Lick Observatory Strategic Planning Committee Minutes

September 13, 2007

In attendance: Graeme Smith, Matt Malkan, Jacky Leighton, Geoff Marcy, Alex Filippenko, Elinor Gates, Steve Vogt, Maureen McLean, David Tytler, Mike Bolte, Josh Bloom, Burt Jones
Absent: Jason X. Prochaska, Bryant Grigsby, Gabriela Canalizo, James Graham

UCO Director Mike Bolte opened the meeting by thanking the members for agreeing to serve. He then discussed his charge to the committee and the areas he hoped the committee would look at. (Bolte's presentation is available on the LOSPC web site.)

Burt Jones, Assistant Director for Lick Observatory, gave a presentation discussing various aspects of current Lick science operation, including staffing, campus support, telescopes and instrumentation, telescope usage, public outreach, current and future instrumental projects, and impacts of anticipated changes in San Jose street lighting. (Jones's presentation is available on the LOSPC website.)

Maureen McLean, Assistant Director for Administration, gave a presentation discussing the Lick budget, including sources and restrictions, facilities operations, maintenance challenges, and emergency services. (McLean's presentation is available on the LOSPC website.)

After the presentations, the committee brainstormed on what Lick should look like in the future.

Brainstorming:

- **Encourage an enthusiastic, noncritical attitude among members of the group.**
- **Try to get everyone to contribute and develop ideas.**
- **Let people have fun brainstorming.**
- **Encourage them to come up with as many ideas as possible, from solidly practical ones to wildly impractical ones.**
- **Welcome creativity**.

The discussion was side ranging and not always linear. In the notes that follow we attempt to bring common threads together.

Advantages of Mt. Hamilton

Since there are many telescopes greater than 3-m in size, what characteristics does Lick possess that will allow it to play a significant role over the next 20 years? The committee identified several.

- Lick has a large, strong user group doing excellent science.
- Ability to undertake programs not possible elsewhere (be nimble and quick).
- The Shane has been a world leader in AO.
- Mt. Hamilton provides an excellent location to test-bed new instruments.
- UCO's ability to build world-class instrumentation. Tie into other facilities (Keck, TMT, LSST).

What Instrumentation?

Given the bright sky at Mt. Hamilton, there was consensus that AO, IR, and high resolution spectroscopy would become more prominent, although it was pointed out that in the UV, the Mt. Hamilton sky continues to be dark. Suggestions from the committee for instrumentation included:

- Optical AO
- Wide-field IR imager and spectrometer
- Wide-field MOS
- Kast upgrade, with IFU

Time Allocation/Scheduling Models

The Shane has been only moderately over-subscribed the last several years. This period has also seen a shift of requests from faculty to postdocs, researchers, and graduate students. Some on the committee thought the moderate over-subscription was because the user group did not ask for all the time they could use. There were many suggestions from the committee on what changes would be beneficial, but there was no consensus. Suggestions included:

- Encourage more graduate student use
- Move to more remote observing
- Undertake large surveys with either Nickel or Shane
- Move to rapid response/time domain astronomy
- Institute queue observing
- Provide more service observing

Public Outreach/Education

There was a strong feeling among most members that Lick should expand its public outreach. This would mean changing UCO's mission statement (see the UCO home page for full mission statement). The observatory has had a long and rich history and is iconic to many in the Bay area. Several members thought that it was important to bring more

people to Lick and increase the activity on the mountain. This would increase public awareness of the important research taking place, possibly lead to major donations, and increase morale among the Lick staff. Some suggestions to increase public outreach were:

- Increase the number of public viewing nights, possibly using amateur astronomers as telescope operators. This would not mean ending the current SVP and Concert of the Spheres programs.
- Allow some amateur access to the smaller telescopes.
- Sell nights or half-nights on the 36-inch, similar to what is done with the Mt. Wilson 60-inch. At Mt. Wilson, half-nights go for $600.
- Move toward a Griffith Park model, including a planetarium. Move Nickel to astrograph dome, and have science on the back of the mountain, public on front.
- Have a summer time undergraduate program.
- Add an annual dinner/fundraiser.
- Allow special group access for a significant (~10k) fee.

There were also some concerns expressed, mainly centering on the remoteness and long drive, and how does one make that long drive worthwhile for the public.

Action Items

The committee asked Lick staff to:

- Provide more information on graduate student use.
- Put together a list of publications utilizing Lick data.
- Add line to Shane proposal asking for the total number of nights the PI could use.
- Survey UC astronomers on their thoughts for the future of Mt. Hamilton.