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Minutes Regular Meeting

Mauna Kea Management Board
Monday, May 2, 2005

Kūkahau'ula, Room 131
640 N. A'ohoku Place
Hilo, Hawai'i 96720

Attending

- MKMB:** Chair Rob Pacheco, 1st Vice Chair Barry Taniguchi, 2nd Vice Chair/Secretary Jim Kennedy, Arthur Hoke, Ron Terry, Harry Yada
- Kahū Ku Mauna:** Ed Stevens
- OMKM:** Stephanie Nagata, Dawn Pamarang, and William Stormont
- Others:** Jim Bell, Robert Fox, Gary Fujihara, Ron Koehler, Wendy Light, Charles Stanton, and Christian Veillet

I. CALL TO ORDER

Chair Rob Pacheco called the Mauna Kea Management Board (MKMB) meeting to order on May 2, 2005 at 10:05 a.m.

II. APPROVAL OF MINUTES

It was moved by Arthur Hoke and seconded by Barry Taniguchi that the minutes of the April 6, 2005 meeting of the MKMB be accepted. The motion was carried unanimously.

III. DIRECTOR'S REPORT

A. Legislative Update

Director Stormont reported both S.B. 904 and 1474 were deferred this session. S.B. 904 requested granting UH authority to promulgate administrative rules and regulations regarding public activities on the mountain. S.B. 1474 directed the state auditor to study the feasibility and necessity of a separate authority, and an evaluation of the existing approval and decision making procedures for the Science Reserve. Following the deferral of S.B. 1474 Senator Lorraine Inouye introduced a concurrent resolution containing language similar to a resolution introduced last year and S.B. 1474.

This resolution requests the auditor to conduct a follow-up audit and address various matters relating to the adequacy of the maintenance, operation, and management of the Mauna Kea Science Reserve. This resolution does not contain any of the specific language we saw earlier in this session and the last session about the feasibility and necessity of creating a separate authority to govern the mountain – however, some of that tone still remains. It requests the auditor conduct a follow-up audit to determine:

- Whether the existing approval and decision-making procedures for the Reserve, as set forth by the rules of the Department of Land and Natural Resources (DLNR) and the University's 2000 Master Plan, sufficiently address the concerns of local groups that have strong interest in the historical and natural preservation of the mountain.
- Whether a new project approval process is necessary or desirable to adequately address the concerns.
- The impact of a new project approval process on the economic viability and projected goals of the Reserve.

- Whether other approval procedures, such as those for geothermal resources sub zones in Chapter 205, Hawaii Revised Statutes (HRS), or for the Kaho‘olawe Island Reserve in Chapter 6K, HRS, are suitable models. (Director Stormont commented this is where the tone of a separate authority still remains in the investigation by the auditor.)
- Whether or not the processes in place are adequate for the collection of rents, fees, charges, contracting procedures, and rulemaking authority pursuant to Chapter 91, HRS.

This measure originated in the Senate. It passed out of the Senate Higher Education Committee, moved over to the House, and was referred jointly to the House Water, Land and Ocean Resources (WLO) and Higher Education committees. It was then to go to Finance. It did not get a hearing in all those committees. Instead it was re-referred to the Higher Education Committee where it was heard and the language was modified substantially. It passed out of the committee and went back to the Senate where the Senate disagreed with the modifications made by the House committee. The Senate eventually agreed to the House amendments late last week. This version of the resolution will be going back to the full Senate sometime this week for approval. The legislature adjourns on Thursday, May 5. Director Stormont stated it looks as though the auditor will be requested to conduct this study.

Director Stormont continued saying the Office has begun discussions with those who went thru the 1998 audit. In a way it is keeping with the discussion at the last meeting about the desire of having someone come in and take a look at what is working and what is not. We are five years into the Master Plan. Director Stormont believes this would be a positive investigation if they look at everything the University has put in place since the last audit. If there are some shortcomings, let us identify it. Certainly this will be an opportunity to identify the good things that have happened.

B. Institute for Astronomy (IfA) Septic Tanks Project

Director Stormont asked Ron Koehler to give an update on the project. Mr. Koehler reported installation of the septic tanks went very smoothly. All of the affected cesspools were pumped out and will now act as leach fields. To officially complete the project the engineer will need to inspect the sites and submit his report to the Department of Health.

Barry Taniguchi guessed a determination was made that none of the observatories fall under this large capacity cesspool. Mr. Koehler replied as far as he knows, yes. Observatory operations are not managed by Mauna Kea Support Services (MKSS). MKSS is not responsible for observatory facilities and their septic tanks and cesspool systems. His understanding is there are some cesspools and they are exempt because they are not considered large capacity. James Kennedy added the legally responsible party would be whoever actually owns the facility.

Ed Stevens inquired if there was a way to verify whether any of the facilities fall into that category. Christian Veillet, Director, Canada France Hawaii Telescope (CFHT) commented that a lot of this information was gathered and published in the National Aeronautics and Space Administration’s (NASA) Environmental Impact Statement (EIS). Chair Pacheco believes there are only three cesspools, all of which are not large capacity and, therefore, not subject to the Environmental Protection Agency (EPA) ruling.

Ron Terry asked if the EPA rule about large capacity cesspools was addressed in the EIS. Dr. Kennedy stated he did not know whether it was or not. He does know the EIS contains a very good inventory of those kinds of things, including the kinds of materials used in cleaning the mirrors.

Dr. Terry stated the State of Hawaii Department of Health (DOH) Wastewater Branch is the entity the EPA is working with. They would know the exact requirements and know most of the large capacity cesspools. If you were really interested you could call the DOH Wastewater Division and get information from them.

C. Barbara Robertson’s Term on the Board

Director Stormont announced that Barbara Robertson’s term on the Board will end in June. This is her second term. Board members were asked if they knew of anyone who might be suitable and want to serve, if so to please forward names and contact information by the end of the week. Names will be submitted to the Chancellor for referral to the Board of Regents for their June meeting.

Dr. Terry asked what criteria or expertise Ms. Robertson contributed as a member of the Board. Director Stormont replied Board representation is from stakeholders in our community. Ms. Robertson represented education. The vacancy will need to be replaced by someone with a background and who works professionally in the area of education.

D. UH Hilo Department of Physics & Astronomy

About a week ago Director Stormont met with Dr. Robert Fox, Physics & Astronomy Chair, who shared what he is trying to do for his department. He would like to see where there are opportunities to partner with other entities involved with astronomy and Mauna Kea. Dr. Fox has been in discussions with several of the observatories and the Mauna Kea Astronomy Education Center. He is also working to create a link with the Institute for Astronomy. Dr. Fox asked about opportunities for a link to this Office and the Management Board. Dr. Fox was invited to share any thoughts regarding this.

Dr. Fox acknowledged Director Stormont's statements. He further explained his department is growing to the point that it is one of the largest departments at UH Hilo and plans to continue to expand the department over time.

E. Transfer of Mauna Kea Support Services (MKSS)

Mr. Taniguchi asked for a progress report regarding the transfer of MKSS to OMKM. Director Stormont replied very little has changed since his last report.

F. NASA/Keck Outrigger Telescopes Project

Mr. Taniguchi asked for a progress report regarding the sublease to handle the new telescope. Are we getting involved with that?

Director Stormont replied yes, he is involved in the discussion regarding the Operating and Site Development Agreement (OSDA). There have been two preliminary meetings between University representatives (Dr. Kudrtizki, IfA and Director Stormont) and representatives from the California Association for Research in Astronomy (CARA) regarding what will be included in the OSDA.

Mr. Taniguchi asked shouldn't we be taking the lead on this? Director Stormont explained because there are scientific elements involved in the OSDA and operational and management issues involved regarding the OSDA, his approach has been that the IfA and OMKM sit side-by-side on behalf of the University in negotiations with the applicant. Director Stormont welcomed any thoughts the Board may have.

Harry Yada asked who approves the final terms and conditions? Director Stormont indicated the ultimate decision comes from the president. Mr. Yada inquired if the Board will see the final OSDA before it goes to the president. Director Stormont imagined it would go thru this Board for their review before it goes up to the president. Mr. Taniguchi agreed that it should.

Mr. Stevens asked for a brief explanation of the intentions of the sublease. Mr. Taniguchi stated he was not sure and that is why he is asking. He further explained right now it calls for two twin observatories but if the Outriggers are added you have a different situation, so one would think there would be an amendment to the operating agreement or sublease. This is where we should be involved to see what they are negotiating – is it good, bad? We may have different thoughts than what IfA might have. Mr. Taniguchi felt we should either be taking the lead or having a strong voice in it. One of the purposes we are trying to establish about the management is that the Board, Kahu Ku Mauna, and the Office be instrumental in getting these kinds of agreements settled. He cannot see the Board being cut out of the process.

Mr. Yada inquired if there was an actual draft. Director Stormont replied there was none. There has been correspondence regarding what the specific points will be. Director Stormont offered to provide very specific updates on what is being called for in the OSDA at the next meeting. He explained that there are two different documents – the OSDA and the sublease. The sublease will have to be modified somewhat and is a generic document. The OSDA is the more specific document.

Dr. Kennedy added historically the OSDA is incorporated into the sublease by reference. It is like a separate chapter of the sublease. It is a part of the sublease but as pointed out, the sublease general language is broad and the site-specifics details are normally handled in the OSDA.

Arthur Hoke inquired if the timeline for that would fall before the next scheduled board meeting. Director Stormont replied it would not.

Chair Pacheco stated one of the problems he has with the current situation is that the Board is forced to deal with a project that has not gone through the UH review process in the manner it was envisioned in the Master Plan. This is because the project was conceived and designed prior to the approval of the Master Plan. As a result a lot has taken

place that is beyond the Board's control, thus putting the Board in a position that implies it has already made a determination about the project. He felt it would be appropriate for the Board to make a statement about the circumstances pertaining to this project and where the Board fits in the current project approval process.

Director Stormont stated this project was already well on the way by the time the new process for reviewing projects was approved and put into place. This is the first time we are involved in a review of a major project, whether or not the discussion regarding conditions for a new OSDA would have begun before any project approvals were put in place is not known. That discussion needs to begin as you are moving thru the project approval process. It does not need to be one before the other for this particular discussion.

Dr. Kennedy thought it was important to maintain perspective. Certainly we are going through something for the first time and sorting out the right way to do it and setting precedents is very important. We should not lose sight of the fact that science people may spend a decade figuring out how to build a large telescope facility before they ever get around to picking the site. What is it going to look like? How is it going to work? How much is it going to cost? Who is going to pay for it? We should not read anything into the fact that there has been a huge amount of technical development and scientific development going on in the last decade. That is just normal. These types of discussions (design review, etc.) come into play when you are at the point where you have the funding and want to find a place to put the telescope. Dr. Kennedy sensed, more or less, that part of it is not any different this time than it would be for any other facility. What is different about it is the design review process coming through the OMKM channel for the first time.

Chair Pacheco understood all that, but for now the site has been selected and the process for applying for the use of the land from the state is well along the way. He wondered if this was an undeveloped site that is called for in the Master Plan for future development, would the Office and Board be dragged along by other processes to the point where a permit is submitted by the State before this Board makes a recommendation to the University?

Mr. Taniguchi stated for future projects this Board will have a say at the front end. Chair Pacheco replied we did not have that with the Outriggers. There is this task and understanding by the public that this Board was created for the public to have input on decisions regarding the mountain. We are being pulled into a situation where decisions have already been made to a certain extent.

Mr. Taniguchi did not think that the agreements have been signed yet. What is important for us is to make sure that the OSDA, for example, does not contain things that should not be done. We need to be sure the environment and cultural resources are protected in the agreements yet to be signed. We have a responsibility to see it is done correctly even though it is half way completed.

Chair Pacheco agreed with that. What he is saying is would it be beneficial for us to have an official statement that we are entangled in the process because of the nature and timing of this project and not because this body made a decision to support the Outrigger project. We have never had discussions regarding support of this project. Yet, by the nature of this agreement we are being drawn into the details.

Dr. Kennedy pointed out that we have to be careful. Our duties and responsibilities are spelled out in the Master Plan, and they include ensuring that any development proposed for the mountain meets the standards in the Master Plan and that the review processes are all properly carried out. The Master Plan does not say that it is up to us to decide whether we like something or not.

Chair Pacheco commented that he sees no distinction between those two things.

Dr. Kennedy replied that the question here is whether or not our role should come before or after somebody does an EIS, or somebody requests a permit from DLNR. The fact is that we could not do our job without going through all of the Master Plan design review processes. Dr. Kennedy said that the design review processes are not being left out. It is a tactical decision as to in what order the different agencies' reviews are done. With respect to the Outriggers, this body did get involved early on and made a very specific recommendation to NASA that they do an Environmental Impact Statement (EIS), rather than an Environmental Assessment (EA), for the sake of community interest. We were not out of the process at all.

Dr. Kennedy believes there was an OMKM decision made somewhere along the line, perhaps by Judge Heen, that it made more sense for us to stand back and let NASA talk to DLNR, which it had to satisfy. NASA also had to satisfy federal requirements before the resources of this body got pulled into the process. At least all the other agencies we know of that are supposed to speak on it, at least at the first phase, have done that. The actual process

of doing the Master Plan design reviews is beginning at that point. One could argue that if we did the design reviews first, then we would probably end up having to do them all over again because DLNR might have laid out a number of requirements that OMKM/MBMB had not considered. Further, the results of an EIS might have changed the design itself. What we are actually doing is working with and evaluating what is left at the end of all those prior discussions.

Mr. Yada stated this is tied to the same discussion we had earlier on the whole issue of roles and responsibilities and some of the confusion that lingers on the part of the Board and everyone else. That is a separate discussion we still have not taken as far as we should. Secondly, in terms of the OSDA, he agrees with Mr. Taniguchi that the Board needs to be more involved to the degree that whatever conditions DLNR has imposed as a result of the process and whatever terms and conditions that may come out of the EIS process and the challenge, if there are specific conditions that need to be put on CARA, then those conditions probably need to be put in the OSDA. It goes back to the roles and responsibilities issue as to whose role is it to ensure these things are included – is it IfA? is it OMKM?

Dr. Kennedy stated he absolutely agreed with that. Mr. Hoke added he wanted to make sure it did not appear as though projects that began before the new Master Plan was approved are grandfathered in. We need to be on top of looking at them to make sure it does not bypass the scrutiny that is in the new Master Plan.

Director Stormont agreed and in later discussions on where we are to date with the Design Review Process (DRP) we will point out that while the early planning took place before the Master Plan and its processes were put in place, we have gone through all of those steps.

Mr. Stevens stated a very similar project or situation could arise in regards to Smithsonian's possible expansion of the Submillimeter Array (SMA) field. Would it fall under this discussion? It would be an addition, but not an approved addition. Director Stormont stated in a sense, yes. It is something that the Master Plan says is possible and could be planned for, but all of the processes laid out in the DRP would be employed. Just because it says it might happen in the Master Plan does not mean it has been approved.

Mr. Stevens commented it might behoove us to acknowledge there may be another situation coming up so we need to sort these issues out.

IV. COMMITTEE REPORTS

A. Kahu Kū Mauna

No report.

B. Environment Committee

Dr. Terry reported the committee met last month and the following was discussed:

- Develop a contractor's environmental manual.
- Ongoing and planned biological projects.
- Committee endorsement for getting staff for the office to assist with environmental issues, particularly with biological research.
- Committee to serve as a conduit for public input and dissemination of information.
- Committee to serve as a provider of information only on environmental aspects and let the Board make the decision on projects. They have geologists and biologists on the committee who can provide the committee with better maps and photos.
- Providing input on a proposed silversword project.

V. OLD BUSINESS

A. Kahu Kū Mauna Council Reappointments

Kahu Kū Mauna Council requested the reappointment of Ululani Sherlock and Ed Stevens to serve their second and final four year terms.

It was moved by Barry Taniguchi and seconded by Arthur Hoke to reappoint Ululani Sherlock and Ed Stevens to the Council to serve their second term beginning July 1, 2005 and ending on June 30, 2009. The motion was carried unanimously.

B. NASA/Keck Outrigger Telescopes Project Design Review Report

Director Stormont stated this project has been in the planning stages for nearly ten years, before there was any thought of developing a new Master Plan, a design review process, this Office and this Board.

Director Stormont reported the staff at Keck and CARA have been very open and accommodating in ensuring that the review of these processes is done in accordance with the Master Plan.

The Pre-Design meeting, the first in the series, took place in August 2001 followed by the Schematic Design meeting in January 2002. The Design Development meeting took place in December 2004. We are now at the point in the Master Plan where we come to the Board and Kahu Ku Mauna with the results of those meetings to seek their guidance and input. Over the past two years, the Conservation District Use Application (CDUA) was challenged; a conservation district use permit (CDUP) was issued but subsequently appealed; and NASA prepared and issued an Environmental Impact Statement (EIS), but a Record of Decision (ROD) has not been published.

Dr. Terry asked when the final EIS was published what was the timeline for the ROD. Director Stormont believed a ROD is typically announced 30 days after the final EIS. The final EIS was published in February 2005. NASA has not given any indication when a ROD will be issued. Dr. Terry explained the ROD does a couple of things. It establishes very concrete mitigation measures that might be germane to the DRP.

Director Stormont asked how far should we proceed given there are still unresolved issues. Director Stormont shared the same feelings as Ed Stevens that he would like to wait until some of these questions are answered before moving forward with the process. There was a strong desire at the third meeting of the DRP to ensure there is a clear understanding of what might happen with these challenges before we move forward. On the other hand, the applicant and developer of the project would like to complete the DRP.

Director Stormont concluded that he is not looking for any action from the Board today. There will be a formal project review report from the Office to the Board before any action is requested.

Jim Bell from CARA addressed the Board encouraging members to consider completing the DRP. The process was started about the time the CDUA was submitted. Two meetings of the design review process have taken place. After the CDUA was submitted it was contested and the DRP process was put on hold until the contested case hearings ended. The hearings have ended and the process was resumed. The BLNR approved a permit. One of the conditions of the permit states that work must start within two years from the date of the permit. The permit was received in October 2004. There is nothing in the Master Plan that says we cannot proceed with the design review process. Mr. Bell understands the public might perceive the project to be proceeding prematurely. But given the two year restriction on starting the work, the length of time it might take to complete the recent court appeal of the BLNR decision (e.g. the contested case hearing took over a year) could severely impact our ability to start the project before our permit expires. Mr. Bell felt the fourth phase of the design review should proceed. The Office and Board would still have many opportunities to make its recommendation to the Board of Regents.

Dr. Terry wanted the Board to be aware that one could apply for an extension of a permit under those circumstances. He then asked Mr. Bell if he saw anything in the upcoming ROD that would affect the DRP. Mr. Bell replied he did not see anything in the EIS that would counter the requirements in the 2000 Master Plan or anything in discussions he has heard from OMKM. He could only see more severe restrictions on the project, not less.

Dr. Terry asked if they might be reflected in the design. Mr. Bell answered it would probably be reflected in the way construction is handled and on environmental mitigation and not so much the design. The Memorandum of Agreement (MOA), which is part of the EIS, requires significant cultural off site mitigation. The off site mitigation he believes was a \$2 million requirement which is not part of the project. It is strictly separate.

Dr. Kennedy added that as he reads the Master Plan there is a reasonable expectation that the DRP would take place in an expeditious fashion. We know, for example, that minor projects have a requirement that the whole process be completed within thirty days. While there is no specific limit for a major project, and there should not be, he believes an applicant has a right to expect a reasonable and expeditious conclusion of the process.

Chair Pacheco questioned if you are still going to be involved in the sublease, why would you stop the DRP? Director Stormont's feeling is there is no hard and fast reason to not move forward with the DRP other than the perception issue. Although we may conclude the DRP and make a recommendation up through the channels to the BOR for a decision regarding compliance with the Master Plan, the BOR might not address it until there is some clarity regarding the pending issues. There might be concern if we were to conclude this process while these issues

remain. If we were to move forward, Director Stormont envisioned having the fourth phase meeting of the DRP in late May or early June followed by a report to the BOR in late June or early July.

A formal report will be transmitted to Board members and put on the agenda for the next Board meeting for a decision as to whether the processes thus far have been in compliance. According to the Master Plan, we are at the stage between the Design Development Meeting and the Construction Documents Review where OMKM's advisory bodies are asked to provide counsel and guidelines for a project.

Dr. Terry stated he finds it highly unusual that we are at construction drawings and the ROD has not been initiated yet. In his 150 plus EIS' and EAs he has never seen this. He asked Mr. Yada, given his experience with the Land Board, if he has ever seen a 100% design without a CDUP. Mr. Yada clarified they do have a CDUP. Mr. Yada commented that to some degree it is a risk of the applicant. They can proceed as fast as they want, as far as they want knowing they may not necessarily have their approvals. It is their resources at risk.

Dr. Terry stated that sometimes there are settlements at this point when an applicant sues over the adequacy of a CDUP, sometimes the attorney for DLNR and the attorney for the applicant can get together to resolve issues. Mr. Yada explained the CDUP has been issued and is being challenged in court, so it is a totally different process.

Mr. Yada stated he has no problem with moving the DRP forward. His concern was not knowing what is in the report. He does not want to see the report at one meeting with expectations of a decision. He would urge staff to have the report at one meeting and decision making at a subsequent meeting.

Associate Director Nagata was not sure if approval of the complete DRP necessarily means overall project approval. She thinks these are two separate issues. The design review is to look specifically at the design of a facility and whether it complies with the objectives in the Master Plan. It would still have to come to this Board for project approval. The recommendation to approve a project definitely goes to the BOR. Dr. Kennedy thought it only goes as far as the president, but that the BOR can ask for anything.

Dr. Terry stated it was not his intention to throw in a "monkey wrench," but he was concerned that if the ROD contains some things that would cause us to rethink the design, he wanted to have that ability.

Director Stormont stated the alternatives discussed in the EIS relate to determining a site for the project and not to design specifications. The design is fairly firm. Dr. Terry commented that the EIS does include the decision on the alternative and agreed with Director Stormont as far as the alternatives go. He just wants to be sure we are not neglecting our duty. He added he would not have objections in moving forward with the DRP, but to memorialize this discussion.

Mr. Taniguchi asked if there was a reason why NASA has not issued the ROD. Director Stormont replied he has not heard from NASA regarding its decision. Jim Bell added Carl Pilcher is scheduling the work and he would be the one to ask. Mr. Taniguchi suggested we ask NASA. Director Stormont stated he will ask.

Director Stormont asked Mr. Yada if a full report is transmitted to Board in the period between this meeting and the next, would he be comfortable with having the action item on the next Board agenda? Mr. Yada explained it could be put as an action item for decision if the Board is ready to make a decision. He does not want the Board to be expected to make a decision without first knowing what is in the report.

Director Stormont intends to get the full report out to Board members by May 13 and hopefully have it as an action item at the next Board meeting. Dr. Terry stated if the ROD is issued between now and then, he would appreciate the Office reviewing the ROD and giving the Board a report. Director Stormont confirmed if it is issued the Office will transmit it to Board and Kahu Ku Mauna Council members.

Dr. Kennedy reinforced what Mr. Yada said and asked that no one interpret his own comments as arguing for rushing due diligence. He would not have any problem at all if the matter was brought to the Board for discussion and not acted on at that moment. This needs to be studied very carefully. He has been advocating moving forward with the process, rather than stopping it. Chair Pacheco commented that we can have it as an action item, but a decision can be deferred.

Associate Director Nagata stated the report needs to go to Kahu Ku Mauna Council first for their review. Director Stormont said it will go to the Council within the same time frame as the Board. Mr. Stevens stated the next Council meeting is Wednesday, May 18. He asked that Director Stormont summarize the minutes of the past

meetings. Director Stormont said the report will lay everything out. It will be a summary and will not contain all of the details discussed in each of the meetings. It will bring together everything that has transpired with respect to the various permits necessary, the timing of everything that has occurred thus far, the contested case coming up, the issuance of the CDUP, the challenges, the OHA challenge to the EA, etc. It will include all the steps, and some of the missteps, taken along the way. Mr. Stevens commented that report would be adequate.

VI. NEW BUSINESS

A. Canada France Hawaii Telescope (CFHT) Ohana Project Update

Christian Veillet, Director, CFHT provided an update on the project that will attempt to try to transmit light from more than one telescope to the same locus. It is a project that has not been accomplished anywhere else. It is an enormous challenge to take two telescopes and make them work together.

The injection module, involving four telescopes – two from Keck and one each from CFHT and Gemini, has been tested and checked, and is working well. The fifth telescope will be Subaru. In addition, the United Kingdom Infrared Telescope (UKIRT) and NASA Infrared Telescope Facility (IRTF) are also interested.

The next step is to link the two telescopes, CFHT and Gemini, then test the system to see if it works. Linking the telescopes requires running a fiber between the two telescopes. The large machinery needed to recombine the light will come this summer. They would like to run the fiber at the end of the year. Two proposals for laying the cable will be submitted. They are contemplating two options: 1) run the fiber on the ground; or 2) dig a trench. The second option will use the side of the road because it has already been excavated. They are looking at a timeframe of the end of the year or the beginning for 2006, provided the two telescopes can agree on a schedule for providing telescope time.

Mr. Stevens inquired if they looked at any of the existing site plans to locate and use existing conduits. Director Veillet stated there are existing conduits between Subaru and Keck. If the link between CFHT and Gemini is successful, the next step will be to try to link Keck and Subaru.

Mr. Taniguchi asked if the theory is the same for the Keck Outrigger. If so why are we doing both? Director Veillet stated in principle it is the same, but it is different because the Ohana Project will be used 10 or 20 nights a year at the maximum. The Keck's Outrigger telescopes are a much smaller size and it can run all the time. Dr. Kennedy added it is not uncommon in astronomy and other sciences to have two different modes of operation. One of which is referred to as the campaign mode. In this mode for a limited period of time you can bring together a number of resources that are independently too expensive to dedicate to that activity all the time. On the other hand, you could build a facility, for example the Keck Outriggers, which is dedicated to a specific kind of function, and operated in a synoptic mode, and not much else.

VII. ANNOUNCEMENTS

Apology to Kahu Ku Mauna Council

Associate Director Nagata brought to the Board's attention an oversight on the part of the Office on how it handled the temporary Seeing Tower project approval process. The Office did not give the entire Council an opportunity to review the project plans before bringing it to the Board. It was an oversight on the Office's part and apologized to Mr. Stevens and the entire Council. Mr. Stevens thanked Associate Director Nagata adding he shared in the oversight too. When the subject was before the Board he should have suggested giving the Council time to review it.

VIII. NEXT MEETING

The next scheduled meeting is Tuesday, June 7, 2005 at 10:00 a.m.

IX. ADJOURNMENT

There being no further business, Chair Pacheco adjourned the regular meeting at 11:40 a.m.

Respectfully submitted:

Signed by James Kennedy
Dr. James Kennedy, Secretary, MKMB

8/31/05
Date