

**Grand Canyon Working Group  
Eleventh Meeting  
December 4-5, 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  
Katherine Andrus, Air Transport Association  
Bill Austin, US Fish and Wildlife Service  
Timothy Begay, Navajo Nation  
Roger Clark, Grand Canyon Trust  
Sherry Counts, Hualapai Tribe  
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.  
Rob Smith, alternate for Roxane George  
John Sullivan, Sundance Helicopters, Inc.  
Heidi Williams, Aircraft Owners and Pilots Association  
David Yeaman, Grand Canyon Private Boaters Association

**NPS, Natural Sounds Program chair, absent:**

Karen Trevino, NPS, Natural Sounds Program

**Member/Alternate Absent:**

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

**Welcome and Introductions:** Lucy welcomed the GCWG members, alternates, staff and observers. GCWG members introduced themselves, as did those in the audience.

**Summary of September 2007 Meeting:** The group reviewed the agenda, and chose to postpone approval of the September 2007 meeting summary to the following day. Sherry Counts asked that the spelling of her name be corrected in the summary. Doug Nering noted that a point he

raised in the last meeting was not included in the summary, and asked for time to raise it later in the meeting, as well as have the correction made.

**Co-chair remarks:** Steve Martin said he was optimistic that the group would have a good discussion on the draft preferred alternative that his staff would present. He looked forward to reviewing with the group the key consensus areas from the last meeting, and hearing discussion on significant areas that still needed resolution. For this meeting, his goal, and that of his staff, was to listen and try to help resolve any outstanding issues. Lynne Pickard said she was pleased that the hard work of the group and NEPA staff from both agencies was paying off, and that closure on the preferred alternative was near. She reminded members that the FAA rulemaking and the EIS safety review of the preferred alternative were in their initial stages, and she anticipated a continuing role for the GCWG through those processes.

Steve acknowledged that the crafting of the draft preferred alternative was challenging. The goal was to create a workable package of elements that would improve the soundscape of the canyon. The relationship between the whole (draft preferred alternative) and its parts (the individual elements which the group considered at the last meeting) was not easy. "To break the package into pieces and put it back together is very complex," he explained. A GCWG member asked for clarification of the group's work at the last meeting. Did the elements discussed by the group become the core of the preferred alternative, or simply another alternative, G? Steve answered that the consensus and discussion of elements at the last meeting became the core of the draft preferred alternative to be presented at this meeting. He added that much of the consensus reached on some of the components from the last meeting was conceptual, and not necessarily final. These expressions of support offered direction for staff to do additional research and develop more specificity for the concepts. "The draft preferred alternative being presented today is not any single interest's preferred alternative," he said, "and would be subject to adaptive management, based on evaluations in the next few years."

A member was concerned that several elements discussed at previous meetings were not found in the strawman document reviewed at the last meeting. He understood that the strawman document contained those items with the most promise for consensus from the group, but he regretted losing those other potentially good ideas. Further, he said, something essential to agreement for some members may not be on this restricted consensus list from the previous meeting. Steve acknowledged that the draft preferred alternative was based on the strawman discussion. Other suggestions will receive review and evaluation in the NEPA process and document.

Steve added that he would welcome adding items for consensus consideration at this meeting, if the group wished.

**Presentation of Draft Preferred Alternative:** Lucy reviewed with the group the Protocols on reaching consensus, and the steps suggested if consensus fails. She reminded the group that failure to reach consensus on any of the proposed elements, or on the package as a whole, would result in a decision by the agencies. A member noted that this was the last meeting for offering consensus, and that therefore the consequences of "thumbs up and thumbs down" were greater than in the past. Lucy agreed that the indication of consensus would no longer be conditional, as it was in some cases last time. She added that even failing consensus, this meeting was very

important in that it was the last chance for the agencies to understand the level of support and the reasons for lack of support for the elements in the draft preferred alternative.

In answer to a question, Steve reiterated that any consensus reached at this meeting would form the basis for the draft preferred alternative, and the agencies would take it forward. It would, however, be subject to further NEPA review -- public comment, safety analysis, and impact evaluations -- which could result in changes. Lynne agreed, emphasizing that the preferred alternative is not a "decision." It will be subject to the safety and NEPA analyses, and the rulemaking process, but "barring unexpected safety, impact or rulemaking issues," the agencies would move forward with the consensus of the group.

NPS staff presented the draft preferred alternative, with a series of slides and explanation. [see website] Members agreed to focus on the major issues first to see if consensus was possible.

**Seasonal Respite: Proposed Camelot Route:** Steve reviewed this proposal for the group. The concept, discussed at length at the last meeting, was to give some respite during part of the year to the area under the Dragon and Zuni corridors, while not curtailing air tour opportunities. The proposal was to shift air tour flights from the Zuni Corridor to the new, westerly route -- the Camelot -- between November and March. Since September, test routes were flown and, although FAA has not performed a safety analysis, the new route shows promise. The shift would result in some impact to winter ground visitors under the new Camelot route, but it would offer quiet for traditional cultural property sites at the Little Colorado confluence, as well areas on the North Rim and the Nankoweap Basin. Furthermore, a dogleg on the route would address complaints from visitors near Dripping Springs. Although the original concept was to close both Dragon and Zuni when Camelot is open, that presented problems with training schedules and weather conditions. The current proposal included a short Dragon route with a dogleg, for a bad weather alternative.

An environmental representative identified a fundamental problem from his perspective with the proposal. "Moving the aircraft noise around won't get us where we need to get," he said. Substituting one route for another won't reduce the total noise, which, for him, is the goal. Why couldn't there be periods during the year when the number of aircraft in the air is reduced from today's levels?

Steve answered that his goal is to meet the definition of substantial restoration of natural quiet, and beyond that to minimize the effect of aircraft noise on visitors and resources as much as possible. A single winter route might change the overall amount of sound at any given time, he said. The environmental representative urged the Park Service to aim higher than the "minimum floor" of the definition, at least to consider the mid-range.

An air tour representative reminded the group that 54% restoration was achieved on the peak day. On other days, particularly in the winter months (the time of the seasonal shift), the number of air tours is a small fraction (10% often) of the peak day. In addition, the new route would compress the air noise in one area, to leave a significantly larger area of the Canyon quiet. Lynne agreed that there would be higher levels of substantial restoration on days other than the peak day, which had 625 air tour and air tour-related operations in the SFRA. The average day was 471, and the lowest day was 305.

Environmental members were concerned that part of the Dragon would remain open. NPS staff identified three issues: the need to handle merging traffic from the north rim safely, the need for a weather alternative route, and the need for a pilot training route in time to handle the spring passenger load. An air tour representative explained the details. During development and test flights of the Camelot route, problems arose, including a blind merger of traffic from the north rim and the Dragon dogleg, (partly due to the the pilot seats in different aircraft affecting visibility), and the need for an alternative route (short) in case bad weather closes the Camelot. In addition, operators need to provide pilot training classes and check rides over more than a two week period prior to opening the Zuni and Dragon for spring flights. There may be 26 seasonal pilots, each needing 10 hours training/checkride time. Air tour operators need a permanent route that doesn't change, so that pilots don't have to be retrained on different routes.

Other members were concerned that the Camelot route extended over a popular ground user site to the north, as well as over the Tonto trail area. An air tour representative explained that the route needs clear terrain features to separate the inbound and outbound traffic, and that Steamboat Mountain is critical for that reason. Avoiding the areas of concern would result in a shorter tour of the canyon, and would leave the route without a prominent feature to facilitate turning. An environmental member explained that shortening the time over the Canyon was something that he would like to see.

In answer to a question, air tour operators explained that it is important to have a long tour and a short tour in order to offer the customer the option of a longer, more expensive tour or a shorter, cheaper one. Keeping as many planes flying as possible is important since insurance and maintenance costs continue through the winter.

A recreational member raised a serious concern. He had spent several days recently at the Canyon and had repeatedly witnessed an early morning flight from Grand Canyon Airport to Page. This flight impacted the quiet in the Zuni and Marble Canyon area, and apparently was not modeled. The member was dismayed that even during the GCWG negotiations, aircraft noise has been increasing without regulation. An air tour representative explained that the Zuni curfew applies to a small area [small pink box in lower right corner of corridor map], and that entering the Zuni from the east places that flight outside the curfew area. The early morning flight is therefore exempt, he said. The recreational member expressed surprise that "the Zuni tour corridor is a small pink box," and that "to say you're not flying the Zuni because you're not flying in that little box, is an artificial selection of terminology."

Lucy summarized the air tour needs with respect to the new route: 1) a weather alternative route; 2) sufficient training time, 3) a prominent feature in the terrain to guide pilots; 4) a choice of routes for the customer, length of time and cost. She also reviewed the environmental and recreational concerns with the route as drawn, including its impact on currently pristine areas, and the fact that it does not reduce total air tour noise, but simply moves it from one place to another. She asked for a straw poll to determine whether or not it was worth it to continue the discussion and seek consensus. Members understood that the "devil is in the detail," and that certain modifications to the route as currently drawn might be possible to meet some of the concerns. Steve supported this, saying that his goal was to find a solution that the group could

support and that met FAA safety needs. If modification of the proposed route is needed, perhaps members could work on this during a break.

Members answered the following question: Is it worth continuing to discuss the proposal for seasonal shift, namely 1) the Camelot route, with some modification if possible, 2) the Dragon with a new dogleg, and 3) closure of Zuni and all eastern routes in winter months, with the exception of Navajo access to Zuni year-round?

Sherry Counts: Speaking for the Hualapai Tribe, Sherry said she would support the proposal as long as the Navajo interests are addressed. She added that Hualapai staff are still waiting to fly the proposed western route.

David Nimkin: Dave said he agreed with the seasonal respite concept, but was unable to support a proposal that included maintaining a portion of the Dragon year-round.

John Sullivan: John supported the concept of seasonal closure, although it puts demands on East End operators. He feels these operators are generous in their offer to close the Zuni for part of the year, in spite of training and other challenges.

Alan Stephen: Alan noted that air tour operators and others have worked very hard to come up with the best possible proposal to allow respite in the east end and avoid impact to critical sites under the new route. Given factors of weather, training, safety, and business viability, he felt they did a good job. He was willing to consider further “tweaking” but not if it meant significant modifications.

Bill Austin: Bill supported the concept, but agreed that the devil is in the detail. He was concerned that some key parties were left out of the proposal development process since the last meeting. The timing of the seasonal shift would not help endangered species, he added. He said he was reluctant to support the new Camelot, as drawn, which he did not see until very recently, because it may impact Spotted Owl habitat. “Everyone needs to be involved in coming up with the details,” he said.

Rob Smith: Rob supported the concept of seasonality, but worried that this proposal would open up new areas of the Park to noise, particularly Hermit basin, which he feared would become a noise sacrifice area. Respite should really mean full respite, he said, not just moving the noise from one place to another. He asked NPS to clarify which routes are open and which are closed.

Heidi Williams: Heidi reminded the group that there was near unanimous agreement in concept on this proposal at the last meeting. She still supported the concept and asked others to validate the work and efforts that the operators have made.

Katherine Andrus: Katherine admitted that as the ATA representative she didn’t have a lot to offer, but she did observe that “this is something that the operators have offered to do, with no benefits to them.” If this was the best they could offer, and the group could not accept it, the only alternative, she said, would be to revert to the status quo.

Roger Clark: Roger commended those who worked on the proposal. As an avid winter hiker of the Tanner Trail, he was concerned that there would be no respite for the Dragon corridor. He

believes that every part of the Canyon should be free from air tour noise at least some part of the year. With part of the Dragon remaining open, Roger could not support the proposal.

Dave Yeamans: Dave said the concept of seasonal respite made sense to him, but that he had not had a chance to review the route in detail. He feared, however, that the current proposal would still impact river runners, perhaps over an even greater number of miles than the status quo.

Craig Sanderson: Craig was not originally supportive of a seasonal closure, but became convinced by other members that it was worth pursuing. He said he saw value in being able to visit a part of the Canyon without air noise during certain months, and supported this proposal. He added, however, that the seasonal respite offered no benefit to operators, and did not further the goal of substantial restoration.

Elling Halvorson: Elling echoed Craig. He did not favor the closings, but would support them as long as they are workable for air tours. He added that the proposal included some relief to Dripping Springs and Hermit's Rest, not only on a seasonal basis but year-round. "Based on the wishes of our environmental community," he said he would support the Camelot route, possibly with minor tweaking.

Doug Nering: Doug expressed appreciation for the effort made to develop this option, and said he had "no desire to insult anyone by rejecting it." However, he was unable to support it, because of the new route's impact on new areas important to hikers, including the Thunder River area. He added that this proposal differed in critical ways from the route contemplated at the last meeting, which he had hoped would be acceptable to operators.

Tim Begay: At this point, Tim said he needed to check with his superiors for a position on this proposal. He saw the seasonal shift not benefiting the Navajo Nation as a whole, but year-round access to Zuni could benefit local chapters. His greater concern was potential impact to traditional cultural properties of both Navajo and Hopi at and near the confluence of the Little Colorado, and in the area of "Snoopy's Nose." The Navajo Nation supported the configuration in Alternative C, which cuts off the nose. He added that historically, tribes were not consulted on the routes, and that it is important to address Native American issues at this point.

Lucy noted that there were at least four rejections of the proposal, and that she recommended the subject revert to the agencies for decision.

**Proposal Camelot, modified:** Following lunch, the air tour operators suggested a modification to the Camelot proposal, as follows:

Between November 15 and March 15:

- 1) The Dragon would remain open, but only for use as a weather alternative and for pilot training purposes;
- 2) A short route would be developed on the Camelot route, which could also serve as the weather alternative for the long tour;
- 3) The Zuni would remain closed (except for Navajo access).

4) Every flight during the winter respite would be reported, and at the end of the season there would be an evaluation of the number of flights on the Dragon, as opposed to the Camelot. (Operators estimate a 90% closure of the Dragon.)

Members had questions about how the decision would be made to use the Dragon for a bad weather alternative, and approximately how many days during the winter months it would be used. Air tour operators estimated that the winter air tour traffic is approximately one-twelfth of the summer traffic, (perhaps 40 a day combined helicopter and fixed wing) and that less than ten percent of the winter flights would require using the Dragon as a weather alternative. The decision would be made by the pilot based on reports from previous flights and on visuals. The Camelot or the Dragon could be flown on the same day, if weather deteriorated or improved. The GA member added that there are published standards defining inclement weather, cloud separation requirements, etc. for those pilots flying visually.

An environmental member asked if it would be possible to put a cap on the use of the Dragon, with a periodic review to insure that safety concerns were being met, and that use of the corridor was not being exceeded. There were also questions about using the long and the short Camelot routes on alternating days.

Air tour operators responded that they would need to offer both the short and long tour everyday for economic reasons, and to allow the customer a choice. They went on to explain that longer flights are also necessary for the health and longevity of the engine. The challenge is to maintain the cycle counts and time outs of the engine. In the turbo engine, for instance, the cycle count increases for shorter flights, whereas on a longer flight the engines and its components are timed out. Starting an engine increases the heat very rapidly, and if a pilot is not paying attention, he can destroy the engine. Manufacturers limit operators in the number of starts because they are more damaging and critical to the life of the engine. When that number is reached, the engines must be overhauled which is very costly. An operator would much prefer to time out an engine rather than start out an engine. Another operator noted that Twin Otter engines are also cycle limited and the frames are hour limited. The ideal flight length is one hour.

In answer to a question about training, operators explained that each pilot needs to fly each route at least twice to take advantage of changing light and weather conditions.

An environmental member asked if the longer Camelot route could be limited to fixed wing planes only. An air tour operator responded that for 40 years customers have had the choice of aircraft, and he did not want to limit that choice now.

Another environmental member thanked the operators for attempting to address some of the concerns raised earlier with respect to the Dragon. He asked if a modification could be made to the longer Camelot route to reduce the river crossings from two to one. An operator answered that the options are limited by the need for proper entry and exit to and from the route and the need for a safe intersection of the two routes. The river is the key feature for guiding and maintaining a safe traffic flow. Another operator added that this proposal reduces river impact compared to the current routes.

In answer to a question, the Park Superintendent assessed the benefit of the proposed seasonal shift. Considering all the east side trails, there would be fewer people affected if the Camelot

were adopted. In early December the campsites under the Dragon are full, he said, and these would experience significant – if not total – relief. The net gain to the ground visitor could be significant, he added. In addition, the impacted river miles would be less, and perhaps the impact to the Spotted Owl.

A recreational member commented that the impact on trails in a 3 mile radius would be equal with or without the new route, but the usage in the east end would definitely benefit from the Camelot shift. A member urged that ground users receive comprehensive and accurate information about which areas would be free from air tour noise during which times.

**Environmental Caucus:** The environmental and recreational interests caucused and returned with the following options:

- 1) Major tweak to Camelot: The proposal was to cross the river perpendicularly away from the north and south Bass Trail areas. The air tour would be shorter, but the impact to the river would be less, the Tonto Trail would be avoided, and the distance from Thunder River would increase.
- 2) Elimination of Camelot: An alternative proposal was to abandon the new route, and use both the existing Zuni and Dragon corridors year-round for fixed wing tours. Helicopters would alternate seasonally, on the Zuni for six months and on the Dragon for six months, to provide some respite from helicopter noise. Fixed wing could also fly blue routes all year.

Discussion: Operators felt that the second option was not viable. With respect to the first option, an operator offered to try to redraw another route that would give both a short and long tour to both fixed wing and helicopter. There was some support for this from environmental and recreational members, who hoped to achieve more protection of the Thunder River area, which receives winter ground use, and other areas, including the river itself. Operators were skeptical that those needs could be met with a safe, economical Camelot route. The group discussed the feasibility of forming a small working group to continue to “tweak” the longer Camelot route. The Superintendent warned that any small group would have very limited time in which to work, given the timeline for the NEPA process.

Lucy posed the question to the group: Is it worth pursuing a redrawing of the Camelot long route to try to reconcile environmental/recreational needs and air tour needs? In a straw poll, three members rejected the proposal. Steve thanked the group for their ideas and information.

**Zuni Corridor, change to winter route:** Ken described the proposed change to Zuni, if it were to stay open in the winter. From November 15 to March 1, the route would approach the confluence with the Little Colorado but not follow the Little Colorado. It would then follow the existing route but cut across lower to protect Nankoweap, and then climb and return on the Dragon. A noise limit was proposed for flights in Marble Canyon, but under this proposal it would afford a northern entrance loop route for air tours. The Green 2 would be operated year round, and a dogleg would be added to avoid Hermit Basin and Dripping Springs. From March 1 – 15 the Zuni would be open to pilot training flights, twice a day.

**Navajo Route:** The Navajo air tour route (only a proposal at this point) will be analyzed in Alternative C for the summer, and could be included in the winter as well, according to Ken. The

Navajo member explained that the ideal for Navajo would be to cut off Snoopy's Nose so that the entire air tour is on the west side of the confluence. In addition, if the Zuni were closed during the winter, Navajo would want to retain the right to use that corridor to exit to Cameron Chapter. The Navajo air tour would be one way counter clockwise, beginning at Tusayan, flying to Cameron, landing for lunch, and returning to Tusayan. They estimate 6 to 10 flights a day, 45 minutes each with a 35 minute stop. The proposal is being developed with Maverick, and then will be subject to internal review by the Navajo Nation. The route would not fly over Hopi traditional cultural sites. The flights would be in addition to the current air tours, but would be subject to current allocations. Maverick explained that the proposal is currently undergoing environmental impact analysis. The aircraft used would be a QT helicopter.

There was a concern that although the additional flights would not exceed the current allocation, they might add additional noise. Air tour operators speculated that the customer for the Navajo tour may choose to have that particular cultural experience, in place of the existing tours, thus resulting in no increase in passengers.

There was also concern from environmentalists that if the Zuni corridor were closed, as with the Camelot proposal, the Navajo activity could undermine the desired quiet under that route.

*Consensus: Members reached consensus on accepting the Navajo use of the Zuni Corridor, if the Zuni-Dragon structure remains as it is, ie. No Camelot alternative.*

### **Blue Direct Mini-tour Routes**

Craig Sanderson described the operators' proposed Blue Direct mini-tour route, using the map. Basically, the route would follow Blue 2, depart and join Blue Direct south and come over the rim. (See Alternatives F and C for different versions.) The tour would travel northeast, then turn around and come back. There would be an altitude change to fly at a lower altitude on the south route. The mini-tour would be one-way for QT aircraft only. The route would require "clipping off" the corner of the existing Flight Free Zone at 7,500 feet in order to rejoin the blue route back to Grand Canyon.

Proponents believe it is good for tribal economic development, providing easy and efficient entry and exit from Grand Canyon West. Tribal members reminded the group that the route needs to be flown, and the proposal reviewed, by Hualapai to insure their cultural interests are protected. (Hualapai members and operators agreed to meet the next morning to discuss these issues.)

There were concerns about safety, congestion and the need for minimal altitude separation.

There were also concerns from environmentalists that they were being "nickel and dimed," with a series of small increases in noise that could have a big cumulative effect. They asked for a tally at the end of the day to see whether these proposed changes benefit the canyon resources, or whether it would be better to stick with the status quo. At the very least, asked one member, new routes should not fly over sensitive areas. An operator pointed out that Cyndy had modeled the Blue Direct routes and that they contribute a very small percentage to the noise picture. The crossing point may be noisier, he said, but the noise from the Blue Direct north and south is a constant.

Ken described the mini-tour route in the preferred alternative G. The NPS proposal is to use the Blue Direct South, depart for 8 to 12 miles along the river with one river crossing, and return to the airport. He asked for opinions on the impact of this route on other routes. He also raised the issue of a curfew on the west end to address the early morning flights from Las Vegas and Tusayan, which create noise during the hour after sunrise and the hour before sunset. In answer to a question, Ken said that NPS did not care if the mini-tour was for QT only or not. Operators had assumed that it was.

Norm Elrod (FAA) reminded the group that the 1996 rulemaking process determined that a curfew on the west end would result in stacking of aircraft and serious safety issues.

In answer to a question, an operator confirmed that the mini-air tour would be subject to the allocations. There would be no increase in flights, however, because the same number of aircraft would be traveling on Blue Direct; some would divert for the mini-tour.

**Public comment:**

Jim McCarthy – Sierra Club, Chair of Plateau Group, northern Arizona: Jim expressed concern that the potential Navajo activity on the Zuni, and the actual sunrise flight to Page, would have serious impacts on the quiet which would be achieved by closing Zuni. In light of this, he suggested closing Dragon during the winter months. Zuni could be left open as a short route, and the long route could travel up Marble Canyon and to Nankoweap. He also urged that allocations be reduced, back to a baseline of 1975 or 1987. If air tours are allowed to increase, the noise will increase as well. He sees allocations as temporary, not as property rights. Air tour-related flights should also be included in the allocation figures. At the last GCWG meeting, he added, there was near-consensus on discussing allocations as a tool. He urged the group to address allocation levels.

Rob Elliott, Grand Canyon River Outfitters Association: Rob expressed appreciation for the effort of stakeholders and agencies over the past years. He supports a seasonal respite conceptually, but objects to the Thunder River version of the Camelot route because of impacts to river runners and hikers. He asked NPS to consider pulling the route back from Thunder River, or crossing the river more perpendicularly, rather than paralleling the Tonto Trail. He added that he understood there were sacred cows for the operators – long and short tours for both fixed wing and helicopters, for instance – and he wanted to suggest a sacred cow of his own – cross the river as perpendicularly as possible. He also wanted the group to know that the curfew is much more than simply protecting the sunset and sunrise views from the rim; it is the protection of the moment when everything is coming to life, or slowing down, a period of special solitude for river runners in particular. He hoped for curfews in the west end, especially for areas where flights drop in elevation.

**DAY 2**

**FAA Aviation Rulemaking Committee Process:** Ida Klepper, FAA, presented a power point (available on website [overflights.faa.gov](http://overflights.faa.gov)) on her agency's ARC process, emphasizing full coordination between NPS and FAA. She explained that the Notice of Proposed Rulemaking (NPRM) is being formatted for Federal Register publication. The rulemaking document will require careful review by the Secretary of Transportation and by OMB, as well as other agencies.

The proposal would then be published in the FR, with a comment period to follow. Ida speculated that there could be a role for the GCWG helping the agency review and analyze the public comments.

ARCs have an oversight role within FAA. Although the FAA reauthorization legislation has not yet passed, at this point it includes new rulemaking requirements. She also predicted the creation of other ARCs to address congestion issues on the east coast. Priorities may be reshuffled, she said, making it impossible to know the details and timeline for this ARC. The rulemaking agenda for FAA and the Department of Transportation is updated twice a year on the FAA website (faa.gov).

Discussion: A member asked how the ARC process would affect the implementation of the NEPA Record of Decision. Ida responded that the EIS process is the “long pole in your tent.” Although there is uncertainty about the reauthorizing legislation and the resolution of the East coast congestion, she said, the Grand Canyon will always be a high priority for the agency, and should receive necessary funding for the rulemaking process. She added that most FAA rulemakings do not have an EIS process to coordinate with. In this case, both the Draft EIS and the NPRM would include the same preferred alternative. The EIS could precede the NPRM, or they could be issued concurrently.

A member asked if the GCWG is also an ARC, or a subset of the ARC. Ida explained that the NPOAG would actually serve as the ARC, and the GCWG is the subgroup of the NPOAG delegated with this responsibility. Lynne added that in creating the GCWG, the NPOAG did not want to act as a filter or an approval entity for the decisions of the Working Group. Recommendations from the GCWG will go simultaneously to NPS and to NPOAG, instead of the more usual prior approval process by NPOAG.

To clarify the timeline for the ARC, Lynne said she anticipates that FAA will submit the preferred alternative and other alternatives for rulemaking in January 2008. Then both processes can move in a coordinated and efficient way, with drafts of both the EIS and NPRM available in late summer or early fall 2008, along with the FAA safety analysis. She added that the rulemaking will have the benefit of impact analyses – socioeconomic for instance – that are already being done for the EIS. FAA envisions those draft documents would be presented to the Working Group in a special meeting. An additional GCWG meeting could accompany the final rulemaking in early 2009. In answer to a question, she said that both agencies will make every effort to avoid duplication and streamline the comment periods and proposal generation for both processes. She sees a role for the GCWG in that coordination and in insuring the accessibility of the information and documents. Ida added that the timeline could be lengthened by 90 days if the rule is considered “significant” and OMB becomes involved. She explained the different levels of “significant” that reflect economic, public interest, or policy importance.

An environmental member asked how a conflict between economic significance and environmental benefits would be resolved in the ARC process. Ida responded that the ARC law requires determinations based on safety.

Ida welcomed members to contact her with any other questions or suggestions.

**Future of the Working Group:** Lynne reiterated that she expects the Working Group to participate in the rulemaking as an advisory group. Although the GCWG phase of reviewing alternatives and producing a preferred alternative for the two agencies is now complete, she sees the GCWG now moving to its next phase and role, as identified in the Protocols. The agencies want to be respectful of members' time and energy, and plan to call meetings only when it is logical and productive. Lynne suggested the following schedule, adding that it will also depend on the level of interest and energy the group has:

Late spring, early summer 2008 – GCWG meeting to review Volpe noise analysis

Fall 2008 – GCWG meeting to review the DEIS and NPRM.

Late fall, early winter – possible GCWG involvement in reviewing, triaging comments

Early 2009 – Meeting on disposition of comments and Final Rulemaking

[Tina Gatewood reminded the group that following the Record of Decision (ROD) there was a 60-day minimum before implementation would be possible.]

Discussion: A member commented that it was unusual for an ARC to review the comments to an NPRM. In this case, since the GCWG is not supporting a consensus recommendation, and since individuals from the GCWG will probably be submitting comments themselves, a meeting to review comments “sounds like an opportunity to do more of what we have been doing.”

Lynne responded that she understood, but thought that the Working Group might have insights on key issues that could benefit the agencies' review of comments. She added that there may be surprises in the safety analysis, the environmental review and other components of the analysis. Another member supported the continued involvement of the GCWG.

An air tour member asked how the agency would handle the cost benefit analysis in the rule. For instance, what if the economic costs to the industry exceeded the value in terms of environmental mitigation? Lynne responded that this not an unusual problem in NEPA process, but “dealing with hypotheticals is hard.” The first step is to scrutinize carefully the calculations, weightings and costs. She could not predict decisions.

Steve Martin added that the Grand Canyon is unique because of the law, and that the dovetailing of the EIS and the regulatory processes is critical. He said he doubted that the regulatory conclusions would differ in any significant way from the EIS conclusions, and he believed that the addition of the major EIS to the rulemaking process would result in a stronger, better set of rules.

A recreational member requested that, since consensus was not reached, the GCWG be able to record the nature and “color of our conversations” in some kind of report. This could document the values of the different interests and the reasons for the inability to reach consensus. He asked facilitators and co-chairs to consider such a report which could enhance the EIS process.

Lucy reminded the group that the Protocols allow the group to request a written opinion from both the majority and the dissenting side of an issue. She asked if the group would like to invoke this clause. An air tour member quickly volunteered to write the environmental side, followed by an environmentalist's offer to write the air tour point of view. All appreciated the good natured humor.

Steve and Lynne suggested that the Working Group wait until they were nearer the end of the process to consider a final report from the GCWG. Lynne noted that an ARC group usually ends its work with a final report to the agency. They both added that the meeting summaries already serve as a comprehensive documentation of the evolution of the group and the interests of the members. Steve added that, even lacking consensus, the process and the discussions among members had helped inform the EIS process and helped the agencies “to deeply understand the various viewpoints.”

A member asked for the status on the NEPA statement of purpose and need. Barry Brayer, FAA, responded that it is drafted and that NPS is preparing a notice for the FR.

An NPS representative explained that the Planning Environment and Public Comment (PEP-C) documents will be on the website as soon as possible following the holidays. NPS will alert the GCWG when the documents are posted. ([parkplanning.nps.gov](http://parkplanning.nps.gov))

### **Return to discussion of Preferred Alternative:**

Blue Direct Route and Mini-tour: NPS staff asked for more comments on the merging of flights north to south, and any operational problems anticipated. In answer to a question Ken repeated that NPS did not envision the mini-tour to be QT only, although it is proposed as such in some alternatives. Lynne noted that the 2000 ATMA mandates a QT route in the preferred alternative, and urged the Park Service to consider a QT designation for this route. An air tour operator understood that the mini-tour was to be QT, and without a curfew. Curfews on the route would limit the number of turns per day, and seriously compromise profitability.

An environmental member said that he could not offer an opinion on the Blue Direct without discussion of QT and curfews. Another said he could not support 12 miles of additional overflight to the river corridor, even if it were QT.

An operator countered that the visitor who elects to take an air tour was as important as those experiencing the canyon by water or on foot, and the value of their experience should be taken into account. To fly over 12 miles of river may make it a value-added experience for them.

Quiet Technology: Ken emphasized that the goal is to use the tools of QT, curfews, route changes, etc. to improve the noise condition over the Park as measured by the standard of natural quiet. An operator noted that air tour flights alone achieve a 60+ % compliance; with air tour-related included, the figure is 54%. He went on to explain the three areas of concern: 1) East End, where virtually all flights are commercial air tours, even the training flights; 2) West End, where there are air tour-related flights, exempt Hualapai flights, and flights in and out of a public airport outside the SFAR; 3) Blue Direct flights, some full, some empty, some air tour, some air tour-related. Modeling shows that changing routes along the narrow corridor of the Blue Direct makes no material change to the level of noise.

There was discussion about the relationship between aircraft size, passenger load and noise contribution. Some feared that conversion to QT would result in replacing smaller planes with larger planes, and add to the current noise footprint. They are skeptical that conversion to QT will actually reduce the number of flights. A recreational member noted what he saw as different perspectives from the point of view of the Park and of FAA. The FAA, he speculated, “wants to move people from one airport to another with the least possible noise.” The interest of the Park,

on the other hand, is in maintaining a level of quiet to benefit resources. Although there is a legal mandate that enables this protection of park resources, he sees no legal action to insure that protection is implemented. He observed there is no effective mechanism for monitoring, reporting, and enforcing aircraft noise at the Park.

Lynne explained the FAA policy which bases standards on weight and size of aircraft. It was not possible, she said, to have one standard regardless of size. It was the same situation in the Canyon; if you had a one-for-one conversion, the result could be an increase in noise. She made clear that the FAA goal in this process was to not increase aircraft noise in the near term, and to make it progressively quieter in the longer term, while encouraging QT conversion.

Steve added that the Park was developing a monitoring program for overflight noise, and planned to implement the provisions of the EIS Record of Decision. Lynne agreed, saying she assumed there would be monitoring at the Park to gather data and determine the degree of compliance being achieved. The recreational member was skeptical, saying that monitoring was now being done by hikers and boaters, and that reports to NPS seem to fall on deaf ears. Steve repeated that the goal was to monitor regularly the information being gathered on aircraft noise both for air tours and for GA as well. Another recreational member urged the Park to take adaptive management seriously, and make changes if needed based on data gathered.

An air tour operator volunteered a provision that would cap overflight noise from air tours at the level of a 19 passenger QT aircraft. In other words, FAA would determine the noise of every manufactured aircraft. If a larger aircraft were developed, it would have to be restricted to no more noise than the current 19 passenger aircraft. Converting all current aircraft to QT should produce a level of 64% restoration. Operators expressed some confusion about why there was concern about the noise produced by a QT aircraft, but seemingly no concern about restrictions on older, noisier aircraft.

Although there was no consensus on the Blue Direct Route or Quiet Technology, Steve thanked the group and said that the discussion had helped inform the agency's next steps.

Curfews: Although all East End flights are officially under curfew (summer 6 pm – 8 am, and winter 5 pm – 9 am), a member reminded the group that at least one flight leaves early in the morning from Grand Canyon airport and flies up Marble Canyon, apparently outside the curfew “box.” An operator noted that 90% of air tours fly within that box, and are under curfew restrictions. Curfews have always applied only to the Dragon and Zuni corridors, which include all the loop tours. In response to a concern about Marble Canyon, operators said they were considering a proposal that would allow fewer aircraft overall, including those that fly from Tusayan over Nankoweap Basin. The goal would be noise-free 85% of the time (currently 75%). They emphasized that they were willing to put limits on themselves, and that they agreed with the Park Service that the quiet restored to Marble Canyon should be preserved, and even increased.

Allocations: Environmental and recreational members spoke of the importance of including allocations in the adaptive management tool box. One member, who had been through a long and painful battle over allocations on the river, acknowledged that allocations were the prerogative of the Park, and outside the purview of the NEPA analysis. He asked NPS to be open to considering

the allocations and caps as tools for achieving natural quiet, and urged the agency to define the terms and justify their decisions in the plan.

An operator reminded the group that the allocations have greatly reduced the numbers of flights since 1987. In addition, flights have been reduced as operators have gone out of business. He went on to say that, although the current law permits unlimited QT flights, operators are willing to live under the present caps even as they convert to QT.

Another member raised a concern that two constituencies were not represented in this discussion: 1) air tour customers who would face an increase in air tour cost if the number of air tours was reduced; and 2) future air tour operators who may want to enter the business.

A recreational member felt that yearly allocations was too broad, and understood that daily was off the table. He asked that the agency consider an allocation system adjusted seasonally.

**Approval of Meeting Summaries:** The group agreed to correct and approve the meeting summaries from September 19-20 (Strawman Discussion) and from September 20 (regular GCWG meeting) by email in the next few weeks.

**Final words:** Lucy suggested that members offer final thoughts to those who would be crafting the preferred alternative.

Sherry Counts, Hualapai Tribe: From Sherry's perspective, the meeting discussion was "skewed," with an undue focus on hikers and boaters, and not enough attention paid to the 5 million visitors "who want to be on a bus, a helicopter, to enjoy the Canyon in their own way." The tour operators and business people continue to give concession after concession, she said, without any reciprocation from the environmentalists. There has to be a middle ground, there has to be balance. She reminisced about hiking to Supai in her youth, and seeing helicopters. She assumed they were just doing their job. "For those that want complete quiet," she said, "the world isn't that way anymore."

David Nimkin, National Parks Conservation Association: David "categorically disagreed" with Sherry's remarks. At the previous few meetings, NPCA has been committed to the protection of the natural resource, and the enhancement of the visitor experience both for the present and the future. He was offended at the suggestion that he had not been acting in good faith in the process, and attempting to find a solution satisfactory to all. He believes that the 5 million visitors deserve to experience the Park in a variety of ways, but not in ways that diminish how others want to experience the Canyon. The situation is "extraordinarily complex," he said, "which is why it has taken so long." He commended those at the table for their "monumental patience to try to make this work." He asked the Park Service to recognize all the visitors and protect the phenomenal world site they come to see, so that whether on the rim, on a trail, or on the river, they can experience the "quiet, natural functioning of the place."

John Sullivan, Sundance Helicopters: John felt that there was a balance problem in the group, and that there was "a lot of emphasis on the needs of a small number of people at the expense of a large number of people." He complimented the environmentalists on their comportment during the process, and said that he had learned a great deal about the foundation and thinking behind their beliefs. John's business interests are on the West End, which have not "thankfully" been the focus of this meeting. He expressed optimism that the modeling of the best available science

shows that the definition has been met, on the peak day for both air tour and air tour-related. “That’s not doom and gloom, and people should take credit where credit is due.” He added that the goal has been achieved, in part, with help and input from the environmental community. “We have achieved the goal now and can make it much better.” Finally, he emphasized the need for a stable business climate, one with incentives and security, to support QT conversion.

Alan Stephen, Scenic and Grand Canyon Airlines: Alan supported the comments of John and Sherry. He also said, “I want to apologize to all that I lose my patience. I respect all of you, you have very good ideas.” With 25 years already invested in this effort, he had hoped for a quick resolution, but sees another 3 years of involvement to go.

Bill Austin, US Fish and Wildlife Service: Bill expressed appreciation for the opportunity to participate, and thanked everyone for their willingness to listen to his issues. He recognized the hard work of all the members, and their “bravery in talking about the details.”

Rob Smith, Sierra Club: Rob spoke of the importance of preserving the Grand Canyon and its natural quiet. “It is critical to do it right,” he said. Most of us live in urban environments, he went on, and wild places and natural quiet are increasingly rare. The visitor registers from 100 years ago talk about the natural quiet. When air tours began flying the Canyon the visitor logs were full of complaints. Now that air tours are restricted to certain areas, it is critically important that we address the noise issue carefully. He praised the agencies for their leadership in this effort. “The formula for a long term solution is to do the very best that we can, to go the extra mile, to protect that most rare resource -- natural quiet.”

Stacy Howard, AOPA: As an Arizonan and regular Park visitor, Stacy wanted to thank the agencies and participants for all their work. She added that she had learned a great deal during the process. She suggested that the environmental community and quiet users could feel satisfaction with the concessions made during this process by the air tour industry, concessions she believes would have considerable economic impact on the industry. Finally, she said that she was comfortable putting her faith in the two agencies to develop a fair and equitable plan.

Katherine Andrus, Air Transport Association: Katherine felt that the process of requesting more and more analysis, although long and costly, has produced a higher quality science than existed before. She said that the group has learned a lot about aircraft noise. She asked the group to consider preparing some kind of report to accompany the Draft EIS that would explain the GCWG process and would be signed by all the members. Since the group failed to reach consensus, and has not produced a statement of majority and dissenting views, as the Protocols allowed, she felt “we owe the public an explanation of what we’ve done – after all, it’s their money.”

Roger Clark, Grand Canyon Trust: Roger wanted to thank everyone for their work and dedication. He reviewed his own personal journey with respect to the Canyon and air tours. He lost a close friend in the midair collision in 1986; he suffered through adversarial processes prior to this one; and finally he had the opportunity recently to sit at Point Sublime and reflect. He was happy to report that he has “nothing but good feelings about everyone here.” He added that over the years, the Park has become much quieter, and that in the end he has hope for a stable regulatory environment. This process, he said, will probably not give him his preferred

alternative, but “it is moving in the right direction – the direction of natural quiet.” In closing, he said that he trusts the agencies to do a good job.

Dave Yeamans, Grand Canyon Private Boaters Association: Dave felt the process was well informed and should lead to a defensible EIS. He supported the idea of a document summarizing the process and the perspectives, even if not required by law. Since this was the last chance to speak openly to the agencies, and since consensus was not possible, Dave spoke on behalf of his constituency, the human interest on the river. He said he trusted the Park Service to represent the interests of the Park itself (non-human). He pointed out that in terms of number of hours visiting the Canyon, the boating community spends much more time than the air tour visitors. He also said “I think we all represent all of the interests. My good friends are also the air tour operators, and when I see that their jaws tighten, I try to understand why.” He added that he understood the business, technical, safety decisions they had to make, but expressed frustration at having to ask “ignorant questions,” in the absence of necessary information about air tours. When operators say that a certain proposal is “the best they can do,” he wanted more detail. For instance, how much change in a route would be necessary to reduce the noise impact? Dave assured the group that his questions were not meant as “resistance,” but simply were an effort to better understand and find the best option. “When a perfectly good idea comes up we still have to explore the limits,” he concluded. “There is more that we can do.... I’m out of gas.”

Craig Sanderson, King Airlines and Westwind: Craig thanked the facilitation team for “creating a forum that has enabled us to trust each other, give concessions, and be honest with each other -- something we’ve never been able to do in the past 20 years.” He reiterated that the Camelot route would have no impact on substantial restoration of natural quiet, because of its use in winter months and not on the peak day. His goal in promoting that route was to try to help friends on the GCWG whose interests he had grown to understand and appreciate. Because of this process, he said, he had a better understanding and a deeper respect for the users of the canyon, and this was a very important accomplishment. “I used to think people would think it’s cool to look at me buzzing through the Grand Canyon. Now I realize that you didn’t think it was cool.” He believes that natural quiet has been restored, and that both viable air tour businesses and continued improvements to the ground visitor experience are compatible. He expressed disappointment that QT aircraft did not receive more support in the group, given the model results that show its potential to make a big difference.

Elling Halvorson, Papillon Airways: Elling saw his role in the group as representing the absent air tour visitor, and advocated for that point of view whenever possible. But he added that he has enjoyed his personal relationships with many at the table from the environmental and recreational side, and appreciated the sensitivity they brought to the process. Anecdotally, Elling believed most river runners don’t notice air tour noise, or are not bothered by it. He suggested that times and locations be noticed so that people know what to expect, without undue attention drawn to the issue, so that people notice what they might otherwise ignore. He said that he trusted the Park Service to come up with a good resolution. “We have given this our honest best and we are in this for the long haul,” he added. “We don’t have any cute, fancy tricks up our sleeve. We discipline our pilots to fly where they are supposed to fly, and we tattle tale on each other if we need to.” If the Camelot route were adopted seasonally, he assured the group that pilots would not abuse the “weather alternative” opportunity to fly the Dragon. Finally, he

thanked the superintendent for the organization and focus he brought to complex issues and materials.

Doug Nering, Grand Canyon Hikers and Backpackers Association: Doug wanted to apologize to Alan and Craig for appearing to be so oppositional during earlier route discussions. “Our differences are differences of perspective and opinion and not for the sake of opposition,” he said. He acknowledged that the noise situation was “no worse than in ‘95 and better than in ‘87.” He repeated his concern that natural quiet had been measurably compromised, even during the life of the GCWG, by the new flight from Grand Canyon to Page at 7:00 am. He added that he was “somewhat gratified that we will continue to have these meetings, because if we didn’t I’d miss you all.”

Steve Martin, Superintendent, Grand Canyon National Park: “This has been a really good process,” said Steve, “and it’s ok that we haven’t reached consensus.” The meetings and participation of all the members informed the process, and he promised to try to honor all points of view. Working with FAA, he pledged his staff to do the very best job possible in developing the final plan. He expressed support for the continued involvement of the GCWG through the regulatory process.

Lynne Pickard, FAA: Lynne wanted to reinforce what others had said. The agencies are now in a much better position to develop a Grand Canyon overflights plan than ever before. “This group, this partnership,” she said, “is building a much more solid foundation for a plan and for mutual understanding.” She also wanted to recognize the “people behind the people at the table,” who have done so much good work for the process. She compared today to the past efforts of the two agencies to resolve this issue. “We tended to be just two agencies working together, perhaps reluctantly, and certainly not in partnership. Today we are engaged in a coordinated NEPA process, and are anticipating a joint rulemaking.” She added that she very much appreciated the work of Steve and his staff in making this partnership a reality, and that she looked forward to seeing the GCWG members in the future.

Lucy said that although consensus was always the goal for mediators, and that although it was not reached in this phase of the process, she was heartened to hear how valuable the experience had been for so many. She was deeply moved by the level of commitment and caring expressed by many members. She also thanked her colleagues Ed and Tahnee for all their contributions.

### **Public Comment**

Rob Elliott, Grand Canyon River Outfitters Association: To Craig, Rob admitted to be “awestruck,” as well as offended, at the sight of a military jet flying below him and the limestone cliffs, at Pacific Palisades. Concerning aircraft noise, he admitted that “dramatic improvements certainly have been made.” To Elling, Rob explained that he tells customers the hours of curfew, and they appreciate knowing what to expect. He doesn’t try to sensitize the customers to the aircraft. Rob has hopes that in the future substantial restoration will be achieved at the mid-range, at least, and not simply the threshold level. He was surprised to hear sensitivity to his issues from operators. He appreciated the 85% goal at Marble Canyon, for instance, and the hope for reaching a 64% restoration in the Canyon with quiet technology. Rob admitted coming with a clear bias against helicopters, but was impressed to hear during a break that there is data that some QT helicopters are quieter than fixed wings. He has a new understanding of the complexity

of the quiet technology issues. The curfew is as valuable for those on the river, he said, as for those on the rim, and he asked that there be some kind of curfew over the river on the Blue routes. Finally, he complimented the agencies on this process, which brings stakeholders and public together, and which is the best for dealing with truly complex issues. He thanked Steve and Lynne for their leadership, and the facilitation team and agency staff for their hard work.

Greg Rochna, Maverick Helicopters: Greg updated the group on challenges to operators. Operating costs have tripled since 2003, in large part due to the weak dollar and the fact that the QT aircraft are French and German. His company is 100% QT aircraft, and with a helicopter costing \$ 2.9 million and an overhaul \$ 600,000, he says incentives are critical to staying in business. A longer route, for instance, would mean fewer overhauls.

Jim McCarthy, Plateau Group of the Sierra Club: Jim appreciated being treated with courtesy and respect during the process, and expressed his own respect for everyone at the table. He offered his philosophy of Grand Canyon management. Park decisions should not be based on votes or money, he said, but on the protection of resources, including of course natural quiet. He suggested a zoning model, where certain areas are designated for quiet, and others for noise. He supported earlier objections to the early morning flights that avoid the curfew by flying east of the corridor. This, he said, is contrary to the spirit of the flight free zones. He recommended that allocations be based on 1975 levels, or at the very least 1987 levels. Jim offered a packet of material on QT and the potential for a noisier future to anyone interested. He supports the agencies requiring that “any new aircraft that would receive the benefits of quiet technology designation would be no louder than aircraft they replace.” Finally, (asking Katherine to bear with him), Jim raised the issue of high altitude commercial aircraft. “If they are off the table, we need a trade off, like reducing allocations.” To conclude, Jim compared various air tour industry costs to the value of natural quiet and other precious Park resources – “absolutely priceless.”

Wynona Sinyella, Hualapai Tribal Councilmember: Councilwoman Sinyella thanked the agencies for including the Tribe in this process. A letter from an agency to a tribe is not consultation, she explained. “This is real consultation, being at the table, talking eye-to-eye.” She commented that the Tribe has been fighting noise battles on many fronts, including the Santa Fe railroad that runs behind the motel and disturbs all the customers. “Every time we try to get ahead, they step on us,” she said, “but that just makes us stronger.” Wynona also thanked their partner air tour companies operating at the West End for boosting the tourism economy. She told the group about her recent trip down the river to Lake Mead with Steve, and baking a cake in a Dutch oven. Speaking for the Tribe, she expressed particular appreciation to Steve for making the Hualapai feel welcome at the table. “Thanks for letting us speak our peace,” she said, “It’s okay to agree to disagree.”

Dick Hingson, National Parks Conservation Association: Dick expressed his appreciation for being able to work on this issue in this process. The value of natural quiet in a place like Grand Canyon is that it is infinite, he said. “If you multiply infinite by a fraction, it’s still infinite.” He made a plea for respites for currently heavily impacted areas during times of heavy ground visitor use, like seasonal months on the North Rim (e.g., Point Sublime, Point Imperial) and Canyon trails such as Hermit's, Boucher, and Tanner during their high-use seasons (spring, fall).

Final Summary GCWG Meeting # 11, December 4-5, 2007

The meeting adjourned at 12:20 pm.

**Summary prepared by Lucy Moore. Please contact her with comments, corrections or questions. 505-820-2166, or [lucymoore@nets.com](mailto:lucymoore@nets.com)**