17, 1991 submitted on behalf of Adelanto and attached hereto as Exhibit "A."

The City of Adelanto is the community most impacted by the operations of George AFB, and feels that its economic potential as a community has been retarded by the Air Force's presence since 1942. With respect to base closure and neighboring communities, Congress has declared that a military installation is a part of the infrastructure of the community in which it is located and there is a long standing symbiotic relationship between a military installation and the community; that the people in an impacted community have made substantial long term investments of time, training, and wealth to support the military installations; that the loss to an impacted community when a military installation is closed may be substantial and in such cases the Congress wishes to mitigate the damage to the impacted community; that an impacted community knows best the needs of the community and the best way to use available resources to meet these needs consistent with existing national priorities; and that unfettered ownership of the real property associated with a closed

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military installation at the earliest possible time can partially offset the loss to a community which results when a military installation is closed. For these reasons, Adelanto requests that its proposal for reuse of the Base as an international airport be given further and equal consideration.

- 1.1 1. THE DEIS FAILS TO PRESENT VIABLE ALTERNATIVES FOR THE REUSE OF GEORGE AFB AS REQUIRED BY LAW. NOR DOES IT PRESENT A "PROJECT" EXCEPT IN A "POST HOC" MANNER.

The purpose of a DEIS as set forth in the National Environmental Policy Act of 1969 ("NEPA"), 42 USC 4321 et seq., and NEPA Regulations, 40 CFR Parts 1500 et seq., is to provide as early as practical an information document that will permit the USAF (after public comment) to reach a final decision on the various alternative projects available after due consideration of the environmental impacts of each. In the DEIS the USAF selected as the environmental project (the "Proposed Action"), a reuse of George AFB pursuant to a purported plan developed by the Victor Valley Economic Development Authority ("VVEDA") and centers around a regional commercial and general aviation airport for reuse of the Base property. VVEDA is a Joint Powers Authority, purported to have been formed in September 1988 in order to obtain title to George AFB and its facilities. VVEDA consists of a partnership of the County of San Bernardino, the City of Victorville, the City of Hesperia and the town of Apple Valley. The City of Adelanto removed itself from VVEDA early in the planning process and pursued its own plan for the purchase and reuse of the Base.

- 1.1 2. The DEIS refers to VVEDA as the recognized reuse authority, and has given its proposal tremendous preferential treatment. The DEIS purportedly analyzes six other alternatives to the proposed action which includes the proposal of the City of Adelanto for the development of an international airport on the George AFB site. However, the treatment and analysis of these other alternatives are summary, conclusory and biased. Thus, the DEIS is a mere post-hoc justification of the USAF's decision, apparently already made, to transfer George AFB to VVEDA for development and reuse. The DEIS should be revised to evaluate each alternative, including the VVEDA plan, on an equal basis. The VVEDA plan is only one of the alternatives. Unfair bias has been used in the preparation of the DEIS.

Nowhere does the DEIS even mention transfer of the base to any agency other than VVEDA, even though the City of Adelanto has submitted plans, comments and alternatives. The DEIS clearly states that VVEDA is the entity to which the USAF wishes to transfer George AFB to the exclusion of all others. Accordingly, Adelanto demands that a supplemental, in-depth study and analysis be conducted on its reuse proposals.

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- 9.2 THE DEIS IS DEFECTIVE IN THAT IN MANY INSTANCES IT HAS RELIED SOLELY ON DATA AND ANALYSES INCLUDED IN THE VVEDA PROPOSAL.

NEPA requires the USAF to perform research and conduct studies for the DEIS if no adequate data exists. The USAF cannot simply rely on data and information produced by VVEDA for the selected project. Not only does the DEIS state that reuse is for VVEDA only, but also it specifically acknowledges that the DEIS is based in substantial part upon VVEDA's studies. The DEIS analyzes Adelanto's proposal using information derived from the VVEDA report. Source material cannot be derived from the "Proposed Action." It is inappropriate to utilize VVEDA data for the analysis of any other alternative.

Accordingly, Adelanto requests that a supplemental, in-depth study of the Adelanto proposal be made.

- 7.3 THE DEIS IS DEFECTIVE IN THAT IT FAILED TO DISCLOSE WHY THE ADELANTO PROPOSAL AND OTHER ALTERNATIVES WERE REJECTED.

The DEIS selects the VVEDA proposal as the "Proposed Action" or the "Project." The DEIS' treatment of the Adelanto proposal and other alternatives did not provide the necessary reasonable, good faith presentation of all alternatives as required by NEPA and other Federal statutes. Further, the DEIS failed to set forth the reasons why the Adelanto proposal and other alternatives were rejected in favor of the VVEDA proposal.

Accordingly, Adelanto requests that the DEIS be revised to reflect a fair and reasoned comparative analysis of its proposal and set forth reasons for its rejection.

- 9.4 THE DEIS IS TOTALLY DEFICIENT IN ITS TREATMENT OF WATER RIGHTS AND COMPLETELY IGNORES THE EXISTING JURISDICTIONAL DISPUTE OVER WATER RIGHTS.

There is a pending water adjudication law suit to determine the appropriate, riparian and usufructuary rights to the Mojave river and the underground water aquifers. This litigation (in the Superior Court of Riverside County) when decided will impact whatever project and alternatives now studied or selected. Though obviously a vital factor in the decision-making process, the DEIS virtually ignores and inadequately considers the possibility that it may be judicially determined that Adelanto, not VVEDA or its components, own the water rights. In addition, Adelanto has now filed two new Declaratory Relief actions and injunction requests in the Superior Court of San Bernardino County to resolve these vital water rights matters.

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8 cont'd Accordingly, Adelanto requests that the DEIS be revised to adequately and properly study the issue of water rights.

The DEIS has not fully disclosed the true facts with respect to available water rights, nor has it shown that there are adequate and legal water resources available for the reuse project.

10.5 9. THE DEIS IS DEFICIENT IN ITS DISCUSSION OF CONTAMINATION, HAZARDOUS MATERIALS AND HAZARDOUS WASTE AND FAILS TO IDENTIFY THE IMPACTS ON THE ADJACENT CITY OF ADELANTO.

NEPA requires that in matters where the extent of an impact cannot be quantified, or on which there is little empiric information, a "worst case" scenario must be presented. Conceding that contamination on George AFB is identified, the DEIS does not adequately deal with this problem. NEPA requires that the DEIS contain detailed explanation of specific measures which will be employed to mitigate adverse impacts. This area cannot simply be left as a problem to be dealt with by the selected project. For instance, it is imperative that great urgency be given to the TCE contamination. Groundwater is the only source of water presently available to the City of Adelanto and other agencies downstream. Therefore, this contamination must be eliminated within timeframes set forth in the DEIS. The DEIS enumerates possible mitigation measures and identify mitigation goals that would be necessary to eliminate existing contamination, but not contamination that will result from the Proposed Action. The information included is presented in general terms, lacking both a detailed description and no analysis of the effectiveness of the measures proposed. The DEIS further fails to discuss the potential impacts from the handling of contaminated and hazardous materials upon the adjacent City of Adelanto.

10.5 Accordingly, Adelanto requests that the DEIS be revised to adequately study contamination that will result from the VVEDA proposal, particularly with respect to its effect on the City of Adelanto, and specific mitigation measures.

7.11 13. THE DEIS FAILS TO ADEQUATELY STUDY FACTORS RELATING TO TRAFFIC IMPACTS OR TO DISCUSS THE IMPACTS OF TRAFFIC OR OTHER TRANSPORTATION COMPONENTS GENERATED BY THE VVEDA PROPOSAL ON THE CITY OF ADELANTO.

14 While the DEIS concedes that there are impacts relating to short range and long range traffic issues, the USAF makes little or no suggestions for treatment of these problems. The purpose of the DEIS is not merely to list the possible problems, it is also required to mitigate, remediate and provide sufficient information so that the

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14 cont'd USAF can weigh these factors in balance. To merely state that there will be an increase in traffic by a given percentage presents the issue, but this must be followed by a remedy.

15 The DEIS does not discuss the effect of increased traffic from the VVEDA proposal on the City of Adelanto. How will the VVEDA proposal affect traffic and circulation in the City of Adelanto, which borders George AFB on three sides? Because of the proposal's magnitude and the substantial construction required, it will generate significant traffic congestion problems. What will be the impact of the expansion of access roads, lane closures, detours, slow moving construction vehicles and equipment, personnel commutes, etc. on the adjacent City of Adelanto? Will the proposal affect public transportation to the City of Adelanto? The DEIS does not include factors, formulas and computations used to arrive at traffic impacts which permits tracing USAF steps to conclusions. The DEIS requires no mitigation for any of the transportation components.

16 The DEIS further fails to adequately address and analyze cumulative impacts other than growth features of the Victor Valley.

17 Accordingly, Adelanto requests that the DEIS be revised to set forth full information on the potential effects of increased traffic and particularly, the effects on the City of Adelanto.

18 7. THE DEIS IS DEFICIENT IN THAT IT FAILS TO ADEQUATELY IDENTIFY AND RESOLVE CONFLICTS WITH "LOCAL PLANS" OF THE CITY OF ADELANTO.

6.3 NEPA requires a DEIS to recognize any "conflict with local plans." Adelanto has had local plans for the reuse of George AFB for years, a fact well known to the USAF. Yet, the DEIS has chosen to not recognize such reuse plans nor to mitigate the damage to such local plans in any manner. Such local plans are most important not only to Victor Valley as a whole, but are indispensable to the City of Adelanto which is the urbanized area most centrally located with respect to George AFB.

The VVEDA proposal does not comply with the goals, policies and objectives of the City of Adelanto's General Plan. The VVEDA proposal is incompatible with residential development within Adelanto. The VVEDA proposal would require the rezoning of certain land within the City of Adelanto and its zoning sphere of influence. The proposed flight paths of the VVEDA proposal conflicts with the zoning in the City of Adelanto. The DEIS proposes that the City of Adelanto implement mitigation measures to minimize the land use impacts of the VVEDA proposal.

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19 6.3 Accordingly, Adelanto requests that the DEIS be revised to study the potential conflicts and damage of the proposed VVEDA project to the local plans of the City of Adelanto.

20 8. THE DEIS IS FATALLY DEFECTIVE IN THAT IT IS VIRTUALLY DEVOID OF MITIGATION MEASURES.

1.18 The DEIS limits itself to stating conclusory impacts on the environment which is only half of what is required by NEPA. Mitigation is the heart and sole end the sine qua non of the DEIS, without which the DEIS is nothing more than a punch-list of impacts without identification of the attendant costs, ramifications and short/long term impacts necessary to correct the problems. It is possible that the cure is worse than the ill, but these factors are ignored by the DEIS. The DEIS identifies impacts of the proposed reuse, but leaves till a later date the identification and implementation of mitigation measures. It is insufficient to present and discuss potential measures in general terms without detail and any analysis of the effectiveness of the measures.

Accordingly, Adelanto requests that the DEIS be revised to include appropriate mitigation measures, and the impacts and feasibility thereof.

21 9. THE DEIS IS DEFECTIVE IN THAT IT DOES NOT IDENTIFY IMPACTS AND PROVIDE FOR SOLID WASTE DISPOSAL.

9.21 The DEIS shows that solid waste disposed at the four existing landfills will increase as a result of the VVEDA proposal. It further shows that under the proposal, the existing capacities of all four landfills will be reached by the year 2006. The DEIS does not, however, identify adequate measures which would mitigate the impacts of the proposal. The DEIS does not consider the effects the lack of solid waste disposal sites will have on the City of Adelanto.

Accordingly, Adelanto requests that the DEIS be revised to explore and include additional mitigation measures, and to identify effects upon the City of Adelanto.

22 10. THE DEIS IS DEFECTIVE AS IT DOES NOT ADEQUATELY DISCUSS THE IMPACT OF WASTEWATER TREATMENT.

9.22 The DEIS states that the VVEDA proposal will cause direct and indirect population changes requiring infrastructural changes within the various wastewater collection districts throughout the Victor Valley. What would be the effect of this on the City of Adelanto? The DEIS does not identify specific mitigation measures necessary to correct existing and future wastewater treatment.

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24 9.22 Accordingly, Adelanto requests that the DEIS be revised to fully discuss impacts and mitigation of wastewater treatment and the potential effects on the City of Adelanto.

25 11. THE DEIS DOES NOT DISCUSS GEOLOGIC AND SEISMIC HAZARDS IN THE VICINITY OF GEORGE AFB.

11.1 The DEIS should be revised to include a comprehensive summary of known geologic and seismic hazards near George AFB. It should clearly identify areas of unsuitable fill soils, potentially unstable slopes, areas of differential settlement, and areas of expansive soils. The DEIS should include seismic information on ground acceleration and the duration of strong shaking that could be expected from large earthquakes on nearby faults. Impacts on seismic shaking on existing buildings in the area and on stability of slopes and fills should be addressed.

26 12. THE DEIS IS DEFECTIVE IN THAT IT DOES NOT DISCUSS THE IMPACTS OF AIR QUALITY DETERIORATION ON THE ADJACENT CITY OF ADELANTO.

13.2 The DEIS does not consider the impacts of air pollutant emissions generated by the VVEDA proposal on the adjacent City of Adelanto. Because of Adelanto's close proximity to the George AFB site, it is clear that air pollutants will impact the City. The DEIS generally shows that the VVEDA proposal will result in construction-related, mobile source, point source and secondary emission source impacts on air quality. It does not consider the effects this additional air degradation will have on human, plant and animal life in the City of Adelanto. The DEIS further fails to deal effectively with cumulative impacts on air quality.

Accordingly, Adelanto requests that the DEIS be revised to fully discuss impacts on and mitigation of air quality deterioration and the potential effects on the City of Adelanto.

27 13. THE DEIS IS DEFICIENT IN THAT IT DOES NOT EXAMINE THE EXTENT AND MAGNITUDE OF NOISE LEVELS GENERATED BY THE VVEDA PROPOSAL ON THE CITY OF ADELANTO.

14.4 Because of the City of Adelanto's close proximity to the George AFB site, the Final DEIS should analyze the impacts of VVEDA proposal generated noise on human and animal populations within the City of Adelanto. Said analysis should quantify the effects of noise annoyances, speech interference, sleep disturbance, health and hearing loss. The DEIS should identify and analyze effects on noise-sensitive receptors within the City of Adelanto. The DEIS finds that mitigation of noise impacts from the VVEDA proposal is infeasible.

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27 | Accordingly, Adelanto requests that the DEIS be revised to fully discuss impacts on  
cont'd | and mitigation of noise deterioration and the potential effects on the City of Adelanto.

28 | 14. THE DEIS IS DEFICIENT IN THAT IT DOES NOT ADEQUATELY STUDY AND  
| ANALYZE IMPACTS ON STATE- AND FEDERALLY-LISTED ENDANGERED,  
| THREATENED OR CANDIDATE SPECIES, AND OTHER UNDOCUMENTED  
| SPECIES IN THE VICINITY.

15.2 | The DEIS recognizes that the project could result in impacts on various State and  
| Federally listed endangered, threatened or candidate species, and other undocumented  
| species in the vicinity due to habitat alteration and loss, noise and activity. These  
| species include the Desert Tortoise (known to inhabit portions of George AFB);  
| Mohave Ground Squirrel (known to occur within the project area); California Red-  
| legged Frog (reportedly found in the vicinity); Southwestern Pond Turtle (may occur  
| within the ROI); and the San Diego Coast Horned Lizard (likely occurs throughout the  
| project area). The DEIS identified other additional sensitive species (not State or  
| Federally listed as threatened or endangered and not yet candidates for such listing)  
| that may occur in the project area. Three small, on-base wetlands would likely be  
| disturbed or possibly lost as a result of project construction. No studies were done  
| to locate and determine the existence in the vicinity of most of the above listed  
| species. In addition, no specific mitigation was proposed. The DEIS enumerates  
| possible mitigation measures in general, but includes no analysis of the effectiveness  
| of the potential mitigation.

Accordingly, Adelanto requests that the DEIS be revised to fully discuss impacts on  
and mitigation of impacts on endangered, threatened, candidate and other species.

29 | 15. THE DEIS IS DEFECTIVE IN THAT IT FAILS TO ADEQUATELY ADDRESS THE  
| SOCIO-ECONOMIC IMPACTS OF THE CLOSURE AND REUSE OF GEORGE AFB  
| ON THE CITY OF ADELANTO.

17.2 | While the USAF conducted a separate socio-economic impact analysis study of the  
| proposed disposal and reuse of George AFB, it did not adequately address the effects  
| of the socio-economic impacts on the City of Adelanto, the most significantly  
| impacted of the communities in the vicinity.

30 | 16. THE DEIS DOES NOT MEET THE REQUIREMENTS OF THE CALIFORNIA  
| ENVIRONMENTAL QUALITY ACT (PUBLIC RESOURCES CODE 11 21000 ET  
| SEQ.

1.19 |

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30 | The proposed reuse of George AFB will be subject to study and analysis as required  
cont'd | by the California Environmental Quality Act, Public Resources Code Sections 21000  
| et seq. ("CEQA"). The USAF, however, made no attempt to comply with CEQA  
| requirements. The selected reuse proposal will be subject to the requirements for an  
| Environmental Impact Report pursuant to CEQA.

Respectfully submitted,

KANE, BALLMER & BERKMAN

  
R. BRUCE TEPPER, JR.

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COUNTY OF SAN BERNARDINO  
ENVIRONMENTAL  
MANAGEMENT GROUP  
CHARLES L. FRYELL  
Air Pollution Control Officer

## AIR POLLUTION CONTROL DISTRICT

15428 Ohio Drive, Suite 200 • Victorville, CA 92382 • (951) 243-8828  
Fax No. (951) 243-8828

November 7, 1991

Thomas J. Bartol, Lt Col, USAF  
Director of Environmental Division  
AFRCE-BMS/DEV  
Norton AFB, CA 92409-6448

Re: COMMENTS ON THE DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE  
- DRAFT ENVIRONMENTAL IMPACT STATEMENT -

Mr. Bartol:

The San Bernardino County Air Pollution Control District (SBCAPCD) appreciates the  
opportunity to provide the following comments regarding the Draft Environmental Impact  
Statement (DEIS) for the Disposal and Reuse of George Air Force Base. SBCAPCD is  
responsible for adopting, implementing, and enforcing air quality regulations; as mandated by  
the federal Clean Air Act (CAA) and California Clean Air Act (CCAA), for the San Bernardino  
County portion of the Southeast Desert Air Basin (District). Additionally, as a Responsible  
Agency, SBCAPCD reviews and analyzes environmental documents for projects that may  
generate significant adverse air quality impacts. In this capacity, SBCAPCD then advises the  
Lead Agency on air quality issues.

## PROJECT DESCRIPTION

The Air Force has proposed closure of George Air Force Base (GAFB) by December 1992, as  
authorized by the Defense Authorization Amendments and Base Closure and Realignment Act  
(BCRA) of 1988. The Air Force will use the redevelopment plans developed by the Victor  
Valley Economic Development Authority (VVEDA) as the Proposed Action and recommended  
alternatives for environmental analysis. The City of Adelanto also developed a reuse plan  
independent of that proposed by the VVEDA as a recommended alternative for reuse of GAFB.

Three reuse alternatives for GAFB were presented by VVEDA. First, the reuse of GAFB is  
proposed as a regional focus for air carrier and general aviation activities. The peripheral  
properties of GAFB would be developed for aerospace-related industries, higher  
education/institutional development, office/business park development, health care services, and  
recreational facilities. Second, VVEDA proposes to expand GAFB in phase as a large hub  
airport. This would entail the acquisition of additional property in order to extend runways,  
acquire clear zones, and increase airport operational capacities. Third, VVEDA proposes an  
evolving airport scheme developed within the existing boundaries of GAFB. The airport would

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begin as a regional air carrier facility and develop into a larger operation serving the localities  
throughout the Pacific Southwest and the Pacific Rim countries. In conjunction with these  
proposals, California Air National Guard operations will remain at GAFB.

The City of Adelanto proposes to acquire GAFB to support the creation of the High Desert  
International Airport (HDIA). This facility is designed to ultimately accommodate 60 million  
annual passengers (MAP), to provide extensive cargo and freight operations, and support the  
needs of future hypersonic and suborbital aircraft now in the planning phases.

## AIR QUALITY ASSESSMENTS

As a Responsible Agency, SBCAPCD wishes to identify some issues and suggest mitigation  
measures that will reduce potential air quality impacts that may result from the Proposed Action  
or recommended alternatives. SBCAPCD's assessments and comments focus primarily on the  
issues addressed in the Proposed Action. The following assessments and comments are  
applicable for each recommended alternative, and should be considered based on the degree to  
which the Proposed Action is implemented.

## Potential Project Impacts

1 | The DEIS for the Disposal and Reuse of George Air Force Base does not adequately address all  
13.3 | potential air quality impacts resulting from the Proposed Action. The DEIS assesses direct  
| emissions of NOx, ROG, and PM-10 from the Proposed Action, but fails to identify and  
| quantify all potential air quality impacts. The Proposed Action has the potential to create  
| substantial direct and indirect criteria pollutants, PM-10, and toxic emissions from several air  
| pollution sources. The air pollution sources and emissions need to be fully quantified and  
| discussed in the DEIS.

2 | The Proposed Action should include a discussion of emissions from stationary equipment such  
13.4 | as IC engines and distillate fuel generators for aircraft operations, National Guard activities, and  
| fire protection operations. Additionally, indirect stationary source emissions may result from  
| the Proposed Action's industrial and commercial developments. To the extent possible,  
13.3 | stationary source emissions need to be quantified as to incremental and cumulative impacts. The  
| cumulative impacts discussion should include stationary source emissions from aircraft operations  
13.3 | and existing stationary sources in the surrounding communities.

## Population and Economic Impacts

5 | Section 4.4.3 of the DEIS Air Quality Discussion does not address cumulative air quality effects  
13.5 | associated with the Proposed Action. The Proposed Action is growth inducing which will result  
| in increased population and employment in the Victor Valley and the Region of Influence (ROI).  
| Therefore, ensuing population and employment growth will result in substantial increases of  
| mobile, area, indirect, and stationary source emissions in the District.

The DEIS estimates that the Proposed Action will increase annual average daily trips (AADT)  
by 33,000 in the year 1996 and 95,700 by 2013. The Proposed Action will create direct mobile

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6 source emissions from construction activities, aircraft operations, support aircraft equipment, transport vehicles, and patrol vehicles. Proposed commercial and industrial development will create indirect mobile source emissions from residential, employee, and patrol traffic. The projected levels of population and employment growth will require new highways and existing road network improvements to adequately serve the resulting needs.

Traffic flow in congested areas may exacerbate criteria pollutant emission concentrations (Hot Spots) in the District. Increased railroad transportation demand will further increase the amount and rate of criteria air pollutant emissions. Emissions from these mobile sources should be quantified as incremental and cumulative air quality impacts. Additionally, cumulative impact discussions should include mobile source emissions from existing and proposed regionally significant projects (eg landfills, malls, planned developments, and industrial parks) within the District, as well as air pollutant transport from the San Joaquin and South Coast Air Basins. Additional traffic generated from the South Coast and San Joaquin Air Basins will increase the rate of air pollutant emission transport into the District.

Energy/Utilities Impacts

6 The DEIS estimates that natural gas demand will increase by 9,300 therms per day (TPD) in the year 1998 to 30,500 TPD by 2013. Electricity demand will increase by 170 MWH per day in 1998 to 580 MWH per day by 2013. The Proposed Action will cause increased indirect area-source emissions from residential and commercial development through the use of natural gas appliances, such as heaters and stoves. The increased electrical demand for the Proposed Action will also result in increased indirect criteria pollutant emissions from the Southern California Edison facility. Emissions from these sources need to be quantified as incremental and cumulative air quality impacts. The cumulative impact discussions should include indirect area-source emissions from the Proposed Action's residential and commercial development, and area-source emissions from existing and proposed development in surrounding communities.

8 Sewage demand will increase .4 million gallons per day (mgpd) in the year 1998 and 1.8 mgpd by 2013. Solid waste generation will increase .04 million cubic yards per year in the year 1998 and .13 million cubic yards per year by 2013. These essential services will add indirect emissions of potential criteria pollutants from process equipment, and toxic emissions from sewage treatment, and methane from landfill gases. The DEIS should discuss potential increases in the generation of related emission from these sources by adequately quantifying the Proposed Action's associated impacts in these areas.

Fugitive Dust Impacts

9 The DEIS estimates that ground disturbances will increase by 502 acres on-base and 101 acres off-base in the year 1998 and 2,439 acres on-base and 202 acres off-base by 2013. The disturbance in the amount of land used to accommodate the Proposed Action will generate significantly higher levels of fugitive dust emissions from all construction and operation activities associated with the proposed development (eg, residential, commercial, and industrial). Additionally, improvements to existing infrastructure will further exacerbate fugitive dust emissions.

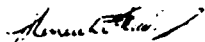
## DOCUMENT 21

Mr. Bartol

5

SBCAPCD staff appreciates the opportunity to review and comment on the Draft Environmental Impact Statement for the Disposal and Reuse of George Air Force Base, and look forward to continued participation in the environmental review processes affecting our District. If you have any questions regarding our comments, please contact Tom Guevara, Air Quality Planner, at (619) 243-8921.

Sincerely,



CHRISTIAN N. IHENACHO  
Supervising Air Quality Planner  
Planning and Technical Services Division

CNE:TO  
(tg:gebase.br:108791)

cc: Charles Pryor  
Kayode Edeh  
Alan Ouellet  
Chris Collins  
Edna Henson  
Tom Guevara

## DOCUMENT 21

Mr. Bartol

4

Level of Significance

- 10 To adequately address the level of significance of air quality impacts that may result from the Proposed Action, all potential sources of air pollution should be identified, and such emissions quantified using a worst case scenario. Furthermore the intensity of the impact after the above determination, will depend on, but not be limited to, the type and number of construction equipment, hours of construction and aircraft operations, the number of construction and support employees, types of fuel and fuel consumption rates for mobile sources, patrol and employee vehicle miles traveled, and vehicle trips. In the absence of such information, SBCAPCD staff will not be able to adequately assess the level of proposed project significance relative to air quality.

Recommended Mitigation Measures

- 11 The recommended mitigation measures do not adequately mitigate all the potential air quality impacts to insignificance. Due to the nature of the Proposed Action and recommended alternatives, it is anticipated that air quality impacts will occur on a project-specific basis. The quantification of potential air quality impact should assess cumulative impacts relative to the nonattainment air pollutants that may affect the District's attainment demonstration as outlined in SBCAPCD's Air Quality Attainment Plan.
- 13 The proposed mitigation measures for the Proposed Action, focus on purchasing Emission Reduction Credits to offset air quality impacts in the District. Emission offsets are regulated by SBCAPCD's New Source Review Program for stationary sources, and can be purchased through the emission banking system. However, additional measures will be needed beyond available emission offsets for the Proposed Action to adequately mitigate significant air quality impacts. Therefore, specific air quality mitigation measures for all air pollutant sources should be developed. Additionally, unavoidable air quality impacts should be fully discussed and justified to demonstrate and disclose adverse air quality effects from the Proposed Action and recommended alternatives. SBCAPCD staff could not possibly identify, or recommend appropriate mitigation measures and the extent to which such measures will adequately mitigate air quality impacts. However, staff recommends that GAFB and SBCAPCD staff initiate and establish a working group for the purpose of identifying potential air quality impacts and appropriate mitigation measures.

CONCLUSION

SBCAPCD staff recommends that all issues raised in this letter be addressed in the Final Environmental Impact Statement; They should be made a condition for approval of the Mitigation Monitoring Program, and where necessary, additional information should be submitted as requested prior to conclusion of the environmental review process. Additionally, SBCAPCD will provide technical assistance in order to develop specific air quality mitigation measures for the Proposed Action and recommended alternatives.

## DOCUMENT 22

## ROY C. HAMPSON &amp; ASSOCIATES

## ENVIRONMENTAL ENGINEERING AND MANAGEMENT

2288 Wyoming Avenue  
P.O. Box 612082  
South Lake Tahoe, CA 96161  
(760) 341-1912

November 7, 1991

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFRC-EMS/DEV  
Morton Air Force Base, California 92409-6448

Re: COMMENTS ON DRAFT ENVIRONMENT IMPACT STATEMENT (DEIS)-  
DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE, CALIFORNIA

Dear Lt. Col. Bartol:

The following comments concerning the Draft Environmental Impact Statement (DEIS) are provided in addition to those previously submitted in my October 15, 1991 letter. A copy of my letter is enclosed for your reference.

On page two, paragraph four of my letter, it was observed that the State Water Resources Control Board had denied George Air Force Base's application to appropriate additional water from the Mojave River for use at the base. This was done on the basis that no additional waters were available in the Mojave River for appropriation. The following discussion is added concerning this issue.

State Water Resources Control Board (SWRCB) Decision No. 1619, adopted June 16, 1988, concluded that there was no water available in the Mojave River System for appropriation. On November 11, 1989, the SWRCB adopted Water Right Order 89-25 which included the Mojave River System on its list of fully appropriated stream systems. Most recently, on August 22, 1991, the SWRCB adopted Water Right Order 91-07 which revises their list of fully appropriated stream systems. The Mojave River continues to be listed as being fully appropriated.

The fact that the Mojave River System is fully appropriated, which includes the "underflow" of the Mojave River, is significant in that it limits the options available for supplying water to the base in the future. Limitations concerning the future supply of water exist not only for the base, but for all water purveyors throughout the Victor Valley.

## DOCUMENT 22

Lt. Col. Bartel  
Comments DEIS  
Page 2 of 2

November 7, 1991

Again, thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Disposal and Reuse of George Air Force Base. If you have questions concerning these comments, please telephone me at the above number.

Very truly yours,

  
Roy C. Rampton  
Professional Civil Engineer

Enclosure

## DOCUMENT 23

PETER WILSON, Governor

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LABONTAIN REGION

VICTORVILLE BRANCH OFFICE  
1400 TENTH STREET, SUITE 100  
VICTORVILLE, CA 92409-6448  
(619) 241-4523  
FAX: (619) 241-7220

November 6, 1991

Lt. Col. Thomas J. Bartel  
Director of Environmental Division  
AFRCI - BWS/DEV  
Horton Air Force Base, CA 92409-6448

Dear Lieutenant Colonel Bartel:

DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS), DISPOSAL AND REUSE OF GEORGE AIR FORCE BASE, SAN BERNARDINO COUNTY, CALIFORNIA

The purpose of this letter is to comment and make recommendations on the disposal and reuse of George Air Force Base (GAFB) and to improve and expedite environmental response actions at GAFB.

The State involvement in cleanup of military bases slated for closure, such as George Air Force Base (GAFB), is motivated by several factors. First, we have legal responsibility to ensure that State environmental cleanup and management laws are obeyed. Second, the State has a sovereign duty to ensure that cleanup plans and actions will result in safe sites and will not threaten water quality, the health and safety of the public and/or the environment. Finally, we have an economic incentive to ensure that appropriate cleanup actions are promptly taken. GAFB, which is slated for closure, will eventually be transferred for civilian use. Therefore, it is important that we oversee cleanup and compliance actions at the base so that the State and local community do not inherit polluted property. It is also important for the cleanup to take place in a timely manner, to minimize economic dislocation in the community.

We believe that both the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) provide opportunities for the State to establish strong roles in overseeing cleanup activities at GAFB.

Pursuant to CERCLA Section 120, the State of California entered into a Federal Facility Agreement (FFA) with the United States Environmental Protection Agency (EPA) and the Department of Defense (DOD) for the cleanup of military bases which are on the National Priority List. The FFA provides an effective mechanism to ensure cooperation among the DOD facilities, EPA, and the State and local regulatory agencies.

The State recognizes that there is an interest, both within the Air Force and within the local communities, to promptly make land and facilities on GAFB available to the private sector for interim use and post-closure use. We need to make sure that activities associated with base reuse do not conflict with or impede the cleanup work as required by the FFA, Federal and State laws. It is not in the public interest to reuse property that has not been adequately cleaned up.

## DOCUMENT 23

Mr. Bartel  
November 6, 1991  
Page 2

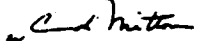
In addition to the general comments discussed above, we have the following specific comments.

- 10.2 1. This subject document (DEIS) indicates that reuse/development of some properties may be delayed as a result of Installation Restoration Program (IRP) activities. This document needs to be more specific in addressing where, when and how the IRP activities will effect reuse. The document should specify that reuse would only be delayed where necessary for investigative and cleanup purposes.
- 10.3 2. The Air Force should notify and involve the State as soon as possible regarding any proposed base reuse or changes in its cleanup policies or priorities. Contaminants and conditions at many areas of the base have yet to be characterized. Additionally, under the current FFA schedule most of the base will not be characterized until 1994 or later. The DEIS must consider the FFA, and should include information regarding public involvement in the CERCLA process through the Technical Review Committee (TRC) mechanism.
- 10.4 3. The FFA schedule, with applicable revisions, should be made an appendix to the subject document. We need to know, at the earliest stage possible, any plans for parcelization or reuse schedule for GAFB. If base reuse affects the FFA schedule, please be aware that according to Section 29 of the FFA, all signatory parties must agree to any changes in the schedule or to the FFA.

We believe that the key to a successful and expeditious cleanup at GAFB is communication and cooperation. The Department of Defense, Federal and State regulatory agencies and local communities need to work together to come to a consensus on issues relating to the cleanup and reuse of this closing base. Additionally, reuse authorities and potential developers need to be aware that most of GAFB may not be immediately available for reuse at the closure date of December 1992.

If you have any questions or comments regarding the above matter, please call Brad Hicks or Cindi Mitten at (619) 241-4523.

Sincerely,

  
Hiram A. Bongi  
Supervising Engineer  
cc: GAFB mailing list

1c/3/bartel.bh

## DOCUMENT 24

## The Resources Agency



of California

Peter Wilson  
Governor

Thompson P. W. Horton  
Secretary

California Conservation Corps • Department of Boating & Waterways • Department of Corrections  
Department of Fish & Game • Department of Forestry • Department of Parks & Recreation • Department of State Resources  
November 7, 1991

U. S. Department of the Air Force  
ATTN: Lt. Colonel Thomas J. Bartel  
AFRCI-BWS/DEV  
Horton AFB, CA 92409-6448

Dear Colonel Bartel:

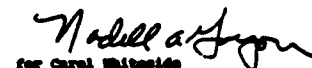
The State has reviewed the Draft Environmental Impact Statement for Disposal and Reuse of George Air Force Base, San Bernardino County, submitted through the Office of Planning and Research.

We coordinated review of this document with the State Lands Commission, Labontain Regional Water Quality Control and Integrated Waste Management Boards, and the Departments of Fish and Game, and Transportation.

The Labontain Regional Water Quality Control Board has responded directly in correspondence dated November 6, 1991.

Thank you for providing an opportunity to review this project.

Sincerely,

  
for Carol Whiteside  
Assistant Secretary,  
Intergovernmental Relations

cc: Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 95814  
(916) 910-4007

The Resources Building Sacramento, CA 95834 (916) 910-4000 FAX (916) 910-4125

California Coastal Commission • California Parks Commission • California State Board of Education  
Energy Resources, Conservation & Development Commission • San Francisco Bay Conservation & Development Commission  
State Coastal Conservancy • State Lands Commission • State Transportation Board

Printed on recycled paper

# GEORGE AFB, CALIFORNIA DEIS COMMENTS BY GEORGE AVIATION CENTER

- The least environmental impact has been submitted by a private organization.
- 13.12 1 • There is not a reference to the impact of air quality to the L.A. Basin. The "Santa Ana" winds cleanse the L.A. Basin. If the air quality decreases in the Victor Valley area the "Santa Ana" winds will draw this air into the L.A. Basin decreasing its air quality.
- The Aviation Center left a large open area so as not to hinder the ability of subsurface water to recharge. The water over draft cannot be taken lightly in a desert climate. As open areas are covered with asphalt, cement or buildings any runoff water is collected and channeled away from the upper Mojave Basin.
- 8.3 2 • There is no reference to the impact on present air space usage, private, sport (airplanes, etc.).
- 3 • The Second proposed alternative by VVEDA does not address the impact of additional housing being added within the proximity of the active runway. This is in conflict with any Commercial Airport development (ref. Santa Paula, Camarillo, Oxnard and Buellton conflicts).
- 8.14 3 • In summary the DEIS is very thorough with only minor inconsistency which can be expected in such a complex document. In general Earth Technology Inc. should be commended in the presentation of the George DEIS.

Director of Environmental Division  
AFRC-EM/DEV  
Horton AFB, Ca. 92409-6448

10 November 1991

ATTN: T. J. Bartol Lt Col, USAF

REF: GEORGE AFB DEIS

Dear Colonel Bartol,

I have enclosed my comments to the George AFB, California Draft Environmental Impact Statement.

Sincerely,



Charles A. Cline George Aviation Center  
P.O. Box 1088  
Goleta, Ca. 93116

(805) 988-6881  
(805) 735-7082



U.S. Department of Justice  
Federal Bureau of Prisons

Washington, DC 20535

November 8, 1991

Lieutenant Colonel Thomas J. Bartol  
Director of Environmental Division  
AFRC-EM/DEV  
Horton Air Force Base, California 92409-6448

Dear Colonel Bartol:


The Federal Bureau of Prisons appreciates the opportunity to review and provide comments on the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of George Air Force Base, California.

- 12 1 • The DEIS indicates that our proposal could generate 450 jobs. This number was recently revised and should be changed to read "approximately 1,000 jobs." This revised figure will impact on some of the areas covered in Table 2.3-11. Employment and Population Effects of Other Land Use Concepts.

Section 4.4.3.6 Federal Transfer and Independent Land Use Concepts. suggests that the western and southern portions of the proposed site are unsurveyed but assumed to be low density tortoise habitat. The Bureau of Prisons is sensitive to its responsibilities regarding wildlife and endangered species and we have experience with a variety of mitigation measures in this regard. We are prepared to implement them should it be necessary.

Thank you for providing us with a copy of the DEIS. Please contact me at (202) 514-6476 if you have any questions.

Sincerely,

  
Patricia K. Sledge, Chief  
Site Selection and Environmental Review



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF  
CALIFORNIA DIVISION  
P. O. Box 1915

Sacramento, California 95812-1915

November 14, 1991

NO COPY BEING TO  
HD-CA

Lt Col Thomas J. Bartol, USAF  
Director, Environmental Division  
Department of the Air Force  
Horton Air Force Base, CA 92409-6448

Dear Lt Col Bartol:

You recently furnished our office a copy of the Draft Environmental Impact Statement (DEIS) for the disposal and reuse of George AFB, Adelanto, California. We have completed a review with respect to transportation and provide the following comments.

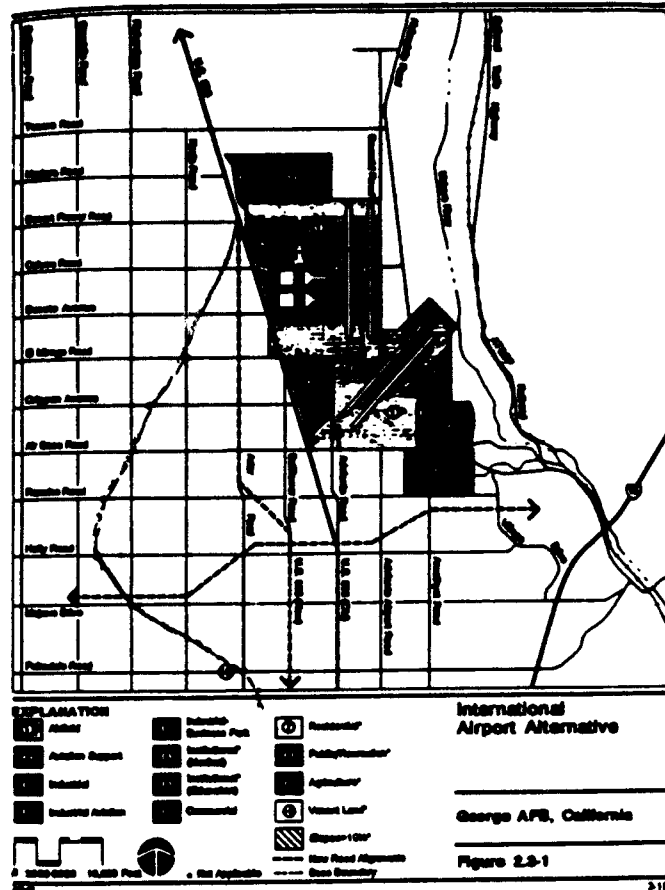
- 1 • Section 2.3.1.5 Transportation.
  - (a) Please be advised that the conceptual realignment of Route 395 includes interchanges at Desert Flower Road, El Mirage Road, Air Base Road, Holly Road, Palmdale Road, Duncan Road, and Phelan Road.
  - 7.4 (b) A conceptual realignment for Route 395 has not been approved by Caltrans. A feasible "consensus" alignment has been identified and will be developed during the environmental review process.
  - (c) The conceptual realignment of Route 395 represented by the north-south dashed line on Figure 2.3-1 is incorrect, see enclosed copy of Figure 2.3-1 with highlighted consensus alignment.
- 2 • Section 2.3.4.6 Transportation. Please identify Topas Road on Figure 2.3-4. This would properly identify the new north-south road extending from Topas Road south to Anesthet Road.
- 7.14 • For specific information on the realignment of Route 395, contact Norm Snyder, Caltrans Consultant Services Branch A Chief, at (714) 383-4361.

We appreciate the opportunity to review this document. If you have any questions, please call Mr. Gene Cobbs or Mr. Thomas Petersen of our staff at (916) 551-1307.

Sincerely yours,

*Leonard E. Brown*  
For  
Roger Borg  
Division Administrator

**Enclosure**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX**

75 Hawthorne Street  
San Francisco, CA 94105  
November 18, 1991

Lt. Col. Thomas J. Bartol  
Director of Environmental Division  
AFRC-EHS/DEV  
Norton Air Force Base, CA. 92409-6449

Dear Colonel Bartol:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the project entitled Disposal and House of George Air Force Base, San Bernardino County, California. Our review is provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 109 of the Clean Air Act.

On 5 January 1989, the Secretary of Defense announced the closure of George Air Force Base (George AFB) pursuant to the Base Closure and Realignment Act. Previous environmental documentation includes a Final EIS for the Closure of George AFB (4 May 1990) and a Record of Decision for this action (20 June 1990). The base is scheduled for closure 31 December 1992.

The DEIS analyzes the potential environmental consequences of base disposal and reuse alternatives. The Proposed Action is reuse of base property for regional commercial and general aviation airport. The plan was developed by the Victor Valley Economic Development Authority formed from local jurisdictions to formulate reuse plans. Six other alternatives are evaluated: international airport, commercial airport with residential development, general aviation center, non-aviation, independent land use options, and no-action. Under the no-action alternative the base would remain under federal control in caretaker status.

George AFB is listed on the Superfund National Priorities List (NPL) which is EPA's list of contaminated sites potentially posing the greatest long-term threat to public health and the environment. This listing is based on actual and potential releases of hazardous materials to the environment. Under Superfund law (Section 106(h)(3) of the Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA); better known as the Superfund program), the Air Force has a statutory requirement to take all necessary remedial action to protect public health and the environment before the transfer of base property. If the land transfer is by deed, the Air Force must provide an agreement, prior to transfer, that guarantees that all necessary remedial action has been taken.

- 1 EPA does not believe the Air Force has demonstrated  
2 compliance with land transfer requirements of the Superfund  
3 program (Section 120(h) of the Comprehensive Environmental  
4 Response, Compensation, and Liability Act (CERCLA)). There is no  
5 evaluation of the relationship between the proposed reuse  
6 alternatives and specific disposal sites. In addition, the  
7 schedule for base reuse appears inconsistent with the schedule  
8 for investigation and cleanup of contaminated sites. We believe  
9 the EIS should present time frames for redevelopment that are  
10 consistent with the Air Force's schedules for investigation and  
11 cleanup of contaminated sites.
- 12 Furthermore, EPA believes the DEIS overstates the hazardous  
13 waste characterization status of George AFB. For instance,  
14 several contaminated sites are presented as having final cleanup  
15 decisions. In actuality these sites are still under  
16 investigation and will not have final cleanup decisions until  
17 March 1993. This presentation is misleading and underestimates  
18 the potential impact of environmental contamination on the reuse  
19 of this facility. The status and schedule of remedial actions  
20 will greatly influence the feasibility, timing and configuration  
21 of redevelopment and must be fully integrated with reuse plans.
- 22 The DEIS does not contain sufficient information for EPA or  
23 the public to fully assess environmental impacts that should be  
24 avoided in order to fully protect public health and the  
25 environment. For example, hazardous waste site information  
26 presented in the DEIS is often incomplete or inaccurate. In  
27 addition, the evaluation of proposed land uses in contaminated  
28 sites (e.g. residential development in the Southwest Disposal  
29 Area) does not disclose how those uses would be compatible with  
30 prior use of the area for disposal of hazardous waste.  
31 Furthermore, a site is cleaned up to a protective level based  
32 upon future land use of the site. Therefore, current and future  
33 cleanup goals may be significantly affected by reuse decisions  
34 and must be an integral part of the evaluation of reuse  
35 alternatives.
- 36 EPA believes full disclosure of the process for integrating  
37 reuse plans and remedial actions is essential. We recommend  
38 evaluation of the integration of base reuse proposals with  
39 cleanup actions on a site-specific basis. We are also concerned  
40 that this deficient DEIS will set a poor precedent for future  
41 disposal and reuse environmental impact statements. George AFB  
42 is the first of 19 closure and reuse actions in Region 9. Nine

of these facilities, including George AFB, are currently listed on the Superfund National Priority List. It is therefore extremely important that this reuse EIS set the proper planning framework for redevelopment actions.

- 9 We do not believe compliance with the National Environmental Policy Act (NEPA) is fully demonstrated. NEPA requires discussion of cumulative effects and appropriate mitigation measures not already included in the alternatives (40 CFR Section 1502.14(f), 1502.16(b), 1506.7). The DEIS has minimal discussion of these items and does not provide information to support many of the conclusions.

- 10 George AFB is located in a nonattainment area for ozone and fine particulates (PM10). All reuse alternatives, except no-action, may potentially interfere with attainment and maintenance of the federal air quality standards. Federal agencies are required by the Clean Air Act to assure that actions conform to an approved implementation plan and will not cause or contribute to any new violation of any standard, increase the frequency or severity of any existing violation, or delay timely attainment of standards (Clean Air Act, Section 176(c)). EPA does not believe the DEIS has demonstrated compliance with this requirement. EPA also believes that a commitment to mitigate for potential air quality impacts is required in advance of project initiation.

- 11 We recommend an interagency agreement or Memorandum of Understanding (MOU) be developed to ensure Federal compliance with the Clean Air Act and timely State submittal to EPA of adequate attainment plans. Such an MOU was signed in August 1991 for the Pease AFB reuse action in New Hampshire. This MOU reconciled the potential air quality impacts of anticipated uses of Pease AFB with the State's obligations to submit adequate attainment plans and with conformity requirements applicable to Federal actions.

- 12 Based upon the above objections, we have classified this DEIS as category NO-2, Environmental Objections - Insufficient Information (see attached "Summary of the EPA Rating System"). EPA believes correction of the above deficiencies is critical for ensuring the public and decision-makers make a well-informed decision on future reuse of George AFB. We strongly recommend the Air Force revise the DEIS and reissue it in draft form for public review. In addition, EPA may consider more adverse ratings for future disposal and reuse EISs which do not sufficiently address the above objections. Our detailed comments are enclosed.

We appreciate the opportunity to review this DEIS. Please send three copies of the revised EIS to this office at the same time it is officially filed with our Washington, D.C. office. We are available to work with you and your staff on this EIS and the proposed reuse action. If you have any questions, please call

Jacqueline Wyland, Chief, Office of Federal Activities, (415) 744-1584, (FTS 484-1584) or Laura Fujii, of her staff, at (415) 744-1579, (FTS 484-1579).

Sincerely,

*Deanna Wieman*  
Deanna Wieman, Director  
Office of External Affairs

Enclosure: (9 pages)

91-246  
MIG01179

cc: Gary Vest, Deputy Asst. Sec. of the Air Force, Washington, D.C.  
Mr. Terry Yonkers, HQ AFMMA/MDV, Washington, D.C.  
Colonel Marill Karp, Commander, 35th Fighter Wing, George AFB  
Ms. Denise Caron, DMT, George AFB, CA.  
Mr. Phil Lanni, AFMCE, San Francisco, CA.  
Mr. Brad Hicks, CMOCE, Lahontan Region  
Mr. John Scandura, CA DTSC, Region 4  
San Bernardino Co. Air Pollution Control District  
Victor Valley Economic Development Authority  
San Bernardino Association of Governments  
Shannon Cunniff, HQ OFA  
Mark Garvey, HQ OFPE

THE DEIS COMMENT, IMP. ACTION, AND STATE OF GEORGIA ACT, MAY 1991

#### COMMENTS

#### HAZARDOUS WASTE COMMENTS

#### Background Information

- 10.14 In September 1990, the Air Force, the EPA and the State of California entered into a Federal Facilities Agreement (FFA). The FFA established a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at George AFB in accordance with CERCLA and applicable state law. The implementation of the FFA will ensure that the environmental impacts associated with past activities at George AFB are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health and the environment. The parties to the FFA adopted a schedule for investigation and remediation which proposes the following Records of Decisions (RODs):

Action	Final ROD Date
Operable Unit 1	March 1993
Operable Unit 2	April 1993
Operable Unit 3	December 1994
Final ROD	July 1996

- 10.14 In accordance with the FFA, the Air Force must develop and submit a schedule for Remedial Design and Remedial Action Work Plans after each ROD is final. The Remedial Design and Remedial Action phase of the process could take five to thirty years for full implementation.

#### Deficiencies

- 10.8 The DEIS is deficient in three areas. First, the DEIS fails to discuss the coordination and integration of reuse plans with the cleanup of contaminated sites. EPA believes reuse and development goals must be selected after taking into account the location of historical hazardous waste disposal sites in order to ensure protection of public health and the environment. For example, reuse alternatives presented in the DEIS propose to some the Southeast Disposal Area, the area with the most contaminated landfills, for residential or commercial use. The Southeast Disposal Area has been characterized as a site used for disposal of tetraethyllead, radioactive materials, paint, and solvents. Another contaminated site, the Central Disposal Area, appears to be proposed for elementary schools, child care centers and public facilities (i.e., movie theaters, library). This area was used by the Air Force to dispose of munitions, leaded paint, and solvents. The DEIS should describe how proposed reuse

THE DEIS COMMENT, IMP. ACTION, AND STATE OF GEORGIA ACT, MAY 1991

- 17 alternatives would be compatible with specific contaminated sites.

- 10.12 Second, the DEIS does not address the potential impacts to cleanup goals caused by reuse decisions. The Air Force states that hazardous waste management and analysis procedures are beyond the scope of the EIS; however, such issues are discussed to provide a baseline for the affected environment (pg. 1-8). Despite this statement, the Air Force does not describe the decision process which is used to determine cleanup levels for contaminated sites. Remediation and cleanup level decisions take into account future use scenarios for the site. A site is cleaned up to a protective level based upon this future use. For example, the potential exposure to contamination is vastly different between a residential and industrial area. Thus, the level of cleanup, remediation method and length of cleanup in these different land use areas will be vastly different. Clearly, reuse decisions significantly affect cleanup goals. Therefore cleanup goals must be an integral part of the evaluation of reuse alternatives. In addition, mitigation measures for potential impacts to cleanup actions are not presented.

- 10.10 Third, the DEIS overstates the characterization status of George AFB. The characterization of the hazardous waste sites is incomplete at George AFB. According to the Air Force generated schedule in the FFA, the final ROD for investigation and remediation for the entire base will not be until 1996. Table 2.2-2 (pg. 2-6) indicates that reuse construction in all land use zones will be initiated in the 1993-1996 timeframe. The Air Force should specify which of the hazardous waste sites cannot be developed due to remediation requirements.

Furthermore, the DEIS often presents deficient hazardous waste site information. The following are examples of such deficiencies:

- 23 1. Section 3.3.3, Installation Restoration Program Sites, states that the type of hazardous materials found are solvents, petroleum products and various solid wastes (pg. 3-64). Current information indicates other types of contaminants, such as radioactive material, munitions and paints, may be present.
- 24 2. Two sites of concern, the Northeast Disposal Area and the Industrial Storm Drain, are presented as having final cleanup decisions. These sites are still under investigation and will not have a final Record of Decision until March 1993.
- 25 3. Section 3.3.3.1, Northeast Disposal Area, inaccurately states that the contamination is confined to the Upper Aquifer.

20 4. The DEIS indicates that the levels of radioactivity found in  
10.10 the Southeast Disposal Area near the radioactive disposal site  
are equivalent to "background" levels even though this has not  
been substantiated with validated data.

27 EPA strongly recommends that the DEIS be revised to  
10.8 specifically discuss the coordination and integration of  
characterization and remediation actions with the various reuse  
28 alternatives and proposed land use scenarios on a site-specific  
10.7 basis. The EIS should clearly demonstrate compliance with CERCLA  
Section 120(h).

29 The Air Force should clearly present the potential affects  
and consequences of each proposed land use and reuse alternative  
10.9 on cleanup actions. Discussion should include, but not  
necessarily be limited to, potential impacts on remediation  
30 decisions, implementation schedules for remediation actions and  
reuse plans, access, and site security. A possible mechanism for  
10.13 resolving reuse and cleanup conflicts should be presented. The  
31 RIS should clearly and accurately portray the characterization  
status of hazardous waste disposal sites so that the public and  
10.10 decision-makers can make a well-informed decision on base reuse.

The Air Force states that further environmental analysis and documentation may be required to address other actions that may be proposed in the future (pg. 5-1). We concur and recommend that tiered site- and project-specific environmental analyses and documentation be seriously considered for future redevelopment actions.

33 The DEIS provides minimal discussion of cumulative impacts  
110 and does not provide information to support the document's  
conclusions that there are no cumulative impacts. For example,  
the evaluation of potential impacts to land use and aesthetics  
(Section 4.2.2) concludes that there are no cumulative impacts  
even though the proposed reuse alternatives may convert vast  
areas of vacant land to residential and industrial uses.

3

38 The Air Force should provide sufficient data to justify  
cumulative impact conclusions. Clearly describe underlying  
110 assumptions and the rationale for these assumptions and the  
resulting conclusions.

36 NEPA requires that the EIS discuss all relevant and reasonable mitigation measures that could improve the project even if they are outside the jurisdiction of the lead agency (40 CFR Section 1502.14(f) and Question 19, March 16, 1981 CEQ Memo on NEPA Regulations). Although possible mitigation measures are discussed during the evaluation of potential impacts, they are not addressed in detail nor are they listed under the specific mitigation measures subheading. For instance, the DEIS states that no mitigation measures would be required for any of the transportation components for the Proposed Action (pg. 4-36), even though the document clearly demonstrates the reduction in level of service for many regional roads if no mitigation is provided (pg. 4-28).

37 The EIS should include detailed discussions of mitigation  
measures to address potential impacts to the environment. These  
discussions should demonstrate that the measures will be  
122 reasonably effective; describe the schedule, funding, and  
responsible parties; and demonstrate enforceability of mitigation  
implementation.

### Existing Conditions

### Existing Conditions

As stated in the DEIS, the project area violates both the Federal and State standards for ozone. Under the classification scheme of the Clean Air Act, the area is classified as "severe II." Therefore not only is an air quality attainment plan required under State law in 1991, but a complete ozone attainment plan must be submitted to EPA by November 15, 1994. EPA has significant concerns with potential impacts to attainment and maintenance of the federal air quality standards since the DEIS correctly identifies interference with attainment as an impact of these alternatives.

39 EPA commends the Air Force for their attempt to quantify both the direct and secondary impacts associated with reuse alternatives. Nevertheless, EPA requests additional information on the Air Force's KIMS modeling system in order to compare this system with our own approved models. At a minimum, EPA requests 13.10 emission burden analyses for determination of compliance with the Federal air quality standards.

13.19 Until such information is available, EPA remains concerned with potential carbon monoxide (CO) violations, fine particulate (PM10) emissions, and ozone. The appropriate ozone analysis should be of projected emissions. Any increase in ozone emissions above current levels would be assumed to contribute to existing standard violations. The SIS should also address the consistency of projected emissions with the California Clean Air Act current plan and provide a full description of modelling assumptions.

The DEIS does not fully address conformity to air quality plans. Federal agencies are required by the Clean Air Act to assure that actions conform to an approved implementation plan (Section 176(c) Clean Air Act). Conformity to an implementation plan means:

"conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and

that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standards or any required interim emission reductions or other milestones in any area." (Clean Air Act, Section 176(c)).

The conformity analysis should use the same emissions model as in the State Implementation Plan in order for emissions factors to be consistent. Given the mandate that air quality attainment plans for particulates, carbon monoxide and ozone be submitted in a federally approvable form in 1991, 1992 and 1994, respectively, it is imperative that approval of any of the proposed reuse alternatives include enforceable commitments that

42 We recommend an interagency agreement similar to the Pease  
AFB Reuse MOU be developed to reconcile the potential air quality  
impacts of anticipated uses of George AFB with the State's  
obligations to submit attainment plans and with conformity  
13.16 requirements applicable to Federal actions.

The air quality analysis indicates that proposed reuse alternatives could contribute to new violations of the National Ambient Air Quality Standards (NAAQS). The EIS correctly states that emissions associated with the proposed reuse alternatives will have to be mitigated to the fullest extent possible and that the remainder must be offset by emission reductions from mobile, stationary, and other area sources (pg. 4-137). As described in the DEIS, mitigation may be difficult, time consuming, and expensive and will require early and extensive coordination with the San Bernardino Air Pollution Control District and California Air Resources Board (pg. 4-134). Therefore, EPA believes that mitigation measures should be evaluated and found to be feasible before issuance of a ROD for a particular reuse plan, and mitigation must be committed to in advance of project initiation.

44 To assure conformity, mitigation plans should: demonstrate  
122 that effectiveness estimates for mitigation are reasonable;  
describe the schedule, funding, and responsibilities for the  
measures; demonstrate enforceability; and show that projected  
emissions will fully conform.

45| 1. The EIS should describe existing George AFB emission credits  
46| and address the issue of credit transfer.

2. Cumulative impacts to air quality are not well discussed. No other projects have been identified by the Air Force which may cause adverse air quality impacts (pg. 4-133). However, a number of freeway and major road improvements (widening, upgrade of status) have been proposed by Caltrans (pg. 3-21). Often such improvements encourage and increase vehicle miles travelled (VMT), thus increasing mobile emissions which can have a significant impact on local and regional air quality. The cumulative impacts should also take into account the effect of such road improvements plus shifting patterns of land use which could adversely impact local air quality characteristics.

## WATER RESOURCES

## Water Supply

Groundwater provides a major portion of the regional water supply. There is already a groundwater overdraft problem (pg. 3-86) and current extraction rates exceed levels granted by the California Department of Water Resources (pg. 4-47). Furthermore, projected demand will exceed the existing State Water Project (SWP) allocation of 50,800 af/yr. (pg. 3-86).

The DEIS clearly states that local communities must identify and make decisions regarding future sources of water (pg. 3-87) but describes only conceptual Mojave Water Agency (MWA) plans (pg. 4-116). Redevelopment of George AFB may have significant impacts on water supply and could greatly affect current water supply planning goals.

- 47 The EIS should describe the short- and long-term water supply plans of the Mojave Water Agency (MWA) and individual water districts in Victor Valley. The implementation schedules and feasibility of these plans should be briefly discussed. For example, the DEIS states that MWA is considering deliveries of up to 87.0 MGD of water from the State Water Project (pg. 4-66). Given the current over-allocation of the SWP and possibility for more stringent water quality standards which may reduce the volume of SWP water available for consumptive uses, this MWA plan may be more difficult to implement than currently perceived.

- 48 Indicate specific impacts, beyond the need for advanced implementation schedules, which future development of George AFB may have on the above plans. Mitigation measures should be presented for these impacts in addition to possible future water supply options available to local communities. We recommend water conservation, reuse and reclamation features be considered while designing specific reuse developments. Planning mechanisms such as phased redevelopment tied to water supply development should be considered.

## Wetlands

- 49 Mojave River wells provide the water supply for George AFB (pg. 4-67). Future redevelopment may encourage increased pumping of these wells. The Mojave River also supports a significant broadleaved winter-deciduous community known as the Mojave riparian forest (pg. 3-105). The EIS should evaluate the potential for future impacts from groundwater pumping and drawdown on this riparian community.

## NOISE COMMENTS

- The DEIS states that mitigation for surface traffic is not considered to be feasible along most of the roadways for which impacts have been identified (pg. 4-158). It appears that the only mitigation measures considered were noise barriers. Mitigation measures similar to those described for aircraft noise may be of use. For instance, remedial measures such as a sound attenuation program for significantly impacted structures could be implemented. Traffic management measures could also reduce noise impacts by modifying the frequency and time of day for maximum traffic generated noise.

## GENERAL COMMENTS

- 51 Appendix D, DEIS Mailing List, does not list other Department of Defense (DOD) agencies. Given the potential impacts to DOD airspace (pg. 4-45), the Air Force may wish to include affected Commands on their mailing list.

## POLICY AND PROCEDURES

1640

10/27/84

REPORT OF ACTION DEFINITIONS  
AND FOLLOW-UP ACTION

## Environmental Impact of the Action

**10-1000 of Objectives**  
The EPA review has identified any potential environmental impacts requiring substantive changes to the proposal. The review may have identified opportunities for elimination of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**10-1000 of Objectives**  
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Substantive measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

**10-1000 of Objectives**  
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Substantive measures may require substantial changes to the preferred alternative or consideration of other project alternatives (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**10-1000 of Objectives**  
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are inconsistent with the standards of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential environmental impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the GAO.

## Summary of the Impact Statement

**Category 1--Adverse**  
EPA believes the draft EIS adequately assesses both the environmental impact(s) of the preferred alternative and those of the alternative reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2--Insufficient Information**  
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified any reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which would reduce the environmental impacts of the action. The identified additional information, data, analysis, or discussion should be included in the final EIS.

**Category 3--Inadequate**  
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified any, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analysis, or discussion are of such a magnitude that they should have full public review as a draft EIS. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 106 review, and that should be formally reviewed and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal should be a candidate for referral to the GAO.

\*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.



## United States Department of the Interior

OFFICE OF THE SECRETARY  
Office of Environmental Affairs  
600 Harrison Street, Suite 515  
San Francisco, California 94107-1376

November 19, 1991

ER 91/963

Lt. Col. Thomas J. Bartol,  
Director of Environmental Division  
AFRC-ENR/DEV  
Morton Air Force Base, California 92409-6448

Dear Lt. Col. Bartol:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of George Air Force Base in California.

We appreciate the opportunity to comment.

Sincerely,

*Patricia Sanderson Fort*  
Patricia Sanderson Fort  
Regional Environmental Officer

cc: Director, OEA (w/orig. incoming)  
State Director, Bureau of Land Management  
Reg. Dir., NPS  
Reg. Dir., BLM

## DEPARTMENT OF TRANSPORTATION

BRIDGE & P.O. BOX 231  
SAN BERNARDINO, CALIFORNIA 92402  
TEL (714) 383-4906

November 18, 1991

CG-SM-395-15.7  
CG-SM-15-43.8

Lieutenant Colonel Thomas J. Bartol  
Regional Civil Engineer  
Ballistic Missile Support (AFBSC)  
George Air Force Base, CA 92409

Dear Lieutenant Colonel Bartol:

Draft Environmental Impact Report (DEIR)  
for Socioeconomic Impact Analysis of  
George Air Force Base Disposal and Reuse

We have reviewed the above-referenced document and request consideration of the following comments:

- 1  
7.15     o   The report should address traffic impacts on State Route 395/Air Base Road Intersection, and Interstate 15/Air Base Road Interchange.
- 2  
7.15     o   The report should address roadbed impacts caused in transporting heavy oversized military equipment. These trips should be made in off peak periods.

When available, we would like to receive the Notice of Determination, Final Environmental Impact Report, Conditions of Approval and the date of any public hearing on this project. Please send this information to:

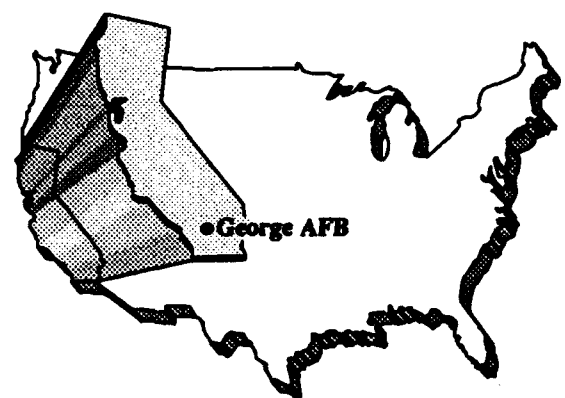
Tom Meyers  
Transportation Planning, CSQA/IGR  
California Department of Transportation  
P.O. Box 231  
San Bernardino, CA 92402

Lieutenant Colonel Thomas J. Bartol  
November 18, 1991  
Page Two

If you have any questions, please contact Tom Meyers at (714) 383-4906 or FAX (714) 383-5936.

Sincerely,

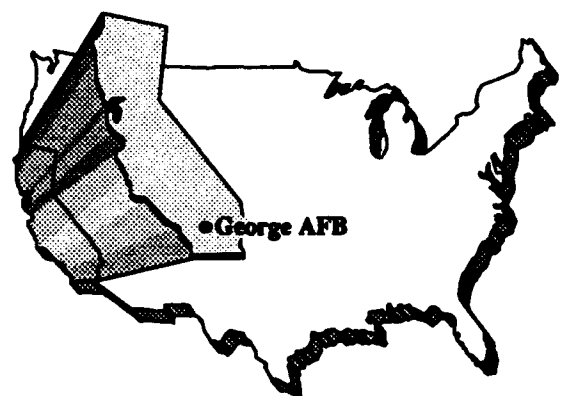
*Harvey J. Sawyer*  
HARVEY J. SAWYER, Chief  
Transportation Planning  
San Bernardino County  
Coordination Branch



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## APPENDICES



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## APPENDIX A

**APPENDIX A**  
**GLOSSARY OF TERMS AND ACRONYMS/ABBREVIATIONS**

## **APPENDIX A**

### **GLOSSARY OF TERMS AND ACRONYMS/ABBREVIATIONS**

#### **GLOSSARY OF TERMS**

**A-Weighted Sound Level (dBA).** A number representing the sound level which is frequency weighted according to a prescribed frequency response established by the American National Standards Institute (ANSI S1.4-1971) and accounts for the response of the human ear.

**Acoustics.** The science of sound which includes the generation, transmission, and effects of sound waves, both audible and inaudible.

**Advisory Council on Historic Preservation.** A 19-member body appointed, in part, by the President of the United States to advise the President and Congress and to coordinate the actions of federal agencies on matters relating to historic preservation, to comment on the effects of such actions on historic and archaeological cultural resources, and to perform other duties as required by law (Public Law 89-655; 16 USC 470).

**Aesthetics.** Referring to the perception of beauty.

**Airport Traffic Area.** Airspace within a radius of 5 statute miles of an airport with an operating control tower, encompassing altitudes between the surface and 2,999 feet AGL, in which an aircraft cannot operate without prior authorization from the control tower.

**Alluvium.** Clay, silt, sand, gravel or similar material deposited by running water.

**Ambient Air Quality Standards.** Standards established on a state or federal level that define the limits for airborne concentrations of designated "criteria" pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, total suspended particulates, ozone and lead) to protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards).

**Aquifer.** The water-bearing portion of subsurface earth material that yields or is capable of yielding useful quantities of water to wells.

**Archaeology.** A scientific approach to the study of human ecology, cultural history, and cultural process.

**Asbestos.** A carcinogenic substance formerly used widely as an insulation material by the construction industry; often found in older buildings.

**Attainment Area.** A region that meets the National Ambient Air Quality Standards for a criteria pollutant under the Clean Air Act.

**Average Annual Daily Traffic.** For a one-year period, the total volume passing a point or segment of a highway facility in both directions, divided by the number of days in the year.

**Avigational.** Pertaining to navigation by aircraft.

**Biophysical.** Pertaining to the physical and biological environment, including the environmental conditions crafted by man.

**Biota.** The plant and animal life of a region.

**Carbon Monoxide (CO).** A colorless, odorless, poisonous gas produced by incomplete fossil-fuel combustion. One of the six pollutants for which there is a national ambient standard. See **Criteria Pollutants**.

**Class I, II, and III Areas.** Under the Clean Air Act, clean air areas are divided into three classes. Very little pollution increase is allowed in Class I areas, some increase in Class II areas, and more in Class III areas. National parks and wilderness areas receive mandatory Class I protection. All other areas start out as Class II. States can reclassify Class II areas up or down, subject to federal requirements.

**Comprehensive Plan.** A public document, usually consisting of maps, text, and supporting materials, adopted and approved by a local government legislative body, which describes future land uses, goals, and policies.

**Control Zone.** Controlled airspace with a normal radius of 5 statute miles from a primary airport plus any extensions needed to include instrument arrival and departure paths, encompassing altitudes between the surface and 14,449 feet MSL.

**Controlled Firing Area.** Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft and to ensure the safety of persons and property on the ground.

**Corrosive.** A material that has the ability to cause visible destruction of living tissue and has a destructive effect on other substances. An acid or a base.

**Council on Environmental Quality (CEQ).** Established by the National Environmental Policy Act (NEPA), the CEQ consists of three members appointed by the President. CEQ regulations (40 CFR Parts 1500-1508, as of July 1, 1986) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements, and the timing and extent of public participation.

**Criteria Pollutants.** The Clean Air Act required the Environmental Protection Agency to set air quality standards for common and widespread pollutants after preparing "criteria documents" summarizing scientific knowledge on their health effects. Today there are standards in effect for six "criteria pollutants": sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), and lead (Pb).

**Cultural Resources.** The study of system behavior, beliefs, institutions, and objects human beings use to relate to each other and to the environment.

**Cumulative Impacts.** The combined impacts resulting from all activities occurring concurrently at a given location.

**Day-Night Average Sound Level (DNL).** The 24-hour average-energy sound level expressed in decibels, with a 10-decibel penalty added to sound levels between 10:00 p.m. and 7:00 a.m. to account for increased annoyance due to noise during night hours.

**Decibel (dB).** A unit of measurement on a logarithmic scale which describes the magnitude of a particular quantity of sound pressure or power with respect to a standard reference value.

**Easement.** A right or privilege (agreement) that a person may have on another's property.

**Effluent.** Wastewater discharge from a wastewater treatment facility.

**Endangered Species.** A species that is threatened with extinction throughout all or a significant portion of its range.

**Environmental Impact Analysis Process.** The process of conducting environmental studies as outlined in Air Force Regulation 19-2.

**Environmental Protection Agency (EPA).** The independent federal agency, established in 1970, that regulates environmental matters and oversees the implementation of environmental laws.

**Fleet Mix.** Combination of aircraft used by a given agency.

**Frequency.** The time rate (number of times per second) that the wave of sound repeats itself, or that a vibrating object repeats itself – now expressed in Hertz (Hz), formerly in cycles per second (cps).

**Friable.** Easily crumbled or ground into powder.

**Fungicides.** Any substance which kills or inhibits the growth of fungi.

**Glacial Till Unit Boundary.** Boundary between two or more glacial till units.

**Habituate.** To become accustomed to frequent repetition or prolonged exposure.

**Hazardous Material.** Generally, a substance or mixture of substances that has the capability of either causing or significantly contributing to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or posing a substantial present or potential risk to human health or the environment. Use of these materials is regulated by Department of Transportation (DOT), Occupational Safety and Health Administration (OSHA), and Superfund Amendments Reauthorization Act (SARA).

**Hazardous Waste.** A waste, or combination of wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Regulated under the Resource Conservation and Recovery Act (RCRA).

**Heavy metals.** A metal (e.g., lead, mercury, cadmium, and chromium) of atomic weight greater than sodium (a.w.-22.9 grams/molecule) that forms soaps on reaction with fatty acids.

**Herbicides.** A pesticide (q.v.), either organic or inorganic, used to destroy unwanted vegetation, especially various types of weeds, grasses, and woody plants.

**Hydrocarbons (HC).** Any of a vast family of compounds containing hydrogen and carbon. Used loosely to include many organic compounds in various combinations; most fossil fuels are composed predominately of hydrocarbons. When hydrocarbons mix with nitrogen oxides in the presence of sunlight, ozone is formed; hydrocarbons in the atmosphere contribute to the formation of ozone.

**Impacts.** An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the adverse effects, usually measured using a qualitative and nominally subjective technique. In this EIS, as well as in the CEQ regulations, the word impact is used synonymously with the word effects.

**Infrastructure.** The basic installations and facilities on which the continuance and growth of a community, state, etc., depend, e.g., roads, schools, power plants, transportations, and communication systems, etc.

**Installation Restoration Program (IRP).** An Air Force program to identify, characterize, and remediate environmental contamination on its installations.

**Interstate.** The designated National System of Interstate and Defense Highways located in both rural and urban areas; they connect the East and West coasts and extend from points on the Canadian border to various points on the Mexican border.

**Leq.** The equivalent steady state sound level which in a stated period of time would contain the same acoustical energy as time-varying sound level during the same period.

**Lithologic Logs.** A detailed description of rock units observed from drill hole data.

**Lmax.** The highest A-weighted sound level observed during a single event of any duration.

**Lead (Pb).** A heavy metal used in many industries, which can accumulate in the body and cause a variety of negative effects. One of the six pollutants for which there is a national ambient air quality standard. See Criteria Pollutants.

**Level of Service (LOS).** In transportation analyses, a qualitative measure describing operational conditions within a traffic stream and how they are perceived by motorists and/or passengers. In public services, a measure describing the amount of public services (e.g., fire protection and law enforcement services) available to community residents, generally expressed as the number of personnel providing the services per 1,000 population.

**Loudness.** The qualitative judgement of intensity of a sound by a human being.

**Masking.** The action of bringing one sound (audible when heard alone) to inaudibility or to unintelligibility by the introduction of another sound.

**Military Operations Area.** Airspace areas of defined vertical and lateral limits established for the purpose of separating certain training activities, such as air combat maneuvers, air intercepts, and acrobatics, from other air traffic operating under instrument flight rules.

**Military Training Route.** Defined routes above the ground established for military flight training at speeds greater than 250 knots and generally below altitudes of 10,000 feet MSL; however, route segments can extend above 10,000 feet.

**Mitigation.** A method or action to reduce or eliminate program impacts.

**Multiple Family Housing.** Townhouse or apartment units that accommodate more than one family though each dwelling unit is only occupied by one household.

**National Ambient Air Quality Standards (NAAQS).** Section 109 of the Clean Air Act requires EPA to set nationwide standards, the National Ambient Air Quality Standards, for widespread air pollutants. Currently, six pollutants are regulated by primary and secondary NAAQS – carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (PM-10), and sulfur dioxide. See Criteria Pollutants.

**National Environmental Policy Act (NEPA).** Public Law 91-190, passed by Congress in 1969. The Act established a national policy designed to encourage consideration of the influences of human activities (e.g., population growth, high-density urbanization, industrial development) on the natural environment. NEPA also established the Council on Environmental Quality. NEPA procedures require that environmental information be made available to the public before decisions are made. Information contained in NEPA documents must focus on the relevant issues in order to facilitate the decision-making process.

**National Priority List.** A list of sites (federal and state) that contain hazardous materials that may cause an unreasonable risk to the health and safety of individuals property, or the environment.

**National Register of Historic Places.** A register of districts, sites, buildings, structures, and objects important in American history, architecture, archaeology, and culture, maintained by the Secretary of the Interior under authority of Section 2(b) of the Historic Sites Act of 1935 and Section 101(a)(1) of the National Historic Preservation Act of 1966, as amended.

**Native Americans.** Used in a collective sense to refer to individuals, bands, or tribes who trace their ancestry to indigenous populations of North America prior to Euro-American contact.

**Native Vegetation.** Plant life that occurs naturally in an area without agricultural or cultivation efforts. It does not include species that have been introduced from other geographical areas and become naturalized.

**Nitrogen Dioxide (NO<sub>2</sub>).** Gas formed primarily from atmospheric nitrogen and oxygen when combustion takes place at high temperature. NO<sub>2</sub> emissions contribute to acid deposition and formation of atmosphere ozone. One of the six pollutants for which there is a national ambient standard. See Criteria Pollutants.

**Nitrogen oxides (NO<sub>x</sub>).** Gases formed primarily by fuel combustion which contribute to the formation of acid rain. Hydrocarbons and nitrogen oxides combine in the presence of sunlight to form ozone, a major constituent of smog.

**Noise.** Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying (unwanted sound).

**Noise Attenuation.** The reduction of a noise level from a source by such means as distance, ground effects, or shielding.

**Noise Contour.** A curve connecting points of equal noise exposure on a map. Noise exposure is often expressed using the average day-night sound level, DNL.

**Nonattainment Area.** An area that has been designated by the Environmental Protection Agency or the appropriate state air quality agency, as exceeding one or more National Ambient Air Quality Standards.

**Ozone (ground level).** A major ingredient of smog. Ozone is produced from reactions of hydrocarbons and nitrogen oxides in the presence of sunlight and heat. Some 68 areas, mostly metropolitan areas, did not meet a Dec. 31, 1987, deadline in the Clean Air Act for attaining the ambient air quality standard for ozone.

**PCB contaminated equipment.** Equipment which contains a concentration of PCBs from 50 to 499 ppm and regulated by the U.S. EPA.

**PCB equipment.** Equipment which contains a concentration of PCBs of 500 ppm or greater and regulated by the U.S. EPA.

**PCB Items.** Equipment which contains a concentration of PCBs from 5 to 49 ppm and regulated by the California EPA.

**Pesticides.** Any substance, organic or inorganic, used to destroy or inhibit the action of plant or animal pests; the term thus includes insecticides, herbicides, rodenticides, miticides, etc. Virtually all pesticides are toxic to man to a greater or lesser degree. They vary in biodegradability.

**Pitch.** The subjective quality of a sound, which determines its position in a musical scale. Pitch depends upon the frequency of air vibrations and, therefore, upon the frequency of the vibrating source.

**Polychlorinated Biphenyls (PCBs).** Any of a family of industrial compounds produced by chlorination of biphenyl. These compounds are noted chiefly as an environmental pollutant that accumulates in organisms and concentrate in the food chain with resultant pathogenic and teratogenic effects. They also decompose very slowly.

**Prehistoric.** The period of time before the written record.

**Prevention of Significant Deterioration (PSD).** In the 1977 Amendments to the Clean Air Act, Congress mandated that areas with air cleaner than required by national ambient air quality standards must be protected from significant deterioration. The Clean Air Act's PSD program consists of two elements—requirements for best available control technology on major new or modified sources, and compliance with an air quality increment system.

**Prevention of Significant Deterioration Area.** A requirement of the Clean Air Act (160 et seq.) that limits the increases in ambient air pollutant concentrations in clean air areas to certain increments even though ambient air quality standards are met.

**Primary Roads.** A consolidated system of connected main roads important to regional, statewide, and interstate travel; they consist of rural arterial routes and their extensions into and through urban areas of 5,000 or more population.

**Quartz.** Monzonite (basement complex), coarse-grained igneous rock containing quartz, feldspar, and mafic minerals.

**Refugia.** Areas of relatively unaltered climate, inhabited by plants and animals during a period of continental climatic change and remaining as a center of relict forms from which a new dispersion and speciation may take place after climatic readjustment.

**Restricted Area.** Designated airspace in which aircraft activity, while not prohibited, is subject to certain restrictions.

**Revetment.** A facing which sustains an embankment.

**Ruderal.** Growing in rubbish, poor land, or waste.

**Single-Family Housing.** A conventionally build house consisting of a single dwelling unit occupied by one household.

**Site.** As it relates to cultural/resources, any location where humans have altered the terrain or discarded artifacts.

**Sludge.** A heavy, slimy deposit, sediment, or mass resulting from industrial activity; solids removed from wastewater.

**Solvent.** A substance that dissolves or can dissolve another substance.

**Sortie.** A mission by an aircraft.

**Sound.** The auditory sensation evoked by the compression and rarefaction of the air or other transmitting medium.

**State Historic Preservation Officer.** The official within each state, authorized by the State at the request of the Secretary of the Interior, to act as liaison for purposes of implementing the National Historic Preservation Act.

**Sulfur Dioxide (SO<sub>2</sub>).** A toxic gas that is produced when fossil fuels, such as coal and oil, are burned. SO<sub>2</sub> is the main pollutant involved in the formation of acid rain. SO<sub>2</sub> also can irritate the upper respiratory tract and cause lung damage. During 1980, some 27 million tons of sulfur dioxide were emitted in the U.S., according the Office of Technology Assessment. The major source of SO<sub>2</sub> in the U.S. is coal-burning electric utilities.

**Therm.** A measurement of units of heat.

**Threatened Species.** Plant and wildlife species likely to become endangered in the foreseeable future.

**Total Suspended Particulates (TSP).** The particulate matter in the ambient air. The previous national ambient air quality standard for particulates was based on TSP levels; it was replaced in 1987 by an ambient standard based on PM-10 levels.

**Transition Area.** Controlled airspace extending upward from 700 feet AGL when designated in conjunction with an airport with an approved instrument approach procedure; or from 1,200 feet AGL when designated in conjunction with airway route structures or segments. Transition areas contain arriving and departing IFR operations within a terminal area and while transitioning between the terminal area and the enroute airspace system.

**Trichloroethylene.** An organic solvent.

**2, 4-D.** (2, 4-dichlorophenoxy) acetic acid - a specific (selective) organic herbicide permitting elimination of weeds without injury to crops. CAS #94-75-7.

**Unified Soil Classification System.** A rapid method for identifying and grouping soils for military construction. Soils are grouped by grain-size, gradation, and liquid limit.

**Vadose Zone.** The zone of aeration, above the groundwater level.

**Wetlands.** Areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil. This classification includes swamps, marshes, bogs, and similar areas.

**Zoning.** The division of a municipality (or county) into districts for the purpose of regulating land use, types of building, required yards, necessary off-street parking, and other prerequisites to development. Zones are generally shown on a map and the text of the zoning ordinance specifies requirements for each zoning category.

## ACRONYMS/ABBREVIATIONS

AADT	average annual daily traffic
ACM	asbestos-containing materials
ADD	Airport Development District
AFB	Air Force Base
AFFTC	Air Force Flight Test Center
AFSFO	Airway Facilities Sector Field Office
af/yr	acre feet per year
AGL	above ground level
ASHERA	Asbestos Hazard Emergency Response Act
AICUZ	Air Installation Compatible Use Zone
ALP	Airport Layout Plan
ALUC	Airport Land Use Commission
ANSI	American National Standards Institute
APZ	Accident Potential Zone
AQMA	Air Quality Maintenance Area
ARB	California Air Resources Board
ARC	Airport Reference Code
ARTCC	Air Route Traffic Control Center
ASV	Annual Service Volume
ATA	airport traffic area
ATC	air traffic control
ATCAA	air traffic control assigned airspace
ATCT	air traffic control tower
AT&SF	Atchinson Topeka and Santa Fe Railroads
BCRA	Base Closure and Realignment Act (Public Law 100-526)
BLM	Bureau of Land Management
BOP	Federal Bureau of Prisons
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CAO	Corrective Action Order
CCAA	The California Clean Air Act
CCR	California Code of Regulations
CDWR	California Department of Water Resources
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFA	Controlled Firing Area
CFR	Code of Federal Regulations
cfs	cubic feet per second

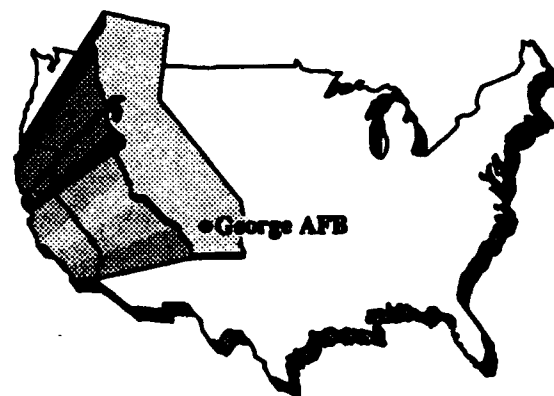
CO	carbon monoxide
COE	Corps of Engineers
Contel	Continental Telephone of California
CUD	Compatible Use District
CSA	County Service Area
CY	calendar year
CZ	clear zone
DAQAP	Draft Air Quality Amendment Plan
dB	decibel
dBA	A-Weighted Sound levels
DERP	Defense Environmental Restoration Program
DHS	Department of Health Services
DME	distance measuring equipment
DMT	disposal management team
DNL	Day-night weighted average sound level
DOD	Department of Defense
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DTSC	Department of Toxic Substance Control
EDMS	Emissions and Dispersion Modeling System
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FBO	fixed base operations
FCC	Federal Correctional Complex
FFA	Federal Facility Agreement
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FL	flight level
FPMR	Federal Property Management Regulations
FS	Feasibility Study
GCA	Ground Controlled Approach
gpd/ft	gallons per day per foot
HAZMAT	831 AD Hazardous Materials Response Plan
HDIA	High Desert International Airport
HHS	Department of Health and Human Services
HI-TACAN	High Altitude Tactical Air Navigation
HIRL	high-intensity runway lighting
HMTA	Hazardous Materials Transportation Act
HUD	Department of Housing and Urban Development
IFR	instrument flight rules
ILS	instrument landing system
ILS/DME	Instrument Landing System/Distance Measuring Equipment

IRP	Installation Restoration Program
JPA	Joint Powers Authority
kV	kilovolt
kwh	kilowatt-hour
LADWP	Los Angeles Department of Water and Power
LFDS	Liquid Fuel Distribution System
LOS	level of service
MAP	million annual passengers
mg/m <sup>3</sup>	milligrams per cubic meter
μg/m <sup>3</sup>	micrograms per cubic meter
MGD	million gallons per day
M/I	Manufacturing/Industrial
MOA	Military Operations Area
MSL	mean sea level
MTR	Military Training Route
MWA	Mojave Water Agency
MWH	megawatt-hours
NAAQS	National Ambient Air Quality Standards
NCP	National Contingency Plan
NEPA	National Environmental Policy Act of 1969
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NLR	noise level reduction
nm	nautical mile
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NOI	Notice of Intent
NOISEMAP	Noise Exposure Model
NPDES	National Pollution Discharge Elimination System Permit
NPI	nonprecision instrument
NPIAS	National Plan of Integrated Airport Systems
NPL	National Priorities List
NRHP	National Register of Historic Places
NSR	New Source Review
O <sub>3</sub>	ozone
ORV	off road vehicle
OS-PL	open space-public land
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PA/SI	Preliminary Assessment/Site Inspection
PAPI	precision approach path indicator
PCBs	polychlorinated biphenyls
pCi/l	picocuries per liter
P.L	Public Law

PM <sub>10</sub>	particulate matter less than 10 microns in diameter
POLs	petroleum, oils, and lubricants
ppb	parts per billion
ppm	parts per million
PSD	Prevention of Significant Deterioration
R-1	single family residential
R-5	multifamily residential
RA	Remedial Action
RACT	Reasonably available control technology
RAMP	Radon Assessment and Mitigation Program
RAPCON	Radar Approach Control
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RD/RA	Remedial Design/Remediation Action
REIL	runway end identifier lights
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RL-5	rural living residential
ROD	Record of Decision (presented in Appendix B of this EIS)
ROG	reactive organic gases
ROI	region of influence
RPZ	runway protection zone
RVR	runway visual range
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SARA	Superfund Amendments Reauthorization Act
SBCAPCD	San Bernardino County Air Pollution Control District
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SEDAB	Southeastern Desert Air Basin
SEL	sound exposure level
SHPO	State Historic Preservation Officer
SI	Site Inspection
SIP	standard instrument procedures
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SST	Super Speed Train
STAR	standard terminal arrival
SW Gas	Southwest Gas Company
SWMD	San Bernardino Solid Waste Management Department
SWP	State Water Project
TAC	Tactical Air Command
TACAN	Tactical Air Navigation
TCE	trichloroethylene

TD	Technology Development
tds	total dissolved solids
TRACON	Terminal Radar Approach Control
TSCA	Toxic Substances Control Act
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VFR	visual flight rules
VOCs	volatile organic compounds
VOR	very high frequency omnidirectional range
VR	Visual Flight Rules Military Training Route
VWRA	Victor Valley Wastewater Reclamation Authority
VVEDA	Victor Valley Economic Development Authority

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## APPENDIX B

**APPENDIX B**  
**GEORGE AFB CLOSURE EIS RECORD OF DECISION**

## **RECORD OF DECISION**

### **CLOSURE OF GEORGE AIR FORCE BASE**

The Final Environmental Impact Statement (EIS) has been prepared to assess the potential environmental impacts from the closure of George Air Force Base (AFB). The closure is the result of the Base Closure and Realignment Act (Public Law 100-526; the "Act") and the recommendations of the Defense Secretary's Commission on Base Realignment and Closure. The Secretary of Defense approved those recommendations and announced that the Department of Defense would implement them. The Congress did not pass a Joint resolution disapproving the recommendations within the time allotted by the Act. Therefore, the Act now requires the Secretary of Defense, as a matter of law, to implement those closures, including that of George AFB. All aircraft and personnel will be withdrawn from George AFB, and the base will be closed. There is a possibility that not all the F-4s will move to Mountain Home as stated in the EIS. The world situation requires continued force restructing and reorganizing in response to Air Force budget reductions. Therefore, other force structure options are being considered and will be addressed in the President's Fiscal Year 1992 Budget.

The Act also makes the Secretary of Defense responsible for management and disposal of the closed Bases. Therefore, in addition to the EIS on the closure of George AFB, a second EIS will be prepared on the final disposition of base property. This second EIS will address potential reuse of the base and the environmental implications of the various reuse opportunities. The Air Force will include in this second EIS proposals for base reuse developed in the community reuse plans.

In the EIS the Air Force has made commitments to study and respond to any potential problems at George AFB. Although some of these commitments are the result of legal requirements, they are all nevertheless consistent with the Air Force's desire to close the Base safely and carefully. Listed below is a summary of the major commitments made in the EIS:

Clean-up and removal of all PCB-contaminated transformers and capacitors will be completed prior to the closure of George AFB in accordance with the Toxic Substances Control Act and with Air Force regulations.

Prior to the sale of Base properties, a thorough survey for asbestos (including review of facility records, visual inspection, and, where appropriate, intrusive inspection) will be conducted by the Air Force. The Air Force policy on asbestos is described in Appendix C of the EIS.

Plans to remove 14 USTs at George AFB were initiated prior to the announced Base closure; these tanks will be removed as planned by acquiring the needed permits from the San Bernardino Department of Environmental Health Services.

Temporarily close in-place 63 Underground Storage Tanks (USTs) for possible reuse by a new user pending approval by the San Bernardino Department of Environmental Health Services of a UST-Closure Plan to be developed by the Base in 1990. Temporary closure is limited to two years by San Bernardino County Department of Health Services and County Fire Codes. All USTs will be tested for leaks; any found to be leaking will be removed by the Air Force and the site will be remediated. All actions will be coordinated with the State of California and with EPA Region IX.

Dispose of oil/water separators except for those that may be needed after Base closure. If a new user does not require the oil/water separators, a plan will be developed for their disposal. Those not disposed of will be decontaminated in accordance with State and Federal requirements.

Closure of the hazardous waste storage facility requires formal closure plans in compliance with the Resource Conservation and Recovery Act. The Closure Plan has been submitted to the EPA as part of the Facility Operations Plan administered by the Environmental Compliance Branch at George AFB.

Drain above-ground bulk storage tanks and purge them of flammable gases.

Dispose of wastes at the hazardous waste storage facility in accordance with requirements of the Resource Conservation and Recovery Act and with California Administrative Code, Title 22.

Dismantle and, if needed, decontaminate the wastewater treatment plant at George AFB that was in service prior to 1980. If clean-up is required, a study will be prepared to identify and evaluate clean-up strategies. Money for any clean-up is expected to be available through the Defense Environmental Restoration Account.

Coordinate Base closure efforts with Caltrans regarding the transport of any heavy equipment along California State highways.

Initiate an archaeological and architectural survey of the Base; coordinate results with the California State Historic Preservation Officer (SHPO).

Initiate a biological survey of the Base for threatened and endangered species.

Continue with the Installation Restoration Program (IRP). Enter into a Federal Facilities Agreement with EPA Region IX and the State of California to provide an enforceable framework for investigating and cleaning up contaminated sites under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) pursuant to the placement of George AFB on the National Priorities List (NPL).

Award a caretaker contract to protect and provide minimum essential maintenance to the buildings and grounds at George AFB, pending property disposal.

Many of the commitments described above and in the Final EIS deal with established processes. The detailed outcome of these processes will often be dependent on investigations and coordination still in progress. Thus, the Final EIS could not always provide the details of specific commitments desired by commentators. This lack of detail, however, is not an indication of a lack of interest; the Air Force is committed to a Base closure that is responsive to environmental concerns and will work with Federal and State agencies to achieve that result.

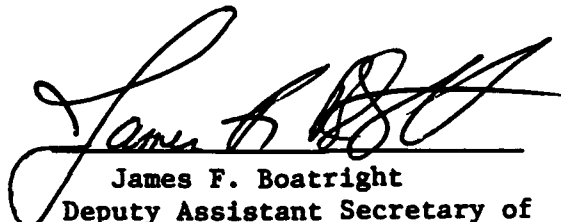
Impacts from Base closure are expected to be either negligible or beneficial to the environment. Because one of the reuse options for George AFB includes a commercial airport, the Air Force recommends that no changes in land use near the Base be implemented by nearby communities until a decision on reuse is made. Military retirees and their dependents will be adversely affected by the closure of George AFB because Base facilities and Base services will no longer be available locally.

Many commentators questioned whether the Air Force's commitment to the cleanup of hazardous waste sites on Base would continue after the Base closes. George AFB was placed on the NPL on February 21, 1990. The Air Force is liable for clean up under Sections 107 and 120 of CERCLA, 42 U.S.C. sections 9607 and 9620. Pursuant to CERCLA section 120, the Air Force is responsible for expeditious performance of investigations and remedial actions (with provisions for public participation). George AFB will enter into an Interagency Agreement (IAG) with EPA and the State of California. This agreement establishes an enforceable framework and time frame for all parties in conducting response actions under CERCLA. EPA possesses statutory authority over the selection of remedial actions for the site. Funding for the cleanup activities under the FFA will be handled through the Air Force IRP, part of a larger Department of Defense (DoD) Defense Environmental Restoration Program (DERP) appropriation.

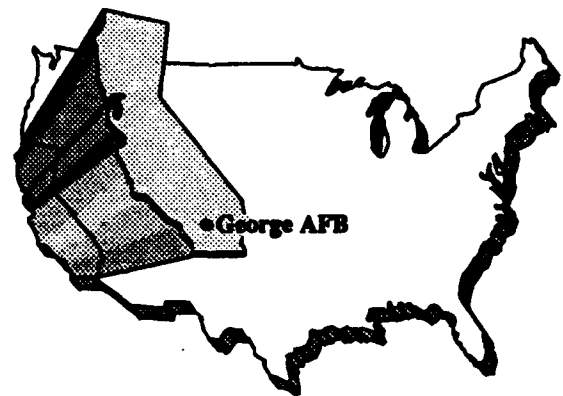
The Air Force will be responsible for the cleanup of on-Base contamination caused by Air Force activities at any stage of the closure and reuse processes. All property transfers will be conducted in compliance with CERCLA Section 120 (h). All cleanup activities will be conducted in accordance with Federal, State, and Air Force regulations. The Air Force, Region IX of the EPA, and the State of California will be involved in decisions on the cleanup of contaminated sites.

In view of all of the above, I have decided to proceed with the closure of George AFB in accordance with the approaches described in the EIS and in this Record of Decision. The Air Force has adopted all practicable means to avoid or minimize environmental harm. The EIS did not identify any alternative strategies for closing the base which are environmentally preferable to the one adopted.

6/29/90 Date

  
James F. Boatright  
Deputy Assistant Secretary of  
the Air Force (Installations)

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## APPENDIX C

**APPENDIX C**  
**NOTICE OF INTENT**

## **APPENDIX C NOTICE OF INTENT**

The following notice of intent was circulated by the Air Force and published in the Federal Register on September 28, 1990 in order to provide public notice of the Air Force's intent to prepare an Environmental Impact Statement of disposal and reuse of George Air Force Base. This Notice of Intent has been retyped for the purposes of clarity and legibility.

### **NOTICE OF INTENT TO PREPARE ENVIRONMENTAL IMPACT STATEMENT DISPOSAL/REUSE OF GEORGE AFB, CALIFORNIA**

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The United States Air Force will prepare an Environmental Impact Statement (EIS) to assess the potential environmental impacts of disposal and reuse of the property that is now George Air Force Base (AFB) near Victorville, California. On 20 June 1990, the Air Force signed a Record of Decision (ROD) for closure of George AFB.

The disposal/reuse of EIS will address disposal of the property to public or private entities and the potential impacts of reuse alternatives. All available property will be disposed of in accordance with provisions of the Base Closure and Realignment Act, Public Law 100-526, and applicable federal property disposal regulations.

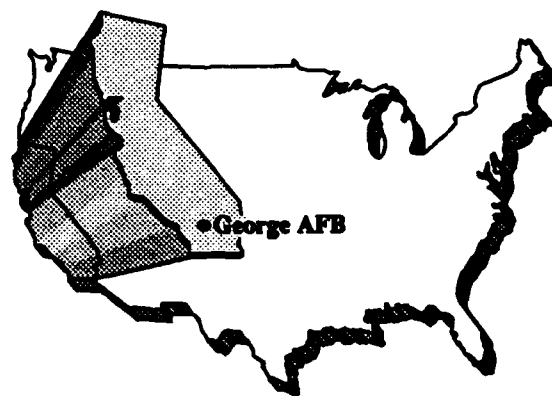
The Air Force is planning to conduct a scoping and screening meeting on October 29, 1990, at 7:00 p.m. in conference room "C", Holiday Inn, Victorville, CA (I-15 & Palmdale Road). The purpose of the meeting is to determine the environmental issues and concerns to be analyzed, to solicit comments on the proposed action and to solicit proposed disposal/alternatives that should be addressed in the EIS. In soliciting disposal/reuse inputs, the Air Force intends to consider all reasonable alternatives to the proposed action offered by any Federal, State, and local government agency and any Federally-sponsored or private entity or individual with an interest in acquiring available property at George AFB. These alternatives will be analyzed in the EIS. The resulting environmental impacts will be considered in making disposal decisions to be documented in the Air Force's Final Disposal Plan for George AFB.

To ensure the Air Force will have sufficient time to consider public inputs on issues to be included in the disposal/reuse EIS and disposal alternatives to be included in the Final Disposal Plan, comments and reuse proposals should be forwarded to the address listed below by November 30, 1990. However, the Air Force will accept comments at the address below at any time during the environmental impact analysis process.

For further information concerning the study of George AFB disposal/reuse and EIS activities, contact:

Lt. Col. Tom Bartol  
AFRCE-BMS/DEV  
Norton AFB, CA 92409-6448  
(714) 382-4891

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## APPENDIX D

**APPENDIX D**  
**FINAL ENVIRONMENTAL IMPACT STATEMENT**  
**MAILING LIST**

**APPENDIX D  
DRAFT ENVIRONMENTAL IMPACT STATEMENT  
MAILING LIST**

This list of recipients includes interested federal, state, and local agencies, and individuals who have expressed an interest in receiving the document. This list also includes the governor of California as well as United States senators and representatives and state legislators.

**ELECTED OFFICIALS**

**Federal Officials**

**U.S. Senate**

Honorable Alan Cranston

Honorable John Seymour

**U.S. House of Representatives**

Honorable George E. Brown Jr.

Honorable Jerry Lewis

**State of California Officials**

**Governor**

Honorable Pete Wilson

**State Legislature**

Honorable Ruben S. Ayala  
California Senate

Honorable Jim Brulte  
California State Assembly

Honorable Gerald R. Eaves  
California State Assembly

Honorable Bill Leonard  
California Senate

Honorable Don Rogers  
California Senate

Honorable Paul Woodruff  
California State Assembly

## **Local Officials**

**Terry Caldwell, Mayor  
City of Victorville**

**Edward J. Dondelinger, Mayor  
City of Adelanto**

**Robert Hammock, Supervisor  
5th District**

**Percy Beakker, Mayor  
City of Hesperia**

**Rob Turner, Mayor  
Town of Apple Valley**

**Marsha Turoci, Supervisor  
First District**

## **GOVERNMENT AGENCIES**

### **Federal Agencies**

**Center for Disease Control  
Center for Environmental Health and Injury Control**

**Department of Agriculture  
Environmental Coordination Office  
Forest Service**

**Department of Agriculture  
Natural Resources and Environment Committee  
Secretary for Natural Resources and Environment**

**Department of Agriculture  
Soil Conservation Service**

**Department of Commerce  
Office of Environmental Affairs**

**Department of Commerce  
Office of Intergovernmental Affairs  
Allison Kaufman, Director**

**Department of Education  
Director, Public Affairs**

**Department of Energy  
Director, Environmental Compliance Division**

**Department of Energy  
Division of NEPA Affairs**

**Department of Health and Human Services  
Office of Environmental Affairs**

**Department of Housing and Urban Development  
Office of Environment and Energy**

**Department of Interior  
Office of Environmental Affairs  
Mr. Gary Cummings**

**Department of Justice  
Federal Bureau of Prisons**

**Department of Labor  
Occupational Safety and Health Administration**

**Department of Transportation  
Federal Highway Administration  
Thomas D. Larson, Administrator**

**Environmental Protection Agency  
Office of Federal Activities**

**Federal Aviation Administration**

**General Services Administration  
Office of Program Initiatives**

**Jeff Peckman  
W.P.E.C.**

**Regional Offices of Federal Agencies**

**Advisory Council on Historic Preservation**

**BLM  
Barstow Resources Area**

**BLM  
Kristin Berry**

**BLM  
Riverside District Office**

**Department of Education  
Director, Public Affairs**

**Department of Forestry  
Dennis Inman**

**Department of Health and Human Services  
Guy Tu**

**Department of Housing and Urban Development  
Region IX  
Community Planning and Development Division**

**Department of Labor  
Occupational Safety and Health Administration**

**Department of Transportation  
Division of Aeronautics**

**Department of Transportation  
Office of the Secretary**

**Environmental Protection Agency  
Region IX  
Air Management Division**

**Environmental Protection Agency  
Region IX, Federal Activities  
Laura Fuji**

**Environmental Protection Agency  
Region IX  
Water Management Division**

**Federal Aviation Administration, Western Pacific Region  
Airports Division**

**Federal Communication Commission  
Long Beach District Office**

**Federal Highway Administration  
Region IX  
Edwin Wood, Regional Director**

**Federal Housing Administration**

**General Services Administration  
Region IX  
Edwin Thomas, Regional Administrator**

**Mojave Desert Soil Conservation District**

**National Park Service**

**National Trust for Historic Preservation  
Western Regional Office**

**Native American Heritage Commission  
William A. Johnson**

**Small Business Administration  
Los Angeles District Office**

**U.S. Fish and Wildlife Service  
Laguna Niguel Regional Office**

**U.S. Forest Service  
San Bernardino National Forest  
Dennis Inman**

**U.S. Geological Service  
Howard Wilshire**

**U.S. Postal Service  
George AFB**

**U.S. Postal Service  
Western Regional Headquarters**

**Veterans Administration  
Southern California Region  
Chief of Construction Evaluation**

**State of California Agencies**

**Air National Guard  
TAG California**

**Air Resources Board  
Barbara Fry**

**California Highway Patrol**

**California Regional Water Quality Control Board - Lahontan Region  
Harold Singer, Executive Director**

**California Waste Management Board  
Jeannie Blakeslee**

**Caltrans - District 8  
Harvey Sawyer**

**Department of Conservation  
Dennis O'Bryant**

**Department of Corrections**

**Department of Education  
Deputy Superintendent for Specialized Programs  
Shirley A. Thornton**

**Department of Fish and Wildlife  
Environmental Branch  
Jack Spruill**

**Department of Forestry  
Douglas Wickzer**

**Department of Health Services  
Kenneth Kizer, Director**

**Department of Health Services  
Public Water Supply Branch  
Bill Gedney**

**Department of Housing and Community Development  
Planning and Review Section, Research Department**

**Department of Transportation  
Division of Aeronautics**

**Department of Transportation  
Division of Highways**

**Department of Water Resources  
Reports Review**

**Heritage Preservation Commission  
Patricia Eckert**

**Native American Heritage Commission  
Office of Historic Preservation**

**State Historic Preservation Officer  
Kathryn Gualtieri**

**Parks and Recreation Department  
Planning Division  
Jim Heiner**

**Public Utilities Commission**

**Regional Water Quality Control Board  
Lahontan Region, Victorville Branch  
Hisam Baqai**

**Resources Agency  
Douglas P. Wheeler**

**State Clearinghouse (10 copies)  
Office of Planning and Research**

**Local Government Agencies**

**Adelanto Chamber of Commerce  
Terry Frederickson**

**Adelanto Elementary School District**

**Apple Valley Chamber of Commerce**

**Apple Valley Community Water District**

**Apple Valley Fire Protection District**

**Apple Valley Heights County Water District**

**Apple Valley Unified School District**

**Baldy Mesa County Water District**

**California State University**

**City of Adelanto  
City Manager, Lee Megargee**

**City of Hesperia  
City Manager, Robert Rizzo**

**City of Victorville  
City Manager, Jim Cox**

**Department of Health Services  
Sanitary Engineering Section**

**Helendale Elementary School**

**Hesperia Chamber of Commerce**

**Hesperia County Water District  
Duane Davis, Director of Operations**

**Hesperia Fire Protection District**

**Hesperia School District  
Dr. Howard A. Carmichael, Superintendent**

**Mariana Ranchos County Water District**

**Mojave Water Agency**

**Oak Hills Chamber of Commerce  
Sharon Fernandez**

**Oro Grande School District**

**Phelan Fire Department**

**Phelan School District**

**Planning Center, Adelanto**

**Riverside County Transportation/Flood Control**

**San Bernardino Associated Governments (SANBAG)**

**San Bernardino County  
Paul Glass**

**San Bernardino County  
Julie Hemphill**

**San Bernardino County  
Airport Land Use Commission  
Ron Riley**

**San Bernardino County  
Airports Division  
James Monger**

**San Bernardino County  
Desert Air Pollution Control District  
Charles Fryxell**

**San Bernardino County  
Environmental Health Services  
Pam Bennett**

**San Bernardino County  
Environmental Public Works Agency  
Office of Planning, Victorville**

**San Bernardino County  
Local Agency Formation Commission  
Jim Roddy**

**San Bernardino County  
Museum**

**San Bernardino County  
Planning Department**

**San Bernardino County  
Public Works Agency**

**San Bernardino County  
Regional Parks  
Gerry Newcombe**

**San Bernardino County  
Road Department**

**San Bernardino County  
Sheriff's Department**

**San Bernardino County  
Solid Waste  
Joe Bellandi**

**San Bernardino County  
Special Districts Department**

**San Bernardino County  
Superintendent of Schools**

**San Bernardino County  
Transportation Department, Aviation Division**

**San Bernardino County  
Transportation/Flood Control  
Chuck Laird**

**Southern California Association of Governments (SCAG)**

**Town of Apple Valley  
Manager, Wayne Lameaux**

**Victor Elementary School District**

**Victor Valley Community College**

**Victor Valley Economic Development Authority  
Peter D'Errico**

**Victor Valley Union High School**

**Victor Valley Wastewater Reclamation Authority  
Kevin Kurtz**

**Victorville Chamber of Commerce  
Gene Gregory, Director**

**Victorville County Water District**

**Libraries**

**Adelanto Branch Library**

**Apple Valley Branch Library**

**Colorado State University**

**Hesperia Branch Library**

**San Bernardino County Library**

**State Library**

**Victorville Branch Library**

**Department of Defense**

**35 FW/CARE, George AFB**

**35 FW/PA, George AFB**

**AFBDA/OL-C, George AFB**

**AFCEE/RCO Western Region**

**AFCEE/ESE (Norton AFB)**

**AFCEE/ESE (Brooks AFB)**

**AFFTC/XRX Edwards AFB**

**Federal Aviation Administration  
Office of the Air Force Representative**

**Federal Aviation Administration  
Office of the Army Representative**

**HQ AFBDA/BD, Pentagon**

**HQ USAF/CEVP, Pentagon**

**HQ TAC/DEVE, Langley AFB, VA**

**Military Department California National Guard  
Adjutant General, M.Gen Robert C. Thrasher**

**National Training Center Fort Irwin, CA**

**Office of Economic Adjustment, Pentagon**

**SAF/LLD, Pentagon  
C. Moyer**

**SAF/LLP, Pentagon  
Tru Pauling**

**S.W. Division NAVFAC**

**Other Organizations/Individuals**

**Action Committee, High Desert International Airport**

**Air Force Association**

**Air Force Sergeants' Association**

**AMVETS, Post No. 20**

**Aries Consultants**

**Arlie O. Aten**

**Armed Forces Aid and Benefit Association**

**Audubon Society**

**Base Community Council**

**Ramon Barrientos**

**Pam Becker**

**Mike Bellamy**

**Bertram Construction**

**Geneva L. Besse**

**Jeff Bogart**

**Bradco Development**

**Building Industry Association**

**California Homeless & Housing Coalition**

Robert Castro  
Charles Cline  
Citizens for Mojave National Park  
Bill Collins  
Community Planning Liaison  
Converse Environmental West  
Bill Covey, Editor of Adelanto Bulletin  
CSA 64, District Manager  
CSW Group, Inc.  
Daily Press  
Damer and Bowman  
Dames and Moore  
Desert Citizens for Better Planning  
Desert Glen Realty  
Desert Protective Council  
Desert Studies Consortium  
Desert Tortoise Council  
Desert Trail Association  
Desert Watch  
Sam Dwyer  
Environmental Action Clearing House  
Gresham, Varner and Savage  
Chet Hale  
Jennifer Harp  
Radio Station KCIN and KATJ  
Trish Harper  
Higman Doehle, Inc.  
Jon Hoffman  
Urban Futures, Inc.

**Koll Company**  
**Labat Anderson Inc.**  
**Adell Laiken**  
**Vern Lowery**  
**Marconi and Chu**  
**Jane McCall**  
**McDonough, Holland & Allen**  
**Marilyn Miller**  
**Mojave River and Water Issues**  
**Ana Monteiro**  
**Mike Oullette**  
**National Federation of Federal Employees, Local 977 and 759**  
**Planning and Conservation League**  
**Porter Real Estate**  
**Press Enterprise**  
**Retired Military/Civilian Social Club**  
**Cliff Rudd**  
**Sheep Creek Water Company**  
**Sierra Club**  
**Bill Smilie**  
**Donald B. St. Charles**  
**Southern California Chapter of Wildlife**  
**Southern California Edison**  
**Victorville Office**  
**Southern California Gas Company**  
**Southwest Gas Corporation**  
**The Nature Conservancy**  
**The Sun**

University of California  
Los Angeles (UCLA)

URS Consultants

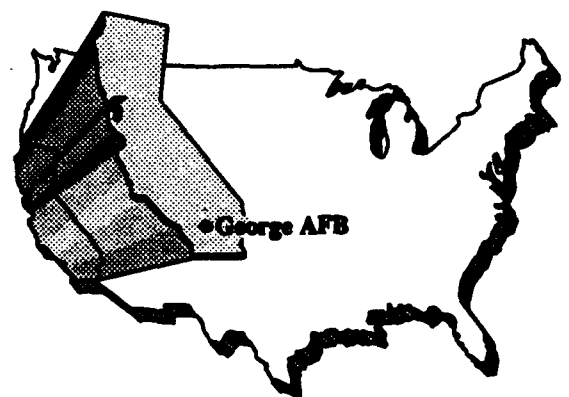
Vector Research Inc.

Wilderness Society

Harry Wilson

Woodward-Clyde Consultants

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## APPENDIX E

**APPENDIX E**  
**IRP BIBLIOGRAPHY**

## **APPENDIX E**

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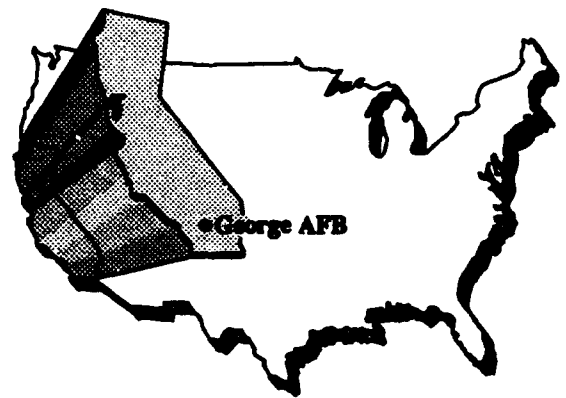
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## APPENDIX F

**APPENDIX F**  
**METHODS OF ANALYSIS**

## **APPENDIX F METHODS OF ANALYSIS**

### **1.0 INTRODUCTION**

The purpose of this Environmental Impact Statement (EIS) is to evaluate the probable environmental impacts of disposal of George AFB. Since disposal necessarily involves the potential for reuse, the EIS evaluates the effects of reusing the base after it is no longer under the management of the Air Force.

Future reuse of the site is uncertain in its scope, activities, and timing. This EIS addresses these uncertainties by evaluating alternative reuse scenarios. These scenarios are intended to encompass the full range of reuses, and their associated environmental impacts, which are reasonably foreseeable due to disposal of the base.

The scenarios are defined on the basis of (1) proposals put forth by affected local communities and interested individuals, (2) general land use planning considerations, and (3) Air Force-developed alternatives to provide a broad range of reuse options for impact analysis. The overall objective in defining the scenarios addressed in this EIS is to span the anticipated range of reuse activities which are reasonably likely to occur.

Reuse scenarios considered in this EIS must be sufficiently detailed to permit environmental analysis. Initial concepts and reuse plans are taken as starting points for scenarios to be analyzed. Available information on any reuse alternative is then supplemented with economic, demographic, transportation, and other planning data to provide a reuse scenario sufficiently detailed for environmental analysis.

These planning data were derived from the various analysis methods for each factor of the affected environment under each reuse scenario. In those instances where the methodology was straightforward or could be succinctly presented, a description of it appears in the main body of the EIS. Methodologies that were more detailed or which require lengthy discussion are presented in this appendix; the methodology for noise is presented separately in Appendix J.

### **2.0 EMPLOYMENT AND POPULATION**

#### **2.1 EMPLOYMENT PROJECTIONS**

The number of jobs on site is a major determinant of scenario-related traffic, utility use, air emissions, and other environmental factors. Employment projections are developed for two major phases of activity on the site: construction and operation. Together these two phases comprise on-site or direct jobs generated

by a reuse scenario. These direct jobs create secondary jobs in the region as a result of reuse-related spending and multiplier effects.

### **Construction Jobs**

Construction jobs are estimated from the list of facilities developed in the land use analysis described below. The value of construction is estimated from the scope of new facilities to be built, the scope of renovation likely to be required for reuse of existing facilities, and the cost per square foot for construction of specified facility types based on industry standards. If a proponent of a potential reuse plan has prepared construction value estimated for key facilities, these are used as appropriate.

Renovation values are further based on judgemental estimates of the extent to which renovation approaches the cost of replacement construction. For example, minor renovation of facilities may be budgeted at a fraction (15 percent, for example) of the cost of new construction for comparable facilities. Major renovation would be budgeted at a higher rate.

Data and coefficients regarding construction jobs relative to the value of construction are then used to project direct construction employment. Comparable coefficients also are used to forecast site-related spending for construction materials and services in the region. This spending is used as an input to estimate secondary jobs related to site reuse.

### **Operation Jobs**

The full buildout land uses are the basis for projecting operation employment over a 20-year reuse horizon. Ratios of jobs to acreages of specific land uses, floor areas of facilities, and other facility characteristics (such as hotel rooms, classrooms, hospital beds, and other factors specific to a particular use) are utilized to estimate full buildout jobs associated with each land use. If a plan proponent has developed job estimates for key land uses, these are incorporated into the analysis.

The number of jobs associated with each land use is then "phased in" over time according to a judgemental buildout or absorption schedule. This schedule reflects assumptions regarding the rate at which the site is developed. Some activities may be fully built out in a short period of time; others may be at only partial buildout at the end of 20 years.

Site-related regional spending for goods and services is then estimated from data on regional sales and inter-industry linkages. These spending projections are used as inputs in calculating secondary jobs.

## **Secondary Jobs**

Secondary or indirect off-site jobs are projected from the direct employment and spending forecast for each reuse scenario. Direct jobs are used to calculate payrolls, which in turn are used to estimate consumer spending in the region. Consumer spending and site-related outlays for goods and services are used as inputs to a multiplier analysis of the regional economy. These multipliers, reflecting the round-by-round expansion effects of initial site-related spending, are developed by the U.S. Department of Commerce.

## **2.2 POPULATION PROJECTIONS**

Site-related direct and secondary jobs are the key inputs to developing projections of population impacts associated with site reuse scenarios. Assumptions regarding local hires and worker relocation determine the extent of worker in-migration due to the activities on the site.

Dependents are estimated based on demographic factors regarding family size. Natural increase of in-migrating workers and their families is estimated from recent demographic trends for the region. Total population impacts are distributed among communities within the study region based on current residential distributions of base civilian personnel and related factors.

## **3.0 LAND USE**

Scenario development includes an identified ultimate or full buildout plan for reuse of the site, as well as considerations of interim development over a 5-, 10-, and 20-year schedule. The base acreage is allocated under each plan to uses identified as the long-term use of each parcel on the site. Such potential reuses may include an airport, aviation support, aircraft maintenance, industrial, commercial, residential, educational, and recreational or open space land uses. The uses applicable to a scenario are specific to that scenario and that site, and are based on a mix of these or other land uses. Some scenarios may, by their nature, require use of adjacent off-base land. Such usage is identified where appropriate, although primary emphasis is placed on on-base land uses.

These full buildout uses are based on the reasonable possibility, rather than probability, that they may occur. Inclusion of a land use, or an entire scenario, is not based on any judgement that such a land use is feasible or represents a market-determined use of the land. Rather, if there is a reasonable possibility that a particular reuse may occur, as evidenced by proposals for that reuse or known cases where such land uses have occurred elsewhere, that reuse would be included in one or more scenarios.

Given a specification of land uses for the site, the types of facilities to be renovated or constructed on the site are then determined. Floor area ratios for

new facilities are developed using typical industrial standards and/or community development ratios. Ancillary facilities, such as road improvements, also are identified.

The result of this effort are (1) a set of reuse plans, one for each scenario to be analyzed, that identify the use of each on-site parcel, and some off-site parcels as appropriate, for each scenario; and (2) a list of major facilities to be constructed or renovated, with an indication of the scope (such as square footage of floor area) for each land use.

#### **4.0 TRANSPORTATION**

The region of influence for the transportation analysis includes the Victor Valley with emphasis on the area surrounding George AFB. Within this geographic area, the analysis examines the existing principal road, air, and rail transportation networks, including those segments of the transportation networks in the region that serve as direct or mandatory indirect linkages to the base, and those that are commonly used by George AFB personnel.

##### **4.1 ROADWAYS**

The number of vehicle trips expected as a result of specific land uses on the site is estimated for each projection year on the basis of direct on-site jobs and other attributes of on-site land uses (such as the number of hotel rooms, projected airport passenger volume, and other factors). The Institute of Traffic Engineers is the principal data source for planning relationships among trips and these various attributes.

Vehicle trips are then allocated to the local road network using prior patterns and expected destinations and sources of trips. The local road network is adjusted to account for changes over time from presently budgeted road capacity improvements and improvements required by the proposed reuse scenarios. Improvements in service may include road widening, intersection upgrades, and mass transit routings in the planning stages.

Traffic volumes typically are reported as either the daily number of vehicular movements in both directions on a segment of roadway averaged over a full calendar year (average annual daily traffic [AADT]) or the number of vehicular movements on a road segment during the average peak hour. The average peak hour volume typically is about 10 percent of the AADT (Transportation Research Board, 1985). These values are useful indicators in determining the extent to which the roadway segment is used and in assessing the potential for congestion and other problems.

Traffic flow conditions are generally reported in terms of level of service (LOS), rating factors that represent the general freedom (or restriction) of movement on

roadways (Table 3.2-1). The LOS scale ranges from A to F, with low-volume, high-speed, free-flowing conditions classified as LOS A. LOS E is representative of conditions that, although not favorable from the point of view of the motorist, provide the greatest traffic volume per hour. With minor interruptions, however, LOS E will deteriorate to LOS F (Transportation Research Board, 1985). As traffic volumes increase or traffic-handling capacities along given roadways decrease, free-flow conditions become restricted and LOS deteriorates. LOS F represents breakdown, stop-and-go conditions. Levels of service generally are evaluated and reported for typical clear-weather conditions.

Traffic flow conditions usually are most congested during morning and evening peak hours and depend on the physical characteristics of the roadway, traffic volumes, and the vehicular mix of traffic. A common design goal is to provide peak-hour service at levels no lower than LOS C or D. A typical two-lane rural highway will have a maximum two-way design capacity of 2,000 to 2,800 passenger vehicles per hour. On such roads, travel is affected substantially by traffic in the opposing lane, and by curves and hills, all of which impair a motorist's ability to pass safely. By contrast, each lane of an interstate highway (divided with restricted access) provides a capacity of about 2,000 vehicles per hour under a wide range of conditions. In urban or suburban settings, the capacity of signalized intersections that restrict traffic flow tends to influence LOS more than the capacity of a roadway segment. LOS ratings presented in this study were determined by peak-hour traffic volumes and capacity for key roadways.

The transportation network of the Victor Valley was examined to identify potential impacts to LOSs arising from closure baseline conditions (caretaker status of George AFB) and effects of alternative future scenarios. Changes in traffic volumes and peak-hour LOS ratings were projected for road segments (excluding intersections and highway ramps). LOS ratings were based on Highway Capacity Manual recommendations (Transportation Research Board, 1985).

Traffic generation associated with an airport assumed 1.6 daily trips and 0.11 peak-hour trips per passenger. Traffic volume associated with the industrial park, aviation support, and business park was based on the number of projected employees (ranging from 3.41 to 4.56 daily trips and 0.08 to 0.56 peak-hour trips per employee). Hotel-generated traffic projections assumed 7.27 daily trips and 0.58 to 0.62 peak-hour trips per room.

Traffic volumes for the ROI were derived from the AADT counts provided by Caltrans and traffic analyses performed in support of base reuse. Changes in traffic volumes arising from land use changes at George AFB were estimated and resulting volume changes on the local road network were determined. Resulting changes in peak-hour LOS ratings were then determined. Changes in work and associated travel patterns were derived by assigning or removing workers (by place of residence) to or from the most direct commuting routes.

## **4.2 AIRSPACE**

### **Data Sources**

Airspace use around an airport environment is driven primarily by such factors as runway alignment, surrounding obstacles and terrain, air traffic control and navigational aid capabilities, proximity of other airports/airspace uses in the area, and noise considerations. These same factors normally apply regardless of whether the airport is used for military or civil aircraft operations. For this reason, the baseline used a preclosure reference in characterizing these factors related to airspace use for military aircraft operations at George AFB. This baseline also addressed the Edwards special use airspace complex because of its close proximity to George AFB and the fact that its use will continue at near capacity after base closure.

Historical data on military aircraft operations and sorties were obtained from the Edwards AFB and George AFB Airspace Managers. These individuals, as well as the air traffic control managers at both bases, provided information on air traffic procedures, instrument approach and departure flight tracks, and other related data that helped characterize airspace use at and around the base. Caltrans and airport owners/operators were also contacted to obtain information on civil airport use. Aviation forecasts were derived from the plans, Caltrans studies, and where necessary, assumptions were made based on other similar airport operational environments.

### **Analysis Methodology**

The type and level of aircraft operations projected for the Proposed Action and alternatives was evaluated and compared to the way airspace was configured and used under the preclosure reference. The capacity of the airport to accommodate the projected aircraft fleet and operations was assessed by calculating the airport service volume, using the criteria in the FAA Advisory Circular 150/5060-5. Potential effects on airspace use were assessed, based on the extent to which projected operations could (1) require modifications to air traffic control systems and/or facilities; (2) restrict, limit, or otherwise delay other air traffic in the region; (3) encroach on other airspace areas and uses; or (4) increase the potential for an aircraft accident. It was recognized throughout the analysis process that a more in-depth study would be conducted by the FAA, once a reuse plan is selected, to identify any impacts of the reuse activities and what actions would be required to support the projected aircraft operations. Therefore, this analysis was used only to consider the level of operations that could likely be accommodated under the existing airspace structure, and to identify potential impacts if operational capacity were exceeded. The FAA was consulted during this process for assistance in identifying potential impacts, based on their air traffic control capabilities and present experience with the George AFB airspace environment.

### **4.3 AIR TRANSPORTATION**

Data addressing private, passenger, and cargo air service in the region were acquired directly from representatives of airports serving the area and air transportation studies of the area.

The effect of base closure on local airports was derived by subtracting current military-related enplanements from current total enplanements. For each reuse alternative, impacts on air transportation were determined by multiplying the ratio of non-military enplanements to non-military population by the projected future populations of the local airport service area.

### **4.4 RAILROADS**

Information regarding existing rail transportation was obtained from AMTRAK and VVEDA. The information source for the proposed super speed train line was the California-Nevada Super Speed Train Commission.

The effects of reuse alternatives on railroad transportation were based on projected populations, using current passenger to population ratios. Population figures were used, since none of the alternatives assumes direct use of local railroads.

## **5.0 UTILITIES**

Utility usage is determined by on-site land uses and area population increases. The utility systems addressed in this analysis include the facilities and infrastructure used for:

- Potable water pumping, treatment, storage, and distribution
- Wastewater collection and treatment
- Solid waste collection and disposal
- Energy generation and distribution, including the provision of electricity and natural gas.

For the reuse alternatives, local purveyors of potable water, wastewater treatment, and energy were anticipated to provide services within the area of the existing base, and these entities would acquire most or all related on-base utilities infrastructure, including the potable water treatment and distribution system, wastewater collectors, natural gas and electrical substation and distribution equipment. It was also assumed that reuse activities would generate solid wastes that would be disposed of in area landfills.

Long-term projections of demand and population were obtained from the various utility purveyors within the Victor Valley (through 2010) for each of their respective

service areas. In each case, the most recent comprehensive projections available were made prior to the base closure announcement and/or do not take into account a change in demand from the base. These projections, therefore, were adjusted to reflect the decrease in demand associated with closure of George AFB and its subsequent operation under caretaker status. These adjusted forecasts were then considered the closure baseline for comparison with potential reuse alternatives.

The potential effects of reuse alternatives were evaluated by estimating and comparing the additional direct and indirect demand associated with each alternative to the existing and projected operating capabilities of each utility system. All changes to the utility purveyors' long-term forecasts were based on estimated population changes in the Victor Valley and the future rates of per capita demand implicitly or explicitly indicated by each purveyor's projections. Projections in the utilities analysis include demand for water, wastewater treatment, solid waste disposal, electricity and natural gas, both on the site of George AFB from activities planned under the Proposed Action and alternatives, as well as resulting changes in domestic demand associated with direct and indirect population changes in the Victor Valley.

## **6.0 HAZARDOUS MATERIALS/HAZARDOUS WASTE**

### **6.1 REGION OF INFLUENCE**

The region of influence (ROI) includes the current base property and all geographical areas that have been affected by an on-base release of a hazardous material or hazardous waste. The IRP sites are located within the base boundary, but contamination associated with IRP sites along the northeast perimeter will extend the ROI beyond the base boundary.

### **6.2 DATA SOURCES/CONTACTS**

Primary sources of data are: existing published reports such as IRP documents, management plan for various toxic or hazardous substances (e.g., hazardous waste, asbestos), RCRA permits, and survey results (e.g., radon, asbestos). Pertinent federal, state, and local regulations and standards were reviewed for applicability to the proposed action and alternatives. Hazardous materials/waste management plans and inventories reviewed included: Asbestos Management Plan (ongoing) and/or Survey Results, Hazardous Waste Management Plan, Hazardous Waste Management Survey, Hazardous Waste Minimization Guidance, PCB Inventory and/or Survey Results, Radon Survey and/or Results, and Underground Storage Tank Management Plan. These documents were obtained through the Base Environmental Planning Branch, Civil Engineering, BioEnvironmental Office, Consolidation and Relocation Effort (CARE) Office, and Defense Reutilization and Marketing Office (DRMO).

Interviews with personnel associated with these on-base agencies provided the information necessary to fill any data gaps. The city of Adelanto and the county of San Bernardino were contacted regarding regulations which would apply to both current and post-closure activities for George AFB.

### **6.3 METHODOLOGY**

Preclosure baseline conditions include current hazardous materials/waste management practices and inventories pertaining to the following area: hazardous materials, hazardous waste, above-ground and underground storage tanks, asbestos, pesticides and herbicides, PCBs, radon, and biomedical waste. Issues considered in impact analysis were (1) the amount and type of hazardous materials/waste currently associated with specific facilities and/or areas proposed under each reuse alternative; (2) the regulatory requirements or restrictions associated with property transfer and reuse; (3) delays to development because of IRP remediation activities; and (4) remediation schedules of specific hazardous materials/waste (i.e., PCBs, bio-medical waste currently used by the Air Force).

### **7.0 SOILS AND GEOLOGY**

Methods used to analyze potential impacts to soils and geology are discussed in Section 4.4.1 of this EIS.

### **8.0 WATER RESOURCES**

Methods used to analyze potential impacts to water resources are discussed in Section 4.4.2 of this EIS.

### **9.0 AIR QUALITY**

The methods used to analyze air quality impacts are discussed in Section 4.4.3 of this EIS.

### **10.0 NOISE**

Methods use to analyze noise impacts under each reuse scenario require substantial discussion, and are presented separately in Appendix J of this EIS.

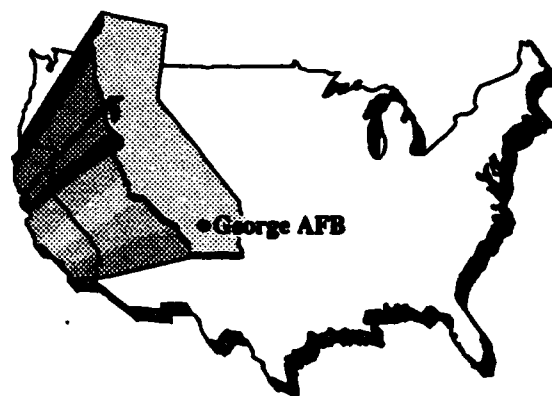
### **11.0 BIOLOGICAL RESOURCES**

For vegetation impacts, the project land use maps were overlaid on the vegetation map and areas affected (by plant community) were estimated using the disturbance area estimates given in the project description for each land use category. The vegetation losses, along with other project disturbances such as noise and vehicle traffic, were then used to evaluate effects on wildlife.

Loss of habitat for the desert tortoise was calculated by overlaying the project land uses on the map of tortoise distribution using the computerized geographical information system (GIS). Effects of habitat fragmentation were then added to these losses after visual interpretation of the maps. All other impacts were qualitatively assessed based on literature data and scientific expertise on the responses of plants and animals to project-related disturbances.

## **12.0 CULTURAL RESOURCES**

Methods used to analyze potential impacts to cultural resources are discussed in Section 4.4.6 of this EIS.



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## APPENDIX G

**APPENDIX G**  
**GEORGE AFB PERMITS**

**George AFB Permits**  
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Permit Number	Permitted Facility/Equipment	Issuing Agency	Date of Expiration
Contract w/POTW to meet discharge req Part A Interim	Industrial/Sanitary Sewer	Victor Valley Wastewater Reclamation Authority	Closure
8603060298	Hazardous Waste Treatment, Superior Valley OB/OD	U.S. EPA Reg IX	05/30/1992
8701261250	Underground Storage Tanks	San Bernardino County Department of Environmental Health Services (DEHS)	05/30/1992
8702260031	Underground Storage Tanks - Hazardous Materials Handlers	DEHS	05/30/1992
8711260030	Underground Storage Tanks - Tank State Fee	DEHS	05/30/1992
8711260031	Underground Storage Tanks - State Tank Fee	DEHS	10/31/1992
8711260032	Underground Storage Tanks - Hazardous Materials Handlers	DEHS	10/31/1992
8706090006	Hazardous Materials Handling	DEHS	08/31/1992
8701071256	Hazardous Materials Handling	DEHS	08/31/1992
8505172058	Hazardous Waste Generator	DEHS	08/30/1992
8706090005	Infectious Waste Generator, Hospital	DEHS	Annual
8706090005	Large Quantity Generator, Hospital	DEHS	Annual
2132	Hazardous Waste Transporter	State Department of Toxic Substance Control (DTSC)	06/30/1992
4-910A0604	Extremely Hazardous Waste Disposal	DTSC	08/06/1992
A0002964	Bead Blast Booth Authority to Construct	San Bernardino County Air Pollution Control District (SBCAPCD)	11/30/1992
B000780	35 CRS/CCFD, Hot Water Boiler, Bldg. 593	SBCAPCD	11/30/1992
B000781	37 CRS/CCFD, Hot Water Boiler, Bldg. 588	SBCAPCD	11/30/1992

*George AFB Disposal and Reuse FEIS*

**George AFB Permits  
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Permit Number	Permitted Facility/Equipment	Issuing Agency	Date of Expiration
B000784	35 MED-GROUP, Hot Water Boiler, Bldg. 1155	SBCAPCD	11/30/1992
B000785	SGALG, Hot Water Boiler, Bldg. 1155	SBCAPCD	11/30/1992
B000786	35 SUPS/CCQD, Hot Water Boiler, Bldg. 253	SBCAPCD	11/30/1992
B000787	37 EMS/CCFD, Hot Water Boiler, Bldg. 256	SBCAPCD	11/30/1992
B000788	35 CSG/DP, Hot Water Boiler, Bldg. 299	SBCAPCD	11/30/1992
B000789	35 CRS/MACD, Hot Water Boiler, Bldg. 310	SBCAPCD	11/30/1992
B000790	35 CSG/SVF, Hot Water Boiler, Bldg. 591	SBCAPCD	11/30/1992
B000791	37 AGS/MAAD, Hot Water Boiler, 497	SBCAPCD	11/30/1992
B000792	37 AGS/CCF, Hot Water Boiler, Bldg. 499	SBCAPCD	11/30/1992
B000793	37 AGS/CCF, Hot Water Boiler, Bldg. 501	SBCAPCD	11/30/1992
B000794	35 CSG/SVF, Hot Water Boiler, Bldg. 591	SBCAPCD	11/30/1992
B000795	37 CRS/MACV, Hot Water Boiler, Bldg. 686	SBCAPCD	11/30/1992
B000796	37 CRS/MACV, Hot Water Boiler, Bldg. 686	SBCAPCD	11/30/1992
B000797	27 TASS/MA, Hot Water Boiler, Bldg. 756	SBCAPCD	11/30/1992
B000798	35 EMS/MAEA, Space Heater, Bldg. 789	SBCAPCD	11/30/1992
B000799	35 AD/SL, Hot Water Boiler, Bldg. 1055	SBCAPCD	11/30/1992
B002175	35 CES/DEF, Live Fire Burn Pit, Bldg. 849	SBCAPCD	11/30/1992
C000790	35 SUPS/LGSF, Hydrocarbon Air Pollution Control System, Bldg. 690	SBCAPCD	11/30/1992
C002965	Fabric Dust Collector	SBCAPCD	11/30/1992
D000791	37 EMS/CCQC, Degreaser, Bldg. 676	SBCAPCD	11/30/1992
D000792	35 EMS/MAEC, Vapor Spray Degreaser Gun Services Department, Bldg. 780	SBCAPCD	11/30/1992
I000798	35 AD/SGQ, Infectious Waste Incinerator, Bldg. 1155	SBCAPCD	11/30/1992
S000793	35 EMS/MAEFR, Spray Paint Booth, Bldg. 652	SBCAPCD	11/30/1992

*George AFB Disposal and Reuse FEIS*

George AFB Permits  
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Permit Number	Permitted Facility/Equipment	Issuing Agency	Date of Expiration
S000794	35 TRNS/LGTM, Spray Paint Booth, Bldg. 555	SBCAPCD	11/30/1992
S000795	35 CSG/CES, Spray Paint Booth, Bldg. 670	SBCAPCD	11/30/1992
S000796	35 CSG/SSRH, Spray Paint Booth, Bldg. 18	SBCAPCD	11/30/1992
S000797	35 EMS/MAEFR, Spray Paint Booth, Bldg. 652	SBCAPCD	11/30/1992
S002112	35 TTW/MA, Aircraft Painting Facility, Bldg. 685C	SBCAPCD	11/30/1992
S002113	37 TFW/MA, Aircraft Painting Facility, Bldg. 682C	SBCAPCD	11/30/1992
S002195	35/37 MAs, Aircraft Paint Touch-up Outdoors (2 Gal Max/Day), Bldg. 682/685	SBCAPCD	11/30/1992
S002283	35/37 MAs, Spray Paint Booth, Bldg. 682/685	SBCAPCD	11/30/1992
T000780 <sup>(a)</sup>	37 EMS/MAEW, Gasoline Storage Tank, Bldg. 559	SBCAPCD	11/30/1992
T000782	35 SUPS/LGSF, Gasoline Storage Tank, Bldg. 660	SBCAPCD	11/30/1992
T000783	35 TRNS/LGTM, Gasoline Storage Tank, Bldg. 555	SBCAPCD	11/30/1992
T000786 <sup>(a)</sup>	35 CSG/DEF, Gasoline Storage Tank, Bldg. 678	SBCAPCD	11/30/1992
T000788	35 SUPS/LGSF, JP-4 Hydrant Refueling and Storage System, Bldg. 708	SBCAPCD	11/30/1992
T000789	35 SUPS/LGSF, JP-4 Storage and Recovery System, Bldg. 690	SBCAPCD	11/30/1992
T001271	35 SUPS/LGSF, Welded Storage Tank, Bldg. 547	SBCAPCD	11/30/1992

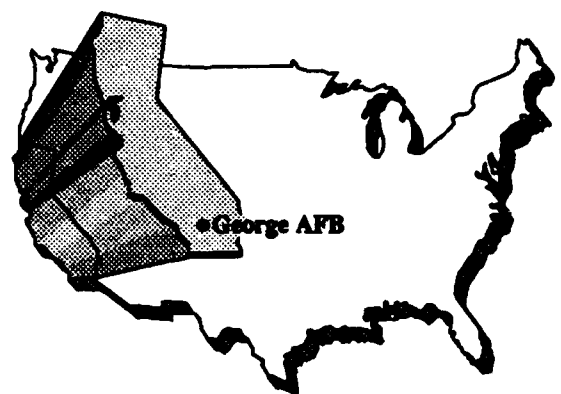
George AFB Disposal and Reuse FEIS

**George AFB Permits**  
**Page 4 of 4**

Permit Number	Permitted Facility/Equipment	Issuing Agency	Date of Expiration
T001272	35 SUPS/LGSF, Welded Storage Tank, Bldg. 548	SBCAPCD	11/30/1992
T001273	35 SUPS/LGSF, Welded Storage Tank, Bldg. 554	SBCAPCD	11/30/1992
T001274	35 SUPS/LGSF, Welded Storage Tank, Bldg. 556	SBCAPCD	11/30/1992
T001275	35 SUPS/LGSF, Welded Storage Tank, Bldg. 557	SBCAPCD	11/30/1992
T001777	35 EMS/MAEW, Gasoline Storage Tank, Bldg. 644	SBCAPCD	11/30/1992
T001778	37 EMS/MAEW, JP-4 Storage Tank AGE Service Sta, Bldg. 644	SBCAPCD	11/30/1992
T001779	37 EMS/MAEW, JP-4 Storage Tank AGE Service Sta, Bldg. 644	SBCAPCD	11/30/1992
T001780	35 CSG/DEF, Gasoline Storage and Dispensing Facility Bldg. 724	SBCAPCD	11/30/1992
T002284	Gas Disposal Facility, Bldg. 749	SBCAPCD	11/30/1992
T002768	Waste Oil Storage Tank, Bldg. 555	SBCAPCD	11/30/1992
T001529	Gasoline Storage and Dispensing Facility, Superfor Valley	SBCAPCD	11/30/1992
G001047	BX, Gasoline Service Station, Bldg. 12	SBCAPCD	11/30/1992

Note: The Ext Haz Waste Disposal Permit is for PCB transformers only; the base is applying for one to include capacitors.  
(a) Removed.

**George AFB Disposal and Reuse FEIS**



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## APPENDIX H

**APPENDIX H**  
**AIR FORCE POLICY, MANAGEMENT OF ASBESTOS**  
**AT CLOSING BASES**

# **APPENDIX H**

## **AIR FORCE POLICY**

### **Management of Asbestos at Closing Bases**

#### **INTRODUCTION**

Asbestos in building facilities is managed because of potential adverse human health effects. Asbestos must be removed or controlled if it is in a location and condition that constitutes a health hazard or a potential health hazard or it is otherwise required by law (e.g., schools). The hazard determination must be made by a health professional (in the case of the Air Force, a Bioenvironmental Engineer) trained to make such determinations. While removal is a remedy, in many cases management alternatives (such as encapsulation within the building) are acceptable and cost effective methods of dealing with asbestos. The keys to dealing with asbestos are knowing its location and condition and having a management plan to prevent asbestos containing materials that continue to serve their intended purpose from becoming a health hazard. There is no alternative to such management, because society does not have the resources to remove and dispose of all asbestos in all buildings in the United States. Most asbestos is not now, nor will it become a health hazard if it is properly managed.

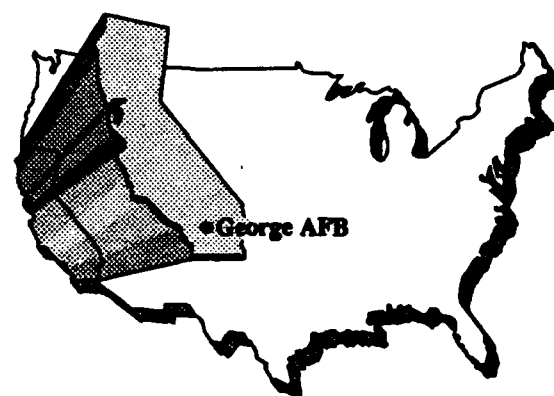
There are no laws applicable to the five closure bases that specifically mandate the removal or management of asbestos in buildings other than the law addressing asbestos in schools (P.L. 99-519). Statutory or regulatory requirements that result in removal or management of asbestos are based on human exposure or the potential for human exposure (i.e. National Emission Standards for Hazardous Air Pollutants (NESHAPS) = no visible emissions, OSHA = number of airborne fibers per cc). There are no statutory or other mandatory standards, criteria, or procedures for deciding what to do with asbestos. Thus, health professional judgement based on exposure levels or potential exposure levels must be the primary determinant of what should be done with asbestos. Apart from this professional and scientific approach, closing bases presents the additional problem of obtaining an economic return to the Government for its property. Asbestos in closing base properties must also be analyzed to determine the most prudent course in terms of removal or remediation cost and the price that can be obtained as a result.

The following specific policies will apply to bases closed or realigned (so that there are excess facilities to be sold) under the Base Closure and Realignment Act, P.L. 100-526.

1. Asbestos will be removed if:

- (a) The protection of human health as determined by the Bioenvironmental Engineer requires removal (e.g., exposed friable asbestos within a building) in accordance with applicable health laws, regulations, and standards.
- (b) A building is unsalable without removal, or removal prior to sale is cost-effective; that is, the removal cost is low enough compared to value that would be received for a "clean" building that removal is a good investment for the Government. Prior to the decision to remove asbestos solely for economic reasons, an economic analysis will be conducted to determine if demolition, removal of some types of asbestos but not others, or asbestos removal and sale would be in the best interests of the Government.
- (c) A building is, or is intended to be, used as a school or child care facility.

2. When asbestos is present but none of the above applies, the asbestos will be managed using commonly accepted standards, criteria and procedures to assure sufficient protection of human health and the environment, in accordance with applicable and developing health standards.
3. A thorough survey for asbestos (including review of facility records, visual inspection, and where appropriate as determined by the Bioenvironmental Engineer and the Base Civil Engineer, intrusive inspection) will be conducted by the Air Force prior to sale.
4. Appraisal instructions, advertisements for sale, and deeds will contain accurate descriptions of the types, quantities, locations, and condition of asbestos in any real property to be sold or otherwise transferred outside the Federal Government. Appraisals will indicate what discount the market would apply if the building were to be sold with the asbestos in place.
5. Encapsulated asbestos in a building structure, friable or not, is not regarded as hazardous waste by the Air Force, nor does encapsulation within the structure of the building constitute "storing" or "disposing of" hazardous waste. Asbestos incorporated into a building as part of the structure has not been "stored" or "disposed of."
6. Friable asbestos, or asbestos that will probably become friable, that has been stored or disposed of underground or elsewhere on the property to be sold will be properly disposed of, unless the location is a landfill or other disposal facility properly permitted for friable asbestos disposal.
7. The final Air Force determination regarding the disposition of asbestos will be dependent on the plan for disposal and any reuse of the building. Decisions will take into account the proposed community reuse plan and the economic analysis of alternatives (see para 4). The course of action to be followed with respect to asbestos at each closing installation will be analyzed in the Disposal and Reuse Environmental Impact Statement, and will be included in the record of decision (ROD). Any buildings or facilities where the proposed asbestos plan is controversial will be addressed in the ROD, whether individually or as a class of closely related facilities.
8. Since other considerations must be taken into account at bases that are continuing to operate, this policy does not apply to them, nor is it necessarily a precedent for asbestos removal policy on them.



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## APPENDIX I

**APPENDIX I**  
**FORM 1006**

## FARMLAND CONVERSION IMPACT RATING

<b>PART I (To be completed by Federal Agency)</b>		Date Of Land Evaluation Request		July 12, 1991	
Name Of Project George Air Force Base -- Reuse & Disposal		Federal Agency Involved		USAF and FAA	
Proposed Land Use Major airport facility		County And State		San Bernardino, CA	
<b>PART II (To be completed by SCS)</b>		Date Request Received By SCS		7/11/91	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form).		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Acres Irrigated	
Major Cropland		Farmable Land in Govt. Jurisdiction		Amount Of Farmland As Defined in FPPA	
Name Of Land Evaluation System Used		Acres: %		Acres: %	
Name Of Local Site Assessment System		Date Land Evaluation Returned By SCS		7/18/91 JRA	
<b>PART III (To be completed by Federal Agency)</b>		Alternative Site Rating			
		Site A	Site B	Site C	Site D & E
A. Total Acres To Be Converted Directly		7,425	13,426	5,073	5,073
B. Total Acres To Be Converted Indirectly		-	-	-	-
C. Total Acres In Site		7,425	13,426	5,073	5,073
<b>PART IV (To be completed by SCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					
<b>PART V (To be completed by SCS) Land Evaluation Criterion</b>					
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)					
<b>PART VI (To be completed by Federal Agency)</b>					
Site Assessment Criteria (These criteria are explained in 7 CFR 658.6(b))		Maximum Points			
1. Acres Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS		160			
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or a local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:		Date Of Selection		Was A Local Site Assessment Used?	
				Yes <input type="checkbox"/> No <input type="checkbox"/>	
Reason For Selection:					

## STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

**Step 1 —** Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

**Step 2 —** Originator will send copies A, B and C, together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

**Step 3 —** SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

**Step 4 —** In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field offices will complete Parts II, IV and V of the form.

**Step 5 —** SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).

**Step 6 —** The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

**Step 7 —** The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

## INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

**Part I:** In completing the "County And State" questions list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

**Part III:** In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

**Part VI:** Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §659.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighted zero, however, criterion #8 will be weighted a maximum of 25 points, and criterion #11 a maximum of 25 points.

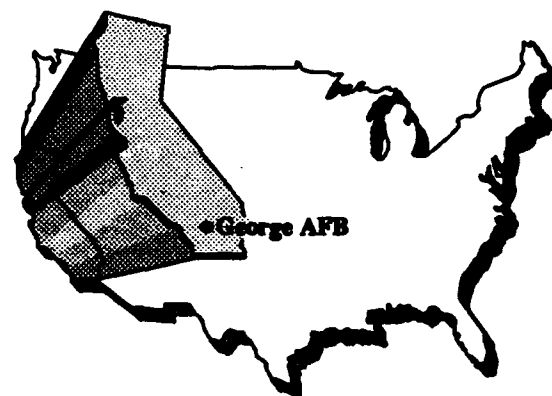
Individual Federal agencies at the national level, may assign relative weights among the 13 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

**Part VII:** In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points:

Total points assigned Site A = 180 x 160 = 144 points for Site "A."

Maximum points possible      200



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## APPENDIX J

**APPENDIX J**  
**NOISE**

## **APPENDIX J**

### **NOISE**

#### **1.0 DESCRIPTION OF PROPOSED ALTERNATIVES**

##### **1.1 PRECLOSURE**

Typical noise sources in and around airfields usually include aircraft, surface traffic, and other human activities.

Military aircraft operations are the primary source of noise in the vicinity of George AFB. The air operations and noise contours for preclosure are derived from the Final Environmental Impact Statement (FEIS) for closure of George Air Force Base, California (U.S. Air Force, 1990e). The contours for preclosure operations are shown in Figure 3.4-3.

The baseline surface traffic noise levels in the vicinity of the base were established in terms of DNL by modeling the arterial roadways on and near the base using current traffic and speed characteristics. The noise levels generated by surface traffic were predicted using the model published by the Federal Highway Administration (FHWA, 1978). The noise levels were presented as a function of distance from the centerline of the nearest road. In airport analyses, areas with DNL above 65 dBA are considered in land-use compatibility planning and impact assessment; therefore, the distances to areas with DNLs greater than 65 dBA are of particular interest.

Annual average daily traffic (AADT) data were developed from information gathered in the traffic engineering study presented in Section 3.2.4, Transportation, and were used to estimate preclosure noise levels. The traffic data used in the analysis are presented in Table J-1. The traffic mix was assumed to be 96 percent cars, 3 percent medium trucks, and 1 percent heavy trucks. Twelve percent of the traffic was assumed to occur at night.

##### **1.2 CLOSURE BASELINE**

At base closure, it is assumed that the airfield would be used very infrequently and only by general aviation aircraft; therefore, the closure baseline does not include aircraft-related noise. The noise levels projected for the closure baseline were calculated using the traffic projections at base closure. The AADTs used for the analysis are presented in Table J-1.

##### **1.3 PROPOSED ACTION**

The Proposed Action for the reuse of George AFB would result in the development of a commercial airport. Primary components of this reuse action include air carrier and commuter operations, general-aviation operations, maintenance operations, and airline training operations.

**Table J-1. Surface Traffic Operations - Project and Non-Project Generated**

Alternative	Annual Average Daily Traffic (AADT)					Speed Assumed (mph)	Road Width Assumed (lanes)
	Preclosure	Closure	1998	2003	2013		
Proposed Action							
Air Base Road West	12500	1550	6629	11565	16576	45	2
Air Base Road East	20600	3590	14804	25681	36747	45	2*
U.S. 395	10300	12150	15996	19823	25342	55	2
El Mirage Road	100**	130	3460	6653	9770	45	2
Helendale Road	50**	60	1729	3332	4885	45	2
Village Drive	12100	1150	7547	13716	19861	45	4
Shay Road	50	60	3390	6583	9680	45	2
International Airport							
Air Base Road West	12500	1550	9083	10408	17890	45	2
Air Base Road East	20600	3590	18785	21421	36617	45	2*
U.S. 395	10300	12150	60976	71238	118894	55	2
El Mirage Road	100**	130	29522	34509	62390	45	2
Desert Flower	-	60	29452	34439	62300	45	2
Village Drive	12100	1150	18799	21970	38848	45	4
Shay Road	50	60	not developed for this alternative				
Commercial Airport w/Residential							
Air Base Road West	12500	1550	12988	17123	24184	45	2
Air Base Road East	20600	3590	28793	37908	53487	45	2*
U.S. 395	10300	12150	19387	22786	29400	55	2
El Mirage Road	100**	130	3919	5255	7511	45	2
Helendale Road	50**	60	3849	5185	7421	45	2
Village Drive	12100	1150	15602	20756	29499	45	4
Shay Road	50	60	7629	10288	14753	45	2
Crippen Avenue	-	130	3919	5255	7511	45	2
General Aviation Center							
Air Base Road West	12500	1550	17524	21020	21405	45	2
Air Base Road East	20600	3590	31630	37837	38726	45	2*
U.S. 395	10300	12150	21277	24225	27277	55	2
Crippen Avenue	130	130	8077	9755	9787	45	2
Village Drive	12100	1150	17114	20567	20855	45	4
Shay Road	50	60	4039	4882	4894	45	2
Non-Aviation							
Air Base Road West	12500	1550	9585	15712	26309	45	2
Air Base Road East	20600	3590	20941	34163	57047	45	2*
U.S. 395	10300	12150	17617	22105	30657	55	2
Crippen Avenue	-	130	6244	10844	18733	45	2
Helendale Road	50**	60	3122	4166	9366	45	2
Village Drive	12100	1150	11006	18470	31325	45	4
Shay Road	50	60	3122	5427	9366	45	2
El Mirage	-	130	9938	13257	30121	45	2

\*For 1998 and later increased to 4 lanes.

\*\*Estimate based on similar roadways.

Airport layout would remain unchanged. The existing northeast-southwest Runway 03/21 would remain 9,133 feet by 150 feet. Runway 03/21 would be used primarily for takeoffs. The 10,000-foot north-south Runway 17/35 would remain unchanged and used primarily for landings. The runway usage for all operations was assumed to be the same as the existing runway usage. The current usage is 42.5 percent on Runway 17 (primarily used for landings), 42.5 percent on Runway 21 (primarily used for takeoffs), 7.5 percent on Runway 03, and 7.5 percent on Runway 35. These percentages were used in the modeling. The flight track assignments assumed in our modeling are included in Tables J-2 through J-5 for the Proposed Action. The flight tracks are shown in Figures 4.4-7 through 4.4-9.

The fleet mix and annual flight operations for each of the modeled years are contained in Table J-6. The following breakdowns were used to define daytime and nighttime operations for this analysis: air-carrier and commuter operations - 93 percent during daytime hours and 7 percent at night; general aviation and maintenance operations - 95 percent during daytime hours and 5 percent at night. Airline training was assumed to be 100 percent touch-and-go operations and would only take place during daytime hours. The stage lengths for air operations are provided in Table J-7.

Currently used engine runup operations were assumed to occur at hush houses. Runups are estimated to occur once during each 24-hour period during the day (7 a.m.-10 p.m.) for 1998 (divided between two runup pads and two aircraft types), increasing to 2.5 times per 24-hour period in the year 2013. It is assumed that Boeing 737-300 and 757-200 type engines would be operated. For the runup operations, the engines would run for 20 minutes at idle power and 5 minutes at departure power. Although hush houses are currently located at these runup locations, the size of the structure was assumed to be too small for commercial jet airliners. It was, therefore, assumed that no noise suppression facilities would be available. The aircraft were assumed to have a heading of 300° for pad HH1 and 170° for pad HH2.

General aviation operations were divided into five types:

- Single-engine - A composite single-engine propeller plane
- Multi-engine - Beech Baron 58P assumed to be a typical multi-engine propeller plane
- Turboprop - Cessna Conquest II assumed to be a typical turboprop
- Turbofan - Cessna Citation I assumed to be a typical turbofan
- Helicopter - Hughes 500D assumed to be a typical helicopter.

It is assumed that 20 percent of the single-engine aircraft (COMSEP) activities would be touch-and-go operations performed only during daytime hours.

A standard 3° glide slope and the takeoff profiles, provided by the FAA's Integrated Noise Model Database 3.9, were assumed.

**Table J-2. Flight Track Assignments, Proposed Action and Commercial Airport with Residential Alternative, 1993**

[illegible]

Table J-3. Flight Track Assignments, Proposed Action and Commercial Airport with Residential Alternative, 1998

Type of Aircraft	03A1			03A2			17A1			17A2			35A1			35A2			17D1			17D2		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
B-727-200	0.01	0.00	0.00	0.00	0.01	0.00	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-9-30	0.01	0.00	0.00	0.00	0.01	0.00	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.11	0.03	0.01	0.11	0.03	0.01	0.62	0.16	0.06	0.62	0.16	0.06	0.05	0.01	0.01	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
B-757-200	0.11	0.03	0.01	0.11	0.03	0.01	0.62	0.16	0.06	0.62	0.16	0.06	0.05	0.01	0.01	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-10-30	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-1011-500	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BECH 1900	0.29	0.07	0.03	0.29	0.07	0.03	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
SAAB 340	0.29	0.07	0.03	0.29	0.07	0.03	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
DHC-6	0.29	0.07	0.03	0.29	0.07	0.03	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
EMBRAER BRASILIA	0.29	0.07	0.03	0.29	0.07	0.03	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	0.99	0.25	0.08	0.99	0.25	0.08	5.59	1.40	0.47	5.59	1.40	0.47	0.49	0.12	0.04	0.49	0.12	0.04	0.00	0.00	0.00	0.00	0.00	0.00
BEC58P	0.42	0.08	0.03	0.42	0.08	0.03	2.38	0.45	0.15	2.38	0.45	0.15	0.21	0.04	0.01	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
CNA441	0.07	0.01	0.00	0.07	0.01	0.00	0.40	0.07	0.02	0.40	0.07	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNA500	0.07	0.01	0.00	0.07	0.01	0.00	0.40	0.07	0.02	0.40	0.07	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OH-6A (HELICOPTER)	0.08	0.02	0.01	0.08	0.02	0.01	0.47	0.09	0.03	0.47	0.09	0.03	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.06	0.01	0.00	0.06	0.01	0.00	0.34	0.06	0.02	0.34	0.06	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757	0.06	0.01	0.00	0.06	0.01	0.00	0.34	0.06	0.02	0.34	0.06	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-767-200	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	3.1	0.7	0.3	3.1	0.7	0.3	17.8	4.2	1.5	17.8	4.2	1.5	1.6	0.4	0.1	1.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Type of Aircraft	21D1			21D2			35D1			35D2			17C1			17C2			35C1			35C2		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
B-727-200	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-9-30	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.62	0.16	0.06	0.62	0.16	0.06	0.05	0.01	0.01	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757-200	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-10-30	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-1011-500	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BECH 1900	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAAB 340	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DHC-6	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EMBRAER BRASILIA	1.62	0.41	0.15	1.62	0.41	0.15	0.14	0.04	0.01	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	5.59	1.40	0.47	5.59	1.40	0.47	0.49	0.12	0.04	0.49	0.12	0.04	3.73	0.00	0.00	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BEC58P	2.38	0.45	0.15	2.38	0.45	0.15	0.21	0.04	0.01	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNA441	0.40	0.07	0.02	0.40	0.07	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNA500	0.40	0.07	0.02	0.40	0.07	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OH-6A (HELICOPTER)	0.47	0.09	0.03	0.47	0.09	0.03	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.34	0.06	0.02	0.34	0.06	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.04	0.01	0.00	0.04	0.01	0.00	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757	0.34	0.06	0.02	0.34	0.06	0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-767-200	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	17.8	4.2	1.5	17.8	4.2	1.5	1.6	0.4	0.1	1.6	0.4	0.1	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.85	0.21	0.00

Table J-4. Flight Track Assignments, Proposed Action and Commercial Airport with Residential Alternative, 2003

Type of Aircraft	Day	03A1	Night	Day	03A2	Night	Day	17A1	Night	Day	17A2	Night	Day	35A1	Night	Day	35A2	Night	Day	17D1	Night	Day	17D2
	Eve.			Eve.				Eve.			Eve.			Eve.			Eve.			Eve.			Eve.
B-727-200	0.01	0.00	0.00	0.01	0.00	0.00	0.06	0.01	0.01	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-9-30	0.01	0.00	0.00	0.01	0.00	0.00	0.06	0.01	0.01	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.18	0.05	0.02	0.18	0.05	0.02	1.01	0.26	0.10	1.01	0.26	0.10	0.09	0.02	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00
B-757-200	0.18	0.05	0.02	0.18	0.05	0.02	1.01	0.26	0.10	1.01	0.26	0.10	0.09	0.02	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-10-30	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-1011-500	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BEECH 1900	0.31	0.08	0.03	0.31	0.08	0.03	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00
SAAB 340	0.31	0.08	0.03	0.31	0.08	0.03	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00
DHC-6	0.31	0.08	0.03	0.31	0.08	0.03	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00
EMBRAER BRASILIA	0.31	0.08	0.03	0.31	0.08	0.03	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00
COMSEP	1.24	0.31	0.10	1.24	0.31	0.10	7.02	1.76	0.59	7.02	1.76	0.59	0.62	0.15	0.05	0.62	0.15	0.05	0.00	0.00	0.00	0.00	0.00
BECSBP	0.58	0.11	0.04	0.58	0.11	0.04	3.31	0.62	0.21	3.31	0.62	0.21	0.29	0.05	0.02	0.29	0.05	0.02	0.00	0.00	0.00	0.00	0.00
CNA441	0.09	0.02	0.01	0.09	0.02	0.01	0.51	0.10	0.03	0.51	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00
CNA500	0.09	0.02	0.01	0.09	0.02	0.01	0.51	0.10	0.03	0.51	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00
OH-6A (HELICOPTER)	0.12	0.02	0.01	0.12	0.02	0.01	0.65	0.12	0.04	0.65	0.12	0.04	0.06	0.01	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.10	0.02	0.01	0.10	0.02	0.01	0.54	0.10	0.03	0.54	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00
B-737-200	0.01	0.00	0.00	0.01	0.00	0.00	0.06	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757-200	0.10	0.02	0.01	0.10	0.02	0.01	0.54	0.10	0.03	0.54	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.06	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	4.0	0.9	0.3	4.0	0.9	0.3	22.4	5.3	1.8	22.4	5.3	1.8	2.0	0.5	0.2	2.0	0.5	0.2	0.0	0.0	0.0	0.0	0.0
Type of Aircraft	Day	21D1	Night	Day	21D2	Night	Day	35D1	Night	Day	35D2	Night	Day	17C1	Night	Day	17C2	Night	Day	35C1	Night	Day	35C2
	Eve.			Eve.				Eve.			Eve.			Eve.			Eve.			Eve.			Eve.
B-727-200	0.06	0.01	0.01	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-9-30	0.06	0.01	0.01	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	1.01	0.26	0.10	1.01	0.26	0.10	0.09	0.02	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757-200	1.01	0.26	0.10	1.01	0.26	0.10	0.09	0.02	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-10-30	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-1011-500	0.04	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BEECH 1900	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAAB 340	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DHC-6	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EMBRAER BRASILIA	1.73	0.45	0.16	1.73	0.45	0.16	0.15	0.04	0.01	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COMSEP	7.02	1.76	0.59	7.02	1.76	0.59	0.62	0.15	0.05	0.62	0.15	0.05	4.68	0.00	0.00	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BECSBP	3.31	0.62	0.21	3.31	0.62	0.21	0.29	0.05	0.02	0.29	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNA441	0.51	0.10	0.03	0.51	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNA500	0.51	0.10	0.03	0.51	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OH-6A (HELICOPTER)	0.65	0.12	0.04	0.65	0.12	0.04	0.06	0.01	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.54	0.10	0.03	0.54	0.10	0.03	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.06	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-757-200	0.06	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-767-200	0.06	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	22.4	5.3	1.8	22.4	5.3	1.8	2.0	0.5	0.2	2.0	0.5	0.2	15.2	1.2	0.0	15.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0

**Table J-5. Flight Track Assignments, Proposed Action and Commercial Airport with Residential Alternative, 2013**

Type of Aircraft	03A1			03A2			17A1			17A2			35A1			35A2			17D1			17D2		
	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.
B-727-200	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-9-30	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-737-300	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03
B-757-200	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03	0.30	0.08	0.03
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC-10-30	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-1011-500	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BEECH 1900	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03
SAAB 340	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03
DHC-6	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03
EMBRAER BRASILLIA	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03	0.27	0.07	0.03
COMSEP	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13	1.52	0.38	0.13
BEC58P	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05	0.76	0.14	0.05
CNA41	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01
CNA500	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01	0.12	0.02	0.01
OH-6A (HELICOPTER)	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01	0.16	0.03	0.01
B-737-300	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01
B-747-200	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01
B-757-200	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01	0.15	0.03	0.01
B-767-200	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4	4.8	1.1	0.4
Type of Aircraft	21D1			21D2			35D1			35D2			17C1			17C2			35C1			35C2		
	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.	Day	Night	Eve.
B-727-200	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01
DC-9-30	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01	0.10	0.02	0.01
B-737-300	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16
B-757-200	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16	1.73	0.44	0.16
B-747-200	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01
DC-10-30	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01
L-1011-500	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01	0.06	0.02	0.01
BEECH 1900	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14
SAAB 340	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14
DHC-6	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14
EMBRAER BRASILLIA	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14	1.53	0.39	0.14
COMSEP	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72	8.63	2.16	0.72
BEC58P	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27	4.33	0.81	0.27
CNA41	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04
CNA500	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04	0.68	0.13	0.04
OH-6A (HELICOPTER)	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06	0.93	0.17	0.06
B-737-300	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05
B-747-200	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01
B-757-200	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01
B-767-200	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2	27.1	6.3	2.2

TABLE J-6a

SCENARIO: Proposed Action and Commercial Airport with Residential Alternative  
 MODELED YEAR: 1993

Type of Aircraft	# of operations	% for category	Total for category
Commercial (Air Carrier)			0
None	-	-	
Commercial (Commuter)			0
None	-	-	
General Aviation			0
None	-	-	
Aircraft Maintenance			0
None	-	-	
Airline Training			10,000
B-747-200	10,000	100	
TOTAL			10,000

TABLE J-6b

SCENARIO:

Proposed Action and Commercial Airport with Residential Alternative

MODELED YEAR:

1998

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Carrier)</b>			3,200
B-727-200	80	2.50	
DC-9-30	80	2.50	
B-737-300	1,440	45.00	
B-757-200	1,440	45.00	
B-747-200	53	1.67	
DC-10-30	53	1.67	
L-1011-500	53	1.67	
<b>Commercial (Commuter)</b>			15,000
Beech 1900	3,750	25.00	
Saab 340	3,750	25.00	
DHC-6	3,750	25.00	
Embraer Brasilia	3,750	25.00	
<b>General Aviation</b>			23,800
COMSEP (composite single engine piston)	16,000	67.23	
Beach Baron 58P (twin engine piston)	5,100	21.43	
Cessna Conquest II (twin engine turboprop)	850	3.57	
Cessna Citation I 500 (twin engine turbojet)	850	3.57	
Hughes 500D (helicopter)	1,000	4.20	
<b>Aircraft Maintenance</b>			1,600
B-737-300	720	45.00	
B-747-200	80	5.00	
B-757-200	720	45.00	
B-767-200	80	5.00	
<b>Airline Training</b>			10,000
B-747-200	10,000	100.00	
<b>TOTAL</b>			53,600

TABLE J-6c

SCENARIO: Proposed Action and Commercial Airport with Residential Alternative  
 MODELED YEAR: 2003

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Carrier)</b>			5,200
B-727-200	130	2.50	
DC-9-30	130	2.50	
B-737-300	2,340	45.00	
B-757-200	2,340	45.00	
B-747-200	87	1.67	
DC-10-30	87	1.67	
L-1011-500	87	1.67	
<b>Commercial (Commuter)</b>			16,100
Beech 1900	4,025	25.00	
Saab 340	4,025	25.00	
DHC-6	4,025	25.00	
Embraer Brasilia	4,025	25.00	
<b>General Aviation</b>			30,800
COMSEP (composite single engine piston)	20,100	65.26	
Beech Baron 58P (twin engine piston)	7,100	23.05	
Cessna Conquest II (twin engine turboprop)	1,100	3.57	
Cessna Citation I 500 (twin engine turbojet)	1,100	3.57	
Hughes 500D (helicopter)	1,400	4.55	
<b>Aircraft Maintenance</b>			2,600
B-737-300	1,170	45.00	
B-747-200	130	5.00	
B-757-200	1,170	45.00	
B-767-200	130	5.00	
<b>Airline Training</b>			10,000
B-747-200	10,000	100.00	
<b>TOTAL</b>			64,700

TABLE J-6d

SCENARIO:

Proposed Action and Commercial Airport with Residential Alternative

MODELED YEAR:

2013

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Carrier)</b>			8,900
MD-83	446	5.00	
B-737-300	4,005	45.00	
B-757-200	4,005	45.00	
B-747-200	148	1.67	
DC-10-30	148	1.67	
L-1011-500	148	1.67	
<b>Commercial (Commuter)</b>			14,200
Beech 1900	3,550	25.00	
Saab 340	3,550	25.00	
DHC-6	3,550	25.00	
Embraer Brasilia	3,550	25.00	
<b>General Aviation</b>			38,900
COMSEP (composite single engine piston)	24,700	63.50	
Beech Baron 58P (twin engine piston)	9,300	23.91	
Cessna Conquest II (twin engine turboprop)	1,450	3.73	
Cessna Citation I (twin engine turbojet)	1,450	3.73	
Hughes 500D (helicopter)	2,000	5.14	
<b>Aircraft Maintenance</b>			4,000
B-737-300	1,800	45.00	
B-747-200	200	5.00	
B-757-200	1,800	45.00	
B-767-200	200	5.00	
<b>Airline Training</b>			10,000
B-747-200	10,000	100.00	
<b>TOTAL</b>			<b>76,000</b>

**TABLE J-7. Stage lengths assumed for Proposed Action and Commercial Airport with Residential Alternative air operations.**

	1993	1998	2003	2013
Commercial	*	1	2	2
Commuter	*	1	1	1
General Aviation	*	1	1	1
Aircraft Maintenance	*	1	1	1
Airline Training	1	1	1	1

\* No operations of this category of aircraft are proposed for this model year.

Note: Stage lengths correspond to the distance flown in increments of 500 miles. Thus, a stage length of 1 corresponds to flights between 1 and 500 miles, a stage length of 2 corresponds to flights between 500 and 1,000 miles, etc. The maximum stage length, for modeling purposes, is stage 7, which corresponds to distances greater than 3,500 miles.

The DNL contours for the proposed flight operations are shown in Figures 4.4-10 through 4.4-13 for 1993, 1998, 2003, and 2013, respectively. The contours around the north/south Runway (17/35) are due primarily to the airline training operations. In 1998, 2003, and 2013 the runups for the maintenance operations are evident in the higher noise contours around the runup pads near the ends of Runway 03/21.

Surface traffic data used in the modeling were developed from the project traffic study presented in Section 3.2.4, Transportation, and Table J-1.

#### **1.4 INTERNATIONAL AIRPORT ALTERNATIVE**

This alternative for the reuse of George AFB would result in the development of an international airport. Primary components of the action include air carrier and commuter operations, general aviation operations, maintenance operations, and air cargo operations.

The current airport layout would not be utilized with this alternative. The plan for this alternative would require the construction of two sets of parallel runways (03L/21R and 03R/21L and 17R/35L and 17L/35R). All of the proposed runways would be 14,000 feet by 150 feet. Runways 03L/21R and 03R/21L would be used primarily for take offs, and 17R/35L and 17L/35R would be used primarily for landings. The flight track assignments assumed in our modeling are included in Tables J-8 through J-10 for the International Airport Alternative. The flight tracks for this alternative are shown in Figures 4.4-14 and 4.4-15.

The fleet mix and annual flight operations for each of the modeled years are contained in Table J-11. The following breakdowns were used to define daytime and nighttime operations for this analysis: air-carrier and commuter operations - 93 percent during daytime hours and 7 percent at night; general aviation and maintenance operations - 95 percent during daytime hours and 5 percent at night; and air cargo - 20 percent during daytime hours and 80 percent at night. The stage lengths for air operations are presented in Table J-12.

Engine runup operations were assumed to occur at hush houses. Runups are estimated to occur once during each 24-hour period during the day (7 a.m. to 10 p.m.) for 1998 (divided between two runup pads and two aircraft types), increasing to 2.5 times per 24-hour period for 2013. It is assumed that Boeing 737-300 and 757-200 type engines would be operated. For the runup operations, the engines would run for 20 minutes at idle power and 5 minutes at departure power. It was assumed that no noise suppression facilities would be available. The aircraft were assumed to have a heading of 300° for pad HH1 and 170° for pad HH2.

General aviation operations were divided into the same five types as in the Proposed Action.

A standard 3° glide slope and the takeoff profiles, provided by the FAA's Integrated Noise Model Database 3.9, were assumed.

Table J-8. Flight Track Assignments, International Airport Alternative 1998

Type of Aircraft	03L1 & 03R1			03L2 & 03R2			17L1 & 17R1			17L2 & 17R2			35L1 & 35R1		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
SAAB 340	0.94	0.24	0.09	0.94	0.24	0.09	5.34	1.37	0.51	5.34	1.37	0.51	0.47	0.12	0.04
DHC-6	0.94	0.24	0.09	0.94	0.24	0.09	5.34	1.37	0.51	5.34	1.37	0.51	0.47	0.12	0.04
DC-9-30	0.91	0.23	0.09	0.91	0.23	0.09	5.17	1.33	0.49	5.17	1.33	0.49	0.46	0.12	0.04
B-737-300	0.91	0.23	0.09	0.91	0.23	0.09	5.17	1.33	0.49	5.17	1.33	0.49	0.46	0.12	0.04
BAE-146	0.91	0.23	0.09	0.91	0.23	0.09	5.17	1.33	0.49	5.17	1.33	0.49	0.46	0.12	0.04
MD-80	0.85	0.22	0.08	0.85	0.22	0.08	4.83	1.24	0.46	4.83	1.24	0.46	0.43	0.11	0.04
B-757	0.61	0.16	0.06	0.61	0.16	0.06	3.45	0.88	0.33	3.45	0.88	0.33	0.30	0.08	0.03
DC-9-30	0.02	0.00	0.08	0.02	0.00	0.08	0.12	0.00	0.47	0.12	0.00	0.47	0.01	0.00	0.04
B-727-200	0.02	0.00	0.08	0.02	0.00	0.08	0.12	0.00	0.47	0.12	0.00	0.47	0.01	0.00	0.04
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	1.05	0.20	0.07	1.05	0.20	0.07	5.96	1.12	0.37	5.96	1.12	0.37	0.53	0.10	0.03
BEC58P	0.30	0.06	0.02	0.30	0.06	0.02	1.72	0.32	0.11	1.72	0.32	0.11	0.15	0.03	0.01
CNA441	0.06	0.01	0.00	0.06	0.01	0.00	0.35	0.07	0.02	0.35	0.07	0.02	0.03	0.01	0.00
CNA500	0.06	0.01	0.00	0.06	0.01	0.00	0.35	0.07	0.02	0.35	0.07	0.02	0.03	0.01	0.00
OH-6A (HELICOPTER)	0.12	0.02	0.01	0.12	0.02	0.01	0.65	0.12	0.04	0.65	0.12	0.04	0.06	0.01	0.00
B-737-300	0.07	0.01	0.00	0.07	0.01	0.00	0.42	0.08	0.03	0.42	0.08	0.03	0.04	0.01	0.00
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00
B-757	0.07	0.01	0.00	0.07	0.01	0.00	0.42	0.08	0.03	0.42	0.08	0.03	0.04	0.01	0.00
B-767-200	0.01	0.00	0.00	0.01	0.00	0.00	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	7.9	1.9	0.8	7.9	1.9	0.8	44.7	10.7	4.8	44.7	10.7	4.8	3.9	0.9	0.4

Type of Aircraft	35L2 & 35R2			21L3 & 21R3			21L4 & 21R4			35L3 & 35R3		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
SAAB 340	0.47	0.12	0.04	0.47	0.12	0.04	5.34	1.37	0.51	5.34	1.37	0.51
DHC-6	0.47	0.12	0.04	0.47	0.12	0.04	5.34	1.37	0.51	5.34	1.37	0.51
DC-9-30	0.46	0.12	0.04	0.46	0.12	0.04	5.17	1.33	0.49	5.17	1.33	0.49
B-737-300	0.46	0.12	0.04	0.46	0.12	0.04	5.17	1.33	0.49	5.17	1.33	0.49
BAE-146	0.46	0.12	0.04	0.46	0.12	0.04	5.17	1.33	0.49	5.17	1.33	0.49
MD-80	0.43	0.11	0.04	0.43	0.11	0.04	4.83	1.24	0.46	4.83	1.24	0.46
B-757	0.30	0.08	0.03	0.30	0.08	0.03	3.45	0.88	0.33	3.45	0.88	0.33
DC-9-30	0.01	0.00	0.04	0.01	0.00	0.04	0.12	0.00	0.47	0.12	0.00	0.47
B-727-200	0.01	0.00	0.04	0.01	0.00	0.04	0.12	0.00	0.47	0.12	0.00	0.47
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	0.53	0.10	0.03	0.53	0.10	0.03	5.96	1.12	0.37	5.96	1.12	0.37
BEC58P	0.15	0.03	0.01	0.15	0.03	0.01	1.72	0.32	0.11	1.72	0.32	0.11
CNA441	0.03	0.01	0.00	0.03	0.01	0.00	0.35	0.07	0.02	0.35	0.07	0.02
CNA500	0.03	0.01	0.00	0.03	0.01	0.00	0.35	0.07	0.02	0.35	0.07	0.02
OH-6A (HELICOPTER)	0.06	0.01	0.00	0.06	0.01	0.00	0.65	0.12	0.04	0.65	0.12	0.04
B-737-300	0.04	0.01	0.00	0.04	0.01	0.00	0.42	0.08	0.03	0.42	0.08	0.03
B-747-200	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.05	0.01	0.00
B-757	0.04	0.01	0.00	0.04	0.01	0.00	0.42	0.08	0.03	0.42	0.08	0.03
B-767-200	0.03	0.00	0.00	0.03	0.00	0.00	0.05	0.01	0.00	0.05	0.01	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	3.9	0.9	0.4	44.7	10.7	4.8	44.7	10.7	4.8	3.9	0.9	0.4

**Table J-9. Filght Track Assignments, International Airport Alternative 2003**

Type of Aircraft	03L1 & 03R1			03L2 & 03R2			17L1 & 17R1			17L2 & 17R2			35L1 & 35R1		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
SAAB 340	2.36	0.61	0.22	2.36	0.61	0.22	13.36	3.43	1.26	13.36	3.43	1.26	1.18	0.30	0.11
DHC-6	2.36	0.61	0.22	2.36	0.61	0.22	13.36	3.43	1.26	13.36	3.43	1.26	1.18	0.30	0.11
DC-9-30	2.28	0.59	0.22	2.28	0.59	0.22	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
B-737-300	2.28	0.59	0.22	2.28	0.59	0.22	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
BAE-146	2.28	0.59	0.22	2.28	0.59	0.22	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
MD-80	2.13	0.55	0.20	2.13	0.55	0.20	12.06	3.10	1.14	12.06	3.10	1.14	1.06	0.27	0.10
B-757	1.52	0.39	0.14	1.52	0.39	0.14	8.62	2.21	0.82	8.62	2.21	0.82	0.76	0.20	0.07
B-757	0.06	0.00	0.25	0.06	0.00	0.25	0.35	0.00	1.40	0.35	0.00	1.40	0.03	0.00	0.12
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	1.02	0.57	0.19	1.02	0.57	0.19	17.14	3.21	1.07	17.14	3.21	1.07	1.51	0.28	0.09
BEC58P	0.96	0.18	0.06	0.96	0.18	0.06	5.45	1.02	0.34	5.45	1.02	0.34	0.48	0.09	0.03
CNA441	0.21	0.04	0.01	0.21	0.04	0.01	1.21	0.23	0.08	1.21	0.23	0.08	0.11	0.02	0.01
CNA500	0.21	0.04	0.01	0.21	0.04	0.01	1.21	0.23	0.08	1.21	0.23	0.08	0.11	0.02	0.01
OH-6A (HELICOPTER)	0.39	0.07	0.02	0.39	0.07	0.02	2.19	0.41	0.14	2.19	0.41	0.14	0.19	0.04	0.01
B-737-300	0.11	0.02	0.01	0.11	0.02	0.01	0.63	0.12	0.04	0.63	0.12	0.04	0.06	0.01	0.00
B-747-200	0.01	0.00	0.00	0.01	0.00	0.00	0.07	0.01	0.00	0.07	0.01	0.00	0.01	0.00	0.00
B-757	0.11	0.02	0.01	0.11	0.02	0.01	0.63	0.12	0.04	0.63	0.12	0.04	0.06	0.01	0.00
B-767-200	0.01	0.00	0.00	0.01	0.00	0.00	0.07	0.01	0.00	0.07	0.01	0.00	0.01	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	20.3	4.9	2.0	20.3	4.9	2.0	115.1	27.5	11.3	115.1	27.5	11.3	10.2	2.4	1.0

Type of Aircraft	35L2 & 35R2			21L3 & 21R3			21L4 & 21R4			35L3 & 35R3		
	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night	Day	Eve.	Night
SAAB 340	1.18	0.30	0.11	13.36	3.43	1.26	13.36	3.43	1.26	1.18	0.30	0.11
DHC-6	1.18	0.30	0.11	13.36	3.43	1.26	13.36	3.43	1.26	1.18	0.30	0.11
DC-9-30	1.14	0.29	0.11	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
B-737-300	1.14	0.29	0.11	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
BAE-146	1.14	0.29	0.11	12.92	3.32	1.22	12.92	3.32	1.22	1.14	0.29	0.11
MD-80	1.06	0.27	0.10	12.06	3.10	1.14	12.06	3.10	1.14	1.06	0.27	0.10
B-757	0.76	0.20	0.07	8.62	2.21	0.82	8.62	2.21	0.82	0.76	0.20	0.07
B-757	0.03	0.00	0.12	0.35	0.00	1.40	0.35	0.00	1.40	0.03	0.00	0.12
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	1.51	0.28	0.09	17.14	3.21	1.07	17.14	3.21	1.07	1.51	0.28	0.09
BEC58P	0.48	0.09	0.03	5.45	1.02	0.34	5.45	1.02	0.34	0.48	0.09	0.03
CNA441	0.11	0.02	0.01	1.21	0.23	0.08	1.21	0.23	0.08	0.11	0.02	0.01
CNA500	0.11	0.02	0.01	1.21	0.23	0.08	1.21	0.23	0.08	0.11	0.02	0.01
OH-6A (HELICOPTER)	0.19	0.04	0.01	2.19	0.41	0.14	2.19	0.41	0.14	0.19	0.04	0.01
B-737-300	0.06	0.01	0.00	0.63	0.12	0.04	0.63	0.12	0.04	0.06	0.01	0.00
B-747-200	0.01	0.00	0.00	0.07	0.01	0.00	0.07	0.01	0.00	0.01	0.00	0.00
B-757	0.06	0.01	0.00	0.63	0.12	0.04	0.63	0.12	0.04	0.06	0.01	0.00
B-767-200	0.01	0.00	0.00	0.07	0.01	0.00	0.07	0.01	0.00	0.01	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	10.2	2.4	1.0	115.1	27.5	11.3	115.1	27.5	11.3	10.2	2.4	1.0

Table J-10. Flight Track Assignments, International Airport Alternative 2013

Type of Aircraft	Day	03A1 Eve.	Night	Day	03A2 Eve.	Night	Day	17A1 Eve.	Night	Day	17A2 Eve.	Night	Day	35A1 Eve.	Night
B-747	7.98	2.05	0.76	7.98	2.05	0.76	145.24	11.61	4.28	145.24	11.61	4.28	3.99	1.02	0.38
DC-9	3.19	0.82	0.30	3.19	0.82	0.30	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
B-737	3.19	0.82	0.30	3.19	0.82	0.30	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
MD-80	2.99	0.77	0.28	2.99	0.77	0.28	16.96	4.36	1.60	16.96	4.36	1.60	1.50	0.38	0.14
B-727	2.99	0.77	0.28	2.99	0.77	0.28	16.96	4.36	1.60	16.96	4.36	1.60	1.50	0.38	0.14
B-757	9.98	2.56	0.94	9.98	2.56	0.94	56.55	14.52	5.35	56.55	14.52	5.35	4.99	1.28	0.47
B-767	3.19	0.82	0.30	3.19	0.82	0.30	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
DC-10	3.19	0.82	0.30	3.19	0.82	0.30	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
L-1011	3.19	0.82	0.30	3.19	0.82	0.30	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
B-757	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	6.89	1.29	0.43	6.89	1.29	0.43	139.03	7.32	2.44	139.03	7.32	2.44	3.44	0.65	0.22
BEC58P	2.37	0.44	0.15	2.37	0.44	0.15	13.41	2.52	0.84	13.41	2.52	0.84	1.18	0.22	0.07
CNA441	0.56	0.11	0.04	0.56	0.11	0.04	3.19	0.60	0.20	3.19	0.60	0.20	0.28	0.05	0.02
CNA500	0.56	0.11	0.04	0.56	0.11	0.04	3.19	0.60	0.20	3.19	0.60	0.20	0.28	0.05	0.02
OH-6A (HELICOPTER)	0.90	0.17	0.06	0.90	0.17	0.06	5.12	0.96	0.32	5.12	0.96	0.32	0.45	0.08	0.03
B-737-300	0.15	0.03	0.01	0.15	0.03	0.01	0.84	0.16	0.05	0.84	0.16	0.05	0.07	0.01	0.00
B-747-200	0.02	0.00	0.00	0.02	0.00	0.00	0.09	0.02	0.01	0.09	0.02	0.01	0.01	0.00	0.00
B-757	0.15	0.03	0.01	0.15	0.03	0.01	0.84	0.16	0.05	0.84	0.16	0.05	0.07	0.01	0.00
B-767-200	0.02	0.00	0.00	0.02	0.00	0.00	0.09	0.02	0.01	0.09	0.02	0.01	0.01	0.00	0.00
B-747	3.99	1.02	0.38	145.24	11.61	4.28	145.24	11.61	4.28	145.24	11.61	4.28	3.99	1.02	0.38
DC-9	1.60	0.41	0.15	18.09	4.65	1.71	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
B-737	1.60	0.41	0.15	18.09	4.65	1.71	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
MD-80	1.50	0.38	0.14	16.96	4.36	1.60	16.96	4.36	1.60	16.96	4.36	1.60	1.50	0.38	0.14
B-727	1.50	0.38	0.14	16.96	4.36	1.60	16.96	4.36	1.60	16.96	4.36	1.60	1.50	0.38	0.14
B-757	4.99	1.28	0.47	56.55	14.52	5.35	56.55	14.52	5.35	56.55	14.52	5.35	4.99	1.28	0.47
B-767	1.60	0.41	0.15	18.09	4.65	1.71	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
DC-10	1.60	0.41	0.15	18.09	4.65	1.71	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
L-1011	1.60	0.41	0.15	18.09	4.65	1.71	18.09	4.65	1.71	18.09	4.65	1.71	1.60	0.41	0.15
B-757	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CONSEP	3.44	0.65	0.22	139.03	7.32	2.44	139.03	7.32	2.44	139.03	7.32	2.44	3.44	0.65	0.22
BEC58P	1.18	0.22	0.07	13.41	2.52	0.84	13.41	2.52	0.84	13.41	2.52	0.84	1.18	0.22	0.07
CNA441	0.28	0.05	0.02	3.19	0.60	0.20	3.19	0.60	0.20	3.19	0.60	0.20	0.28	0.05	0.02
CNA500	0.28	0.05	0.02	3.19	0.60	0.20	3.19	0.60	0.20	3.19	0.60	0.20	0.28	0.05	0.02
OH-6A (HELICOPTER)	0.45	0.08	0.03	5.12	0.96	0.32	5.12	0.96	0.32	5.12	0.96	0.32	0.45	0.08	0.03
B-737-300	0.07	0.01	0.00	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.07	0.01	0.00
B-747-200	0.01	0.00	0.00	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.01	0.00	0.00
B-757	0.07	0.01	0.00	0.84	0.16	0.05	0.84	0.16	0.05	0.84	0.16	0.05	0.07	0.01	0.00
B-767-200	0.01	0.00	0.00	0.09	0.02	0.01	0.09	0.02	0.01	0.09	0.02	0.01	0.01	0.00	0.00

TABLE J-11a

SCENARIO: International Airport Alternative

MODELED YEAR: 1993

Type of Aircraft	# of operations	% for category	Total for category
Commercial (Air Carrier)			0
None	-	-	
Commercial (Commuter)			0
None	-	-	
General Aviation			0
None	-	-	
Aircraft Maintenance			0
None	-	-	
Airline Training			0
None	-	-	
TOTAL			0

TABLE J-11b

SCENARIO: International Airport Alternative  
 MODELED YEAR: 1998

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Passenger)</b>			80,000
SAAB-340	12,400	15.50	
DHC-6	12,400	15.50	
DC-9	12,000	15.00	
B-737	12,000	15.00	
BAE-146	12,000	15.00	
MD-80	11,200	14.00	
B-757	8,000	10.00	
<b>Air Cargo</b>			2,000
DC-9-30	1,000	50.00	
B-727-200	1,000	50.00	
<b>General Aviation</b>			19,400
COMSEP (composite single engine piston)	12,800	65.98	
Beech Baron 58P (twin engine piston)	3,700	19.07	
Cessna Conquest II (twin engine turboprop)	750	3.87	
Cessna Citation I (twin engine turbojet)	750	3.87	
Hughes 500D (helicopter)	1,400	7.22	
<b>Aircraft Maintenance</b>			2,000
B-737-300	900	45.00	
B-747-200	100	5.00	
B-757-200	900	45.00	
B-767-200	100	5.00	
<b>TOTAL</b>			103,400

TABLE J-11c

SCENARIO: International Airport Alternative  
 MODELED YEAR: 2003

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Passenger)</b>			200,000
SAAB-340	31,000	15.50	
DHC-6	31,000	15.50	
DC-9-30	30,000	15.00	
B-737-300	30,000	15.00	
BAE-146	30,000	15.00	
MD-80	28,000	14.00	
B-757-200	20,000	10.00	
<b>Air Cargo</b>			3,000
B-757-200	3,000	100.00	
<b>General Aviation</b>			58,400
COMSEP (composite single engine piston)	36,800	63.01	
Beech Baron 58P (twin engine piston)	11,700	20.03	
Cessna Conquest II (twin engine turboprop)	2,600	4.45	
Cessna Citation I (twin engine turbojet)	2,600	4.45	
Hughes 500D (helicopter)	4,700	8.05	
<b>Aircraft Maintenance</b>			3,000
B-737-300	1,350	45.00	
B-747-200	150	5.00	
B-757-200	1,350	45.00	
B-767-200	150	5.00	
<b>TOTAL</b>			264,400

TABLE J-11d

SCENARIO: International Airport Alternative  
 MODELED YEAR: 2013

Type of Aircraft	# of operations	% for category	Total for category
<b>Commercial (Air Passenger)</b>			<b>525,000</b>
B-747-200	105,000	20.00	
B-737-300	42,000	8.00	
MD-80	39,375	7.57	
MD-83	81,375	15.57	
B-757-200	131,250	25.00	
B-767-200	42,000	8.00	
DC-10	42,000	8.00	
L-1011	42,000	8.00	
<b>Air Cargo</b>			<b>4,000</b>
B-757-200	4,000	100.00	
<b>General Aviation</b>			<b>137,300</b>
COMSEP (composite single engine piston)	83,800	61.03	
Beech Baron 58P (twin engine piston)	28,800	20.98	
Cessna Conquest II (twin engine turboprop)	6,850	4.99	
Cessna Citation I (twin engine turbojet)	6,850	4.99	
Hughes 500D (helicopter)	11,000	8.01	
<b>Aircraft Maintenance</b>			<b>4,000</b>
B-737-300	1,800	45.00	
B-747-200	200	5.00	
B-757-200	1,800	45.00	
B-767-200	200	5.00	
<b>TOTAL</b>			<b>670,300</b>

**TABLE J-12. Stage lengths assumed for International Airport Alternative air operations.**

	<b>1993</b>	<b>1998</b>	<b>2003</b>	<b>2013</b>
<b>Commercial</b>	•	1	3	3
<b>Commuter</b>	•	1	1	1
<b>General Aviation</b>	•	1	1	1
<b>Aircraft Maintenance</b>	•	1	1	1
<b>Air Cargo</b>	•	3	3	3

\* No operations of this category of aircraft are proposed for this model year.

**Note:** Stage lengths correspond to the distance flown in increments of 500 miles. Thus, a stage length of 1 corresponds to flights between 1 and 500 miles, a stage length of 2 corresponds to flights between 500 and 1,000 miles, etc. The maximum stage length, for modeling purposes, is stage 7, which corresponds to distances greater than 3,500 miles.

The DNL contours for the proposed flight operations are shown in Figures 4.4-16 through 4.4-18 for 1998, 2003, and 2013, respectively. The contours around the north/south runways (17R and 17L/35R and 35L) are due primarily to arrivals. The break in the contours near the north end of the runways is an artifact of the model, since it stops considering noise from landing aircraft at the point where they touch down. Runups for the maintenance operations are evident in the circular noise contours south of the proposed terminal. The contours to the southwest of runways 04L and 04R/21L and 21R are due primarily to departing aircraft.

Surface traffic data used in the modeling were developed from the project traffic study and presented in Section 3.2.4, Transportation, and Table J-1.

## **1.5 COMMERCIAL AIRPORT WITH RESIDENTIAL ALTERNATIVE**

This alternative is similar to the Proposed Action and has the same flight track assignments (see Tables J-2 through J-5), aviation operations (see Table J-6), and same stage lengths (see Table J-7) as the Proposed Action. Flight tracks for the Commercial Airport with Residential Alternative are shown in Figures 4.4-7 through 4.4-9.

The airport area would encompass the airfield- and aviation-support land-use categories. The presence of a large residential area, which encompasses 39 percent of the based-owned property, is the main difference between this alternative and the Proposed Action.

Surface traffic data used in the modeling were developed from the project traffic study presented in Section 3.2.4, Transportation, and Table J-1.

## **1.6 GENERAL AVIATION CENTER ALTERNATIVE**

The General Aviation Center Alternative for the reuse of George AFB would result in the development of a general aviation airport. Primary components of the action include both general aviation operations and maintenance operations.

Airport layout would remain unchanged. The existing northeast-southwest Runway (03/21) would remain unchanged and would be used primarily for takeoffs. The north-south Runway (17/35) would remain unchanged and would be used primarily for landings. The flight track assignments assumed in our modeling are included in Tables J-13 through J-16 for the General Aviation Alternative. The flight tracks for this alternative are the same as those for the Proposed Action (see Figures 4.4-7 through 4.4-9).

The fleet mix and annual flight operations for each of the modeled years are contained in Table J-17. The day-night breakdown of operations was assumed to be 95 percent daytime and 5 percent nighttime for all operations. All operations were assumed to be stage length 1.

**Table J-13. Flight Track Assignments, General Aviation Center Alternative 1993**

[illegible][illegible]

### Table J-14. Flight Track Assignments, General Aviation Center Alternative 1998

[illegible]

**Table J-15. Flight Track Assignments, General Aviation Center Alternative 2003**

Type of Aircraft	03A1 Day	03A1 Night	07A2 Eve.	07A2 Night   Day	17A1 Eve.	17A2 Night   Day	35A1 Eve.	35A1 Night   Day	35A2 Eve.	35A2 Night   Day	17D1 Eve.	17D1 Night   Day	35C1 Eve.	35C1 Night   Day	17D2 Eve.	17D2 Night
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	0.00	0.00	0.00													

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[illegible]

TABLE J-17a

SCENARIO: General Aviation Center Alternative  
 MODELED YEAR: 1993

Type of Aircraft	# of operations	% for category	Total for category
General Aviation			12,000
COMSEP (composite single engine piston)	10,800	90	
CNA441 (twin engine turboprop)	1,200	10	
Aircraft Maintenance			500
B-737-300	415	83	
B-747-200	85	17	
TOTAL			12,500

TABLE J-17b

SCENARIO: General Aviation Center Alternative  
 MODELED YEAR: 1998

Type of Aircraft	# of operations	% for category	Total for category
General Aviation			27,000
COMSEP (composite single engine piston)	24,300	90	
CNA441 (twin engine turboprop)	2,700	10	
Aircraft Maintenance			1,600
B-737-300	1,328	83	
B-747-200	272	17	
TOTAL			28,600

TABLE J-17c

SCENARIO: General Aviation Center Alternative  
 MODELED YEAR: 2003

Type of Aircraft	# of operations	% for category	Total for category
General Aviation			35,000
COMSEP (composite single engine piston)	31,500	90	
CNA441 (twin engine turboprop)	3,500	10	
Aircraft Maintenance			2,600
B-737-300	2,158	83	
B-747-200	442	17	
TOTAL			37,600

TABLE J-17d

SCENARIO: General Aviation Center Alternative  
 MODELED YEAR: 2013

Type of Aircraft	# of operations	% for category	Total for category
General Aviation			50,000
COMSEP (composite single engine piston)	45,000	90	
CNA441 (twin engine turboprop)	5,000	10	
Aircraft Maintenance			4,000
B-737-300	3,320	83	
B-747-200	680	17	
TOTAL			54,000

Engine runup operations were assumed to occur at hush houses. Runups are estimated to occur 0.312 times during each 24-hour period during the day (7 a.m. to 10 p.m.) for 1993 (divided between two runup pads and two aircraft types), increasing to 2.5 times per 24-hour period for 2013. It is assumed that Boeing 737-300 and 757-200 type engines would be operated. For the runup operations, the engines would run for 20 minutes at idle power and 5 minutes at departure power. Although hush houses are currently located at these runup locations, the size of the structures was assumed to be too small for commercial jet airliners. It was, therefore, assumed that no noise suppression facilities would be available. The aircraft were assumed to have a heading of 300° for pad HH1 and 170° for pad HH2.

General aviation operations were divided into single engine propeller and twin engine turboprop aircraft.

It is assumed that 20 percent of the single-engine aircraft (COMSEP) operations would be touch-and-go operations and these would be performed only during daytime hours.

A standard 3° glide slope and the takeoff profiles provided by the FAA's Integrated Noise Model Database 3.9 were assumed.

The DNL contours for the proposed flight operations are shown in Figures 4.4-19 through 4.4-22 for 1993, 1998, 2003, and 2013, respectively. The contours are due primarily to aircraft maintenance runup operations.

Surface traffic data used in the modeling were developed from the project traffic study presented in Section 3.2.4, Transportation, and are shown in Table J-1.

## **1.7 NON-AVIATION ALTERNATIVE**

This alternative includes only non-aviation land uses. The focal point of the Non-Aviation Alternative is a large residential land-use zone. The existing airfield will remain inactive and the open areas around the airfield and in the southern portion of the base will be used mainly for residential and recreational purposes. No off-base property would be acquired for this alternative. Other components of this alternative include industrial, educational, medical, and commercial areas. The total acreage of each land-use category is shown in Table 2.3-9.

Surface traffic data used in the modeling were developed from the project traffic study and are presented in Table J-1.

## **1.8 NO-ACTION ALTERNATIVE**

The disposal and reuse of George AFB under the No-Action Alternative would allow the Air Force to retain ownership of the property after closure. The property would be preserved and not put to further use (i.e., placed in a condition intended to minimize deterioration). A disposal management team

would be provided to ensure base security and maintain the grounds and physical assets, including the existing utilities and structures. There would be no military activities/missions performed on the property.

## 2.0 NOISE METRICS

Noise, used in this context, refers to sound pressure variations audible to the ear. The audibility of a sound depends on the amplitude and frequency of the sound and the individual's capability to hear the sound. Whether the sound is judged as noise depends largely on the listener's current activity and attitude toward the sound source, as well as the amplitude and frequency of the sound. The range in sound pressures, which the human ear can comfortably detect, encompasses a wide range of amplitudes, typically a factor larger than a million. To obtain convenient measurements and sensitivities at extremely low- and high-sound pressures, sound is measured in units of the decibel (dB). The dB is a dimensionless unit related to the logarithm of the ratio of the measured level to a reference level. Table 3.4-7 presents typical dB levels for various sources in urban environments.

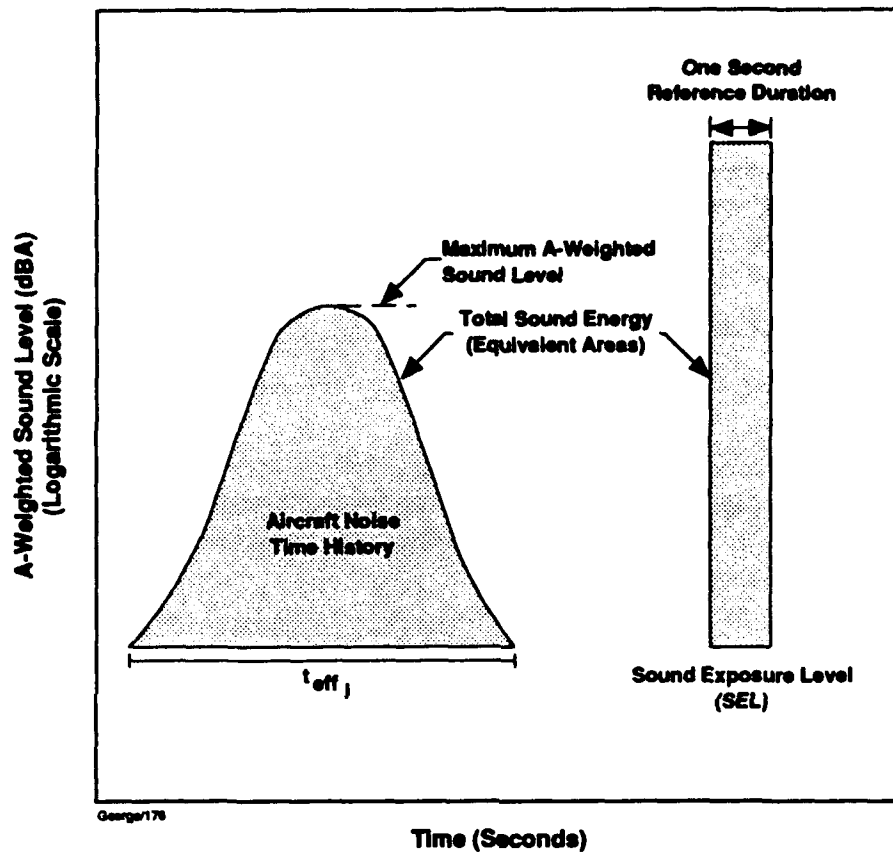
Because the logarithmic nature of the decibel unit, sound levels cannot be added or subtracted directly. However, the following shortcut method can be used to combine sound levels:

<u>Difference between two dB values</u>	<u>Add the following to the higher level</u>
0 to 1	3
2 to 3	2
4 to 9	1
10 or more	0

The ear is not equally sensitive at all frequencies of sound. At low frequencies, characterized as a rumble or roar, the ear is not very sensitive while at higher frequencies, characterized as a screech or a whine, the ear is most sensitive. The A-weighted sound level denoted as dBA was developed to measure and report sound levels in a way which would more closely approach how sound is perceived. All sound levels reported herein are in terms of A-weighted sound levels.

Environmental sound levels typically vary with time. This is especially true for areas near airports where noise levels will increase substantially as the aircraft passes overhead and diminish to typical community levels. Both the Department of Defense and the FAA have specified three noise metrics to describe aviation noise.

**Maximum Sound Level:** The highest A-weighted sound level observed during a single noise event no matter how long the sound may persist (Figure J-1).



**Sound Exposure  
Level (SEL)**

**Figure J-1**

**Sound Exposure Level (SEL):** The SEL value represents the A-weighted sound level integrated over the entire duration of the event and referenced to a duration of 1 second. Hence, it normalizes the event to a 1-second event. Typically most events (aircraft flyover) last longer than 1 second and the SEL value will be higher than the maximum sound level of the event. Figure J-1 indicates the relationship between the maximum sound level and SEL.

**Day-Night Average Sound Level (DNL):** The DNL is the 24-hour energy average A-weighted sound level with a 10-dB weighting added to those levels occurring between 10 p.m. and 7 a.m. the following morning. The 10-dB weighting is a penalty representing the added intrusiveness of noise during normal sleeping hours. DNL is used to determine land-use compatibility to noise from aircraft and surface traffic.

### **3.0 NOISE MODELS**

#### **3.1 SURFACE TRAFFIC**

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Noise Model was used to predict surface traffic noise. The model uses traffic volumes, vehicular mix, traffic speed, traffic distribution, and roadway length to estimate traffic noise levels.

#### **3.2 AIR TRAFFIC**

The FAA-approved Noise Exposure Model (NOISEMAP), Version 6.0, was used to predict aircraft noise levels. Since the early 1970s, the Department of Defense has been actively developing and refining the NOISEMAP program and its associated data base. The NOISEMAP computer program is a comprehensive set of computer routines for calculating noise contours from aircraft flight and ground runup operations, using aircraft unique noise data for both fixed- and rotary-wing aircraft. The program requires specific input data, consisting of runway layout, aircraft types, number of operations, flight tracks, and noise performance data to compute a grid of DNL values at uniform intervals. The grid is then processed by a contouring program which draws the contours at selected intervals. NOISEMAP was selected for use with the George AFB alternatives due to the model's ability to analyze engine maintenance run-ups and helicopter operations.

### **4.0 ASSESSMENT CRITERIA**

Criteria for assessing the effects of noise include annoyance, speech interference, sleep disturbance, noise-induced hearing loss, possible non-auditory health effects, reaction by animals, and land-use compatibility. These criteria are often developed using statistical methods. The validity of generalizing statistics devised from large populations are suspect when applied to small sample sizes as previously performed in the affected areas near

George AFB. Caution should be employed when interpreting the results of the impact analysis.

#### 4.1 ANNOYANCE DUE TO SUBSONIC AIRCRAFT NOISE

Noise-induced annoyance is an attitude; a covert mental process with both acoustic and non-acoustic determinants (Fidell et al., 1988). Noise-induced annoyance is not a behavior (such as a complaint, which may or may not be motivated by annoyance), nor is it a simple and immediate sensation like loudness, free of cognitive and emotional influences. Annoyance differs from loudness (the subjective magnitude of a sound) in several ways; most importantly, annoyance grows in direct proportion to the duration of exposure, whereas loudness is insensitive to signal duration beyond about a quarter of 1 second. Furthermore, while loudness is directly tied to ongoing exposure, the annoyance of multiple noise intrusions waxes and wanes over periods of weeks and months. Formal definitions of noise-induced annoyance tend to be either very broad or unhelpfully specific. Annoyance is perhaps most often defined as a generalized adverse attitude toward noise exposure. Noise annoyance is affected by many factors, including sleep and speech interference and task interruption.

"Community response" (a term often used to describe the annoyance of groups of people exposed to environmental noise sources in residential settings) also lacks precise meaning. In its common-sense meaning as the prevalence of individual annoyance within a geographic area, the term "community response" is something of a misnomer, since community-level processes are not at issue. Nonetheless, certain broad understandings of the term have been adopted for regulatory use.

The Federal Environmental Protection Agency (1973), for example, refers to "community response" as "what the community does about noise or sources." Such a definition of community response blurs the distinction between attitudes and behaviors. Since "what the community does" can range from nothing at all to complaints, protests, political debate, litigation, regulatory challenges, legislation, and even violent demonstration, this definition is undesirably broad.

Among the many non-acoustic factors, that some researchers have suggested affect the prevalence of annoyance in communities, are various attitudes toward noise sources and their operators (fear, malfeasance, distrust, etc.), socioeconomic levels of individuals, and economic dependence on operation of noise sources. The term response bias can be applied to all of these. The prevalence of annoyance in different communities may reflect differences in response bias as much as differences in exposure. Two communities, in which 20 percent of the residents describe themselves as highly annoyed, can have quite different noise exposures. For example, greater numbers of people in cohesive, stable and well-established communities composed of homogeneous, older, wealthier, and better-educated populations, may describe themselves as

annoyed by noise exposure as do people exposed to the same noise environments in the complementary sorts of communities.

In communities in which the prevalence of annoyance is affected primarily by noise, reductions in exposure can be expected to lead to reductions in prevalence of annoyance. In communities in which the prevalence of annoyance is controlled by non-acoustic factors such as odor, traffic congestion, etc., there may be little or no reduction in annoyance associated with reductions in exposure.

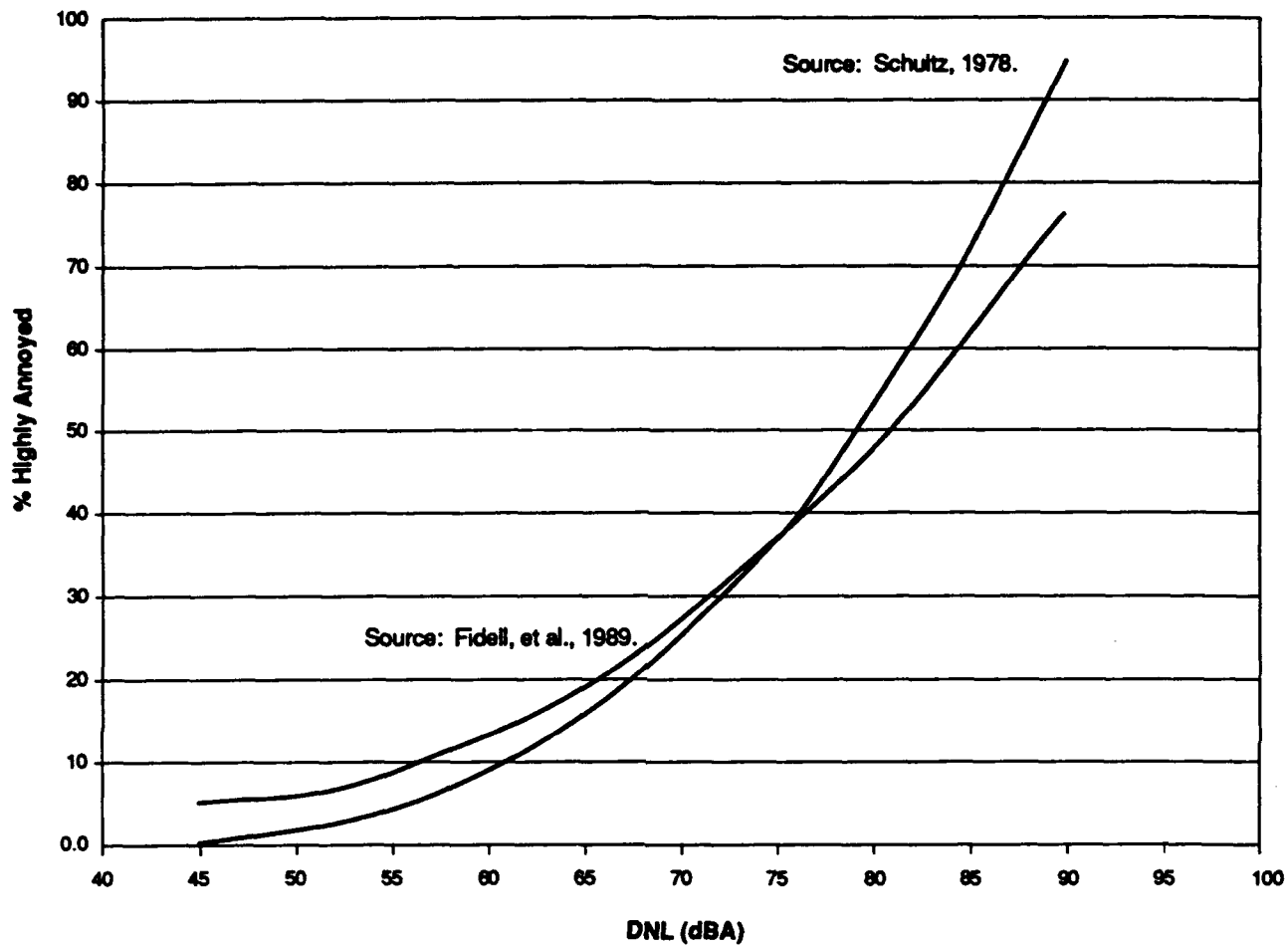
The intensity of community response to noise exposure may even, in some cases, be essentially independent of physical exposure. In the case of community response to actions, such as airport siting or scheduling of supersonic transport aircraft, vigorous reaction has been encountered at the mere threat of exposure, or minor increases in exposure.

Although the prevalence of annoyance in a community cannot be measured without soliciting opinions from residents concerning covert mental states, this does not imply that measurement of annoyance cannot be accomplished in an objective manner. The standard method for determining the prevalence of annoyance in noise-exposed communities is by attitudinal survey. Surveys generally solicit self-reports of annoyance through one or more questions of the form "How bothered or annoyed have you been by the noise of (noise source) over the last (time period)?" Respondents are typically constrained in structured interviews to select one of a number of response alternatives, often named categories such as "Not At All Annoyed," "Slightly Annoyed," "Moderately Annoyed," "Very Annoyed," or "Extremely Annoyed." Other means are sometimes used to infer the prevalence of annoyance from survey data (for example, by interpretation of responses to activity interference questions or by construction of elaborate composite indices), with varying degrees of face validity and success.

Predictions of the prevalence of annoyance in a community can be made by extrapolation from an empirical dosage-effect relationship. Based on the results of a number of sound surveys, Schultz (1978) developed a relationship between the percent of highly annoyed and DNL:

$$\% \text{ Highly Annoyed} = 0.8553 \text{ DNL} - 0.0401 \text{ DNL}^2 + 0.00047 \text{ DNL}^3$$

Note that this relationship should not be evaluated outside the range of DNL = 45 to 90 dB. Figure J-2 presents this equation graphically. Less than 15 to 20 percent of the population would be predicted to be annoyed by DNL values less than 65 dBA while over 37 percent of the population would be predicted to be annoyed from DNL values greater than 75 dBA.



**Community Noise Annoyance Curves**

**Figure J-2**

## **4.2 SPEECH INTERFERENCE AND RELATED EFFECTS DUE TO AIRCRAFT FLYOVER NOISE**

One of the ways that noise affects daily life is by preventing or impairing speech communication. In a noisy environment, understanding of speech is diminished by masking of speech signals by intruding noises. Speakers generally raise their voices or move closer to listeners to compensate for masking noise in face-to-face communications, thereby, increasing the level of speech at the listener's ear. As intruding noise levels rise higher and higher, speakers may cease talking altogether until conversation can be resumed at comfortable levels of vocal effort after noise intrusions end.

If the speech source is a radio or TV, the listener may increase the volume during a noise intrusion. If noise intrusions occur repeatedly, the listener may choose to set the volume at such a high level that the program material can be heard even during noise intrusions.

In addition to losing information contained in the masked speech material, the listener may lose concentration because of the interruptions and, thus, become annoyed. If the speech message is some type of warning, the consequences could be serious.

Current practice in quantification of the magnitude of speech interference and predicting speech intelligibility range from metrics based on A-weighted sound pressure levels of the intruding noise alone to more complex metrics requiring detailed spectral information about both speech and noise intrusions. There are other effects of the reduced intelligibility of speech caused by noise intrusions. For example, if the understanding of speech is interrupted, performance may be reduced, annoyance may increase, and learning may be impaired.

As the noise level of an environment increases, people automatically raise their voices, usually at the rate of 3 dB for each increase in background noise level. The effect does not take place, however, if the noise event were to rise to a high level very suddenly.

### **4.2.1 Speech Interference Effects From Time-Varying Noise**

Most research on speech interference due to noise has studied the case of steady-state noise. As a result, reviews and summaries of noise effects on speech communications concentrate on continuous or at least long duration noises (Miller, 1974). However, noise intrusions are not always continuous or long duration, but are frequently transient in nature. Transportation noise generates many such noise intrusions, consisting primarily of individual vehicle passbys, such as aircraft flyovers. Noise emitted by other vehicles (motorboats, snowmobiles, and off-highway vehicles) is also transient in nature.

It has been shown, at least for aircraft flyover noise, that accuracy of predictors of speech intelligibility are ranked in a similar fashion for both steady-state and

time-varying or transient sounds (Williams et al., 1971; Kryter & Williams, 1966). Of course, if one measures the noise of a flyover by the maximum A-level, intelligibility associated with this level would be higher than for a steady noise of the same value, simply because the level is less than the maximum for much of the duration of the flyover. One study (Williams et al., 1971) has actually shown that speech is more intelligible during those portions of the flyover that are equal in level to a steady sound of the same spectral shape.

#### **4.2.2 Other Effects of Noise Which Relate to Speech Intelligibility**

Aside from the direct effects of reduction in speech intelligibility, related effects may occur that tend to compound the loss of speech intelligibility itself.

##### **Learning**

One of the environments in which speech intelligibility plays a critical role is the classroom. In school classrooms exposed to aircraft flyover noise, speech becomes masked or the teacher stops talking altogether during an aircraft flyover (Crook, 1974). Pauses begin to occur at flyover levels as low as 60 dBA. Masking of the speech of teachers who do not pause starts at about the same level.

At levels of 75 dB, some masking occurs for 15 percent of the flyovers and increases to nearly 100 percent at 82 dB. Pauses occur for about 80 percent of the flyovers at this level. Since a marked increase in pauses and masking occurs at levels above 75 dB, this level is sometimes considered as one above which teaching is impaired due to disruption of speech communication. The effect that this may have on learning is unclear at this time. However, one study (Arnoult, 1986) could find no effect of noise on cognitive tasks from jet or helicopter noise over a range from 60 to 80 dB (A-level), even though intelligibility scores indicated a continuous decline starting at the 60 dB level. In a Japanese study (Ando, 1975) researchers failed to find differences in mental task performance among children from communities with different aircraft noise exposure.

Although there seems to be no proof that noise from aircraft flyovers affects learning, it is reported by Mills (1975) that children are not as able to understand speech in the presence of noise as are adults. It is hypothesized that part of the reason is due to the increased vocabulary which the adult can draw on as compared to the more limited vocabulary available to the young student. Also, when one is learning a language, it is more critical that all words be heard rather than only enough to attain 95 percent sentence intelligibility, which may be sufficient for general conversations. It was previously mentioned that at 75 dB maximum A-level for aircraft flyovers heard in a classroom masking of speech increases rapidly. However, it was also noted that pausing while flyovers occur and masking of speech for those teachers that continue to lecture during a flyover start at levels around 60 dB. This is comparable to measured speech

levels in the rear of classrooms which suggests 95 percent sentence intelligibility during the maximum level of the flyover (Pearsons & Bennett, 1974).

### **Annoyance**

Klatt (1969) studied the annoyance of speech interference by asking people to judge the annoyance of aircraft noise in the presence and absence of speech material. The speech material was composed of passages from newspaper and magazine articles. In addition to rating aircraft noise on an acceptability scale (unacceptable, barely acceptable, acceptable, and of no concern), the subjects were required to answer questions about the speech material. The voice level was considered to represent a raised-voice level (assumed to be 68 dB). In general, for the raised voice talker, the rating of barely acceptable was given to flyover noise levels of 73 to 76 dB. However, if the speech level was reduced, the rating of the aircraft tended more toward unacceptable. The results suggested that if the speech level were such that 95 percent or better sentence intelligibility was maintained, a barely acceptable rating or better acceptability rating could be expected. This result is in general agreement with the finding in schools that teachers pause or have their speech masked at levels above 75 dB (Crook, 1974).

Hall (1985) recently tried to relate various types of activity interference, related to speech and sleeping, to annoyance. The study found that there is a 50-percent chance that people's speech would be interfered with at a maximum A-level of 58 dB. This result appears to contradict the other results until one considers that the speech levels in the Klatt study and in the school environment of the Cook study are higher than the levels typically used in the home. Also, in a classroom situation, the teacher raises their voice for awhile to an even higher level as the flyover noise increases in intensity.

#### **4.2.3 Predicting Speech Intelligibility and Related Effects Due to Aircraft Flyover Noise**

It appears, from previous discussions, that when aircraft flyover noises exceed approximately 60 dB, speech communication may be interfered with by either masking or pausing on the part of the talker. Increasing the level of the flyover noise maximum to 80 dB would reduce the intelligibility to zero even if a loud voice is used for those who attempt to communicate.

The above refer to indoor levels. The same noises measured outdoors would be 17 to 27 dB higher than those levels for summer (windows open) and winter months (windows closed), respectively. These estimates were taken from EPA reviews of available data (EPA, 1974).

Levels of the aircraft noise produced inside dwellings and schools near the end of airport runways would, in many cases, exceed the levels of 60 dB inside (77 dB outside) homes and schools. The high speed and low altitude of the aircraft involved are unlikely to produce noise intrusions at these levels for

durations greater than a few seconds during each occurrence. During this time, speech intelligibility would be close to zero. However, since the total duration is so short, it is anticipated that only a few syllables would be lost. People may be annoyed, but the annoyance would not be due to loss in speech communication, but rather due to startle or sleep disturbance.

#### **4.3 SLEEP DISTURBANCE DUE TO NOISE**

The effects of noise on sleep have long been a concern of parties interested in assuring suitable residential noise environments. Early studies noted background levels in people's bedrooms in which sleep was apparently undisturbed by noise. Various levels between 25 to 50 dB (A-weighted) were observed to be associated with an absence of sleep disturbance. The bulk of the research on noise effects, on which the current relationship was based, was conducted in the 1970s. The tests were conducted in a laboratory environment in which awakening was measured either by a verbal response or by a button push, or by brain wave recordings (EEG) indicating stages of sleep (and awakening). Various types of noise were presented to the sleeping subjects throughout the night. These noises consisted primarily of transportation noises including those produced by aircraft, trucks, cars, and trains. The aircraft noises included both flyover and sonic booms. Synthetic noises, including laboratory-generated sounds consisting of shaped noises and tones, were also studied.

Lukas (1975) and Goldstein and Lukas (1980) both reviewed data available in the 1970s on sleep-stage changes and waking effects of different levels of noise. Since no known health effects were associated with either waking or sleep-stage changes, either measure was potentially useful as a metric of sleep disturbance. However, since waking, unlike sleep-stage changes, is simple to quantify, it is often selected as the metric for estimating the effects of noise on sleep. These two reviews showed great variability in the percentage of people awakened by exposure to noise. The variability is not merely random error, but reflects individual differences in adaptation, habituation, and interpretation of the meaning of the sounds. Such factors cannot be estimated from purely acoustic measures in noise exposure.

Another major review, by Griefahn and Muzet (1978), provided similar information concerning effects of noise on waking. However, Griefahn and Muzet's results suggested less waking for a given level of noise than predicted by Lukas.

A recent review (Pearsons et al., 1989) of literature related to sleep disturbance demonstrated that the relationship, based exclusively on laboratory studies, predicts greater sleep disturbance than likely to occur in a real-life situation in which some adaptation has occurred. The prediction relationships developed in this review should not be considered to yield precise estimates of sleep disturbance because of the great variability in the data sets from which they were developed. The relationships include only the duration and level

components of "noise exposure." Increasing the precision of prediction would depend on quantification of some of the non-acoustic factors. Further, a recent review of field as well as laboratory studies suggests that habituation may reduce the effect of noise on sleep (Pearsons et al., 1989).

Noise must penetrate the home to disturb sleep. Interior noise levels are lower than exterior levels due to the attenuation of the sound energy by the structure. The amount of attenuation provided by the building is dependent on the type of construction and whether the windows are open or closed. The Environmental Protection Agency (EPA) recommends the use of attenuation factors of 17 dB (decibels) for summertime (windows open) and 27 dB for wintertime (windows closed) conditions.

In conclusion, the scientific literature does not provide a consensus on sleep disturbance. There is no recognized criteria or standard which provides guidance to assess sleep disturbance due to noise.

#### **4.4 NOISE-INDUCED HEARING LOSS**

Hearing loss is measured in decibels and refers to the permanent auditory threshold shift of an individual's hearing in their ear. Auditory threshold refers to the minimum acoustic signal that evokes a auditory sensation, i.e., the quietest sound a person can hear. When a threshold shift occurs a person's hearing is not as sensitive as before and the minimum sound that a person can hear must be louder. Threshold shift, which naturally occurs with age, is called presbycusis. Exposure to high levels of sound can cause temporary and permanent threshold shifts usually referred to as noise-induced hearing loss. Permanent hearing loss is generally associated with destruction of the hair cells of the inner ear.

The EPA (EPA, 1974) and the Committee on Hearing, Bioacoustics, and Biomechanics (NAS, 1981) have addressed the risk of outdoor hearing loss. They have concluded that hearing loss would not be expected for people living outside the noise contour of 75 DNL. Several population studies near existing airports in the United States and the United Kingdom have shown that the possibility for permanent hearing loss in communities near intense commercial take-off and landing patterns is remote. A FAA-funded study compared the hearing of the population near the Los Angeles International Airport to that of the population in a quiet area away from aircraft noise (Parnel et al., 1972). A similar study was performed in the vicinity of London Heathrow Airport (Ward et al., 1972). Both studies concluded that there was no significant difference between the hearing loss of the two populations, and no correlation between the hearing level with the length of time people lived in the airport neighborhood.

#### **4.5 NON-AUDITORY HEALTH EFFECTS OF RESIDENTIAL AIRCRAFT NOISE**

Based on summaries of previous research in the field (Thompson, 1981; Thompson and Fidell, 1989), predictions of non-auditory health effects of aircraft noise cannot be made. A valid predictive procedure requires evidence for causality between aircraft noise exposure and adverse non-auditory health consequences, and knowledge of a quantitative relationship between amounts of noise exposure (dose) and specific health effects. Because results of studies of aircraft noise on health are equivocal, there is no sound scientific basis for making adequate risk assessments.

Alleged non-auditory health consequences of aircraft noise exposure which have been studied include birth defects, low birth weight, psychological illness, cancer, stroke, hypertension, sudden cardiac death, myocardial infarction, and cardiac arrhythmias. Of these, hypertension is the most biologically plausible effect of noise exposure. Noise appears to cause many of the same biochemical and physiological reactions, including temporary elevation of blood pressure, as do many other environmental stressors. These temporary increases in blood pressure are believed to lead to a gradual resetting of the body's blood pressure control system. Over a period of years, permanent hypertension may develop (Peterson et al., 1984).

Studies of residential aircraft noise have produced contradictory results. Early investigations indicated that hypertension was from 2 to 4 times higher in areas near airports than in areas located away from airports (Karagodina et al., 1969). Although Meecham and Shaw (1988) continue to report excessive cardiovascular mortality among individuals 75 years or older living near the Los Angeles Airport, their findings cannot be replicated (Frerichs et al., 1980). In fact, noise exposure increased over the years while there was a decline in all cause, age-adjusted death rates and inconsistent changes in age-adjusted cardiovascular, hypertension, and cerebrovascular disease rates.

Studies, which have been controlled for a multiple of factors, have shown no, or a very weak, association between noise exposure and non-auditory health effects. This observation is applicable for studies of occupational and traffic noise, as well as for aircraft noise exposure. In contrast to the early reports of 2- to 6-fold increases in hypertension due to high industrial noise (Thompson et al., 1989), the more rigorously controlled studies of Talbott et al. (1985) and van Dijk et al. (1987) show no association between hypertension and prolonged exposure to high levels of occupational noise.

Studies of occupational noise exposure effects have consistently shown that the effect of noise, if any, is so modest that it is difficult to demonstrate in epidemiologic studies. The reported mean differences in blood pressure between high and low noise exposed groups range from 0 to 10 millimeters of mercury (mm Hg).

In the aggregate, studies indicate no association between street traffic noise and blood pressure or other cardiovascular changes. Two large prospective collaborative studies of heart disease are of particular interest. To date, cross-sectional data from these cohorts offer contradictory results. Data from one cohort show a slight increase in mean systolic blood pressure (2.4 mm Hg) in the noisiest compared to the quietest area, while data from the second cohort show the lowest mean systolic blood pressure and highest HDL cholesterol (lipoprotein protective of heart disease) for men in the noisiest area (Babisch & Gallacher, 1990). These effects of traffic noise on blood pressure and blood lipids were more pronounced in men who were also exposed to high levels of noise at work.

It is clear from the foregoing that the current state of technical knowledge cannot support inference of a causal or consistent relationship, nor a quantitative dose-response, between residential aircraft noise exposure and health consequences. Thus, no technical means are available for predicting extra-auditory health effects of noise exposure. This conclusion cannot be construed as evidence of no effect of residential aircraft noise exposure on non-auditory health. Current findings, taken in sum, indicate only that further rigorous studies are needed.

#### **4.6 DOMESTIC ANIMALS AND WILDLIFE**

A recent study was published on the effects of aircraft noise on domestic animals which provided a review of the literature and a review of 209 claims pertinent to aircraft noise over a period spanning 32 years (Bowles et al., 1990). Studies since the late 1950s were motivated both by public concerns about what was, at that time, a relatively novel technology, supersonic flight, and by claims leveled against the U. S. Air Force for damage to farm animals by very low-level subsonic overflights. Since that time, over 40 studies of aircraft noise and sonic booms, both in the U.S. and overseas, have addressed acute effects, including effects of startle responses (sheep, horses, cattle, fowl) and effects on reproduction and growth (sheep, cattle, fowl, swine), parental behaviors (fowl, mink), milk letdown (dairy cattle, dairy goats, swine), and egg production.

The literature on the effects of noise on domestic animals is not large, and most of the studies have focused on the relation between dosages of continuous noise and effects. Chronic noises are not a good model for aircraft noise, which lasts only a few seconds, but which is often very startling. The review of claims suggest that a major source of loss was panics induced in naive animals.

Aircraft noise may have effects because it might trigger a startle response, a sequence of physiological and behavioral events that once helped animals avoid predators. There are good dose-response relations describing the tendency to startle to various levels of noise, and the effect of habituation on the startle response.

The link between startles and serious effects, i.e., effects on productivity, is less certain. An effect will be defined in this document as any change in a domestic animal that alters its economic value, including changes in body weight or weight gain, numbers of young produced, weight of young produced, fertility, milk production, general health, longevity, or tractability. At this point, changes in productivity are usually considered an adequate indirect measure of changes in well-being, at least until objective legal guidelines are provided.

Recent focus on the effects on production runs counter to a trend in the literature towards measuring the relation between noise and physiological effects, such as changes in corticosteroid levels and measures of immune system function. As a result, it is difficult to determine the relation between dosages of noise and serious effects using only physiological measures. The experimental literature is inadequate to document long-term or subtle effects resulting from exposure to aircraft noise.

#### **4.7 LAND USE COMPATIBILITY GUIDELINES**

Widespread concern about the noise impacts of aircraft noise essentially began in 1950, with the major introduction of high-power jet aircraft into military service. The concern about noise impacts in the communities around airbases, and within the airbases themselves, led the Air Force to conduct major investigations into the noise properties of jets, methods of noise control for test operations, and the effects of noise from aircraft operations in communities surrounding airbases. These studies established an operational framework of investigation and identified the basic parameters affecting community response to noise. These studies also resulted in the first detailed procedures for estimating community response to aircraft noise (Stevens & Pietrasanta, 1957).

Although most attention was given to establishing methods of estimating residential community response to noise (and establishing the conditions of noise "acceptability" for residential use), community development involves a variety of land uses with varying sensitivity to noise. Thus, land planning, with respect to noise, requires the establishment of noise criteria for different land uses. This need was met with the initial development of aircraft noise compatibility guidelines for varied land uses in the mid-1960s (Bishop, 1964).

In residential areas, noise intrusions generate feelings of annoyance on the part of individuals. Increasing degrees of annoyance lead to the increasing potential for complaints and community actions (most typically, threats of legal actions, drafting of noise ordinances, etc.). Annoyance is based largely upon noise interference with speech communication, listening to radio and TV, and sleep. Annoyance in the home may also be based upon dislike of "outside" intrusions of noise even though no specific task is interrupted.

Residential land-use guidelines have developed from consideration of two related factors:

- Accumulated case-history experience of noise complaints and community actions near civil and military airports

- Relationships between environmental noise levels and degrees of annoyance (largely derived from social surveys in a number of communities).

In the establishment of land-use guidelines for other land uses, the prime consideration is task interference. For many land uses, this translates into the degree of speech interference, after taking into consideration the importance of speech communication and the presence of non-aircraft noise sources related directly to the specific land use considered. For some noise-sensitive land uses where any detectable noise signals which rise above the ambient noise are unwanted (such as music halls), detectability may be the criterion rather than speech interference.

A final factor to be considered in all land uses involving indoor activities is the degree of noise insulation provided by the building structures. The land-use guideline limits for unrestricted development within a specific land use assume noise insulation properties provided by typical commercial building construction. The detailed land-use guidelines may also define a range of higher noise exposure where construction or development can be undertaken, provided a specified amount of noise insulation is included in the buildings. Special noise studies, undertaken by architectural or engineering specialists, may be needed to define the special noise insulation requirements for construction in these guideline ranges.

Estimates of total noise exposure resulting from aircraft operations, as expressed in DNL values, can be interpreted in terms of the probable effect on land uses. Suggested compatibility guidelines for evaluating land uses in aircraft noise exposure areas were originally developed by the FAA as presented in Section 3.4.4, Noise. Part 150 of the FAA regulations prescribe the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs. It prescribes the use of yearly DNL in the evaluation of airport noise environments. It also identifies those land use types which are normally compatible with various levels of noise exposure. Compatible or incompatible land use is determined by comparing the predicted or measured DNL level at a site with the values given in Table 3.4-8. The guidelines reflect the statistical variability of the responses of large groups of people to noise. Therefore, any particular level might not accurately assess an individual's perception of an actual noise environment.

While the FAA guidelines specifically apply to aircraft noise, it should be noted that DNL is also used to describe the noise environment due to other community noise sources, including motor vehicles and railroads. The use of DNL is endorsed by the scientific community to assess land-use compatibility as it pertains to noise (ANSI, 1980). Hence, the land-use guidelines presented by the FAA can also be used to assess the noise impact from community noise sources other than aircraft.

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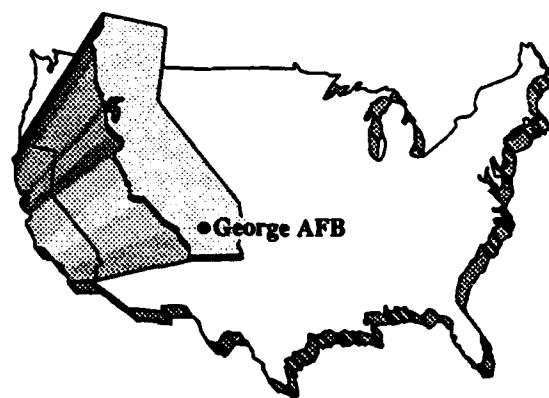
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## APPENDIX K

**APPENDIX K**  
**THREATENED, ENDANGERED, AND OTHER**  
**SPECIES OF CONCERN OCCURRING ON OR NEAR**  
**GEORGE AFB**

## APPENDIX K

### THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN OCCURRING ON OR NEAR GEORGE AFB

Table K-1 summarizes information on listed and candidate species, and additional information for many of these species is presented herein:

**Desert Tortoise.** The Mojave population of the desert tortoise (*Gopherus agassizii*) was listed as a federally endangered species in 1989 by emergency rule and as a threatened species by final rule on April 2, 1990. The desert tortoise requires firm but not hard ground (such as the banks of washes or compacted sand) for construction of burrows. Mojave desert areas, with moderate shrub cover and relatively free of human disturbance, are probable habitats for the tortoise. George AFB is located in an area considered to support low desert tortoise densities. A Bureau of Land Management (BLM) map of tortoise density shows the northern third of the base to be in a geographic area capable of supporting 20 to 50 tortoises per square mile (Western Mojave Land Tenure Adjustment Project, 1988). A recent biological survey (Science Applications International Corporation, 1990) has shown that the desert tortoise inhabits portions of George AFB and its vicinity (see Figure 3.4-5). A small pocket (304 acres) in the northeast corner of the base (and extending outward past the base boundary) is expected to have high densities of desert tortoises (50 to 100/square mile). Low densities were found in 730 acres, and the remainder of the area surveyed (1,130 acres) contained no tortoises. Areas that have not been surveyed and could have low densities of desert tortoise, as well as areas that are not expected to contain any tortoises, are also shown in Figure 3.4-5.

**Least Bell's Vireo.** The least Bell's vireo (*Vireo belli pusillus*) is federally and state-listed as endangered. It requires dense riparian woodland for foraging, breeding, and protection and is not expected within the project area because of the lack of suitable habitat. It has declined as a result of regional destruction of lowland riparian habitat and brood parasitism by cowbirds.

**Mohave Tui Chub.** The Mohave tui chub is the only native fish known in the Mojave River drainage. It was once common in the river and its tributaries, but introduction of the arroyo chub (*Gila orcutti*) led to elimination of the species from the river by 1967 through competition and hybridization. Beginning in 1969, Mohave tui chubs from Lake Tuendae have been transplanted in various locations to establish refugia populations (St. Amant, 1971). Currently, only four populations of the species are known to exist, none of which are within the ROI. Planned recovery efforts for this species presently do not include reintroductions near George AFB.

**Swainson's Hawk.** Swainson's hawk (*Buteo swainsoni*) is listed as threatened by the state of California. The species favors desert grasslands and agricultural

areas for forage, and requires nearby scattered trees for nesting. Occurrences within the ROI are possible.

**Western Yellow-billed Cuckoo.** The western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is listed as endangered by the state of California. The main reason for its decline has been the elimination of the dense riparian groves that it requires as habitat. It is not likely to be found in the project area because the Mojave River riparian zone does not provide suitable habitat.

**Mohave Ground Squirrel.** The Mohave ground squirrel (*Spermophilus mohavensis*) is listed by the state of California as threatened and is a Category 2 candidate for federal listing. It inhabits open communities of creosote bush scrub, Joshua tree woodland, and shadscale. The squirrel occurs within the project area and has been reported near Oro Grande and Victorville.

**Alkali Mariposa Lily.** The alkali mariposa lily (*Calochortus striatus*) is not expected to be found in the project area, due to the lack of suitable meadow or seep habitat within the base vicinity.

**Barstow Woolly Sunflower.** The base is within the range of and provides suitable habitat for the Barstow woolly sunflower (*Eriophyllum mohavense*), though most known occurrences of the species are east rather than south of Barstow. The species possibly occurs on the base.

**Desert Cymopterus.** The desert cymopterus (*Cymopterus deserticola*) has been reported a few miles east and southeast of the base. Suitable habitat occurs on the base, and the species is likely to be found within the ROI.

**Mojave Monkeyflower.** The Mojave monkeyflower (*Mimulus mohavensis*) is known to occur within the Helendale quadrangle, which is within 1 mile of the base boundary. Its presence within the ROI is very likely.

**California Red-legged Frog.** The California red-legged frog (*Rana aurora draytoni*) is a Category 2 candidate for federal listing. It is generally found near water, inhabiting humid forests, woodlands, and streamsides. It has been reportedly found "in the vicinity" and may occur within the planning area (City of Adelanto, 1990).

**Southwestern Pond Turtle.** The southwestern pond turtle (*Clemmys marmorata pallida*) is a thoroughly aquatic turtle that is a Category 2 candidate for federal listing. Preferred habitat is quiet waters, such as pools with aquatic vegetation (Stebbins, 1954). Individuals generally hibernate under detritus away from the immediate stream floodplain in winter, although they can be active year-round where winters are mild. The eggs are laid in an earthen cavity excavated by the female in sunny areas near the margin of permanent waters, on grassy hillsides, or in open fields. Most eggs are laid from June to mid-July (URS Consultants, 1988). Pond turtles are present at many locations along the

Mojave River and may occur within the ROI as a resident in perennial pools or as a transient visitor when flow is present in the river.

**San Diego Coast Horned Lizard.** The San Diego coast horned lizard (*Phrynosoma coronatum blainvillei*) is a Category 2 candidate for federal listing. It has been observed 1 mile west of Oro Grande. It is likely that the species occurs throughout the project area.

**Willow Flycatcher.** The willow flycatcher (*Empidonax traillii*) is a candidate for listing as endangered by the state of California. Although a fairly common spring and fall transient, the species has been nearly extirpated as a breeder in southern California due to destruction of riparian habitat and cowbird pressure. The species was recorded near Victorville in 1921, but is unlikely to be presently found in the project area because of a major population decline and lack of high-quality habitat.

Table K-2 shows additional sensitive species that may occur in the project area (species not state or federally listed as threatened or endangered and not yet candidates for such listing).

**Table K-1. Threatened and Endangered Species  
Potentially Occurring at George AFB and Vicinity**

Page 1 of 3

Name	Status <sup>1</sup>			Habitat and Distribution
	Federal	State	CNPS	
<b>Plants</b>				
Alkali Mariposa Lily ( <i>Calochortus striatus</i> )	C2	-	1B	Occurs in alkaline meadows and springs between 2,500-4,500 feet, in the Mojave Desert near the northern base of the San Gabriel and San Bernardino mountains. Not expected as suitable habitat does not occur in base vicinity.
Desert Cymopterus ( <i>Cymopterus deserticola</i> )	C2	-	1B	Occurs in sandy soil in creosote bush scrub and Joshua tree woodland, from the vicinity of Victorville west to Kramer and Muroc. Known from Apple Valley South and Apple Valley North quadrangles, which are adjacent to the Victorville quad (which contains much of George AFB).
Barstow Woolly Sunflower ( <i>Eriophyllum mohavense</i> )	C2	-	1B	Occurs in sandy or rocky places between 2,000-3,000 feet in creosote bush scrub. According to Munz, the species occurs only within 30 miles of Barstow.
Mojave Monkeyflower ( <i>Mimulus mohavensis</i> )	C2	-	1B	Occurs in sandy or gravelly soil between 2,000-3,000 feet in creosote bush scrub and Joshua tree woodland in the Barstow-Victorville-Ord Mountains area. Known to occur within the Helendale quadrangle, which is within one mile of base limits.
<b>Gastropods</b>				
Victorville Shoulderband ( <i>Helminthoglypta mohaveana</i> )	C2	-	-	Aestivates among and under loose rocks on dry hillsides. Reported on rocky outcrops along Mojave River banks above Victorville and Oro Grande.
<b>Fish</b>				
Mohave Tui Chub ( <i>Gila bicolor mohavensis</i> )	E	E	-	Once common in the Mojave River but reportedly extirpated by 1967. Four known populations occur outside the ROI.

**Table K-1. Threatened and Endangered Species  
Potentially Occurring at George AFB and Vicinity**

Page 2 of 3

Name	Status <sup>1</sup>			Habitat and Distribution
	Federal	State	CNPS	
<b>Amphibians</b>				
California Red-Legged Frog ( <i>Rana aurora draytoni</i> )	C2	CSC	-	Primarily a pond frog, it inhabits humid forests, woodlands, grasslands, and streambanks. Generally found near water. May be found within project area.
<b>Reptiles</b>				
Desert Tortoise ( <i>Gopherus agassizi</i> )	T	T	-	Frequently ranges in creosote bush scrub, desert washes, and dunes. Found throughout the base and vicinity.
Southwestern Pond Turtle ( <i>Clemmys marmorata pallida</i> )	C2	CSC	-	A thoroughly aquatic turtle that inhabits ponds, marshes, rivers, streams, etc. May inhabit portions of the Mojave River within the ROI.
San Diego Coast Horned Lizard ( <i>Phrynosoma coronatum blainvilliei</i> )	C2	CSC	-	Found in open sandy areas within chaparral or coastal sage scrub, and also in dry washes and along roads. Species has been reported west of Oro Grande, within a mile of the base boundary.
<b>Birds</b>				
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	E	E	-	Requires dense riparian woodland vegetation for foraging, breeding, and protection. Not expected in the project area because the Mojave River riparian zone does not provide suitable habitat.
Swainson's Hawk ( <i>Buteo swainsoni</i> )	-	T	-	Requires scattered trees (even Joshua trees) surrounded by desert grassland or agricultural areas. Has not been reported within the ROI, though suitable habitat is available.
Western Yellow-Billed Cuckoo ( <i>Coccyzus americanus occidentalis</i> )	-	E	-	Requires dense riparian groves, particularly with a thick understory of willow or mesquite. Not likely to be found within the project where the riparian zone does not provide suitable habitat.

**Table K-1. Threatened and Endangered Species  
Potentially Occurring at George AFB and Vicinity**

Page 3 of 3

Name	Status <sup>1</sup>			Habitat and Distribution
	Federal	State	CNPS	
Birds (Cont'd)				
Willow Flycatcher ( <i>Empidonax traillii</i> )	FSS	CE	-	Requires riparian woodlands for nesting, particularly willow thickets. Recorded in 1921 near Victorville. Unlikely to be found within the project area because of low numbers in known populations, and lack of high-quality habitat.
Mammals				
Mohave Ground Squirrel ( <i>Spermophilus mohavensis</i> )	C2	T	-	Inhabits open areas of creosote bush scrub, Joshua tree woodland, or shadscale. The fruit of the Joshua tree is its favored food. Occurs within the base ROI, near Oro Grande, and north of Victorville.

- Notes: 1. Federal Status (determined by U.S. Fish and Wildlife Service):
- E Endangered; in danger of extinction throughout all or a significant portion of its range.
  - T Threatened; likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
  - C2 Information indicates that proposal to list these species is possibly appropriate, though more data on vulnerability and threat are necessary.
  - C3c Previously considered as a candidate, but too widespread or not threatened at this time.
  - FSS Federal (BLM and USFS) sensitive species.

**State Status**

- E Listed as endangered by the State of California
- T Listed as threatened by the State of California.
- CE Candidate for listing as endangered by the State of California.
- CSC California Department of Fish and Game "species of special concern."

**California Native Plant Society (CNPS) Status**

- 1B Rare, threatened, or endangered in California and elsewhere.
- 4 Plant of limited distribution-a watch list.

**Table K-2. Additional Species of Special Concern  
Potentially Occurring at George AFB and Vicinity**

Page 1 of 2

Name	Status <sup>1</sup>			Habitat and Distribution
	Federal	State	CNPS	
<b>Plants</b>				
Booth's Evening Primrose ( <i>Camissonia boothii</i> ssp. <i>boothii</i> )	-	-	4	Occurs in Joshua tree and pinyon-juniper woodlands, known within San Bernardino County. Unlikely near George AFB due to lack of suitable habitat.
Mojave Buckwheat ( <i>Chorizanthe spinosa</i> )	C3c	-	4	Occurs in dry sandy and gravelly places between 2,500-3,500 feet in creosote bush scrub and Joshua tree woodland in the western Mojave Desert. George AFB has suitable habitat.
<b>Birds</b>				
Bendire's Thrasher ( <i>Toxostoma bendirei</i> )	-	CSC	-	Very local summer resident of the Mojave Desert, primarily in east San Bernardino County. Breeds primarily in Joshua tree woodlands, with scattered shrubs and patches of grassland. Possible but unlikely near George AFB.
Cooper's Hawk ( <i>Accipiter cooperi</i> )	-	CSC	-	Occupies a variety of woodland and semi-open habitats. Breeds mainly in riparian groves and mountain canyons. Known to breed in desert oases. Once reported near Victorville (1921), but is unlikely to occur within the project area due to disturbances in riparian habitat.
Golden Eagle ( <i>Aquila chrysaetos</i> )	-	CSC	-	Occurs over a large range, favoring grasslands, brushlands, deserts, savannas, open coniferous forests, and montane valleys. Known to have nests north of the ROI, and expected to forage over the site. Fully protected in California by CDFG code.
LeConte's Thrasher ( <i>Toxostoma lecontei</i> )	-	CSC	-	Inhabits sparse desert scrub (creosote, saltbrush, etc.), especially around small washes. Also occupies Joshua tree woodland. Has been sighted on George AFB, near Victorville, and at several locations near Adelanto.

**Table K-2. Additional Species of Special Concern  
Potentially Occurring at George AFB and Vicinity**

Page 2 of 2

Name	Status <sup>1</sup>			Habitat and Distribution
	Federal	State	CNPS	
<b>Birds (Cont'd)</b>				
Prairie Falcon <i>(Falco mexicanus)</i>	—	CSC	—	Birds of open regions that prefer desert scrub and grasslands. For nesting, they require cliffs or rocky outcroppings adjacent to open foraging areas. An active nest site has been reported within the ROI, 5 miles south of Helendale on the west bank of the Mojave River.
Summer Tanager <i>(Piranga rubra)</i>	—	CSC	—	Nests in mature riparian groves dominated by cottonwoods. Has been reported along the Mojave River in the planning area (3-5 miles northwest of Victorville).
Yellow-Breasted Chat <i>(Icteria virens)</i>	—	CSC	—	Summer resident of riparian thickets of the lowlands and lower portions of foothill canyons. Has been observed in degraded riparian habitat at Mojave Narrows Regional Park, southeast of Victorville.
Burrowing Owl <i>(Athene cunicularia)</i>	—	CSC	—	Resides in open lowland areas, including open desert scrub. Active burrows have been found on George AFB.
Black-Tailed Gnatcatcher <i>(Poliophtila melanura lucida)</i>	—	CSC	—	Favors desert washes with dense growths of mesquite, palo verde, ironwood, and acacia. Also occurs sparingly in other desert scrub habitats, including creosote. Suitable, though not high-quality habitat exists on site.
Short-eared Owl <i>(Asio flammeus)</i>	—	CSC	—	Winter resident and potential occasional breeder in the region. Forages over wetlands, farmlands, and other open habitats. Has been observed at George AFB.

Notes: 1. Federal Status (determined by U.S. Fish and Wildlife Service):  
C3c Previously considered as a candidate, but too widespread or not threatened at this time.  
FSS Federal (BLM and USFS) sensitive species.

**State Status**

CSC California Department of Fish and Game "species of special concern."

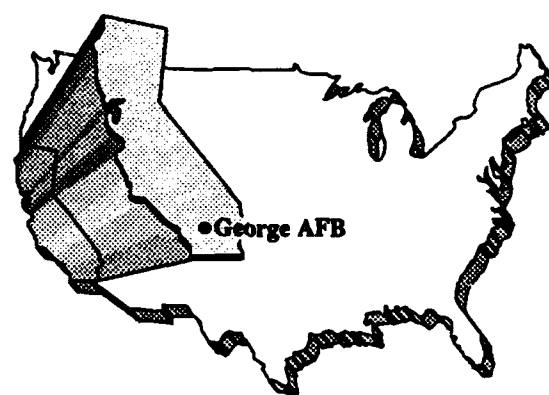
**California Native Plant Society (CNPS) Status**

4 Plants of limited distribution-a watch list.

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## APPENDIX L

**APPENDIX L**  
**AIR QUALITY**

TABLE L-1. EMISSIONS INVENTORY FOR OXIDES OF NITROGEN, (Tons / Day)

SOURCE	PROPOSED ACTION				INTERNATIONAL AIRPORT				COMMERCIAL AIRPORT				GENERAL AVIATION				NON-AVIATION			
	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013
Aircraft Flying Operations (a)	1.01	1.15	1.41	1.51	0.00	1.52	4.13	35.76	1.01	1.15	1.41	1.51	0.00	0.04	0.07	0.11	0.00	0.00	0.00	0.00
Aircraft Ground Operations (b)	0.00	0.02	0.02	0.03	0.00	0.04	0.10	0.24	0.00	0.02	0.02	0.03	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00
Aircraft Ground Equipment (c)	0.04	0.19	0.23	0.27	0.00	0.37	0.95	2.39	0.04	0.19	0.23	0.27	0.00	0.10	0.13	0.19	0.00	0.00	0.00	0.00
Fuel Combustion (d)	0.00	0.28	0.52	0.95	0.00	1.11	1.12	1.33	0.00	0.17	0.27	0.33	0.00	0.20	0.24	0.20	0.00	0.11	0.18	0.29
Waste Burning (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solvent Use (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Storage and Transfer (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Processes (d)	0.00	0.61	1.08	2.07	0.00	0.00	2.34	2.91	0.00	0.38	0.56	0.72	0.00	0.43	0.40	0.44	0.00	0.24	0.37	0.64
Miscellaneous Processes (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
On-Road Vehicles (d)	0.00	0.55	0.98	1.19	0.00	2.19	2.11	2.54	0.00	0.34	0.51	0.63	0.00	0.39	0.45	0.38	0.00	0.21	0.33	0.56
Off-Road Vehicles (e)	0.00	0.58	1.04	1.77	0.00	2.28	2.23	2.49	0.00	0.36	0.54	0.62	0.00	0.41	0.34	0.37	0.00	0.22	0.35	0.55
TOTAL	1.05	3.38	5.28	7.79	0.00	7.51	12.98	47.67	1.05	2.61	3.54	4.54	0.00	1.58	1.75	1.71	0.00	0.78	1.23	2.04

TABLE L-2. EMISSIONS INVENTORY FOR REACTIVE ORGANIC GASES, (Tons / Day)

SOURCE	PROPOSED ACTION				INTERNATIONAL AIRPORT				COMMERCIAL AIRPORT				GENERAL AVIATION				NON-AVIATION			
	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013
Aircraft Flying Operations (a)	0.32	0.39	0.40	0.43	0.00	0.16	0.51	48.28	0.32	0.39	0.40	0.43	0.00	0.03	0.04	0.06	0.00	0.00	0.00	0.00
Aircraft Ground Operations (b)	0.00	0.02	0.03	0.03	0.00	0.04	0.11	0.27	0.00	0.02	0.03	0.03	0.00	0.01	0.02	0.02	0.00	0.00	0.00	0.00
Aircraft Ground Equipment (c)	0.00	0.02	0.02	0.03	0.00	0.03	0.09	0.22	0.00	0.02	0.02	0.03	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00
Fuel Combustion (d)	0.00	0.05	0.08	0.14	0.00	0.18	0.18	0.19	0.00	0.03	0.04	0.05	0.00	0.03	0.04	0.03	0.00	0.02	0.03	0.04
Waste Burning (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solvent Use (d)	0.00	0.18	0.34	0.69	0.00	0.69	0.72	0.97	0.00	0.11	0.17	0.24	0.00	0.12	0.13	0.15	0.00	0.07	0.11	0.21
Petroleum Storage and Transfer (d)	0.00	0.05	0.10	0.21	0.00	0.21	0.22	0.29	0.00	0.03	0.05	0.07	0.00	0.00	0.04	0.04	0.00	0.02	0.03	0.06
Industrial Processes (d)	0.00	0.52	0.11	0.10	0.00	0.21	0.24	0.14	0.00	0.03	0.06	0.04	0.00	0.04	0.02	0.02	0.00	0.02	0.04	0.03
Miscellaneous Processes (d)	0.00	0.14	0.27	0.52	0.00	0.56	0.57	0.73	0.00	0.09	0.14	0.18	0.00	0.10	0.00	0.11	0.00	0.05	0.09	0.16
On-Road Vehicles (e)	0.00	0.16	0.25	0.20	0.00	0.62	0.53	0.44	0.00	0.10	0.13	0.11	0.00	0.11	0.11	0.07	0.00	0.06	0.08	0.10
Off-Road Vehicles (d)	0.00	0.21	0.38	0.70	0.00	0.82	0.82	0.97	0.00	0.13	0.19	0.24	0.00	0.15	0.13	0.15	0.00	0.08	0.13	0.21
TOTAL	0.33	1.74	1.98	3.05	0.00	3.53	3.99	52.51	0.33	0.95	1.23	1.42	0.00	0.60	0.54	0.66	0.00	0.32	0.51	0.81

TABLE L-3. EMISSIONS INVENTORY FOR PM10, (Tons / Day)

SOURCE	PROPOSED ACTION				INTERNATIONAL AIRPORT				COMMERCIAL AIRPORT				GENERAL AVIATION				NON-AVIATION			
	1993	1996	2003	2013	1993	1996	2003	2013	1993	1996	2003	2013	1993	1996	2003	2013	1993	1996	2003	2013
Aircraft Flying Operations (a)	0.03	0.04	0.03	0.04	0.00	0.01	0.04	2.05	0.03	0.04	0.03	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Aircraft Ground Operations (b)	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aerospace Ground Equipment (c)	0.00	0.01	0.02	0.02	0.00	0.03	0.07	0.18	0.00	0.01	0.02	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fuel Combustion (d)	0.00	0.02	0.04	0.06	0.00	0.01	0.08	0.12	0.00	0.01	0.02	0.03	0.00	0.02	0.02	0.02	0.00	0.01	0.01	0.03
Waste Burning (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solvent Use (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Storage and Transfer (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Processes (d)	0.00	0.49	1.02	1.60	0.00	0.19	2.18	3.41	0.00	0.31	0.52	0.85	0.00	0.34	0.47	0.51	0.00	0.19	0.34	0.75
Miscellaneous Processes (e)	0.00	2.87	5.66	8.91	0.00	1.07	12.20	18.90	0.00	1.68	2.91	4.72	0.00	1.91	2.61	2.85	0.00	1.04	1.91	4.19
On-Road Vehicles (e)	0.00	0.14	0.27	0.41	0.00	0.55	0.58	0.87	0.00	0.09	0.14	0.22	0.00	0.10	0.12	0.13	0.00	0.05	0.09	0.19
Off-Road Vehicles (d)	0.00	0.06	0.13	0.21	0.00	0.03	0.28	0.44	0.00	0.04	0.07	0.11	0.00	0.04	0.06	0.07	0.00	0.02	0.04	0.10
TOTAL	0.03	3.63	7.17	11.25	0.00	1.89	15.44	25.99	0.03	2.18	3.71	5.98	0.00	2.43	3.30	3.60	0.00	1.31	2.40	5.25

**TABLE L-4. EMISSIONS INVENTORY FOR OXIDES OF SULFUR, (Tons / Day)**

SOURCE	PROPOSED ACTION				INTERNATIONAL AIRPORT				COMMERCIAL AIRPORT				GENERAL AVIATION				NON-AVIATION			
	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013
Aircraft Flying Operations (a)	0.06	0.08	0.09	0.10	0.00	0.11	0.30	3.90	0.06	0.08	0.09	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Aircraft Ground Operations (b)	0.00	0.00	0.01	0.01	0.00	0.01	0.02	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aircraft Ground Equipment (c)	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Combustion (d)	0.00	0.19	0.39	0.62	0.00	0.07	0.84	1.32	0.00	0.12	0.20	0.33	0.00	0.13	0.18	0.20	0.00	0.07	0.13	0.29
Waste Burning (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solvent Use (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Storage and Transfer (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Processes (d)	0.00	0.01	0.01	0.02	0.00	0.00	0.81	0.65	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00
Miscellaneous Processes (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-Road Vehicles (e)	0.00	0.05	0.09	0.14	0.00	0.18	0.19	0.29	0.00	0.03	0.05	0.07	0.00	0.03	0.04	0.04	0.00	0.02	0.03	0.06
Off-Road Vehicles (d)	0.00	0.12	0.25	0.39	0.00	0.05	0.55	0.85	0.00	0.08	0.13	0.21	0.00	0.08	0.12	0.13	0.00	0.05	0.09	0.19
TOTAL	0.06	0.45	0.85	1.28	0.00	0.42	2.72	6.49	0.06	0.32	0.48	0.73	0.00	0.25	0.35	0.39	0.00	0.14	0.25	0.55

TABLE L-5. EMISSIONS INVENTORY FOR CARBON MONOXIDE, (Tons / Day)

SOURCE	PROPOSED ACTION				INTERNATIONAL AIRPORT				COMMERCIAL AIRPORT				GENERAL AVIATION				NON-AVIATION			
	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013	1993	1998	2003	2013
Aircraft Flight Operations (a)	0.95	1.98	2.15	2.91	0.00	1.64	4.30	147.64	0.95	1.98	2.15	2.91	0.00	0.30	0.41	0.60	0.00	0.00	0.00	0.00
Aircraft Ground Operations (b)	0.01	0.08	0.09	0.11	0.00	0.14	0.37	0.93	0.01	0.08	0.09	0.11	0.00	0.04	0.05	0.08	0.00	0.00	0.00	0.00
Aircraft Ground Equipment (c)	0.04	0.19	0.23	0.26	0.00	0.36	0.92	2.34	0.04	0.19	0.23	0.26	0.00	0.10	0.13	0.19	0.00	0.00	0.00	0.00
Fuel Combustion (d)	0.00	0.87	1.81	2.85	0.00	0.34	3.89	6.07	0.00	0.54	0.93	1.51	0.00	0.61	0.84	0.90	0.00	0.33	0.61	1.34
Waste Burning (d)	0.00	0.00	0.01	0.01	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Solvent Use (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Storage and Transfer (d)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Processes (d)	0.00	0.05	0.11	0.17	0.00	0.02	3.89	0.37	0.00	0.03	0.06	0.09	0.00	0.04	0.05	0.06	0.00	0.02	0.04	0.08
Miscellaneous Processes (d)	0.00	0.17	0.35	0.55	0.00	0.07	0.75	1.17	0.00	0.01	0.18	0.29	0.00	0.12	0.16	0.18	0.00	0.06	0.02	0.26
On-Road Vehicles (c)	0.00	2.63	5.01	7.51	0.00	10.38	10.78	16.01	0.00	1.62	2.58	3.98	0.00	1.85	2.31	2.40	0.00	1.01	1.69	3.53
Off-Road Vehicles (d)	0.00	0.94	1.96	3.09	0.00	0.37	4.22	6.58	0.00	0.60	1.01	1.64	0.00	0.66	0.91	0.99	0.00	0.36	0.66	1.45
TOTAL	1.00	6.90	11.71	17.46	0.00	13.32	29.14	181.13	1.00	5.05	7.23	10.80	0.00	3.72	4.86	5.38	0.00	1.78	3.02	6.67

**THE FOLLOWING NOTES APPLY TO TABLES G1 THROUGH G5**

- (a) Emissions are predicted by the EDMS model based on projected types of aircraft and estimated frequency of flight operations for each aircraft type.
- (b) Emissions are based on 1988 aircraft ground operations data from Table 3.4-5 (see section 3.4.3 in main body of the text) times the ratio of flight operations for this alternative to the number of 1988 flight operations.
- (c) Emissions are based on 1988 aerospace ground equipment data from Table 3.4-5 (see section 3.4.3 in main body of the text) times the ratio of flight operations for this alternative to the number of 1988 flight operations.
- (d) Emissions of PM<sub>10</sub>, SO<sub>x</sub>, and CO are based on the ratio of source emissions to population as defined by the 1987 inventory for the San Bernardino County portion of the SEDAB (ARB 1990a). Control measures implemented since 1987 are assumed to provide only minor emissions reductions for this source category. Emissions of HC and NO<sub>x</sub> are based on the ratios of source emissions to population as defined by the 1991 Draft Air Quality Attainment Plan emissions inventory forecasts (SBAPCD, 1991a). The planning inventory forecasts account for the effect of future control measures.
- (e) Emissions are calculated in a manner similar to that as described in footnote (d) above. In addition, a factor equal to the current year EMFAC7 emission rate divided by the year 1987 EMFAC7 emission rate (ARB, 1990b) is applied for PM<sub>10</sub>, SO<sub>x</sub>, and CO to account for changes in tailpipe emission exhaust standards. A similar factor is not used for HC and NO<sub>x</sub> because changes in exhaust standards are already accounted for in the planning emissions inventory forecasts.