

Appendix A

RESPONSES TO COMMENTS ON THE FEIS

The comments received by the FAA on the Final Environmental Impact Statement (FEIS) document are presented in this appendix. The comment period started on May 10, 2006 and continued for 45 days through July 3, 2006. Below, **Table A-1** shows the page number for each comment and the associated response.

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U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

Don Young
Chairman

James L. Oberstar
Ranking Democratic Member

Lloyd A. Jones, Chief of Staff
Elizabeth Megginson, Chief Counsel

June 30, 2006

David Heymsfeld, Democratic Chief of Staff

The Honorable Marion C. Blakey
Administrator
Federal Aviation Administration

c/o Mr. T.J. Stetz Regional Environmental Protection Specialist
Federal Aviation Administration
NW Mountain Region, Airports Division
1601 Lind Avenue, SW, Ste. 315
Renton, Washington 98055-4056

Re: Final Environmental Impact Statement (EIS) on St. George, Utah's Proposed
Replacement Municipal Airport

Dear Administrator Blakey:

I am writing at this time to comment on the Final Environmental Impact Statement (FEIS) on St. George, Utah's Proposed Replacement Municipal Airport. The National Park Service (NPS) is a cooperating Federal agency on the FEIS due to potential noise impact on Zion National Park. As indicated in your public notice, comments are welcome on the FEIS's newly updated, refined information, and analysis on air quality and noise, to include the audibility analysis.

It has come to my attention that the Federal Aviation Administration (FAA) at the request of the NPS, conducted extensive noise studies and analyses of potential noise impacts to Zion National Park and other potentially noise sensitive properties from the replacement airport. These studies are outlined in Appendices T through Y of the FEIS. They include additional noise modeling of high altitude aircraft operations as well as cumulative noise modeling for aircraft operations in the vicinity of Zion National Park. Some of the aircraft operations included in the noise modeling do not even serve St. George and others are operating at cruise altitudes.

The Honorable Marion C. Blakey
Final Environmental Impact Statement (EIS) on St. George, Utah's Proposed
Replacement Municipal Airport
Page 2 of 2
June 30, 2006

Much of the new found interest in potential noise impacts from aircraft operations in the vicinity of national parks is an outgrowth of efforts by the FAA and NPS to deal with safety and noise issues related to *air tour operations* over Grand Canyon National Park and other units of the NPS. These activities have been conducted at the direction of Congress pursuant to the Overflights Act and the National Parks Air Tour Management Act of 2000. These two Acts were intended to address the low altitude operations and repetitive noise generated by *air tours* over GCNP and other National Parks. Unfortunately, due to overzealous interpretations and faulty court decisions, these efforts have been greatly expanded to include all aircraft operations in the vicinity of a National Park, which can mean as much as several hundred miles away and at all altitudes.

I want to make it perfectly clear for the record, at no time did Congress intend for all aircraft operations within a block of airspace extending miles from the farthest edge of a National Park boundary and at all altitudes, including general aviation (GA), military and commercial overflight activities be included in the environmental impact analysis. Nor did Congress ever intend for NPS and FAA to consider aircraft flying at or near cruising altitude over any of our national parks. Lastly, Congress certainly never intended regulation and environmental impact analysis required by the two Acts for air tour operations be applied beyond air tour operations to include all Federal airport and airspace projects.

The potential negative impacts that such an approach would have on the National Airspace System (NAS) in terms of efficiency, safety, environmental impacts, and costs are enormous and quite frankly unacceptable. This is especially true if the approach is expanded to all units of the National Park System and other potentially noise sensitive properties. This is most certainly not the outcome either anticipated or intended when Congress enacted the Overflights Act.

Thank you for the opportunity to provide comments on the Final Environmental Impact Statement (EIS) on St. George, Utah's Proposed Replacement Municipal Airport. Your close consideration of these comments is appreciated as you issue your Record of Decision for St. George, and as you consider the potential environmental impacts of other FAA actions in the future.

Sincerely,



DON YOUNG
Chairman

Response to Don Young – U.S. House of Representatives, Committee on Transportation and Infrastructure (June 30, 2006)

Thank you for your interest in this project. We appreciate your comments and input regarding congressional intentions under the Overflights Act and the National Parks Air Tour Management Act of March 2000. We conducted this National Environmental Policy Act (NEPA) evaluation in response to a legal directive and public input. We believe it was necessary to conduct the extensive noise analysis presented in this EIS to fully and thoughtfully respond to the comments and concerns of the court, other Federal agencies, the public, and to satisfy NEPA and other legal requirements.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Arizona Strip Field Office
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In Reply Refer To:
1790

June 30, 2006

Mr. T.J. Stetz
Regional Environmental Protection Specialist
Federal Aviation Administration
Northwest Mountain Region
Airports Division
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Renton, Washington 98055-4056

Fax: (425) 227-1600

VIA FAX AND FIRST CLASS MAIL

RE: Final Environmental Impact Statement and DOT Section 4(f)/303(c) Evaluation for a Proposed Replacement Airport for the City of St. George, Utah

Dear Mr. Stetz:

The Arizona Strip District Office (ASDO) of the U.S. Bureau of Land Management (BLM) appreciates this opportunity to provide comments on the above-referenced Final Environmental Impact Statement (FEIS) and DOT Section 4(f)/303(c) Evaluation for the proposed St. George replacement airport.

At the outset, we appreciate the Federal Aviation Administration's (FAA) work in preparing and releasing this FEIS. As we have also previously indicated, we recognize the obvious constraints posed by the current St. George airport, and we support the need for this replacement airport.

However, we are disappointed with the FAA's response to the four paragraphs on page 2 of our previous November 8, 2005, letter on the DEIS. These four paragraphs of comments are reprinted in FEIS Appendix R with the identifier as comment #45. There is a line drawn to the right and down the side of these four paragraphs, and the FAA response is identified as number 1. In this response, the FAA says that our concerns about changes in future commercial air tours, and their potential effects on noise sensitive areas that BLM manages, "... are not reasonably foreseeable." We respectfully disagree with this conclusion.

We do not believe that this conclusion adequately addresses the “reasonably foreseeable scenario” described in our previous letter, as follows:

This scenario is the combination of overall increases in regional populations and aviation uses, greater market demand for scenic commercial air tours, combined with potential new limits or restrictions on commercial air tours over NPS units, especially Grand Canyon, Zion, and Bryce Canyon National Parks. We believe that the market demand for commercial air tours may continue to grow and that, as limits go into effect over NPS units, they may generate new or increased air tours over some BLM noise sensitive areas. Some of these areas have scenic qualities comparable to those found in the NPS units. The existing tour routes would not reflect these changes, nor would the projected future uses of these existing routes. In addition, the operator interviews would not because they do not yet know what any future limits would be, where they would occur, and when they would take effect.

While we concur with the FAA that the details of such changes, such as where specific new commercial tour routes may occur, are highly speculative at this time, we did not ask for or expect that level of analysis. Instead, we asked general questions about how these changes would be addressed. Because BLM noise sensitive areas are not covered by the National Parks Air Tour Management Act planning process used for National Park Service (NPS) noise sensitive areas, we continue to believe that these questions are timely and important. Unfortunately, the FAA did not answer these questions in its response. Our questions are re-printed below in the relevant paragraph for context:

We also do not know what level of NEPA analysis will be done in connection with these future commercial air tour decisions, nor what role the BLM ASDO may play in that analysis. While we recognize that this may be a very difficult scenario to analyze, we nevertheless request that the FAA do so to the best of its ability in the Final EIS. For example, a key question to be addressed would be: How could regional population and aviation use increases, new or expanded regional airports, greater market demand for commercial air tours, and future limits on commercial air tours over NPS units potentially cause indirect or cumulative effects on BLM noise sensitive areas subject to Section 4(f)/303(c)? A related question would be: To the extent that such indirect or cumulative effects are possible, how could the FAA mitigate these effects?

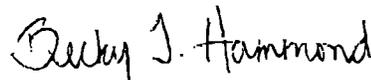
These questions gave the FAA an opportunity to address how changes in commercial air tour operations and routes in the coming years would be handled cooperatively between the FAA and land management agencies like the BLM ASDO to ensure effective implementation of Section 4(f)/303(c). As you are aware, BLM ASDO administers all or part of two national monuments and eight national wilderness areas which qualify under Section 4(f)/303(c) and could be affected by future air tour decisions. The FAA apparently chose to dismiss this opportunity with the rationale that there is little or no nexus in the summary statement that “St. George is used primarily as a refueling or lunch stop for air tours and is not currently, nor expected to be, an originating location of much air tour activity.” If this statement proves false in the coming years, and our scenario

proves accurate, we are concerned that compliance with Section 4(f)/303(c) may be much more difficult and controversial at that time.

In addition, we are somewhat confused by the FAA's second paragraph response. It says, in response to our question about potential low-level commercial air tour noise, that "There are no currently accepted standards to help define an "impact" or various levels of adverse impact." It goes on to say that the FAA and NPS are conducting scientific research to develop improved assessment methodology. While the FEIS contains voluminous data and analysis of higher-elevation flights over many noise sensitive areas (without finding any significant effects except at the Little Black Mountain ACEC), there is virtually no data or analysis on potential future effects of lower-elevation flights over most of these same areas, despite the fact that such effects would likely be much more significant. Again, we did not ask for or expect details on specific changes in commercial air tour routes, only guidance on what standard would be used to determine when these changes would trigger a constructive use under Section 4(f)/303(c) and what related monitoring would occur. Therefore, we are left without any guidance or timeline for when it may become available.

Please re-consider these comments as you prepare the Record of Decision (ROD). We would also appreciate receiving a copy of the ROD when it becomes available.

Sincerely,



for Scott R. Florence
District Manager

Response to Scott R. Florence – U.S. Department of the Interior, Bureau of Land Management, Arizona Strip Field Office (June 30, 2006)

The National Parks Air Tour Management Act of 2000 (the Act) applies to any person who conducts a commercial air tour operation over a unit of the National Park System, over tribal lands that are within or abutting a unit of the National Park System, or any area within one-half mile outside of a unit of the National Park System. The Act specifically excludes Grand Canyon National Park, tribal lands within or abutting Grand Canyon National Park, parks or tribal lands located in the state of Alaska, and flights conducted by a commercial air tour operator over or near the Lake Mead National Recreation Area solely as a transportation route to conduct an air tour over Grand Canyon National Park. The Act expressly prohibits commercial air tour operations over Rocky Mountain National Park, regardless of altitude.

The Act requires all persons operating or intending to operate commercial air tours to apply to the FAA for authority to conduct such activity. The Act further requires the FAA, in cooperation with the National Park Service (NPS), to develop an Air Tour Management Plan (ATMP) for each unit of the National Park System or tribal land that does not have a plan in effect at the time a person applies for authority to conduct such an operation. Therefore, it is the application by the commercial air tour operator that triggers the need for Federal action to develop an ATMP for a unit of the National Park System, or abutting tribal land. The FAA has received applications from commercial air tour operators to conduct commercial air tours for approximately 100 national park locations. More information on these locations and the ATMP program can be found at <http://www.atmp.faa.gov>.

Once the need has been triggered, the FAA and the NPS prioritize and schedule the development of the ATMP. Upon initiating the ATMP and associated National Environmental Policy Act (NEPA) study, the current conditions of the commercial air tour operations (i.e., aircraft fleet mix, routes, altitudes, times of day, times of year, etc.) are researched and defined. The FAA and the NPS then jointly formulate alternatives to the current conditions for consideration in further detailed analyses. Additionally, upon initiating the NEPA process, the FAA and the NPS work to identify all stakeholders that may have an interest in the project. Part of the initial data gathering phase includes research and identification of those properties within the boundaries of the park and the surrounding areas, which meet the provisions of Section 4(f)/303(c). The FAA will consult with BLM, as well as all appropriate Federal, state, and local officials having jurisdiction over the affected 4(f)/303(c) resources when determining whether project-related noise impacts would substantially impair the resources.

At the present time, the FAA does not have a schedule for development of ATMPs, however, NPS has repeatedly indicated that completing an ATMP for Zion National Park is a priority. Currently, air tours are authorized to fly over Zion National Park,

and their operations are limited to the annual number of flights that they conducted for the year prior to April 5, 2000, when the Overflights Act was signed by former President Clinton.

FAA Advisory Circular (AC) No. 91-36D, *Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas*, encourages pilots making VFR flights near noise-sensitive areas to fly not less than 2,000 feet above ground level (AGL), weather permitting. For the purpose of AC 91-36D, the ground level of noise-sensitive areas is defined to include the highest terrain within 2,000 feet AGL laterally of the route of flight, or the uppermost rim of a canyon or valley. This operational guidance would apply to any Bureau of Land Management (BLM) noise-sensitive areas.

Low elevation flights from the existing airport and the proposed replacement airport are addressed in **Chapter Six** of the FEIS. The information provided in that chapter addresses the noise levels associated with flights between the existing airport and the proposed replacement airport and other airports within the initial area of investigation. The cumulative noise effects from both high and low altitude flights are addressed in **Chapter Seven** of the FEIS. Low altitude noise level effects were derived largely from piston-powered (i.e., propeller) aircraft operating to and from the existing airport and the proposed replacement airport throughout the initial area of investigation and from air tour operators that fly within the same area, regardless of whether they operate at either the existing airport or the proposed replacement airport or not.

As described in the FEIS **Appendix R, Comments/Responses**, Comment #45, Response #1, changes in future commercial air tours are not reasonably foreseeable. It is difficult to reliably predict the location of future air tour traffic because air tour operators have not identified future routes and it is not yet known where air tour traffic may be permitted to fly. The EIS takes into account the forecast air tour operations for the initial area of investigation, however, the future location of air tours is too speculative to allow the FAA to predict where additional flights might occur if the areas currently open to air tours are prohibited to air tours in the future.

Substantial impairment under Section 4(f) is a specific standard relating to transportation use, and occurs only when the activities, features, or attributes, purposes and values of the resource that contribute to its significance or enjoyment are substantially diminished. With respect to aircraft noise, for example, noise must be at levels high enough to have negative consequences of a substantial nature that amount to a taking of a park or portion of a park for transportation purposes. This is a different standard under different statutory authority than "impairment" as determined by NPS under NPS statutory authority.



United States Department of the Interior



NATIONAL PARK SERVICE

Zion National Park
Springdale, Utah 84767

L7617 (ZION-RM&R)

June 29, 2006

Lowell H. Johnson, Manager
Airports Division
Federal Aviation Administration
Northwest Mountain Region
1601 Lind Avenue, SW
Renton, Washington 98055-4056

Dear Mr. Johnson:

We recognize and appreciate the effort that has gone into the analysis of potential impacts on Zion National Park (ZION) from the proposed St. George replacement airport. We are especially pleased with your willingness to proceed with actions to mitigate impacts from aircraft use over the park. We look forward to working with you and the City of St. George on the actions identified in Chapter 6 and further detailed in Appendix X-Monitored Noise Abatement Initiatives of the Final Environmental Impact Statement (FEIS) including:

- Pilot Education: The City of St. George and ZION will hold annual noise abatement pilot briefing with the intent to encourage pilots to avoid noise-sensitive areas.
- Commercial Operator Agreements: The City of St. George will include a recommendation in all commercial operator agreements that operators avoid ZION and Little Black Mountain.
- Printed Materials: The City of St. George, in coordination with the Bureau of Land Management (BLM) and the National Park Service (NPS) will prepare printed materials to help educate pilots about noise-sensitive areas.
- Monitoring: The City of St. George will meet annually with the Federal Aviation Administration (FAA), BLM and NPS to ensure these actions are undertaken and to monitor their effectiveness.
- FAA's Denver Airports District Office will participate in educational initiatives.

The NPS continues to recognize the need for a replacement airport facility for St. George and Washington County, Utah. Our aim as a cooperating agency for the EIS process has been to support and facilitate that end, while working diligently to protect the resources of the relevant units of the NPS for present and future generations.



Should you have any questions, please contact me or Kezia Nielsen, Environmental Protection Specialist, at 435-772-0211 or kezia_nielsen@nps.gov. Again, we appreciate the opportunity to work through these important issues with you and your staff.

Sincerely,



Jock F. Whitworth
Superintendent

cc:
Regional Director, IMRO
Manager, Natural Sounds Program Office, WASO
Environmental Compliance Officer, IMRO
GIS Team Leader/Overflights Coordinator, IMRO
Superintendent, BRCA
Superintendent, CEBR
Superintendent, GRCA
Superintendent, LAME
Superintendent, PARA
Superintendent, PISP

***Response to Jock F. Whitworth – U.S. Department of the Interior,
National Park Service, Zion National Park (June 12, 2006)***

Thank you and your staff for your interest, extensive comment, dialogue, and involvement in this EIS over the past two years. Your comments have been noted and are important in achieving harmony between the proposed replacement airport and Zion National Park. The initiatives outlined in your letter and contained in Appendix X in the FEIS and in the ROD will be the basis for grant conditions to be established in potential future Federal airport grants-in-aid issued to the City of St. George.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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JUN 12 2006

Ref: 8EPR-N

Mr. T.J. Stetz, Regional Environmental Protection Specialist
Federal Aviation Administration
Northwest Mountain Region, Airports Division
1601 Lind Avenue, S.W., Suite 315
Renton, WA 98055-4056

Re: Comments on Proposed St. George Municipal
Airport Replacement FEIS, St. George, Utah
CEQ # 20060183

Dear Mr. Stetz:

EPA is commenting on the Final Environmental Impact Statement (FEIS) for the proposed St. George Municipal Replacement Airport, dated May 2006. EPA provided comments on the Draft EIS on November 7, 2005. The Federal Aviation Agency (FAA) has responded to those comments in the FEIS. This letter provides information on issues we still believe need some explanation. In several areas, EPA is pleased, however, with many of the changes made in the FEIS, as explained below.

Air Quality

EPA complements the FAA on its stated commitment to enhanced particulate matter emission reduction strategies for construction activities, especially diesel emission equipment and operating policies. Recent air quality monitoring by the State of Utah, indicates levels of particulate matter in the St. George area exceeding air quality standards. Fugitive dust is a health concern in arid regions, especially when soil is disturbed by development and construction.

EPA commented on the DEIS that air toxics (hazardous air pollutants or HAPs) should have been considered in the EIS (See Comment number 1). FAA responded that they did not do this analysis in part because the area is in complete attainment with NAAQS. FAA states that this is a clear indication that air toxics would not be a concern. First, attainment of NAAQS is not an indicator of HAPS. Toxic emissions could increase while criteria pollutants decrease. Air



toxics, many of which are hydrocarbons, can be a microscale issue whereas the NAAQS are generally regional issues. Second, showing that the NAAQS are not violated is not the only analysis required under NEPA. A NEPA analysis should show trends for pollutants as well as compare the impacts of alternatives. In this case, there are no real differences between alternatives, but a trend analysis – whether toxic pollutants will be going up or down - and information on what the starting level is with air toxics would have been beneficial.

The response to comment number 2 states, “While an increase in urban growth in the St. George area may be reasonably foreseeable, it is outside the control of the FAA to direct or manage local land use and transportation policy.” This is not an appropriate response to a request for information on foreseeable growth emissions. The NEPA analysis is never based on what FAA can control. An alternative, e.g., that is outside the legal jurisdiction of the lead agency must be analyzed in an EIS if it is reasonable (see CEQ 40 Questions, question 2b). The NEPA document can and should analyze the impacts of growth in a manner that shows local jurisdictions what they can do to minimize the impacts of that growth. That is very appropriate in a NEPA document, and has been done for many projects.

We appreciate the inclusion of estimated PM2.5 emissions and future trends. PM2.5 and PM10 pollution problems have been found in lightly populated areas around the country including the Cache Valley in northern Utah. Based on the analysis it does not appear that PM2.5 is a concern in this area, but we would not have known this without the analysis.

Water Quality

Thank you for considering methods to reduce water quality impacts to the Virgin River. The management practices you have added include consideration of secondary containment for the bulk fueling and storage areas to capture incidental spills, development of a stormwater pollution prevention plan, and construction of stormwater detention and retention basins both during construction and operation. We would like to see these items and the other measures designed to ensure that water quality does not degraded stated in the ROD as more than considered.

Future Land Use Plans and Zoning

FAA states, in response to EPA Comment number 10, that since the appropriate detail on the development related to the airport is unknown, it cannot be effectively analyzed. In the next paragraph, it is stated that the FAA is familiar with development typical of airports similar in size and use to the St. George airport. That information could have been used to analyze in a general way the impacts of the airport-related development.

Cumulative Impacts

EPA’s comment on the cumulative impact analysis in the DEIS was that except for the noise analysis, the Cumulative Impacts Section of this EIS is extremely qualitative. FAA’s response is that “The magnitude of direct impact of the project when added to the reasonable and foreseeable impacts of the Southern Corridor and other projects is relatively small compared to

the availability of resources within the study area and region. Development proposals for areas near the proposed replacement airport have not been developed in sufficient detail to allow for a realistic and reasonable determination of impacts to be considered.”

While we recognize that construction of the replacement airport and Southern Corridor highway represent less than 1% of the loss of habitat in this area, we cannot know what that means cumulatively unless some analysis is done. There are land use plans in place that give a reasonable indication of what the future growth will be in the vicinity, and we are aware that several major land development projects near the airport have been planned. Even if the direct and indirect impacts from this project are not great, they have to be put into context of what is happening to a resource cumulatively to show whether the impact is significant or not. Again, not enough analysis was done on individual resources to support the statements made in the document. An approximation of areas of impervious surface, based on current building practices, could have been used to show that the growth may or may not have an impact on water quality. An explanation of that number could state that until further development plans are concrete, the number is an approximation. A statement such as is made in Section 7.9 on the cumulative impacts on biological resources, that there will be a constant struggle to balance development and transportation needs and that it will likely cause long-term cumulative impacts on natural habitats and the species they support should be followed with information on what can be done to reduce such an impact. Again, the amount of habitat impacted can be extracted from local land use plans.

We hope that these comments clarify our positions. They are meant as clarifications for use on future projects. We wish to thank the FAA and their consultants for the meeting we held to clarify some of these issues, and thank you for the changes you made to the document based on our comments. Please contact myself at 303 312-6004 or Deborah Lebow at 303 312-6223 if you have any questions on these comments.

Sincerely,



Larry Svoboda, Director
NEPA Program
Office of Ecosystem Protection and Remediation

Response to Larry Svoboda – U.S. Environmental Protection Agency, Region 8 (June 12, 2006)

Air Quality - We appreciate USEPA's comment that air toxics or hazardous air pollutant (HAPS) trend analysis would be beneficial. As explained previously in response to USEPA's related comment on the DEIS, the FAA has several reasons for its decision not to perform a quantitative HAPs analysis. First, the edge of existing residential development is 1.8 miles from the replacement airport. Currently, there are no homes or other receptors neighboring the replacement airport. In addition, local land use planning agencies intend to establish overlay districts to control incompatible development in the area surrounding the airport through zoning and other mechanisms. To that end, the City of St. George, in coordination with Washington City, has developed an Airport Vicinity Land Use Plan (AVLUP) that identifies appropriate land uses and zoning requirements for areas in the immediate vicinity of the proposed replacement airport. Both cities are prepared to adopt zoning consistent with the plan, in the form of Airport Influence Area and Overlay Zone Zoning for their respective jurisdictions surrounding the replacement airport. Within the overlay zones, business, industrial and mixed use commercial development is envisioned. With the development of this type of zoning, there are not currently and are not expected to be individuals living in the vicinity of the airport who could be exposed to local HAPS emissions in the reasonably foreseeable future. Therefore, there is no potential for a microscale issue. A quantitative HAPS analysis would not provide useful information in these circumstances.

Second, the proposed replacement airport is located in an area that is designated attainment for all criteria pollutants. This is relevant because of the area's attainment with the National Ambient Air Quality Standards (NAAQS) and because HAPs generally correlate with volatile organic compounds (VOCs) for gaseous components and with particulates (PM) for metallic components. The minor increases found for project VOCs and PM in the emissions inventory provide a clear indication that there would be no local problem with HAPs even if there were adjacent communities.

Third, there is no indication that potential HAPs emissions would have reasonably foreseeable significant adverse impacts. In these circumstances, there is no requirement to address incomplete and unavailable information that might bear upon the choice between alternatives pursuant to 40 CFR 1502.22.

In contrast, the FAA included or estimated HAPs emissions in recent EISs for proposed projects at O'Hare and LAX. Unlike the proposed replacement airport at St. George, those projects were at busy airports that are located in large metropolitan areas, that are surrounded by densely populated areas, and that are within areas designated nonattainment or maintenance areas for ozone, VOCs, and particulates.

Lastly and most importantly, HAPs is an emerging scientific area and FAA headquarters (Office of Environment and Energy) and USEPA headquarters (Office

of Air Quality Planning and Standards and the Mobile Source Division in Ann Arbor, Michigan) are working on issues associated with airport-related HAPs emissions. In order to address current limitations of the existing modeling tools and critical input data, the FAA and USEPA are working together with other agencies and organizations to improve HAP databases, particularly for aircraft, and to develop more reliable methodology for airport studies. In addition to research, the FAA is consulting with USEPA on proposed guidance for conducting airport-related HAPs emission inventories. This guidance will supply needed standardization and important information, including: (1) a compendium of aircraft and engine emission profiles; (2) a rating system for HAPs data to describe its reliability based on how the test data were collected and documented; and (3) a list of factors to determine if and how much HAPs analyses is required.

Water Quality – The water quality measures described in the FEIS have been made a condition of the FAA's Record of Decision (see Section 5 of the ROD) and will be enforced in the grant issued to the City of St. George by the FAA.

Future Land Use Plans and Zoning – To clarify our Response #10 to USEPA's Comment Letter #41 as presented in Appendix R of the FEIS, the FAA is familiar with the types of landside development typically associated with airports of this size. We understand that there are developments planned off-airport and on land in the vicinity of the proposed replacement airport, however, these planned developments are in the early conceptual planning stages and may rely on the extension of infrastructure, including the construction of the Southern Corridor and the replacement airport, to clearly define the type, location, and densities of planned uses. For FAA to assess the impacts associated with these planned developments would serve no purpose within the NEPA framework.

Cumulative Impacts – According to USEPA guidance, the level of analysis and scope should be commensurate with the potential impacts, resources affected, project scale, and other factors.¹ As presented in the EIS, the direct impacts of the proposed action are not significant. Extensive coordination with the National Park Service, the Bureau of Land Management, Washington County, Washington City, and the City of St. George, as land management entities, was conducted for completion of the EIS and under the AVLUP effort conducted in conjunction with the EIS to identify future land use and development trends and sensitive resource areas. The AVLUP planning effort included the replacement airport property and areas in relatively close proximity to the airport that are depicted in city and country future land use plans. This planning area extends 2.5 to 3 miles beyond the replacement airport site. Beyond this initial zone of future development, no future land use planning information is available.

Although development is planned and areas of land have been zoned in the vicinity of the proposed replacement airport, the details of many of the developments are still in very preliminary stages. There are approximately 4,515 acres of land

¹ *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*; USEPA Office of Federal Activities, EPA 315-R-99-002, May 1999.

(including the replacement airport site) that would be subject to changes in land use designation resulting from the relocation of the St. George Airport and construction of the Southern Corridor. This land lies within the jurisdictions of the City of St. George, Washington City, and Washington County and is mostly undeveloped at this time. Even without development of the replacement airport, the entire 4,515-acre area could potentially suffer the incremental loss of existing habitat overtime from various scattered developments. Although all of the existing and proposed land use designations would require some percentage of open space or place restrictions on lot coverage, none of the jurisdictions currently restrict owners from clearing their land for development. The Southern Corridor will likely increase the demand for development throughout this area, even if the airport was not relocated to the preferred site.

As described in the AVLUP, approximately 703 acres of land under the jurisdiction of the City of St. George and outside of the replacement airport property would be developed into a mix of business and commercial uses to support the airport. The Fort Pearce Wash Industrial Park and South Block Community Plan developments would include approximately 119 acres of dedicated open space along the Fort Pearce Wash. Within the boundaries of Washington City, approximately 832 acres outside of the airport boundary is planned for a mix of industrial, commercial, and residential development which would include approximately 125 acres of open space. The remaining area surrounding the replacement airport and under the jurisdiction of Washington County, includes 1,673 acres of planned business park, industrial, and mixed commercial-residential uses including approximately 88 acres of open space. Of the 4,515 acres addressed in the AVLUP and contained in this future development area, approximately 1,306 acres would be used for the airport, leaving 3,209 acres of developable land; of which approximately 333 acres would be reserved as open space, presumably in natural cover. Therefore, a minimum of 10.3 percent of the land in close proximity to the airport would remain in natural cover – desert scrub, creosote bush, shrub cactus, riparian scrub – with additional habitat provided in pockets of undeveloped land. As one would move farther away from the airport and this initial zone of development, it would be assumed that development would become less dense, providing additional areas of open habitat.

Following good planning principles, it would be assumed that these planned developments would take advantage of natural topography and drainage patterns, to the extent practicable, creating connected areas of habitat and wildlife travel corridors along valleys and drainages where vegetative cover is more prevalent. It could be estimated that a second zone of development (which is currently beyond the purview of the communities, the county, and the FAA) could include as little as 25-45 percent open land area/natural habitat due to the potential for lower density developments such as agricultural, rural residential, and open space. It would be anticipated that this future development would most likely take place on plains and plateaus which would remove desert-scrub and shrub cactus habitats, displacing some resident wildlife, including small mammals, reptiles, and birds. Areas of protected habitat for species such as the burrowing owl, kit fox, and desert tortoise, should be taken into account and addressed appropriately during future planning and land development processes.

Due to the lack of detailed planning information, including development types, lot sizes, densities, and open space requirements, there is no specific foundation on which to build a quantitative analysis of the potential loss of habitat associated with the development of the proposed replacement airport. Taking too broad of a look at development and consequently over approximating the impact of future development on the resources present could be just as detrimental, if not more so, than under approximating impacts. An over estimation of future and cumulative impacts could also have a detrimental effect on future planning and development.²

² "An agency must consider the cumulative impacts of future actions only if doing so would further the informational purposes of NEPA. Restricting cumulative impact analysis to foreseeable future actions ensures that the details of these actions are sufficiently concrete for the agency to gather information useful to itself and the public." *City of Oxford v. Federal Aviation Admin.*, 428 F.3d 1346, 1353-1354 (11th Cir. 2005).



WASHINGTON COUNTY

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June 12, 2006

Mr. Douglas R. Murphy, Regional Administrator
Northwest Mountain Region
1601 Lind Avenue S.W. Ste. 315
Renton, Washington 98055-4056

Dear Mr. Murphy 

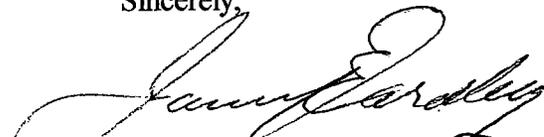
The Washington County Commission is in receipt of the final environmental impact report for the construction of a new airport in the City of St. George, Utah. We are pleased to note that your findings are in harmony with the environmental assessment that was completed by the City of St. George in June of 2000. The County Commission was in full support of the 2000 DEA, and we fully support the final draft EIS.

We fully recognize the many hours of study and research that have gone into this project by the FAA staff along with consultants that were retained to do the work and to bring closure to this long running issue. We feel that the EIS is very comprehensive in its analysis and should eliminate any further delays in being able to move this project forward.

With your support in giving final approval to the EIS currently under consideration, we can look forward to moving ahead with construction, and finally have an airport that will serve the needs of the residents of Washington County for many generations to come.

Your expeditious review and approval of this document is greatly appreciated!

Sincerely,


James J. Eardley, Chairman
Washington County Commission


Alan D. Gardner, Commissioner


Jay Ence, Commissioner

Response to Commissioners James J. Eardley, Alan D. Gardner, and Jay Ence; Washington County (June 12, 2006)

Thank you for your interest in this project. Your comments have been noted.

SIERRA CLUB
National Parks and Monuments Committee
2625 N. Marion Drive, Flagstaff, Arizona, 86001
(928) 699-8366

July 3, 2006

Mr. T. J. Stetz
Regional Environmental Protection Specialist
Federal Aviation Administration
Airports Division
1601 Lind Avenue, SW, Suite 315
Renton, WA 98055-4056

Dear Mr. Stetz:

I appreciate having been provided a copy of the final environmental impact statement for the replacement airport at St. George, Utah. This letter represents the Sierra Club, on behalf of its National Parks and Monuments Committee, which now offers these comments for your consideration.

These comments will be provided in two sections: (1) the main body of this letter, which addresses “big picture” issues; and (2) the attached Appendix, which provides certain detailed comments. The Appendix references the lengthy Comment Letter of November 7, 2005, “Comments re the St. George Replacement Airport EIS”, which were submitted by myself on behalf of the Grand Canyon Trust (Flagstaff, AZ), and co-signed by Steve Bosak, for the National Parks and Conservation Association (Washington, D.C.)

1. Zion National Park: A Special Place, Increasingly Impaired by Aviation Impacts

This author brings special expertise^{1,2} to the assessment of Zion National Park as a special place, now approaching or exceeding substantial impairment due to the noise and visual impacts from the National Airspace System (NAS) operating overhead. The “special place” dimension has been further documented by the recent letter, dated July 2, 2006, to yourself, from Donald A. Falvey, of Marysvale, Utah, commenting on this particular FEIS. We hereby incorporate Don Falvey’s comments, by reference, into this letter (recognizing further the special expertise of Mr. Falvey as the former Superintendent of Zion National Park.)

¹ For details, see my Affidavit to the U.S. Court of Appeals, D.C. Circuit, within the 2001-2 case briefs, for *Grand Canyon Trust vs. FAA* (decided May 24, 2002). This affidavit is hereby incorporated by reference.

² See also, “Testimony of Dick Hingson”, Rockville, Utah, at the St. George Public Hearing”, Jan. 12, 2000 (NPS), re the General Management Plan and DEIS, for Zion National Park, also incorporated by reference.

Most importantly, the special-ness of Zion is inherent in the very name of the Park, which has evocative meaning for many in Utah, as in the world around, as “God’s House, exalted upon the mountains.” While not legally a religious shrine, nonetheless the aura (feeling) of Zion is indeed one of noble and high dignity, amidst beauty and tranquility deserving of reverence and respect. This feeling is enhanced by the documented, stunning, and extended silences of Zion’s great natural cathedrals and rock alcoves.

This FEIS, has, however, conclusively documented how Zion’s precious natural quiet is being tragically, and unnecessarily obliterated by the repeated thunder of hundreds of commercial jets which streak, daily and nightly, directly above these special Park landscapes. The peak jet noise levels frequently exceed the natural ambient by as much as 20 to 40 dBA.

This unnatural “growling” and “rolling thunder” noise (often accompanied by long, lingering, accumulated contrails), reverberates through otherwise quiet, primeval back-country landscapes. It sounds much like bowling balls being repeatedly introduced down an alley, with audible sound tracks (according to the FEIS) of six minutes and more.

One common flight path appears so aligned with the Park’s main canyon that it might as well, by accident or design, be now termed commercial aviation’s “Great Bowling Alley“, rather than the *Zion* originally designated in 1909 as a protected special place.

Perhaps one or two of such intrusions in any given hour upon the natural symphony of back-country quiet below would be acceptable. However, this FEIS and its supporting raw data files³ disclose an alarming story, with a rapidly worsening, near-term forecast.

The story is illustrated by mapping the data for NA35 and NA45 (i.e., “Numbers of Events Above” 35 dBA and 45 dBA, respectively) for each of Zion’s 89 grid points. Within fifteen years, i.e., 2020, it is patently clear that the southern half of these grid points will experience daytime NA35 levels of approximately a dozen or more intrusive events *per hour*, on average, between 7 a.m. and 10 p.m., every day. Compare against the “substantial impairment” level of 8 events per hour suggested in the GCT/NPCA comment letter on the DEIS.

Adding insult to injury, all of these same “southern half” Zion grid points will experience a subset of comparatively loud aviation noise surges, *exceeding 45 dBA*, at the rate of *three to five events per hour*, on average, all day long, from 7 am to 10 pm (quieting only during the dead-of-night hours after 10 p.m.)

A ‘Ringing’ That Never Stops

As former Superintendent Don Falvey pointed out, in his comment on the DEIS, “Imagine attending a symphony orchestra performance, and hearing someone’s cell phone ringing. The experience of enjoying the performance would be destroyed, even

³ See FEIS Technical Support File (Landrum & Brown): “Special Tables For 15 Hr.xls”

though the measurable sound levels may not be great.”

So, this newest data confirms, the aviation “cell phones” will be going off, at repeated intervals of only a few minutes, all through each and every natural sounds experience, in any given hour, all day long. The resulting impact on absorbed, entranced, backcountry visitors would be unacceptable for the park and its managers, much as for any symphony orchestra or its managers.

A final, confirming illustration of this increasingly tragic outcome is from the Per Cent of Time Above Natural Ambient Data, as forecast for Y2020. Plots of this TAA(amb, nat) data for the 15-hour day, against each of the 89 Zion Park grid points, shows the following:

- Almost all of about thirty grid points centered over the southeastern portion of the original, “classic”, national park will become impacted, daytime, *40 to 60 percent of each (average) hour*, by aviation noise “above natural ambient.”
- Once meaningful Per Cent Time Audible figures become available for these same grid points, the near-total, near-term, obliteration of natural quiet in this critical portion of the Park will be evident.

As Don Falvey’s most recent letter exclaims, “*The noise cup (from aviation). . . is overflowing*” within Zion! As he concludes, (his emphasis), “**Clearly, the noise levels reported in this FEIS do not allow Zion National Park to achieve (its) objectives of preserving or restoring the Natural Quiet and providing opportunities to experience solitude.**”

2. FAA: Mitigation Policies and Proposals

Therefore, the Sierra Club fully supports the assessment and recommendations made by former Superintendent Falvey, in his July 2, 2006 letter. By repeating his recommendations, we reinforce specific needs. Appropriate mitigation, with a clear timeline for implementation, needs to be set forth in the Record of Decision, as per the following bulleted items:

- Establish Special Use Airspace above Zion National Park “which excludes those aircraft using the St. George Replacement Airport, air tour aircraft, and aircraft using the area airports identified in Chapter Five of the DEIS.”
- Formally establish arrival and departure patterns (for all aircraft using the NAS) to minimize noise impacts on the Park.
- In particular, re-direct the routes of high altitude traffic “away from the southern portion of Zion National Park.” That area -- the focus of the greatest visitor activity - - is experiencing, and will continue to experience, unacceptable impairment of increasing, cumulative impacts, by aviation noise.”
- Also, implement the noise abatement initiatives as described in the FEIS, including the pilot education program, commercial operator agreements, printed information (maps, charts, literature) and flight monitoring procedures.

- Additionally, develop and implement -- with declared timelines-- an air tour management plan (ATMP) for Zion National Park, as directed by the National Parks Air Tour Management Plan of 2000. Absent the full, substantial mitigation called for in the preceding bullets, this plan should have as Preferred alternative, a ban on air tours in Zion. Further, as current air tour operators may meanwhile go out of business, or otherwise fail to use their current allocations under Interim Operator Authority (IOA), these allocations should be *retired*. They should not be transferable to any other entity or corporation.

The need to protect Zion National Park from aircraft noise has been long established, and has been reinforced by the decision of the Department of the Interior earlier this month, to reassert its 2000 NPS Management Policies, including additional soundscape protection from external sources, as stated in Sec. 8.2.2.

It may be that -- as the EIS claims -- the replacement airport (less than two percent of the cumulative sound energy) will be slightly quieter for Zion than to continue with the existing airport. We recognize and value that finding. However, the real import of this long and expensive planning exercise has been to provide a basis for accurately, and meaningfully comprehending and mitigating the effects of the other 98% of the rapidly growing noise impact. In this regard the EIS appears of significant utility, notwithstanding the still serious reservations noted in the accompanying appendix.

Thank you for your attention to these comments. We look forward to a Record of Decision, one which respects and incorporates the urgent issues raised herein.

Sincerely yours,

(signed)
Dick Hingson

Cc: Karen Trevino, NPS (Natural Sounds Program)
Jock Whitworth, NPS (Zion)
Jeff Bradybaugh, NPS (Grand Canyon-Parashant)

Appendix

A number of points held over from the November 7, 2005 comment letter of the Grand Canyon Trust and NPCA drew FAA response in the FEIS. We here offer comments about these FAA responses, as warranted.

1. Point #1: re cumulative, substantial impairment from aviation noise. We agree with the earlier GCT/ NPCA position that substantial impairment thresholds are imminently being crossed, if they haven't already. The "back of the environmental camel" may already be --for now-- broken, by this level of noise impairment. The fortunate thing about noise impact, is, it can be reversed through appropriate policies. FAA has not provided any serious, objective analysis that substantial impairment is not at issue, and so needs to seek NPS guidance in this regard..
2. Point #2: re mitigation: It remains undeniably in the public interest, that FAA (temporarily, intermittently, or permanently) prohibit or diminish airspace usage over Zion. FAA's intentions in this regard appear to be still overly guarded and minimalist.
3. Point #4: re "Desired Conditions" noise thresholds: We reaffirm this point. Loudness and frequency as well as duration or persistence are critical noise parameters, which should be evaluated for soundscape management in national parks.
4. Point #5: re Audibility Data: Because of the failure of FAA to develop a compression algorithm for "high-flyers" under INM 6.2, the Per Cent Time Audible data is meaningless and absurd. FAA has known for four years (since the St. George and Grand Canyon decisions in 2002 in the D.C. Circuit) that it needed this algorithm to meaningfully compute and address audibility. It failed to do so, at great cost to the understandability of this document in terms of the cumulative analysis for en route over flight, and its effect on NPS "Desired Conditions." Re Lmax: FAA's lack of response re this valid point is noted.
5. Point #6: re "averaging": While we appreciate new sensitivity analysis using the 15-hour day for NA thresholds, still, the presentation in the FEIS itself was so sparse, as as to be largely unhelpful. Only by requesting and utilizing detailed support tables could the pertinent information be obtained and mapped out. We further note and regret the continued absence of hourly, empirical noise data in the FEIS, for Zion.
6. Point #7: re "Broad Regional Context". FAA has continued to ignore the GCT/NPCA request for "cumulative flight density" data/graphics, as requested. Without mapped Flight Density and/or Flight Tracks -- on broadened regional or indeed national scales -- it is nearly impossible for the affected public to conceptualize what ultimate mitigation, for long distance routes, could or could not be

- accomplished for Zion or any other DOT 4(f) area analyzed in this study.
7. Point #8: re “Existing Conditions” Data. Thank you for providing some new data on this point, for Zion, at least.
 8. Point #9: re “Jet Contrails over Zion”. This FAA response was totally inadequate to the aesthetic landscape issues expressed, now under rapidly increasing threat. We repeat that visual and aesthetic impacts are part of customary NEPA analysis. The failure of the FEIS to provide this assessment, re *contrails*, is strongly noted.
 9. Point #10: Re *L90*. The failure of the FEIS to meaningfully address the specific, detailed arguments presented, re its non-utilization of this metric, is likewise strongly noted.
 10. Point #11: Re “User-Friendly Graphics”. The failure of the FEIS to do much along the lines requested is strongly noted. We do appreciate the 15-hour day sensitivity analysis along with the NA35 sensitivity analysis, so far as it was developed and presented. The analysis presented was minimal in its detail, unfortunately. It could and should have been mapped out for each of Zion’s 89 grid points, as requested.
 11. Point #13: Re “Psychological Impacts Assessment”. We are disappointed by the FAA’s continuing to ignore the obvious implications of Britton Mace’s work on low-level noise impacts on landscape appreciation and backcountry experience. Presumably, on projects where NPS is co-lead or lead, this work will receive the attention that is overdue
 12. Point #17: Re Leq analysis. Cumulative increases of even one unit of Leq are of great concern when considering the future of national parks and designated wilderness. FAA’s arbitrary, deficient parameters (drawing on DNL and so many units of increase required before an increase of DNL or Leq becomes “significant”) are strongly noted, and deplored, in reference to so iconic a national park as Zion.
 13. General Point re DOT 4(f)303c: Notwithstanding the FAA’s response comment, law and regulations regarding DOT 4(f) application should not be regarded as “settled.” The clear trend of the noise forecasts is that *substantial, long-term impairment* of Zion National Park is at hand, whether in terms of DOT 4(f)303c (as interpreted by FAA Order 1050.1e) or the National Parks Organic Act itself (as potentially interpreted by NPS Management Policies, or by further amendment.)

Response to Dick Hingson - Sierra Club, National Parks and Monuments Committee (July 3, 2006)

The commenter states that he appreciates and values the FAA finding that the replacement airport will be slightly quieter for Zion National Park than would the airport it is replacing. His primary focus, however, is on the FEIS supplemental noise analyses and the findings that the projected cumulative noise resulting from non-project related aviation overflight sources may often exceed natural ambient noise levels for Zion National Park, and thus make it more difficult for Zion to preserve or restore the "natural quiet" of this unique natural resource; particularly in the southern portion of the park.

Your recommendation that the FAA should address this issue by adopting a number of mitigation measures; including prohibition of certain types of lower-altitude aircraft operations over all portions of Zion, and the rerouting of higher-altitude aircraft away from the southern portion of Zion; was already addressed in the FEIS in **Appendix W, *Issues Relating to Mitigation of Aircraft Noise Impacts on Zion National Park***, and **Appendix X, *Monitored Noise Abatement Initiatives***.

The FAA does not accept the assertion that the non-project cumulative noise projected by the supplemental noise analysis will "substantially impair" park values. As noted in the FEIS **Appendix R, *Comments/Responses***, Comment #47, Response #4, the FAA is not aware of any scientific studies or empirical research suggesting that the type of threshold suggested by the commenter is appropriate for making determinations of constructive use under Section 4(f)/303(c). FAA Order 1050.1E, Appendix A, Paragraph 14.5g, explains that supplemental noise analyses are intended to aid public understanding of noise impacts, but that such metrics are "not, by itself, a measure of adverse aircraft noise or significant aircraft noise impact". Indeed, some of these supplemental metrics, such as "audibility", have limitations, since in its current form audibility over-predicts noise, and also does not faithfully depict reality as experienced by most visitors to Zion (see discussion of limitations of audibility in the FEIS, **Appendix T, *Audibility Evaluations for Zion National Park***, and **Appendix W**, pages W-5 to W-7). Nonetheless, this is the metric that the National Park Service, the Grand Canyon Trust, and others requested be used to evaluate the impacts of this project. It is the best modeling methodology currently available in this area, and indeed was useful in comparing alternatives and evaluating impacts.

The FAA currently has no established threshold of significance for overflight noise over national parks or similar natural areas. As noted in the FEIS, in **Appendix W**, on page W-3, "these are complex issues on which there are divergent opinions and very limited studies, and they will not be resolved during the duration of this EIS." The FAA has engaged in efforts with the National Park Service (NPS) and other organizations directed toward these goals, and hopes to continue these efforts in the future.

The final, and most important point worth noting, is that even if for the sake of argument one were to accept the proposition that projected, cumulative, non-project noise levels are likely to “substantially impair” Zion’s values, the FEIS demonstrates that the replacement airport project will not contribute to this substantial impairment, since it has been shown to generally reduce, rather than increase, noise levels over Zion, when compared with the existing airport.

As discussed in the FEIS, in **Appendix W**, on pages W-7 to W-9, NEPA requires a comparison of future with and without project environmental impacts. And, as discussed in the FEIS **Appendix R**, Comment #47, Response #1, under Section 4(f)/303(c) a pre-existing substantial impairment is not relevant in determining whether a proposed action would itself result in substantial impairment of properties protected by this law. Mitigation, therefore, is inappropriate where implementation of the project will not by itself cause increases in overall cumulative noise levels. Here, the cumulative overflight noise exists independent of, and does not causally result from the replacement airport project that is approved in this Record of Decision. Furthermore, overall cumulative noise impact in Zion National Park, considering all current and expected sources of aircraft noise, is less with the new airport than for the airport it replaces. Stated otherwise, in terms used by the District of Columbia Circuit Court of Appeals in its 2002 opinion, the project will not break the back of the environmental camel, since this replacement airport project will remove, rather than add, straws to that camel’s back.

Accordingly, the FAA does not accept the suggestion that the agency address any asserted substantial impairment by banning or redirecting flights away from most airspace over Zion. The FAA, depicted in the FEIS **Appendix X**, has, however, developed voluntary measures for reducing noise impacts on Zion. As noted in **Section 6** of this Record of Decision, the implementation of these voluntary measures by the city of St. George will be enforced through conditions placed on FAA grant funding for this replacement airport project.

Responses to the following points presented in the *Appendix* to your comment letter are provided as follows:

Point #1: ‘cumulative, substantial impairment’ – The FEIS demonstrates, through extensive noise analysis (including the use of supplemental metrics), that the replacement airport project will not contribute to a substantial impairment of Zion National Park, since it has been shown to generally reduce, rather than increase, noise levels over Zion, when compared with the existing airport.

Point #2: ‘mitigation’ – As stated above and in the FAA’s previous responses to this comment, and as explained in **Chapter Eight** of the FEIS, the proposed replacement airport at St. George would not result in a “use” of Zion National Park. Therefore, no mitigation is required under Section 4(f)/303(c).

Point #4: ‘desired conditions’– The FAA reaffirms its Response #4 to the Grand Canyon Trust Comment Letter #47 as presented in **Appendix R** of the FEIS. The FAA cannot accept a suggestion to use number of events above 35 dBA (“NA35”) as

a noise threshold of significance for purposes of determining “substantial impairment” under Section 4(f)/303(c). First, NA35 does not represent Department of Transportation or Department of the Interior policy, or the policy of any Federal agency, for a National Environmental Policy Act of 1969 (NEPA) standard of significance in evaluating aircraft overflight noise for NPS units. Second, the FAA is not aware of any scientific studies or empirical research suggesting that this type of threshold is appropriate for adoption by the FAA in making its determinations of constructive use under Section 4(f)/303(c) or significance under NEPA. The extensive noise analysis presented in the FEIS, which includes an audibility analysis using Integrated Noise Model (INM) v6.2b, is sufficient to demonstrate that the proposed replacement airport would not result in significant noise impacts or a substantial impairment of Zion.

Point #5: Re Audibility Data: As the Federal Interagency Committee on Aviation Noise (FICAN) reported,³ audibility is an extremely complex metric, and no noise model will ever be able to predict with absolute certainty the audibility of a particular aircraft event at a specific location. Nevertheless, FICAN concluded that it could assess the accuracy of the FAA’s noise model (INM 6.2) and another model developed by the Department of Defense (NMSim) in calculating audibility, and that the two models performed equally well. INM 6.2 was then selected by FICAN as the best practice modeling methodology currently available. So, the FAA is using the best available science to calculate aircraft audibility.

On any given day, there is a large number of aircraft flying on a fairly steady basis on a number of routes over Zion National Park. The FAA air traffic control sequences aircraft on the same route flying at the same altitude to separate them for safety reasons. However, aircraft are also on multiple routes and are separated by altitude, so that multiple aircraft noise events can occur within overlapping time frames. Under the existing condition in the EIS, there are approximately 397 aircraft noise events over ZNP on an average day. The average time audible per aircraft noise event is 8 minutes. Multiplying by 397 overflights per day, by 8 minutes of audibility per event, provides the potential for 3,176 minutes of audibility on the average day.

Practically speaking, high-altitude aircraft may be in the line-of-sight of any given receiver on the ground for a much longer duration than low-altitude aircraft, and this can result in significantly higher time audible values. Since the area covered by the “noise footprint” of a high-altitude aircraft is larger than that of a low-altitude aircraft, more receiver locations may be affected by each overflight and “noise footprints” may overlap, which also can result in significantly higher time audible values. So, it is neither surprising nor incorrect that INM 6.2 is calculating a large amount of audible aircraft noise in Zion National Park.

³ *FICAN Findings and Recommendations on Tools for Modeling Aircraft Noise in National Parks*, Washington, DC: Federal Interagency Committee on Aviation Noise, February 2005 (<http://overflights.faa.gov/>).

INM calculates all audible noise. What INM does not do is take overlapping audible noise events into account when calculating percent time audible of all aircraft during the day. Instead, it sums up all individual audible aircraft events. Looking at it another way, INM is not over-predicting aircraft audibility; it is just not collapsing the overall time audible when audible aircraft events happen within the same geographic area within approximately the same time frame. So there is over-prediction in the total percent time audible when all aircraft audibility is added together, if the 100 percent cap in INM 6.2 is not invoked. The cap ensures the maximum percent time audible is 100 percent for a specified time period.

The FAA and the NPS are cooperatively investigating the possibility of a compression algorithm for high-altitude aircraft operations, with the technical assistance of The Volpe Center. The challenge is the need for detailed schedule and operational data, as well as data to verify and validate the results. High-altitude overflights vary from day-to-day, and very limited in-situ audibility data for high-altitude aircraft operations exist.

This same issue has arisen with respect to the audibility analysis of high altitude aircraft at Grand Canyon National Park. NPS technical staff have done some preliminary analysis unrelated to INM 6.2 that provides additional evidence of a fairly regular and close sequencing of audible high altitude jet noise over the Canyon during daytime hours, so the FAA would expect high percentage values for percent time audible for high altitude aircraft during the day, even with a compression algorithm. There are fewer aircraft noise events, and therefore less over-lapping noise events at night.

In summary, the FAA and NPS regard INM 6.2 as the best currently available science for predicting aircraft audibility. NPS and the FAA agree that over-prediction issues do not affect the comparability of the audibility analysis of alternatives.

Point #6: 'averaging' – As stated in Response #6 to the Grand Canyon Trust Comment Letter #47 presented in **Appendix R** of the FEIS, no hourly noise data is currently available. The FAA and USEPA use average noise levels as standards to set impact thresholds, as referred to in **Appendix W**. Most aircraft flights occur during daytime hours as described in the EIS **Chapter Six, Table 6.2, Day/Night Traffic Distribution – 2003 Conditions**, which may be compared to the 24-hour average noise levels disclosed in **Table 6.1, Average Day and Annual Operations – 2003 Current**. The metrics used in the noise analysis are described in **Appendix A, Principles of Aviation Noise Evaluation**, of the DEIS. An average day value is computed by dividing the annual total activity by 365. The process used to establish the noise level for the 24-hour day involves noise modeling of average daytime activity coupled with an assumed average ambient level representative of the average measured L50 existing ambient level within Zion.

Point #7: 'broad regional context' – The FEIS addresses the impacts of the development of a replacement airport at St. George, not the redistribution of high

altitude flight paths over the southwestern United States. The impacts of cumulative aircraft overflights exist independent of, and do not causally result from the replacement airport project that is approved in this Record of Decision.

Point #8: 'existing conditions' – In addition to describing the existing physical conditions within the immediate vicinity of the replacement airport and the public land areas within the initial area of investigation, the FEIS disclosed the 2003 computed noise levels for the immediate vicinity around the existing and proposed replacement airport sites, for all grid points within Zion National Park, and for all other 4(f)/303(c) sites within the initial area of investigation (see **Appendix S, St. George Replacement Airport EIS Noise Levels for 2003 Conditions Zion National Park and Other 4(f)/303(c) Sites**).

Point #9: 'jet contrails over Zion' – As stated in Response #9 to the Grand Canyon Trust Comment Letter #47 as presented in **Appendix R** of the FEIS, FAA Order 1050.1E, Appendix A, Section 12, *Visual Impacts*, instructs that the visual sight of aircraft, aircraft contrails, or aircraft lights at night, particularly at a distance that is not normally intrusive, should not be assumed to constitute an adverse impact. Information gathered by the NPS and the U.S. Forest Service (USFS) has indicated that the visual effects of aircraft or aircraft contrails are minor. Visitor survey information compiled by NPS from 39 different units of the national park system reported that approximately 18 percent of visitors reported seeing aircraft and that three percent of visitors were annoyed by seeing aircraft. The USFS study on *Potential Impacts of Aircraft Overflights of National Forest System Wilderness* (1992) found that annoyance of wilderness visitors was associated more strongly with noise exposure than with the visibility of aircraft or the condensation trail, and that aircraft were rarely noticed for visual effects alone. Based on these findings by other public land management agencies, the presence of contrails does not constitute an adverse impact to the use of public lands.

Point #10: Re 'L₉₀' – Through coordination with the NPS, the FAA conducted an L₅₀ natural ambient noise metric evaluation to replace the use of the L₉₀ metric (see **Appendix N**). Further, the FAA agreed to conduct an additional audibility analysis for Zion National Park as reported in the FEIS, **Appendix T**. Prior to the availability of audibility methodology, the NPS used L₉₀ as their surrogate metric for audibility. The use of the L₅₀ natural ambient and audibility methodologies were accepted by the National Park Service (see **Appendix N, Coordination with the National Park Service**, in the FEIS).

Point #11: 'user-friendly graphics' – In the FEIS, the resulting data from key noise analyses were presented in a format that would be the most understandable to the widest audience possible. The FEIS, when combined with the DEIS and including appendices, included 25 figures, 75 exhibits, and more than 620 tables. In terms of public disclosure and presentation of information, the graphics and tables in the FEIS satisfied the informational needs of the vast majority of commenters.

Point #13: 'psychological impacts assessment' – Reiterated from Response #13 to the Grand Canyon Trust, Comment Letter #47 as presented in **Appendix R** of the

FEIS; the studies that have been done on effects of aircraft noise on visitors to national parks or wilderness areas have focused on annoyance and interference with enjoyment. The *Report on Effects of Aircraft Overflights on the National Park System* (NPS 1995) and the *Potential Impacts of Aircraft Overflights of National Forest System Wilderness* (U.S. Forest Service 1992) are large-scale studies in which a concerted effort was made to apply quantitative methods to outdoor recreationists' reactions to aircraft noise exposure in wilderness-type environments. The results of these studies indicate that fewer than 20 percent of visitors to national parks or forests, recalled hearing airplane noise during their visit, including visitors to parks with frequent low-altitude air tour flights. Two to three percent of visitors thought aircraft noise had an impact on them, while less than two percent of the visitors felt the aircraft noise interfered with their enjoyment of the park. The National Park Service surmised that the negative reactions to aircraft noise would be stronger from people who spent more time in isolated areas and that had differing expectations about solitude. The USFS study focused on users of wilderness areas with similar findings – aircraft noise intrusions did not appreciably impair the surveyed wilderness users' overall enjoyment of their visits or reduce their reported likelihood of repeat visits.

Point #17: 'Leq analysis' – Because Leq is a cumulative metric, considerable relative changes in noise energy are required to generate a 1 dBA change (+26 percent or -20 percent of total energy). For this reason, we have used several supplemental metrics to further describe the effects of the proposed replacement airport on Zion National Park. The following metrics were included for both baseline and proposed project actions:

- the loudness of single event noise
- the number of events above various noise level thresholds
- the Time Above existing and natural average ambient sound levels
- the Time Audible above existing and natural ambient sound levels

General Point RE DOT 4(f)/303(c): As stated previously, even if one were to accept the proposition that projected, cumulative, non-project noise levels are likely to “substantially impair” Zion’s values, the FEIS demonstrates that the replacement airport project and the associated future forecast of aviation activity will not contribute to a “substantial, long-term impairment” of Zion National Park, since it has been shown to generally reduce, rather than increase, noise levels over Zion, when compared with the existing airport. In terms of overflight noise, the FAA currently has no established threshold of significance for overflight noise over national parks or similar natural areas. As noted previously, this is a complex issue on which there are divergent opinions and very limited studies, and they will not be resolved during the duration of this EIS. As stated previously, the FAA has engaged in efforts with the National Park Service and other organizations directed toward these goals.

Donald A. Falvey

P. O. Box 55
Marysvale UT 84750

June 24, 2006

Mr. T. J. Stetz
Regional Environmental Protection Specialist
Airports Division
1601 Lind Avenue, SW Suite 315
Renton WA 98055-4056

Dear Mr. Stetz,

Thank you for providing me a copy of the final environmental impact statement for the replacement airport at St. George, Utah. I offer the following comments for your consideration:

Zion National Park is a special place

Throughout the document there are numerous references to the national significance of the park and recognition that **Zion National Park is a very special place, worthy of protection.**

-Reference is made to the National Park Service Organic Act in which the parks are directed to be managed “to conserve the scenery and the natural and historic objects and the wild life therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations”.
(page 5-20)

-Over ninety percent of the park is being considered for designation as wilderness, requiring the park to manage these lands to include the preservation of natural conditions (including the **lack of man-made noise**) and assure that there will be outstanding opportunities for solitude. (page 5-24)

-One of the park’s purposes is to **provide** a variety of opportunities and a range of experiences, from **solitude** to high use, to assist visitors in learning about and enjoying park resources without degrading those resources. (page 5-24)

*-The desired conditions within the park as identified in the park's general management plan include the provision that **natural sounds predominate** and that visitors have opportunities throughout the park to **experience natural sounds in an unimpaired condition.**(page 5-25)*

*-The NPS Report on Effects of Aircraft Overflights on the National Park System (prepared in accordance with Public Law 100-91, The National Park Service Overflight Act of 1987) identified Zion National Park as an **"immediate priority area for maintaining or restoring natural quiet."** (page 5-25)*

*-Lowell H. Johnson, Manager of the Airports Division of the Northwest Mountain Region in a March 1, 2005 letter to Superintendent Jock Whitworth noted that the supplemental noise analysis prepared in this FEIS is **"based solely on the unique values** represented by ZNP, a nationally significant parkland protected by Title 49 of the United States Code, par 303(c), whose **quiet setting is a recognized purpose and attribute."** (Appendix N)*

-The park has developed strategies to minimize noise impacts from both land and air sources which are outlined in Superintendent Whitworth's February 4, 2005 letter to Mr. Lowell Johnson. (Appendix N)

*-As part of the GMP planning process, five river segments within the park and six segments on adjacent BLM managed lands were found **eligible and suitable for inclusion in the national wild and scenic rivers** system and have been included in the draft legislation affecting land use in Washington County as prepared by US Senator Bennett and US Congressman Matheson. (please note that Section 6-10 of the FEIS, page 6-453 reports that there are no segments of the Virgin River eligible for consideration as a national wild and scenic river in the area of investigation.)*

Zion will continue to experience noise impacts even with the replacement airport

*I was very pleased to see the additional analyses performed to evaluate the noise impacts over Zion National Park. I was also pleased to see that the replacement airport will result in a lesser impact than the continued use of the existing airport. **These analyses do reveal, however that the park is experiencing noise impacts currently from aircraft overflights and these impacts will continue and will increase over time even with the construction of the new airport.***

*Exhibit 7.23 shows that the cumulative aviation noise with the replacement airport will exceed the natural ambient levels from 10 to 30 % of the time in 2010. By 2020 some areas of the park, especially those containing some of the park's most prominent features and highest use levels (the area initially reserved as Mukuntuweap National Monument) would be exposed to noise levels exceeding the natural ambient levels 35-40 % of the time. (Exhibit 7.25) **Conclusion: Zion National Park is experiencing aviation related noise impacts and the impacts will increase even with the replacement airport. These impacts are most notable in the most popular and highly visited areas of the park. Based on these figures it won't take very many years for these percentages to reach 100%.***

*The FEIS also identifies that in 2020 with the existing airport the park would be exposed to cumulative aviation noise above existing ambient levels an average of 182 minutes per day and above natural ambient levels an average of 232 minutes. The replacement airport would add an additional 2 minutes per day to these totals. (page 8-13). **Conclusion: Zion National Park is experiencing aviation related noise impacts and the impacts will increase even with a replacement airport.***

*These calculations are averaged over a 24- hour day. When analyzed for a 15-hour period, the cumulative natural ambient levels in 2020 would be exceeded nearly 15 minutes each hour (Table B, Appendix U). Levels above 35 dBA would be experienced nearly nine times each hour (Table A, Appendix U). **Conclusion: The impacts as described above are more severe when considering the impacts occur during daylight hours (15 hours) as opposed to averaging over a 24 hour period.***

*The Audibility Evaluations in Appendix T are very revealing. The Cumulative Audibility Effects as noted in Table AUD-A reveal that, for existing ambient conditions "the total number of minutes per day during which aircraft noise is computed to be audible exceeds the number of minutes available per day at all but two sites evaluated in Zion National Park ." When evaluated against natural ambient conditions as noted in Table AUD-C, "cumulative audibility is computed to exceed the total number of minutes per day at each of the 89 grid points within Zion for all three years of assessment." (pages T-10 and T-11) These results are for aviation noises resulting from all aviation sources. At 1440 minutes per day, the aviation noise level at Scouts Lookout is audible for only 2438.2 minutes in 2020, nearly two days of impacts in one day!. (Table AUD-A) **Conclusion: The noise cup is not half-full or half-empty, it is overflowing!***

Clearly, the noise levels reported in this FEIS do not allow Zion National Park to achieve their objectives of preserving or restoring the natural quiet and providing opportunities to experience solitude.

FAA Mitigation Policies and Proposals

As noted in the Executive Summary, the National Environmental Policy Act (NEPA) requires FAA to identify “possible conflicts between the replacement airport and the objectives of Federal, regional, state, tribal, and local land use plans, and controls for the area concerned, and the extent to which the FAA would reconcile its proposed action with the plan or law.” (page ES-3)

The FAA policy regarding management of airspace over federally managed lands is defined in FAA Order 7400.2F, Appendix 9. This policy recognizes that the NPS manages areas with unique values, meriting special environmental protection with some areas providing opportunities for solitude and natural quiet, allowing visitors to experience nature unaffected by civilization. To implement this policy the FAA is committed to consult actively with other federal agencies to identify and mitigate aircraft noise levels that are not compatible with designated locations in federally managed areas.

The FAA in its Advisory Circular 91-36D, Visual Flight Rules (VFR) Flight Near Noise-sensitive Areas, established voluntary practices which include: avoiding noise sensitive areas altogether, by flying at elevations greater than 2,000 feet above ground level in noise sensitive areas, and avoiding prolonged flight at low altitudes on departure or arrival at an airport.

Mitigation actions proposed in the FEIS (page 6-526) include development of a voluntary approach pattern to keep aircraft as high as possible and west of the park, a commitment to work with the park in preparation of an air tour management plan (already required by Public Law 106-189, The National Air Tour Management Act of 2000), and the development of various voluntary noise abatement initiatives which generally accept the strategies identified in the park’s GMP to minimize noise and visual impacts of aviation in the park.

Summary

Zion National Park is a special place, possessing national significance charged with preservation of its natural and cultural resources and offering a variety of activities for visitor use including the opportunity for solitude and the ability to hear natural sounds. The ability of the park to continue to meet its obligations as directed by Congress and further defined by the NPS management policies and the park’s general management plan are threatened by noise of aircraft flying over the park. The replacement airport at St. George will provide a lesser noise impact than if operations were to be continued at the present airport but the replacement airport will still contribute audible impacts in the park each day and those impacts will increase over time. FAA can help the park meet its objectives and fulfill their own policies and objectives by implementing a meaningful mitigation program.

Recommendations

I recommend that the mitigation program include establishment of a Special Use Airspace above the park which excludes those aircraft using the St. George replacement airport, air tour aircraft and aircraft using the area airports identified in Chapter Five of the DEIS.

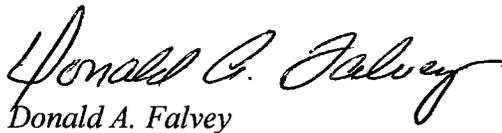
I recommend that arrival and departure patterns be formally established to minimize noise impacts on the park.

I recommend the noise abatement initiatives as described in the FEIS be implemented, including the pilot education program, commercial operator agreements, printed information (maps, charts, literature) and flight monitoring procedures

I recommend that the routes of high altitude air traffic be directed away from the southern portion of Zion National Park as that area, which is the focus of the greatest visitor activity, is experiencing -and will continue to experience -the greatest cumulative impacts of aviation noise.

The need to protect the park from aircraft noise is a concern shared by many, including the citizens of the towns of Rockville and Springdale who have prepared a joint resolution in favor of preserving natural quiet and solitude in the park and in their communities.. The cooperation and support of the FAA to achieve these goals and their efforts in this planning effort are greatly appreciated.

Sincerely,


Donald A. Falvey

Response to Donald A. Falvey (June 24, 2006)

The commenter states that he was pleased to see that the replacement airport will result in a lesser impact than the continued use of the existing airport. Your primary focus, however, is on the FEIS supplemental noise analyses and the findings that the projected cumulative noise resulting from non-project related aviation overflight sources may often exceed natural ambient noise levels for Zion National Park, and thus make it more difficult for Zion to preserve or restore the “natural quiet” of this unique natural resource; particularly in the southern portion of the park.

Your recommendation that the FAA should address this issue by adopting a number of mitigation measures; including prohibition of certain types of lower-altitude aircraft operations over all portions of Zion, and the rerouting of higher-altitude aircraft away from the southern portion of Zion; was already addressed in the FEIS in **Appendix W, *Issues Relating to Mitigation of Aircraft Noise Impacts on Zion National Park***, and **Appendix X, *Monitored Noise Abatement Initiatives***.

The FAA does not accept the assertion that the non-project cumulative noise projected by the supplemental noise analysis will “substantially impair” park values. As noted in the FEIS **Appendix R, *Comments/Responses***, Comment #47, Response #4, the FAA is not aware of any scientific studies or empirical research suggesting that the type of threshold suggested by the commenter is appropriate for making determinations of constructive use under Section 4(f)/303(c).

FAA Order 1050.1E, Appendix A, Paragraph 14.5g, explains that supplemental noise analyses are intended to aid public understanding of noise impacts, but that such metrics are “not, by itself, a measure of adverse aircraft noise or significant aircraft noise impact”. Indeed, some of these supplemental metrics, such as “audibility”, have limitations, since in its current form audibility over-predicts noise, and also does not faithfully depict reality as experienced by most visitors to Zion (See discussion of limitations of audibility in FEIS **Appendix T, *Audibility Evaluations for Zion National Park***, and **Appendix W**, pages W-5 to W-7). Nonetheless, this is the metric that NPS, the Grand Canyon Trust, and others requested be used to evaluate the impacts of this project. It is the best modeling methodology currently available in this area, and indeed was useful in comparing alternatives and evaluating impacts.

In the FEIS, **Appendix T, Table AUD-A** reports the cumulative number of minutes during the 24-hour day that aircraft noise was computed to be audible by the Integrated Noise Model (INM). Obviously, noise cannot be audible for more minutes during a day than there are minutes during the day. What INM does not do is take overlapping audible noise events into account when calculating percent time audible of all aircraft during the day. Instead, it sums up all individual audible aircraft events. Looking at it another way, INM is not over-predicting aircraft audibility; it is just not collapsing the overall time audible when audible aircraft events happen within the same geographic area within approximately the same time frame. The excess cited is a result of the model’s process of computing the

audible noise associated with an individual flight and then adding each flight's audibility to derive a total. Any excess beyond 1,440 minutes is representative of overlapping events when more than one event can be audible at the same time. This is quite possible when multiple aircraft fly at high altitude over an area of very low ambient noise levels, as is the case at Zion National Park.

As noted in the FEIS, **Appendix W**, page W-7, "the FAA does not accept the premise that park visitors' ability to detect aircraft noise in a park-like setting is per se a significant adverse impact, or constitutes a substantial impairment of park values."

The FAA currently has no established threshold of significance for overflight noise over national parks or similar natural areas. As noted in the FEIS, in **Appendix W**, on page W-3, "these are complex issues on which there are divergent opinions and very limited studies, and they will not be resolved during the duration of this EIS." The FAA has engaged in efforts with the National Park Service and other organizations directed toward these goals, and hopes to continue these efforts in the future.

The final, and most important point worth noting, is that even if for the sake of argument one were to accept the proposition that projected, cumulative, non-project noise levels are likely to "substantially impair" Zion's values, the FEIS demonstrates that the replacement airport project will not contribute to this substantial impairment, since it has been shown to generally reduce, rather than increase, noise levels over Zion, when compared with the existing airport.

As discussed in the FEIS, in **Appendix W**, on pages W-7 to W-9, NEPA requires a comparison of future with and without project environmental impacts. And, as discussed in the FEIS **Appendix R**, Comment Letter #47, Response #1, under section 4(f)/303(c) a pre-existing substantial impairment is not relevant in determining whether a proposed action would itself result in substantial impairment of properties protected by this law. Mitigation, therefore, is inappropriate where implementation of the project will not by itself cause increases in overall cumulative noise levels. Here, the cumulative overflight noise exists independent of, and does not causally result from the replacement airport project that is approved in this Record of Decision. Furthermore, overall cumulative noise impact in Zion National Park, considering all current and expected sources of aircraft noise, is less with the new airport than for the airport it replaces. Stated otherwise, in terms used by the District of Columbia Circuit Court of Appeals in its 2002 opinion, the project will not break the back of the environmental camel, since this replacement airport project will remove, rather than add, straws to that camel's back.

Accordingly, the FAA does not accept the suggestion that the agency address any asserted substantial impairment by banning or redirecting flights away from most airspace over Zion. The FAA, as described in the FEIS **Appendix X**, has, however, developed voluntary measures for reducing noise impacts on Zion. As noted in **Section 6** of this Record of Decision, the implementation of these voluntary

measures by the city of St. George will be enforced through conditions placed on FAA grant funding for this replacement airport project.

In addition to raising issues with the noise analysis, a comment was made in reference to the eligibility of segments of the Virgin River for inclusion in the National Wild and Scenic Rivers System. The Virgin River segments in Arizona (described in **Section 6.10** of the FEIS), like the 170 miles of Virgin River located within Zion National Park, have not been officially designated as part of the National Wild and Scenic River System, and were therefore, not included in the evaluation of impacts of the proposed replacement airport. The FAA understands that the *Washington County Growth and Conservation Act of 2006*, drafted by Senator Bennett in March 2006 and which nominated the Virgin River segments within Zion National Park, remains in draft form at this time. The official designation of these segments of the Virgin River as Wild and Scenic has not been confirmed by the National Park Service as of July 11, 2006.

From: Mark Perryman
Sent: Wednesday, July 05, 2006 5:17 PM
To: Sara Hassert; Shari Cannon-Mackey; Barb Castro
Subject: FW: update

-----Original Message-----

From: Carolyn.Read@faa.gov [mailto:Carolyn.Read@faa.gov]
Sent: Monday, July 03, 2006 1:57 PM
To: TJ.Stetz@faa.gov; Mark Perryman
Subject: Fw: update

Carolyn T. Read, P.E., ANM-610
Manager, Planning, Environmental, and Financial Programs Branch
(425)227-2608

----- Forwarded by Carolyn Read/ANM/FAA on 07/03/2006 01:57 PM -----

Darrell Hafen
<dghafen@yahoo.com>
To
Carolyn Read/ANM/FAA@FAA
07/03/2006 11:57 AM
cc
Subject
update
Please respond to
dghafen@yahoo.com

Ms. Read, I have not had a chance to review the
EIS for the St. George Airport but I have enought

information to issue a strong request, in the interests of the United States of America, to not approve the EIS or move forward on any steps for approval for this airport until serious issues dealing with the future of our country are resolved with St George City and the Washington County Commission which all relate to the airport. There is a pending Washington County Growth And Conservation Act proposed by Senator Bennett to be introduced into Congress. This Act has serious implications to the EIS for the Airport because there are water and power issues that reach over the Arizona Border and there are potential lawsuits that will arise over the Lake Powell Pipeline and the Southern Utah Water And Power Authority (which St George and the Washington County Conservancy District are opposing) which involves the future of water and Power in the West. If St George and Washington County Conservancy District do not recognize constitutional rights of individual citizens then why should the USA support any project that St George proposes. I can prove that St George has inflicted damage on families by their past unconstitutional actions, so I would suggest that the FAA put a hold on the airport issue until the cooperation of St George, Washington County Conservancy District and the Washington County Commission are recognizing constitutional rights instead of threatening to arrest people who do not agree with them on basic constitutional rights. There is 12,000 acres of land next to the airport location that has serious legal conflicts that need to be resolved, plus there needs to be cooperation on infrastructure on the Utah Side of the border as well as the Arizona side. I would suggest that FAA hold a public hearing on the allegations I am bringing forth and secure full information on the truth of the matters at hand before any approvals are given to move forward. Please e mail me a response to receipt of this notice and also send me notices to Box 675, Washington, Utah 84780 and 140 East So Temple, Salt lake city, utah 94111. phone 801 673 2897. DarrellG. Hafen

Response to Darrell Hafen (July 3, 2006)

The FAA has no jurisdiction over local issues related to personal property rights, utility service, and local conservation issues. The FAA may only involve themselves in discussions of these matters if and when the planning and/or resulting improvements directly affect the ability of the FAA to issue grants-in-aid for airport improvements or to ensure the safe operation of the Nation's air traffic system. The FAA may be involved with decisions involving off-airport infrastructure improvements, such as roadways, when the improvements could directly affect the improvement and/or operation of an airport. Both the City of St. George and the Washington County Commission have been involved in the planning efforts associated with the proposed replacement airport and have been amenable to the results and decisions presented in the FEIS. The FAA is aware of the legislation drafted by Senator Bennett in March of 2006, as it proposes to change the designation of several public land areas within the vicinity of the proposed replacement airport. The FAA will continue to follow this possible legislation through the legislative process.

T. J. Stetz
FAA Northwest Mountain Region
1601 Lind Ave., SW, Ste 315
Renton, WA 98055-4056

Re: New airport in St. George, Utah

To T. J. Stetz,

We are opposed to the Federal Government's wasting hundreds of millions of dollars and other resources on constructing a new airport for St. George, Utah for the following reasons:

1. Cedar City has a regional airport just 50 miles from St. George. The Cedar City airport has a long runway that can accommodate regional and larger jets. The Cedar City airport also has a new terminal that opened just last fall.
2. Flights to Cedar City do not cause any impact on Zion National Park as flights to St. George would do.
3. All necessary support services, such as ILS, are already in place in Cedar City.
4. With increased demand, it would eliminate cedar City's need for its Essential Air Service subsidy of almost \$1 million, which would save taxpayers even more money.

Please take these considerations into account when making your decision regarding the construction of the new St. George airport. Thank you.

Respectfully,



Mr. and Mrs. Ernest Heyborne

Response to Mr. and Mrs. Ernest Heyborne

The use of the Cedar City Airport (CDC) was evaluated as an alternative to construction of the proposed replacement airport in the EIS. It was removed from further consideration because it would not satisfy the travel demand based in St. George and would not serve as a replacement airport for the St. George Municipal Airport (SGU). Even if CDC was improved, an airport in St. George would need to remain operable because of the local demand.

The Federal government does not control where, when, and how airlines provide their services; nor is the Federal government the driving force in airport capacity development or airport utilization. Rather, the aviation industry, in partnership with local and regional government, and in response to market demand, determines where and how air travel demand is accommodated. It should also be noted, however, that any substantial redistribution of traffic from SGU to other airports, or increasing service to other destinations would require airline strategic decisions that cannot be predicted or relied upon.

Samuel Roth
1997 Eucalyptus Cir
St. George, UT

July 3, 2006

T.J. Stetz
Regional Environmental Protection Specialist

Mr. Stetz:

My comments are focused toward the clear need for the FAA to address and mitigate the impacts that aircraft flights over Zion National Park pose on those seeking the rare solitude and natural quiet that the backcountry wilderness areas of the park provide. In my opinion the question of whether or not the St. George Airport should be relocated should be addressed by a discussion of economics rather than environmental issues. Do the monetary benefits really outweigh the costs? That is not something that I am prepared to address, but I would like to comment on the “use” of the park by aircraft flying overhead.

Appendix W states that the noise levels in Zion “are well below the DNL 55 dB level that the U.S. Environmental Protection Agency has identified as the level to protect human health and welfare with a 5 dB margin of safety, and are additionally well below the DNL 45 dB goal to be achieved indoors when sound insulating residential and other buildings.” This statement appears to be false as Table S.2033-2 in Appendix S shows an average of 1 event per day exceeding the 60 dBA threshold and between 13 and 28 events per day exceeding the 45 dBA level. Claiming that the aircraft noise will not damage the hearing of those visiting Zion National Park should go without saying, but the data show that the noise levels do exceed the limit set by the EPA to prevent hearing damage.

The final paragraphs of Appendix W address the question: does the replacement airport “use” Zion National Park. As stated in the excerpt below, the FAA would be responsible to mitigate and minimize harm to the natural quiet of Zion if the replacement airport were found to “use” the park.

49 USC § 303(c) is a substantive statute, prohibiting DOT from approving a project that “uses” publicly owned lands from a public park, unless there is no feasible and prudent alternative, and in such a case, the agency has an obligation to mitigate by including “all possible planning to minimize harm to the affected land from the proposed use.”

The EIS concludes that because the replacement airport only contributes a small percentage of the aircraft noise in Zion Park, the FAA is not required to include all possible planning to minimize harm to the affected land from the proposed use.

Concluding that the FAA should not be required to mitigate aircraft noise over Zion because the replacement airport will only contribute a small portion of the cumulative noise is an incorrect conclusion. If no flights existed except those originating at the St. George Airport, then the replacement airport would undoubtedly be seen as a “use” of the park. A new project bears the burden of compliance with all standards and regulations; current conditions that are out of compliance do not excuse a new project from complying fully with applicable standards.

Setting aside all of the metrics and quantitative noise analyses, as a frequent user of the backcountry of Zion, I can state that low flying aircraft over the park not only qualify as a use but could also be categorized as a major annoyance and violator of the natural setting, and should be subject to the same disciplinary actions that would result if one were to drive all-terrain vehicles in the backcountry of the park. The EIS should at least require the FAA to prohibit all low level flights over Zion National Park as a mitigation measure.

As a final note, the EIS has focused much of its attention on the noise from aircraft, but the visual impact of the jet trails left by high altitude flights are also important. On a recent visit to Zion I happened to look up and count nine distinct and clearly visible jet trails crisscrossing the sky. These visual impacts should be considered in future discussions of the impacts of flights over natural places like Zion National Park.

Sincerely,

Samuel Roth
1997 Eucalyptus Cir
St. George, UT 84790

Response to Samuel Roth (July 3, 2006)

In asserting that **Appendix W, *Issues Relating to Mitigation of Aircraft Noise Impacts on Zion National Park***, is false as evidenced by **Appendix S, *St. George Replacement Airport EIS Noise Levels for 2003 Conditions, Zion National Park and Other 4(f)/303(c) Sites***, the commenter has confused the definitions of cumulative DNL noise level and the single event noise levels represented by the number of events data. The DNL level is an average noise level representative of the total noise energy present at a location for a 24-hour period, with penalties applied for energy that is generated during the nighttime hours of 10 p.m. to 7 a.m. Single event levels used in computing the Number of Events Above metric are based on instantaneous noise threshold levels. Consequently, for an area to exceed the FAA or USEPA noise thresholds cited in **Appendix W**, the average noise level (i.e., DNL) must exceed those thresholds, not the single event noise level.

In order for a location exposed to one event per day to exceed the 60 dBA of DNL threshold, that one event would have to last for the entire day. Similarly, when 13 to 28 events exceed the 45 dBA single event noise level, the time of exposure associated with those events would have to approximate 24 hours to exceed the 45 dBA of DNL level. Therefore, hundreds of events, more than are projected to be present, would need to occur during an average 24-hour period to exceed the cited FAA or USEPA levels.

As presented in the FEIS **Appendix W, *Issues Relating to Mitigation of Aircraft Noise Impacts on Zion National Park***, and **Appendix X, *Monitored Noise Abatement Initiatives***; the FAA has considered measures to minimize the impacts of aircraft overflights on Zion National Park resulting from the proposed replacement airport. The noise abatement initiatives described in **Appendix X** include: implementation of a pilot education program, development of commercial operator agreements, distribution of printed materials to educate pilots, flight monitoring, and implementation of various educational initiatives.

The assertion in the comment that jet contrails are a major visual impact is not supported by evidence. Contrails are line-shaped "condensation trails" that are sometimes produced by aircraft engine exhaust, typically at aircraft cruise altitudes several miles above the Earth's surface. Contrails have been a normal effect of jet aviation since its earliest days. They are composed primarily of water (in the form of ice crystals) and do not pose a health risk to humans. For a contrail to form, suitable conditions must occur immediately behind a jet engine in the expanding engine exhaust plume. Depending on the temperature and amount of moisture in the air at the aircraft altitude, contrails evaporate quickly (if the humidity is low) or persist (if the humidity is high). Atmospheric temperature and humidity at any given location undergo natural daily and seasonal variations and hence, are not always suitable for the formation of contrails. (For more information refer to *Aircraft Contrails Factsheet*, U.S. Environmental Protection Agency, EPA430-F-00-005, September 2000, www.epa.gov.)

The FAA has concluded, after consultation with the NPS (see **Appendix N, *Coordination with the National Park Service***, in the FEIS and **Appendix A** of the Record of Decision), the impacts from the proposed replacement airport do not result in a "use" of Zion National Park as defined under Section 4(f)/303(c).

June 10, 2006

T.J. Stetz
FAA
Northwest Mountain Region
1601 Lind Avenue, S.W.
Suite 315
Renton, Washington 98055-4056

Dear Mr. Stetz:

As a former navy pilot, I know something about jets. They are noisy and dangerous.

The proposed airport site in St. George, Utah, will destroy the quality of life in St. George and the surrounding areas. This area is a "jewel" and I hope you will visit before you make a decision.

You will see lots and lots of houses near the proposed site with more to come.

I have lived in and around airports throughout my life. I remember when we were flying jets out of NAS Jacksonville. Residents complained about the noise and they moved the jet squadrons to Cecil Field, which, at that time, was in the "boondocks". We drove twenty miles to get to work.

Within a few years, Cecil Field was surrounded by houses. Residents complained about the noise and Cecil Field was closed.

That story has repeated itself throughout the country.

The selected site for the new airport in St. George is too close to town. The city has already expanded to the proposed airport site and there is a new development, nearby, called the "Knolls".

"Coral Canyon", which is a huge housing development situated between St. George and Zion National Park is, I think, right under the approach to the Southwest runway of the proposed airport site. Coral Canyon has been developed by Arizona Public Service.

There is a vast amount of land surrounding St. George, on the Arizona Strip, which could house a noisy airport. It makes no sense to create unnecessary noise, danger, and traffic in St. George when you could use the land you already own on the Arizona Strip and keep the airport away from thousands of people.

Please decline the request to build a new airport at the currently proposed site in St. George. It is wrong.

Sincerely,



Albert B. Scholl, Jr.
1110 East Fort Pierce Drive
St. George, Utah 84790
(435) 634-0801
Eagle@infowest.com

Response to Albert B. Scholl, Jr. (June 10, 2006)

In St. George, the edge of existing residential development in the vicinity of the proposed replacement airport is located approximately three-quarters of a mile to the west-northwest of the western airport property boundary. The Knolls of Little Valley, at River Road and South 2800 Street, is located within this part of the City, approximately 1.8 miles from the proposed replacement airport. The Coral Canyon Community and Golf Course is located in the northwest corner of Washington City, near the intersection of I-15 and State Route 9, and lies approximately 7.5 miles north-northeast of the proposed replacement airport. Both communities experience overflights from the existing airport and would continue to experience overflights from the proposed replacement airport. Operations from the proposed replacement airport would not create an aircraft noise or safety issue for these and other surrounding communities.

The Arizona Strip encompasses five million acres of the far northwestern corner of Arizona north of the Colorado River and south of the Utah border. Sites located in northern Arizona were initially reviewed during the airport site selection study conducted by the City in 1998, but these sites were eliminated from further consideration due to limitations of the natural terrain, runway orientation constraints, and/or distance from the City of St. George to the site. The City has conducted planning efforts in association with the EIS in the form of an Airport Vicinity Land Use Plan (AVLUP) to ensure that development is compatible with aviation uses within the vicinity of the proposed replacement airport.

From: Mark Perryman
Sent: Wednesday, July 05, 2006 5:18 PM
To: Sara Hassert; Shari Cannon-Mackey; Barb Castro
Subject: FW: St. George Utah Replacement Airport FEIS Comment Letter - Spotts

From: TJ.Stetz@faa.gov [mailto:TJ.Stetz@faa.gov]
Sent: Wednesday, July 05, 2006 2:57 PM
To: zz Karl Lewis; Patricia Deem; Carolyn.Read@faa.gov; Lowell.Johnson@faa.gov; Mark Perryman; TJ.Stetz@faa.gov
Subject: Fw: St. George Utah Replacement Airport FEIS Comment Letter - Spotts

----- Forwarded by TJ Stetz/ANM/FAA on 07/05/2006 11:54 AM -----

"Richard Spotts" <spotts@infowest.com>

To TJ Stetz/ANM/FAA@FAA

cc

07/03/2006 04:02 PM

Subject St. George Utah Replacement Airport FEIS Comment Letter

July 3, 2006

Mr. T.J. Stetz
Regional Environmental Protection Specialist
Federal Aviation Administration
Northwest Mountain Region
Airports Division
1601 Lind Avenue, S.W., Suite 315
Renton, Washington 98055-4056

RE: Final Environmental Impact Statement and DOT Section 4(f)/303(c)
Evaluation for a Proposed Replacement Airport for the City of St. George, Utah

Dear Mr. Stetz:

Please accept and consider my following comments on the Final Environmental Impact Statement (FEIS) and DOT Section 4(f)/303(c) Evaluation for the proposed St. George replacement airport.

I am disappointed with two of the FAA's responses to my November 7, 2005 letter on the DEIS. My letter is reprinted in FEIS Appendix R with the identifier as comment #39. The FAA responses of concern are numbered #2 and 4.

In FAA response #2, it says that my concerns about future changes and increases in lower-elevation commercial air tours over noise sensitive areas are "not reasonably foreseeable." I strongly disagree. The FAA has already initiated the administrative processes to limit such air tours over Grand Canyon National Park, and has announced through interim restrictions that future changes are also anticipated under the National Parks Air Tour Management Act rulemaking process. Moreover, the explosive growth in population in surrounding communities is obvious, as reflected in the current proposals to expand or build a number of new airports. As such, the prospect for change in air tour routes is very foreseeable. While it may not be possible at this point to predict where specific new air tours may develop, it is possible for the FAA to describe the process of how such changes would be approved and how noise sensitive areas would be protected. I hope that this FEIS deficiency is corrected in the Record of Decision (ROD).

In FAA response #4, it says that there is currently no standard for determining when commercial air tour noise may constitute a constructive use in noise sensitive areas that may be impermissible under Section 4(f)/303(c). It also says that the FAA and NPS are working on developing noise criteria. While the FEIS has a huge amount of detailed information on noise effects from higher-altitude commercial flights over noise sensitive areas, it contains no modeling or other noise estimates for probable lower-altitude air tours over at least some of these areas. I hope that this FEIS deficiency is corrected in the ROD. It is especially important for the FAA to describe its administrative process and firm schedule for developing and approving these noise criteria so that they can be promptly and effectively applied.

I would appreciate receiving a copy of the ROD.

Thank you very much for your consideration.

Sincerely,

Richard Spotts

1125 W. Emerald Drive

St. George UT 84770-6026

spotts@infowest.com

Response to Richard Spotts (July 3, 2006)

The National Parks Air Tour Management Act of 2000 (the Act) applies to any person who conducts a commercial air tour operation over a unit of the National Park System, over tribal lands that are within or abutting a unit of the National Park System, or any area within one-half mile outside of a unit of the National Park System. The Act specifically excludes Grand Canyon National Park, tribal lands within or abutting Grand Canyon National Park, parks or tribal lands located in the state of Alaska, and flights conducted by a commercial air tour operator over or near the Lake Mead National Recreation Area solely as a transportation route to conduct an air tour over Grand Canyon National Park. The Act expressly prohibits commercial air tour operations over Rocky Mountain National Park, regardless of altitude.

The Act requires all persons operating or intending to operate commercial air tours to apply to the FAA for authority to conduct such activity. The Act further requires the FAA, in cooperation with the National Park Service (NPS), to develop an Air Tour Management Plan (ATMP) for each unit of the National Park System or tribal land that does not have a plan in effect at the time a person applies for authority to conduct such an operation. Therefore, it is the application by the commercial air tour operator that triggers the need for Federal action to develop an ATMP for a unit of the National Park System, or abutting tribal land. The FAA has received applications from commercial air tour operators to conduct commercial air tours for approximately 100 national park locations. More information on these locations and the ATMP program can be found at <http://www.atmp.faa.gov>.

Once the need has been triggered, the FAA and the NPS prioritize and schedule the development of the ATMP. Upon initiating the ATMP and associated National Environmental Policy Act (NEPA) study, the current conditions of the commercial air tour operations (aircraft fleet mix, routes, altitudes, times of day, times of year, etc.) are researched and defined. The FAA and the NPS then jointly formulate alternatives to the current conditions for consideration in further detailed analyses. Additionally, upon initiating the NEPA process, the FAA and the NPS work to identify all stakeholders that may have an interest in the project. Part of the initial data gathering phase includes research and identification of those properties within the boundaries of the park and the surrounding areas, which meet the provisions of Section 4(f)/303(c). The FAA will consult with all appropriate Federal, state, and local officials having jurisdiction over the affected 4(f)/303(c) resources when determining whether project related noise impacts would substantially impair the resources.

At the present time, the FAA does not have a schedule for development of ATMPs, however, NPS has repeatedly indicated that completing an ATMP for Zion National Park is a priority. Currently, air tours are authorized to fly over Zion National Park, and their operations are limited to the annual number of flights that they conducted for the year prior to April 5, 2000, when the Overflights Act was signed by former President Clinton.

FAA Advisory Circular (AC) No. 91-36D, *Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas*, encourages pilots making VFR flights near noise-sensitive areas to fly not less than 2,000 feet above ground level (AGL), weather permitting. For the purpose of AC 91-36D, the ground level of noise-sensitive areas is defined to include the highest terrain within 2,000 feet AGL laterally of the route of flight, or the uppermost rim of a canyon or valley. This operational guidance would apply to any Bureau of Land Management (BLM) noise-sensitive areas.

Low elevation flights from the existing airport and the proposed replacement airport are addressed in **Chapter Six** of the FEIS. The information provided in that chapter addresses the noise levels associated with flights between the existing airport and the proposed replacement airport and other airports within the initial area of investigation. The cumulative noise effects from both high and low altitude flights are addressed in **Chapter Seven** of the FEIS. Low altitude noise level effects were derived largely from piston-powered (i.e., propeller) aircraft operating to and from the existing airport and the proposed replacement airport throughout the initial area of investigation and from air tour operators that fly within the same area, regardless of whether they operate at either the existing airport or the proposed replacement airport or not.

Substantial impairment under Section 4(f) is a specific standard relating to transportation use, and occurs only when the activities, features, or attributes, purposes and values of the resource that contribute to its significance or enjoyment are substantially diminished. With respect to aircraft noise, for example, noise must be at levels high enough to have negative consequences of a substantial nature that amount to a taking of a park or portion of a park for transportation purposes. This is a different standard under different statutory authority than "impairment" as determined by NPS under NPS statutory authority.

The FAA currently has no established threshold of significance for overflight noise over national parks or similar natural areas. As noted in the FEIS, in **Appendix W**, on page W-3, "these are complex issues on which there are divergent opinions and very limited studies, and they will not be resolved during the duration of this EIS." The FAA has engaged in efforts with the National Park Service and other organizations directed toward these goals, and hopes to continue these efforts in the future.