

**Grand Canyon Working Group
Ninth Meeting
June 12 - 13, 2007
Chaparral Suites
Scottsdale, Arizona**

Summary of Discussion and Agreements Reached

Facilitators/recorders: Lucy Moore, Ed Moreno, Tahnee Robertson

Members Present:

Lynne Pickard, FAA, Working Group Co-chair
Steve Martin, Superintendent, Grand Canyon National Park, Working Group Co-chair
Bill Austin, US Fish and Wildlife Service
Marklyn Chee, alternate for Alan Downer, Navajo Nation
Roger Clark, Grand Canyon Trust
Roxane George, Sierra Club
Elling Halvorson, Papillon Airways
Craig Sanderson, alternate for Cliff Langness, King Airlines, Inc. and Westwind Aviation
Doug Nering, Grand Canyon Hikers & Backpackers Assoc.
David Nimkin, National Parks and Conservation Association
Alan Stephen, Scenic and Grand Canyon Airlines, Inc.
Rick Eisenreich, alternate for John Sullivan, Sundance Helicopters, Inc.
John Timmons, alternate for Katherine Andrus, Air Transport Association
Charlie Vaughn, Hualapai Tribe
Heidi Williams, Aircraft Owners and Pilots Association
David Yeaman, Grand Canyon Private Boaters Association

NPS, Natural Sounds Program chair:

Karen Trevino, NPS, Natural Sounds Program

Member/Alternate Absent:

Roland Manakaja, Havasupai Tribe
Mark Grisham, Grand Canyon River Outfitters Association
Bob Henderson, alternate for Alan Zusman, Naval Facilities Engineering Command
Leigh Kuwanwisiwma, Hopi Tribe

Summary of Agreements:

Consensus: The draft summary of the eighth meeting was approved as written.

Consensus: Model runs will be done for three categories: all aircraft, air tour and air-tour related, and commercial air tour.

Consensus: Facilitators were authorized to create a strawman set of recommendations for discussion and negotiation at the next meeting.

DAY ONE:

Welcome and Introductions: Lucy Moore welcomed members, alternates, staff and observers to the ninth meeting of the Grand Canyon Working Group. All present introduced themselves. Steve Martin, new superintendent at Grand Canyon National Park, is now co-chair of the Working Group. Karen Trevino of the NPS Natural Sounds Program will occupy the special representation seat previously held by Joe Alston. Roxane George, although no longer employed by the Sierra Club, remains their representative on the Working Group. Marklyn Chee announced that this would be his last meeting, as he is leaving tribal government. Tony Joe will replace Marklyn as the alternate for Alan Downer, Navajo Nation.

Facilitator Remarks: Lucy acknowledged that the GCWG had not met for six months, and that during that time the two agencies had been working on certain issues relating to the NEPA process. She reviewed the agenda, pointing out that much of the meeting was devoted to an update on the NEPA process, and that time was reserved on Day Two for the group to continue discussion of promising elements identified at the December meeting to address flights under 18,000 feet.

Approval of Meeting Summary: The summary of meeting # 8 was postponed on the agenda to the second day, when it was approved as corrected.

Handouts: Tahnee reviewed handouts for the meeting:

- Agenda
- List of 27 elements developed at the December meeting
- Draft summary of December meeting (for members only)
- Evaluation sheet
- Packet of materials relating to NEPA updates and the 6 alternatives

Setting the Stage: Overview from the co-chairs: Steve Martin expressed appreciation for all members and staff who have been working on these issues so diligently. He had attended two Working Group meetings prior to this one, as regional director, and as Park Service deputy director in Washington. He is "getting up to speed" as fast as he can, and is hopeful that resolution is near. The two agencies are working on a proposal that will reconcile the conflicting instructions in the Overflights Act and the court case regarding high altitude flights. "There is devil in the detail," he added, and his agency is ready to offer some suggestions to the group. But, the intent is to try to reach consensus.

Steve and Lynne both reported on a productive interagency meeting in May in Washington. The Department of the Interior Acting Assistant Secretary for Fish and Wildlife and Parks, David Verhey, confirmed that the Secretary is extremely interested in national parks, and in the resolution of the overflights issue. Lynne echoed that Dan Elwell, FAA's Assistant Administrator for Aviation Policy, Planning and Environment is engaged in this effort and has written a letter to DOI expressing FAA's long-term commitments regarding high altitude aircraft noise.

Legislation: Members were particularly interested in the recent efforts to introduce legislation to amend the Overflights Act. Lynne summarized the legislative activities in recent months. At the September 2006 GCWG meeting, it was clear that the group was unable to reach consensus on how to reach NPS restoration goals without significant impact on the national airspace. The problem reverted to the agencies for resolution. FAA believed that legislation would be needed to remove high altitude enroute aircraft flights from the equation. FAA proposed such legislation for inclusion in the Administration's bill for FAA reauthorization and received initial verbal indications of support from the DOI political level. However, fairly strong NPS concerns were expressed during the formal interagency review of the bill and time ran out for reaching a solution, so the Grand Canyon legislation was omitted from the Administration's bill. There is now no Executive Branch legislative proposal for Grand Canyon overflights.

Senator McCain drafted legislation as well, surprising many including FAA. Many organizations and other agencies were asked to comment on the language, and did. Lynne said she found some provisions odd and unexpected. Tribal and emergency exemptions were left out, and the proposal would have inadvertently undermined the NEPA process. Furthermore, the proposed language seemed to bypass the GCWG. FAA went through several rounds of comments with McCain's office, as did NPS and several GCWG members who had been asked to comment. Senator McCain's office subsequently advised all parties that he would not submit a proposal during Senate Committee review, but might introduce something when FAA reauthorization came up on the floor.

Steve agreed that settling the high altitude problem is imperative in moving forward. The NPS position is that this can be done administratively and with the GCWG. His agency responded to McCain's request for comment, reaffirming the need to let the Working Group complete its task. The consensus of the Working Group should carry a lot of weight in Washington, he said.

Steve added that he believes there is an administrative solution to the high altitude dilemma, but that his focus now is the Working Group process. If legislation seems necessary to support the EIS Record of Decision, he might consider it at that time. Legislation now would create more problems for the Working Group and make their process overly complex, he concluded. The best solution with respect to Congress is to show that the GCWG can get this job done.

Both agencies made it clear that they are not initiating legislation at this time. But co-chairs explained that when Congressional staff request an opinion from an agency, as members of the federal government, that agency must respond. In addition, the response is to be kept confidential. There was discussion about the inconsistency of this kind of communication with Congress with the protocols of the GCWG. Although the protocols *encourage* members to alert the group if they have contact with Congress, the press or the courts, it is not mandated. A member expressed disappointment that those non-federal agencies that were contacted did not notify the Working Group, as requested in the protocols. Some members felt that it was unfair and destructive for congressional staff to

contact some GCWG members and not others. They would have preferred to have dealt with the Congressional inquiries in the group setting, had time allowed.

Discussion:

[Mike Loghides, McCarran International Airport, joined the discussion, per agreement.]

There were additional questions about the commitment of FAA not to pursue legislation at this time. Lynne repeated that no one at FAA is proposing legislation at this time, but that when presented with proposals from other sources, "We are going to respond, not sit back and take a pass." She added that she appreciates the NPS ideas, but remains concerned that a legislative solution may be necessary in the future to bring clarity to this process and make distinctions in types of aircraft and kinds of situations.

Karen spoke for NPS saying that although legislation may be necessary to codify a solution, at this point the Working Group deserves a chance to fulfill its mission unimpeded by legislation. Other members echoed this sentiment. Some felt that the Working Group should express themselves as a group to Senator McCain, and that it had been detrimental to the process for some members to have been asked for comment, and others not.

A member pointed out that any attempted legislative fix undermines the group. Even if the Working Group were to agree on language, once the language goes to Congress the group loses all control, and risks everything.

A tribal member observed that his issues were different from others, and that once a process is underway, his tribe needs to protect its own position, "not sign on to a generic position."

Letter to Senator McCain: The group considered drafting a letter from the GCWG to Senator McCain, and perhaps appropriate committee chairs, asking for a moratorium on the pursuit of legislation to resolve the high altitude conundrum. Specifically, the letter would thank the Senator for his interest and involvement and request that he not introduce legislation while the GCWG is developing its recommendations (in line with the timeline and charge in the Federal Register). A small group volunteered to draft language.

On Day Two the full group reviewed the language drafted by the small group. A straw poll indicated that consensus on sending the letter could not be achieved. In addition, attorneys from both agencies indicated that there would be legal problems for the agencies to sign such a letter. Any letter from an aviation rulemaking committee should come from the FAA Administrator. Some members made it clear that they would lobby individually with McCain and others to discourage legislation and allow the GCWG to complete its tasks. There was agreement that any group member communicating with Congressional staff should not represent themselves as speaking for the GCWG. Lynne said she would communicate to FAA's political level and Congressional staff that

legislation would be counterproductive at this time, but advised the Working Group that FAA is not persuaded that it will not be necessary in the future.

Roles and Responsibilities: Co-chairs clarified that by authority of the Overflights Act, NPS develops recommendations, and FAA implements them, unless there are safety reasons not to. FAA and NPS have signed a General Agreement that covers roles, responsibilities and procedures for the NEPA process, and commits the agencies to working out any differences collaboratively. The two agencies are joint leads on the EIS process: NPS will select the preferred alternative, and FAA is the implementing agency. The NEPA analysis needs to support the FAA rulemaking and other decisions involving implementation. FAA will present more information on their Aviation Rulemaking Committee process (ARC) at the next GCWG meeting.

FAA plans to begin a safety review of the alternatives as soon as possible, in order not to hold up the process. On the other hand, the agency needs to assess safety factors in a cost-effective way, hopefully spending most of their effort on the preferred alternative.

Although the preferred alternative is scheduled by the NEPA team for a January 2008 meeting, the agencies emphasized that the GCWG can have a significant role in the development of that alternative. Members can work with the elements identified in the current alternatives, and perhaps at a subsequent meeting in the fall they can learn more about the analysis and explore consensus on some of the elements. The agencies are hoping for group consensus on a recommendation. If the GCWG does not reach consensus, the agencies will consider the group's deliberations. Steve indicated that his goal is GCWG consensus on the preferred alternative, or alternatively to incorporate as much consensus as possible in NPS's preferred alternative.

During the FAA rulemaking process, the GCWG will serve as an Aviation Rulemaking Committee, with special status in that process.

Timeline: Co-chairs noted that the timeline for the NEPA process has slipped. The EIS Record of Decision is now scheduled for early spring of 2009. FAA rulemaking will begin prior to the ROD, during the EIS process and is targeted to be completed in the Fall of 2009. Charting, training and other preparations for implementation will be necessary before the rule would take effect in the Spring of 2010. Co-chairs regret the timeline delay, but believe strongly that the process should be handled carefully, and that the GCWG should be given the opportunity to complete its work.

Definition of Substantial Restoration of Natural Quiet: During the last few months, NPS has considered the potential for administrative action that would make possible the achievement of substantial restoration and not interfere with the high altitude flights. NPS reviewed this approach with FAA at a May interagency meeting. Steve Martin presented language that reflects current NPS thinking, but he encouraged GCWG members to review and comment. The language is intended to clarify -- not change -- the definition, and to provide a way of dealing with the high altitude flights in a way that could lead to resolution. Following comment by the GCWG and review by NPS staff, the

definition clarification will be published in the Federal Register, with a formal comment period.

Briefly, recommendations affecting Grand Canyon National Park overflights at an altitude of 17,999 feet (the current height of the Special Flight Rules Area) and below would be within the purview of the GCWG and the EIS process. At 18,000 feet and above, NPS would work with the industry and FAA to mitigate the noise from high altitude aircraft as technology permits. Specifically, the two agencies would agree to focus on 1) source reduction, 2) airspace redesign, and 3) advanced navigational capability. These three areas would, of course, be pursued only as safety considerations permit. These three opportunities were described in a letter from FAA's Dan Elwell to the Department of Interior and the Park Service, and were incorporated in the NPS proposed definition clarification. [Both the letter and the NPS proposed language were distributed to the GCWG on their request.]

Steve added that the agency's overall goal is to improve the soundscape of the park and provide fair business opportunity for the air tours. By bifurcating the high altitude and the flights at and under 17,999, aircraft noise can be decreased over the Park without making the air tours responsible for all aircraft noise. High altitude noise will be included in the overall cumulative noise calculation for the Canyon. The NEPA document would include strategies, benchmarks, and timing consistent with Dan Elwell's letter for taking advantage of new technology and navigational systems as they become available.

Discussion:

There were questions about the impact of the language on GA flights. Would they be included in the flights at and under 17,999 feet? The GA member expressed AOPA's reservations about the effects of the refined definition on general aviation.

Some questioned the language stating that there "will be" reduction in noise. Given the rapid growth of high altitude air traffic in the area, how can noise reduction be guaranteed?

Lynne spoke for FAA, saying that the letter from FAA's Dan Elwell was an effort to begin discussions between the agencies, and that the commitments offered are irrespective of the 1987 Overflights Act. Although the letter contemplated legislation, NPS has incorporated the ideas in their administration language. This does not change FAA's commitment.

Concerning the GA flights, there is no actual operational or noise data, but indications (discusses at a previous GCWG meeting) are that the contribution is probably minimal. There was a comment that the goal is to minimize noise, even it cannot be captured or quantified.

Members thanked Steve for the effort at an administrative correction. An air tour operator acknowledged that the Overflights Act was intended for tour aircraft. He added, however, that he is concerned about the "or more" language. Although in 2007 there may be an

understanding that 50% of the Park, and 75- 100% of the time meets the goal, and that the air tour industry continues to strive for more reduction in noise beyond that, in the future, an agency decision-maker may disagree and "start this thing all over." Steve responded that he understood the need for stability and certainty, and that he was not intending to "move the target."

Karen added that the intent was to provide triggers for additional improvement, as possible, in the spirit of adaptive management and flexibility. There were questions about adaptive management and risk of interpretation in the future. An environmental representative spoke of the desirability – and the legal authority -- of giving an agency the flexibility to be creative and experiment. He commended both agencies on "a breakthrough in this discussion."

In answer to member questions, Steve emphasized that the proposed language was not final, but reflected the agency's current thinking. It is the agency's effort to resolve the issue of high altitude aircraft and to deal fairly with those affected. He expressed hope that this bifurcated concept would open the door to resolution.

Tribal Involvement:

Grace Ellis (NPS) and Barry Brayer (FAA) reported they were planning to have informal meetings with both Hualapai and Navajo while they are in attendance for the GCWG. The pan-tribal meetings are proving to be difficult to coordinate, and the NEPA team may shift their strategy to individual visits.

Cooperating agencies:

Grace plans to formalize the relationship tomorrow in a meeting with cooperating agencies BIA and Navajo.

Timeline review:

Grace and Barry reinforced Lynne's message about the timeline slippage, saying that the goal is to produce an excellent product with an inclusive process, not to keep to an unrealistic schedule. The Working Group has had an important role, and will continue to influence policy and implementation, they added.

The NEPA contractors (Denver Service Center, overall management, and Parsons, impact topics) issued a Progress Report in April 2007. They estimate 13 weeks from now for analysis and noise modeling (Volpe). In the meantime, the technical subgroup (see below) is charged with reviewing appropriate noise metrics for the EIS. There will be over 300 maps and contours. Grace Ellis commented that high altitude aircraft noise is lower than air tour noise, and so merits different treatment which is consistent with the proposal to clarify the substantial restoration definition.

In December, the Working Group will receive analysis results, for review prior to a GCWG meeting in January 2008. At that meeting, focus will be on a preferred alternative. The NEPA team anticipates that the GCWG will also meet in June and

August 2008, with a final EIS released in February 2009, and the Record of Decision in March or April 2009.

Noise Modeling Update (Cyndy Lee)

Cyndy reported that she has already finished modeling Alternative A. The forecast condition is on hold, waiting for a method to account for different fleet mixes in the future. She will begin work on Alternatives B – F soon, starting with 2 – 3 weeks of model set up and 8 – 10 weeks of model runs. The soundscape of the affected environment is being written by DSC; Cyndy will write the environmental consequences to the soundscape. Cyndy outlined the 7 scenarios to be run for each alternative and each metric, for the base year and the forecast year:

1. all aircraft
2. all air tour & air tour related, and the following subsets:
 - 2a. commercial air tours
 - 2b. Grand Canyon West
 - 2c. transportation/repositioning
 - 2d. over-the-edge
 - 2e. Brown routes

Discussion:

There was concern that the 3 metrics and resulting 300 noise maps will provide so much information that it will be impossible to deal with. A participant asked if it would be possible to combine air tour and air tour-related in the same model run.

There were questions about the five subsets of air tour and air tour-related. Cyndy replied that if the Park is close to a management goal, but an area is bombarded by noise, it could be helpful to know which group is contributing to that noise. In addition, said an air tour operator, it is important to account for noise in a way that distinguishes one source from another, to avoid unfair allocation of noise on one group over another.

Another participant urged that Grand Canyon West (GCW), Over-the-edge, Bar 10, and Supai flights should be exempt from the calculations. DOI attorney Carla Mattix explained GCW has a regulatory exemption, meaning that the noise effect is included in the analysis, but not counted in the allocation. Hualapai is not statutorily exempted, she said.

A participant suggested that GCW, Over-the-edge and Brown routes be combined for modeling purposes. The Hualapai representative felt that this did not make sense because Bar 10 is distant from the other two. He also suggested that other tribal flights, like Havasupai wildlife management flights, be categorized separately. Others spoke in favor of exempting the three categories from the noise signature. The Over-the-edge flights, for instance, are connected with a river trip.

Another observed that it seemed as if this number of categories was to help people position themselves, rather than find an equitable way to solve the problem.

In response to a question, Cyndy said that aircraft at 18,000 feet and above will be modeled, but only once since they will be accounted for in cumulative impacts.

The FAA representative said that she felt the discussion was "going back in time," that long ago it was understood that all noise would be counted, but not all sources would be regulated. High altitude commercial and GA flights above the SFRA that are audible in the Park, as well as aircraft that are audible but flying outside the Park, will be counted cumulatively.

In answer to a question, Cyndy explained that actual testing was done to validate the model, such that operations from other parts of the Park would be confirmed with reasonable accuracy. (No testing was conducted in the West End.)

Sensing there was no agreement on combining any categories, Cyndy suggested focusing her modeling on the top three. After some discussion, the group agreed by consensus to direct Cyndy to model the first three categories, understanding that the second category, air tour and air-tour related will include all five of the subsets identified above. Cyndy indicated that she could break out the noise analysis into multiple air tour categories if the Working Group wants to see them.

Consensus Agreement: Model runs on three categories: all aircraft, air tour and air-tour related, and commercial air tour.

Noise Metrics:

The two agencies have formed a technical working group to evaluate a listening area metric that the Park Service is proposing to use in the Grand Canyon EIS process. The working group includes Kurt Fristrup and Ken McMullen (NPS), Tom Connor (under contract to FAA), Paul Joly (FAA), Cyndy Lee (Volpe), and a sixth person yet to be named. The group has had one conference call, and one meeting yesterday. They are working to agree on "terms of reference," or a scope of work, which will include review and evaluation of metrics proposed to be used for the Grand Canyon EIS.

The metric in question would be used to measure visitor, wildlife and cultural impacts to certain areas within the SFRA, and would help shape the preferred alternative according to NPS. FAA believes the metric has not had adequate development, peer review, or technical foundation, and would prefer for the EIS to employ metrics used to date with the GCWG that are already established metrics.

Discussion: Members had concerns about the metric, including how late it was in the process to introduce new noise metrics. Some feared it would affect the definition of substantial restoration, and therefore appeared to be a backdoor change of the rules. They were also concerned that the agency seemed to be disregarding the agreement reached by the Working Group last year on the use of INM 6.2. Others asked about noise from boats and other sources. The FAA and others felt it is critical that there be a high level of comfort and confidence in the methods and the results, and advised against introducing a new or innovative metric..

NPS said they are committed to providing the best possible information on noise impacts to Park resources, and believe that this is a valuable tool to analyze the visitor experience and cultural impacts. Karen remarked that FAA and DOT methodologies focus on damage to the human ear and assess noise in urban areas, neither of which is adequate for the task before NPS. INM 6.2 is a noise model and does not analyze impacts to natural or cultural resources. Use of this new metric is an effort to be more objective, to provide a measurement for these other impacts. Karen added that NPS is required by law to analyze these impacts, and that the Council on Environmental Quality, the arbiter of NEPA, has made it very clear that NPS has the expertise and jurisdiction to analyze the effects of noise on national park resources.

NPS, she said, is not intending to create a "moving target," as some fear, but on the contrary is looking for certainty. Appropriate tools, she said, include adaptive management, which allows for some flexibility and creativity in crafting the solution.

Kurt added that the new metrics have nothing to do with the substantial restoration of natural quiet. They are to be used strictly in the context of the NEPA analysis, and will not apply to the definition. Lynne clarified, however, that metrics would be used to shape the preferred alternative, and not just to provide NEPA data.

A member acknowledged that although the work of the GCWG was to achieve natural quiet, the NEPA process requires analysis of many other categories of impact. Another felt that more information about the effects of noise on specific Park resources will lead to a more effective decision. "This comes down to an issue of trust and gathering as much information as we can." He suggested that it is the responsibility of NPS to make judgments about the choice of metrics.

Tom Connor was asked about the magnitude of the issue. He responded that he would not have been brought back in to reconstitute the technical team if Lynne had not been concerned.

A member pointed out that the Federal Register notice that created the GCWG said the Working Group will review the noise work to have confidence in the results, and the introduction of new metrics unfamiliar to the group are not consistent. In answer to a question about whether or not the metrics were in current use, Karen responded that NPS has been developing them over the past year, although she knows FAA is not comfortable. Steve said NPS should perhaps reconsider, if it's regarded by the GCWG as a step backwards.

Lynne said the Grand Canyon overflights history was that previous efforts to achieve an overflights plan tended to fall apart over technical reasons. Technical confidence is important and was an early assignment of the GCWG. She reminded the group that the first months of GCWG work was heavily devoted to building confidence in the noise methodology and model. FAA was recently informed of NPS's intent to add metrics, and was not comfortable. She said that NPS understood that, and both agencies agreed to

reconstitute the FAA/NPS technical team to do a review and bring their report back to the GCWG.

In the morning of Day Two, Steve Martin announced that NPS did not want to hold up the work of the GCWG with debate on the new metric. The technical working group will continue to evaluate the metric (which NPS believes has great potential) for future application, but it will not be used in this EIS for Grand Canyon overflights. NPS is committed to pursuing the best tools for evaluating impacts and protecting Park resources. Steve encouraged the group to continue to find common ground and develop a set of recommendations that will support Park goals and insure a viable air tour industry.

Steve reassured the group that building trust is paramount for him, and that he is committed to working together. Clarifying the definition of substantial restoration was "an honest effort to move forward" to resolve an issue that had seriously impaired the progress of the Working Group. He repeated that he welcomed comments on the draft definition. By the same token, in looking at impact topics, the NPS intent is to use the best tools available to make the Canyon a better place, for all users. He apologized for the presentation of the new metric and any confusion it might have caused.

Steve further commented that he wanted to change tactics over the next few months to pick up the pace of the schedule, and welcomed ideas and discussion on how to move more quickly toward GCWG consensus.

The GA member said she had serious concerns about the apparent lack of concern for GA in this meeting, which makes her more supportive of legislation than she has been before to protect GA interests.

NEPA PRESENTATION: [available on the website]

Matrix of Alternatives: Paul Joly walked the group through the matrix. The following descriptions are not all inclusive. Details can be found on the website.

Alternative A: "No Action" alternative, although by law it will include provisions for quiet technology. [see website for more detail on Alternative]

Alternative B: Unimplemented 2000 EA Proposal. This is an alternative identified as number 3 in the previous FAA analysis. It contains proposed commercial air tour route changes for the Dragon and Zuni corridors (elimination of "Snoopy's Nose") and the Marble Canyon Sector, as well as changes to the corridors and flight free zones on the east side of the SFRA. The FFZ is expanded to the north to include confluence of the Colorado and Little Colorado. There is no schedule for conversion to QT. [see website for more detail on Alternative]

Alternative C: Consolidated Use: This alternative concentrates air tours where there are already lots of ground visitors. There are no caps. It includes a seasonal curfew in the

East end, addition of Zuni entrance/exit for Cameron Chapter of Navajo, elimination of Dragon corridor, addition of Developed Area Tour Corridor, elimination of GA in Fossil and Dragon, for GA Zuni expanded north and lowered to 9,500 feet (MSL), Flight free zone lowered to 14,500, full conversion to QT in 10 years. A non-quiet technology route was left off the map in error. [see website for more detail on Alternative]

Alternative D: This alternative includes parts of the NPS 1994 Report to Congress, including seasonal curfews on the East End, daily caps based on a noise budget, changes to routes in Dragon and Zuni corridors and in Marble Canyon, addition of a new administrative route for Havasupai, reduction of GA corridors to two, and quiet incentive route in Dragon for fixed wing, but not helicopters. The FFZ is raised to 18,000 feet. No conversion to QT required. [see website for more detail on Alternative]

Alternative E: Alternating Seasonal Use: This alternative includes alternating seasonal use of Dragon and Zuni and elimination of the connection between the two corridors. It also calls for the current yearly allocation with a daily cap of 364 flights (including air tour-related flights), a one hour respite in the middle of the day, linking curfews to sunrise and sunset, elimination of GA Fossil corridor and all Marble Canyon routes, elimination of East end loop tour, addition of administrative route to Havasupai, and raising all Flight Free Zones to 17,999. [see website for more detail on Alternative]

Alternative F: Modified Current: NEPA staff clarified that this alternative does *not* represent any consensus of the GCWG, but includes suggestions made in the subgroups or by individual members. Elements include shifting the Dragon corridor two months in the winter (12 –1 to 1-31) to protect Hermit's Rest and Basin, Dripping Springs, and Boundary Road, and to provide a tour of Point Sublime. Non QT aircraft would enter at Zuni corridor at altitude necessary to cross without noisy climb-out. There would be incentives for quiet technology (forgiveness of fees, a quiet technology green 2 helicopter route, with tribal permit), elimination of the Fossil GA corridor, and changes in boundary of FFZs and SFRA. The route south of Hualapai would be moved to avoid cultural properties. No helicopter traffic on south side of river. [see website for more detail on Alternative]

Discussion:

Given that NEPA staff do not have definitive description of a noise budget, an air tour operator asked how the agencies could make decisions in the absence of a defined noise budget. Would they use hypothetical operators and number of allocations? NPS answered that the noise budget will be defined in the NEPA analysis. Cyndy added that depending on thresholds and criteria, allocations may be scaled down by percentage, using peak day operation numbers.

Some urged that the NEPA evaluation should look at the character of the noise, not just the volume, and that impact to resources other than the soundscape should be included.

A tribal representative said that the Colorado River Management Plan consultation process never addressed socio economic impacts to tribe. He fears the same inadequacy in this process. Ed Harvey, NEPA consultant answered that the EIS would evaluate socio-economic impacts to Tribes, including the impact of caps.

A member asked why routes were placed outside the SFRA. NPS answered that it was necessary to include the route, because it exists, and it will be modeled to show its effects on adjacent lands.

A member asked how the EIS would deal with high altitude noise. NPS answered that it will be considered cumulatively, ie. not contributing to the percentages. They will consider the character of the noise, the fact that the decibels are lower and not as audible, but that noise will be added in to the calculations. An air tour operator suggested that the process was pointless if high altitude is not dealt with more directly.

Another air tour operator expressed some surprise that the impacts included much more than the soundscape. He warned the group to be careful and not become involved in issues that aren't sound-related.

Google Earth Demonstration:

Greg Jarvis, a Denver Service Center natural resource specialist, showed the group a demonstration of the capability of Google Earth to map routes, see them from different angles and fly them. He said that some noise data could be incorporated, depending on the nature of the data. Trails and proposed wilderness areas are included in the data base.

Observer Comment

Greg Rochna, President, Maverick Helicopters: Mr. Rochna expressed great frustration that companies like his that have complied with the intent and the letter of the law have not received any recognition in the form of benefits or incentives. Maverick flies 100% quiet technology aircraft, and they will continue to buy and to fly QT. The expenditure is significant, and he expects to receive some compensation, in the form of credits, tax incentives, or route advantages. He added that regulation of his industry often feels burdensome and unreasonable. For instance, his passengers are required to wear life jackets flying over the desert.

Dennis Hughes, Hughes and Associates: Mr. Hughes noted that the MITRE report did not use any simulation modeling. In terms of airspace redesign, he said, it would be in the best interest of the group, especially air traffic interests, to request that the GCWG be on the redesign committee, and to get this Grand Canyon project particularly on the airspace redesign list as soon as possible. Advanced navigation has existed for 10 years, he added, and some existing aircraft are using it, in spite of the MITRE report to the contrary. Finally, he suggested that mixed fleet data, which is in the radar data, be acquired from FAA and would be useful input for INM 6.2.

Steve Martin closed the day's session with the hope that the vast knowledge around the table could produce a preferred alternative before next January, perhaps through a smaller subgroup of the whole.

DAY TWO:

NEPA Discussion: Following the NEPA updates, GCWG members raised the following concerns:

Cultural Impacts: Cultural impacts are disproportionately great for tribal communities, who have cultural practices, sacred places (including those relating to creation stories) to protect, said a tribal representative. He added that tribes are a minority, and as such environmental justice issues may apply. Contractors answered that the EIS will include background for each of the affected tribes to emphasize the importance of culture and beliefs.

Wildlife Impacts: There were questions about techniques for evaluating noise impacts on wildlife, and distinguishing between aircraft noise or other causes of impacts. In addition, there was a request that the EIS consider the conditioning and adaptation that wildlife make to various man-made intrusions, including aircraft noise.

Socio-economic Impacts: There was a request to include the tracking of dollars within the region, for instance the "leakage" of Hualapai dollars to Kingman. Contractors answered that they would look at costs to gateway communities of changing routes, per operation. They will also include the impact of the alternatives on foreign tourists, and the impact of foreign tourists on the local and regional economy. The EIS will take into account external economies and multipliers. For instance, pointed out a member, many of those taking air tours are foreign (up to 80-90% at certain times of the year), and studies show that the Grand Canyon is the reason for their visit. The value of the tour, hotels, bus tours, retail, and the multiplier effect from international spending should be included in the EIS. A contractor noted that foreign money is "all new money" and that they would include data on the amount spent plus the multiplier.

A member urged the contractors to also include the socio-economic impacts derived from the access and services provided to the disabled passengers on air tours.

The EIS will also include data on impacts to Park operations, including staffing.

A member asked contractors to consider how to evaluate the intrinsic value of the Grand Canyon, beyond what is paid for a tour, etc. "How can you value the existence of the Grand Canyon, even if you never plan to visit it?"

Visitor Use Surveys: Members were concerned that some visitor use surveys "cue" the respondent to answer a certain way, biasing the results. Some worried that too much attention would be drawn to aircraft noise in the survey process; other were concerned that surveys did not recognize the value of solitude and wilderness, but only focused on

aircraft noise. Ground visitors, said a member, in general do not believe that they have been surveyed fairly or accurately.

Contractors noted that they will be looking at a body of documentation on visitors to national parks, including thousands of interviews on visual and auditory impact.

Impacts to General Aviation: The GA representative noted that four of the alternatives impact the GA flights crossing the Canyon, and that her constituency "was a gaping hole" in the NEPA process to date. The transportation needs of this constituency must be included. There was special concern about flights over 14,500 feet over the Park and the economic impact of such restrictions on the GA community. She added that the GA community is definitely a primary affected party, and that costs of rerouting can, and should, be calculated. For instance, there is data and analysis on the economic impact to GA (billions of dollars) in studies contracted as part of the air defense zone rulemaking process in DC.

Contractors acknowledged that they would be using data gathered for flights in the SFRA above and below 18,000 feet. For flights outside the SFRA, they will have to make an educated guess, since those flights are not restricted.

Communication between GCWG and Contractors: As decided at the last meeting, any member who wishes to communicate with a contractor should contact Lucy, who will contact Barry and Ken. Any contractor wishing to speak with a member should contact Barry and Ken.

GCWG Process: Viewpoint of Members: Members each offered their perspective at this point in the meeting:

Steve Martin: Steve spoke optimistically about the potential for a consensus-based preferred alternative, if Working Group members pool their knowledge and commit to a solution. He acknowledged that the introduction of the Listening Area Metric had brought a level of confusion to the process, and he agreed that any new metric needed have the group's support, as had been done with INM 6.2. NPS will move forward with the Listening Area Metric, believing that it holds great potential for the protection of park resources, but it will not be used in the Grand Canyon EIS. "We have a good array of tools people have already agreed to so let's move forward with those."

Lynne Pickard: Lynne thanked Steve for his thoughts, and for an optimistic start to the day. The Council on Environmental Regulations reminds us, she said, that while we want a good EIS, it is not the best document, but the best decision, that is important.

David Nimkin: As relative newcomer to the process, David hopes to bring a fresh eye to the process, the work that has already occurred and the barriers that make it hard to proceed. He supported the use of informal caucus groups, as a way to avoid polarization and mistrust, and suggested that a multi-disciplinary, multi-interest caucus might move the group's thinking forward. He is confident that legislation can be discouraged at this

point, and he supports bifurcation of the high altitude aircraft from the current process. He urged the group to keep up the momentum Steve suggested, and look for links among the various alternatives that might achieve the goal of restoration of natural quiet, while respecting the significant financial interests of the air tour industry.

Karen Trevino: Karen emphasized to the group that NPS feels strongly about visitor experience, and will continue to develop metrics that are appropriate for protection of both natural resources and the visitor experience. They will move forward with new metrics, but have chosen not to delay the Grand Canyon process by introducing a new metric. NPS look forward to working with Tom Connor, she added, and will engage other acoustic experts, as needed to bring benefits and insights.

Roxane George: Roxane underlined the importance of good, comprehensive analysis of the impacts to resources, in order for her to make a decision, or offer consensus on a preferred alternative. "I don't want to have random acts of consensus either, want consensus informed by analysis," she said. She supported the idea of working in a caucus format. She added that she would like at some point to better understand the new metrics, and was sorry that it was dismissed so quickly.

Elling Halvorson: Elling offered support for the concept of working in a small group to move a preferred alternative forward.

David Yeamans: David also supported a smaller working group, either formally, or informally established. He said there were about 5-6 interests at the table; one person representing each could form a microcosm of the whole group, plus NEPA staff, and create a map illustrating the negotiated interests of the group. This output could even form the basis of a communication to Senator McCain.

[Lucy summarized the comments so far:

- Legislation not to be pursued
- Working Group should work hard, efficiently to reach consensus, before January
- NPS is choosing not to use the Listening Area Metric at Grand Canyon, but will continue to explore its value at other parks, through the work of the technology group.
- Members have a desire for common ground
- Some favor creating a small group to create a collaborative proposal
 - Interests -- Environmental, ground visitors, tribes, air tour, agencies, NEPA
 - Products -- Map representing alternative created by small group

[Working Group members continued around the table.]

Heidi Williams: Heidi expressed great frustration. She felt that GA interests were being ignored by the Group, and this was driving her toward support of legislation.

Alan Stephen: Alan expressed cautious optimism that the Working Group had the opportunity to "get back in the driver's seat," and was not necessarily disempowered by the NEPA process.

Marklyn Chee: Marklyn explained that he needed to speak with the Navajo chapters before offering an official view.

Charlie Vaughn: Charlie thanked Dave Nimkin for "a breath of fresh air," and the reminder that it is critical to understand each other's interests and move forward collaboratively. But in general he felt that the GCWG was failing to understand the complexities and variety of tribal interests. Havasupai is more concerned about preserving cultural landmarks; Hualapai has the same concerns, but also is interested in pursuing economic opportunities. Also, the relationship between wildlife, noise, aircraft, and monitoring equipment can be very complex. For instance, animals can have an impact on the equipment, and in turn the equipment can cause animals to move.

Rick Eisenreich: Rick supported the use of small groups as a mechanism for communication.

Roger Clark: Roger said he has been frustrated at the lack of progress on the issues, and supported the use of smaller groups if that would increase efficiency.

Craig Sanderson: Craig observed that the group had been unable to reach any consensus on elements or alternatives, and that although it would be difficult to compose a fair group of so many varied interests, he supported the caucus or small group concept.

Bill Austin: Bill expressed confusion about the process, and where he, as the USFWS representative fits in. He is willing to contribute his expertise and opinions on wildlife impacts at any point, either in the full group, or in a small group setting. The NEPA analysis will hopefully allow him to be more specific about impacts, but he is glad to comment prior to the analysis as well. He is concerned that sooner or later all the interests, including his, will need to be brought together in some kind of coordinated, complementary way, and he was not sure how that was going to happen. He urged the group to "roll up our sleeves and get to work."

Discussion of Process: Members considered next steps for identification of recommendations for the EIS process. They discussed pros and cons and strategies for forming a small group – a microcosm of all the interests – to negotiate draft recommendations for the whole group to discuss. The challenge was to create a group small enough to be efficient, and still be inclusive of all interests. In a sense, the GCWG is the smallest possible representative group, and asking tribes or environmentalists or aircraft industry members to represent others in their category seemed unworkable. Asking one environmentalist, or one air tour company, to represent their colleagues/competitors would require a level of trust and a degree of communication that probably does not exist in the group. A tribal representative reminded the group that the

federal government has a trust relationship with tribes, and is governed by certain rules and regulations in dealing with tribes.

There was agreement that any ad hoc caucuses that wanted to take on preliminary negotiations would be helpful, but formal creation of a sub-group was not feasible, because of the impossibility of agreeing on representation and the lack of trust among members. A participant suggested that the composition of such ad hoc caucuses should be fluid and dynamic, depending on the topics.

Some asked NPS "to forward a proposal, so we know what you are aiming for." This would give the Working Group an advantage as it moves forward to try to craft a preferred alternative.

Some suggested that the GCWG meetings would be more efficient if they were "streamlined," with no audience, so that the members could negotiate more freely and openly, with less inhibition.

Remarks of Co-Chairs:

Lynne suggested that the group return to the List of Elements from the last meeting, or some other concrete proposals, and explore what might be workable. Some members who are particularly interested in one element or another could meet in small groups and bring back discussion points for the whole group. NEPA staff could also comment on those elements, as possible, given the limited analysis to date.

Steve supported the idea of moving forward. The Working Group, he observed, tended to backtrack just at the moment it might take a bold step forward. He offered to do whatever might help the group move forward. He reminded members that the purpose of the GCWG process is to shape a preferred alternative. "If we don't do this together in the next few months the agency will chose a preferred alternative and we will have the classic pie fight that NEPA processes can bring on," he observed. The Park needs a future that is secure, where resources are protected for future generations, and where the air tour business is allowed to prosper. Crafting the best possible preferred alternative, he added, depends on the wisdom and contributions of the GCWG and a commitment to consider bold alternatives. "There is a lot of talent here, and the real future is with those who dare to move to the radical center."

Definition of Substantial Restoration [NPS proposed clarification of definition can be found on the website]

Some working group members spoke of their concerns about the additional paragraph (in italics, below). They felt it was vague and inappropriate, and left the industry without needed security.

50% of the park is a minimum in the restoration goal and "or more" will be determined as a result of the analysis of impacts to the park's natural resources as a part of the NEPA compliance in the EIS. This includes not only the impact of soundscape on park resources but the impact of noise on visitor experience and wildlife.

Steve Martin acknowledged concerns about the paragraph. He said that restoration may well be more than 50% of the Park, and that the analysis would reveal that. But in his opinion the paragraph above did not have to be part of the new definition language. He offered to publish the proposed clarification in the Federal Register *without* that paragraph. He invited GCWG members to send him comments on the proposed definition by June 27. Air tour operators expressed appreciation for the Park's response.

General Aviation discussion:

The group was concerned about how GA flights would be handled in the EIS analysis, given the lack of good activity numbers. How could changes in GA routes be analyzed for noise impact when the current impacts are unknown? Cyndy suggested using a sensitivity analysis and modeling of typical GA aircraft to compare with comparables. This would be based on estimates. The GA representative on the GCWG asked that those doing the analysis consult with her as they move forward.

Process: Strawman:

Given the difficulty in creating a formal subcommittee of the whole, there was support for moving forward with ad hoc caucuses, as members wished. Lucy suggested a role for the facilitators in crafting a strawman for discussion at the next meeting. They would do this by talking individually and confidentially with all members to determine what is negotiable and what is not. Members would be encouraged to meet in informal caucuses – either all one interest, or cross-interest – to work on consensus proposals for the strawman. Lucy, Ed and Tahnee would be in touch with all the members to determine how they want to contribute to the strawman. The strawman would be distributed to members at least two weeks prior to the next meeting.

The group supported the suggestion and by consensus authorized the facilitators to undertake:

- Exploration of common ground among members and the feasibility for a strawman set of recommendations;
- If enough common ground exists, crafting of a strawman document for consideration and negotiation at the next meeting.

Next Meeting, September 19-20, 2007:

The group decided to work in study session format September 19, without observers and with minimal agency staff. This will give members a chance to openly discuss the strawman and begin negotiations in a private setting. The second day will be a regular GCWG meeting open to the public.

Final Discussion:

As a preliminary step in the strawman process, members volunteered to share ideas and proposals.

Heidi Williams: Heidi said that she was willing to consider reducing the number of GA corridors from four to three. If this happened, however, her constituents would be more concerned with changes in altitude for FFZs, particularly the Sanup area.

Roxane George: Roxane is hoping for an increase in quiet area in the East End. She is willing to look for opportunities for more than one air tour route throughout the year, as long as there is a decrease in areas impacted by aircraft noise.

Alan Stephen: Alan had no comment.

Elling Halvorson: Elling supports Alternative F, although it contains problems for fixed wing aircraft. He said that he needs two air tour routes, but there may be flexibility in their location. He wanted to reassure everyone present that air tour noise had been drastically reduced in the past 20 years, and that a ground visitor today may very well not hear any air tour noise.

Marklyn Chee: The Navajo Nation has an interest in protecting cultural resources and promoting economic development. Most important in this process is maintaining air tour corridor access for Cameron Chapters to provide the community economic opportunity. Marklyn added that any project within the SFRA that flies over Navajo country must first consult with the tribal government.

Charlie Vaughn: Hualapai wants to "stay out of East end issues," and preserve its right to economic development. They support the modified Green 4 route.

Rick Eisenreich: Rick's interest is in the West end, where most of his flights land on Hualapai land in the canyon and return to Las Vegas. He suggested that the proposed route in Alternative F would fly in on the north side of the river, cross and depart at Horse Flat Canyon. This would benefit the tribe and avoid the skywalk. Rick added that he has no problem with any of the identified West end proposals, and that he can live with the proposed changes to SFRA.

Craig Sanderson: Craig's priority is restoration of the Las Vegas – Grand Canyon air tour route. He believes it was eliminated incorrectly, based on old modeling. Craig said that his constituency may have things to put out for consensus, but he admitted that it is "hard to lay your cards on the table, when you can't pull them back." "It is time to show our cards," he added, "and meet in the middle."

Bill Austin: Bill's interest is in reducing impacts to endangered species. He needs to see more data and more specifics on routes, altitudes and frequencies before he can evaluate the alternatives. At this point, he said, "anything is on the table."

Lynne Pickard: Lynne reiterated that the FAA interest was in aviation safety, and in the quality and integrity of the environmental analysis that will be used in the aviation rulemaking process.

Steve Martin: Steve believes it is possible to increase areas of natural quiet and improve resources, as well as offering certainty and viability for businesses. He mentioned several areas he would like to discuss: protection of Marble Canyon, repositioning of Zuni and Dragon in minor ways, maybe seasonality and alternating routes, minor rest periods, and possibly curfews, reducing the GA corridors, support of Hualapai proposals. He acknowledged the special needs of GA and tribes. He looks forward to the results of the impact analyses.

Karen Trevino: Karen looks forward to a robust and sustainable soundscape where one can hear natural and cultural sounds, both for the benefit of the visitor and the Park's ecosystem. The analysis and the management plan must pass scientific, judicial and public scrutiny. She added that she assumes the plan will recognize NPS jurisdiction and expertise concerning the protection of, and impacts to, resources.

Doug Nering: Doug favors Alternative E favorite, although Alternative F is most reflective of the past caucus work between air tour and environmental/recreational interests. He expressed appreciation to Heidi for her offer, and offered support for her position on the altitude changes. The pilot community "believes in the freedom to fly," he added, "just as hikers want freedom to hike." He hopes for a management plan where every part of the Canyon is in its natural state at least some part of the year.

David Yeamans: David favors Alternative E, but believes that Alternative F is more practical. Alternative F gives 65 uninterrupted miles of quiet for the boater. He is concerned about the location of the river crossings on Blue Direct north dogleg (the QT tour), which he considers a compromise. He would appreciate moving the Marble Canyon routes away from the edge of the Canyon, and would like elimination of the Fossil Corridor. He wondered if air tours could be moved back from the Canyon edge. The seasonal concept doesn't affect the rafting interests, he added.

David Nimkin: David echoed Steve and Karen's comments on the need to protect the Grand Canyon's unique resources, one critical component being the soundscape. He sees potential in a solution that includes seasonality, providing a respite for visitors on the ground and at the same time honoring the business interests. A good solution, he added, will be built on trust.

Observer Comments

Doug Helton, National Business Aviation Association: Mr. Helton offered some information concerning microjets. They do not perform well at low altitudes, and would never be used to go into the Canyon. They will use the latest technology and will use the latest quiet technology. Their performance is very high in terms of climb rate. The only possible impact from a business jet would be on arrival.

Jim McCarthy, ground visitor: Mr. McCarthy pointed out that NPS regulates commercial and noncommercial boats, and that no one considers regulating one and not the other. He was concerned that the GA representative was suggesting her constituents not be

regulated.* He urged the group to regulate GA as well as air tours. He also supported seasonality as a management tool for air tours.

Brian Fayner, NPCA: Mr. Fayner reminded the group that every park that has been established has had its challenges. "It is worth working together," he said, "to make these parks something all can experience and take pride in." He asked what the Grand Canyon would look like without the Park. Millionaire Stephen Mather helped create the NPS, he said, in 1916 to protect these resources and provide the opportunity for the public to experience them. "You are all a part of that process to help agencies fulfill their mandate and intent of the act," he added. He urged everyone to write letters urging congress to let the GCWG do its work and find a solution without legislation hanging overhead.

Co-Chairs' Final Remarks: Steve Martin observed that working together can make a difference at Grand Canyon. "We're close," he said, "The differences aren't catastrophic." He offered himself and his staff to help the group reach an agreement in the next few months. "This is the best we shot that we have," he added. "Let's give it everything we have." He thanked everyone for their efforts.

Lynne Pickard also thanked the group, and admitted that this task has been harder than anticipated in the beginning. She acknowledged that members are spending more time on this undertaking than expected – some on business time, others on their own time. "I appreciate every one of you," she said.

TASK LIST: The following tasks were generated during the meeting:

- More detail on analysis of GA impacts – NEPA team
- More detail on "noise budget" – what it is, how it's developed
- More detail on inclusion of ESA issues in the NEPA and GCWG processes
- Development of strawman for next meeting – Facilitators
- Preparation of presentation on Aviation Rulemaking Committee for next meeting – FAA
- Publication of clarification of definition of substantial restoration in FR – NPS

NEXT MEETING: Chaparral Suites, Scottsdale

- September 19, 2007 – Study Session (closed to the public)
- September 20, 2007 – Regular GCWG meeting (open to the public)

* The GA member clarified that GA is *already* regulated and in order to regulate further, the impact must be assessed.

Summary prepared by Lucy Moore. Please contact her with any questions or comments. 505-820-2166, or lucymoore@nets.com