Minutes of OTC telecon, Wednesday October 18th, 2006, 15:30 UTC.

Last revised 2006-10-28, DTE.

OTC members present: Richard Bradley, Walter Brisken, Bill Cotton, Darrel Emerson (chair), Rick Fisher, Tony Kerr, Matt Morgan, Peter Napier, Roger Norrod, John Payne, Marian Pospieszalski, Dick Sramek, Dick Thompson & John Webber.

Dale Frail and Ted Miller also attended.

Minutes of last meeting For reference, the final minutes of our last meeting are at:

http://www.tuc.nrao.edu/~demerson/otc/otc_2006-06-14_1.pdf.

Agenda:

- 1. Outcome of the "Technologies fostered ..." document.
- 2. Update on the OTC proposal to review external R&D contracts awarded by NRAO
- 3. A future R&D meeting, similar to the recent GB meeting?
- 4. Future R&D Long Range Planning
- 5. Future OTC activities

1. The "Technologies fostered by Radio Astronomy ..." document

Rick reported. The document is finished, and is in a form that Phil Jewell had wanted.

There was discussion as to whether this document represented too much of an advertising hype approach, and whether we should write our own document with less hype that might be suitable for different purposes.

Dick thought that some things were overblown and some things were repeated.

Peter comment that the hype is inevitable in a publicity document. Such a document needs to be tailored to the specific audience; guidance from NRAO management is required on what that audience is. One possible purpose is to have something available to hand out to staffers of important congressmen, who may be voting on science bills etc.. This is different from something one might hand out to colleagues at, say, CORF.

John Webber asked if we might obtain guidance from AIP physical science research areas. Are there comparable publicity documents, and more professional documents? We should either ask someone or find similar documents. E.g. particle accelerator groups must surely produce the same type of publicity material to hand out to congressional staff. We suspect we're not the only ones to do this.

Bill Cotton asked why would we want this? One example is CORF, but inside the astronomy community, it's not clear.

The immediate goal is not specifically to do with staffers. The immediate need is to help NSF for AST initiative - hopefully to increase the NSF budget next year.

In the course of the various preliminary drafts, the document changed from something mainly technical into a document more suited to the layman.

Dick commented that we do need to make sure the hype isn't too heavy.

Rick said that Fred has also asked for a defensible Powerpoint version, which Rick is in the process of preparing.

Dick commented that it would be good to include a list of references; Dick agreed to supply this.

2. The OTC proposal to review external R&D contracts awarded by NRAO. [This can be found at http://www.tuc.nrao.edu/~demerson/otc/R-D_contracts.pdf]

Ted Miller addressed this, on behalf of NRAO's business division.

NRAO doesn't issue many R&D contracts. Recent examples include the U of A, UC Berkeley, and the FASR project. Ted asked what exactly does the OTC want to see from the PI of a project?

John Webber said we were interested in knowing about development contracts for anything that represents a real research effort. E.g. the ALMA LO laser synthesizer, or spending money on doing design work for experimental semiconductor processes.

Ted: the contracts do not always originate with ADs. Education may have to come out of the OTC as to what is required and when. This kind of work does not always go out for bids; often there are already named partners. The OTC might say yes or no, but by then it may already a fait accompli.

John commented that the intent was about using NRAO resources for external contracts for things that might not work. The way contracts work is that you go out for something new and it's the person who has the approval authority who says yes or no. At that level we need to educate the people who approve the contracts, particularly for large amounts of money. E.g. if JW is ready to sign a contract, he needs to say "This is an important new development which involves significant amounts of money, and is now suitable for OTC review." We need to educate people who have the signing authority to consider whether there might benefit by examination by the OTC.

Rick asked whether OTC review applied to NSF proposals too. The answer is "Yes."

The OTC should be able to offer an opinion before purchase req. is submitted. The PR stage too late, a done deal. So, education of people with commitment authority is needed. They should know there's the opportunity for OTC to give advice.

Peter agreed. We were thinking of development contracts of difficult hardware as much as research contracts to universities. OTC input at the request for proposal stage is needed. The review of the RFP would be an appropriate time. Peter's prediction however is that this won't be well received. The most significant development within NRAO at the moment is ALMA. There won't be enthusiasm for injecting another review process. If we do this, we need to talk to Adrian. The laser development is the most relevant work going on at the moment.

Ted asked "who's the target?" He agrees point of RFQ it's the point to insert the OTC. John replied that advanced rx development, in any sort of collaboration with another research organization group, would be appropriate for OTC to review. For example, if Matt Morgan wants to get devices made with NRAO money, someone should review that.

Ted: how do we get education to engineer's at the Matt level? (Matt interjected: "I just heard it.") JW suggests we look at the list of people with commitment authority, & write an appropriate memo. We would circulate this to those actually authorize the expenditures. We should phrase that we're not looking to stop things happening, but are looking that ensure that resources are spent well and not duplicated unnecessarily in different parts of the Observatory. This is an offer of help, as well as a possible "you shouldn't do that." We want to make sure we're spending money in efficient way, not duplicating what someone else has already done.

We should suggest to Fred & Phil that every significant proposal MUST be submitted to a review by the OTC.

JW should be involved in reviewing the technical details, which may or may not be the SOW. Part of the technical evaluation is whether work is feasible, and whether it's the right people.

JW volunteered to draft memo for Fred/Phil to send out.

Ted added that this should be included in the Proposal Writing Guide. Dale Frail agreed it might be inserted into the guide. Tony Kerr commented: In section 4 ("Threshold for Review")of the original OTC document, proposals would normally be communicated to the *review panel* by DH or site director. He suggests changing "review panel" to "OTC" since the review panel will only be chosen after the proposal has been received by the OTC. JW: a review at an earlier stage would be profitable. Once the site director has it, it's too late.

Tony continued: in the summary on the first page of our document it says: "The OTC proposes that in the future proposed grants for hardware development (footnote: excluding pure software which is the purview of the OCC) should be thoroughly reviewed internally..." The words "hardware development" should be changed to "development other than software" to cover such things as studies of thermal behavior of telescopes which are neither hardware nor software.

3. An Instrumentation Workshop.

Rick said that the old "Future Instrumentation" workshops were not very effective. The recent GB meeting was focused and was far more useful. It was successful enough that we might want to duplicate. For example, Socorro next, followed by ALMA, with, say, two years between meetings.

Dale commented: Next week is the AUI mid-term review. How do we plan and make priorities and get input? This would be timely. One thing is we need soon is for scientific & engineering staff to discuss priorities. Could we present OTC's document & the results from the GB meeting at a meeting of this kind?

Peter asked "Why so quickly?" Dale: The cycle is set by budget. We want to demonstrate on an annual basis internal & external feedback into the budget setting process.

For focused meeting, would VLBA be appropriate? Brisken wanted Socorro engineers to have full participation.

GB workshop was successful because Jay was point man responsible for arranging everything. The workshop (JW said) should proceed from science drivers.

Dale will get together with Darrel to nominate a scientist to take the lead in arranging such a workshop, with the OTC's help.

4. Long Range R&D Planning

We've revised budget & text of long range plan already. Tony said that that a revised document is almost ready after a couple of cycles.

Darrel commented that, although we had sought scientific input in our R&D planning, relatively little had been received - about 6 NRAO scientists had sent comments. The uncertainties in budget act as a disincentive.

Peter commented that it is all budget driven, so we can't expect much active participation from NRAO scientists.

Tony volunteered to resurrect the last version of our document.

5. Next meeting.

Darrel will arrange the next OTC telecom in about one month. After the results of the Senior Review become known, we should have a better idea of available resources.

Rick will turn the GB workshop into document. He will distribute to scientists and to the OTC.

DTE, 2006-10-23