

# **International Academy of Astronautics SETI Permanent Study Group**

**Minutes from 2007 Annual Meeting  
Wed 26 September 2007, 9:00 am, Room M 2.02  
57<sup>th</sup> International Astronautical Congress, Hyderabad, India**

## **In attendance:**

Members: Seth Shostak (Chair), Claudio Maccone (Co-Chair), Paul Shuch (Co-Chair), Robert DeBiase, Kathryn Denning, Douglas Vakoch. Guest: Alexander Zaitsev

In the absence of the secretary, K. Denning was asked to take the minutes.

The Chair expressed his welcome and appreciation for people spending time and money to attend the meeting. A brief round of introductions followed, and the meeting was called to order.

## **1) Review and approval of meetings from Valencia meeting**

Corrections:

Maccone noted a misprint about Valencia meeting: Salvatore Pluchino was not in fact in attendance and so his name should be struck.

Typo – at the bottom of pg 1 – should be PESEK lecture, not Pasek lecture.

**MOTION:** Shuch moved to adopt minutes as amended. DeBiase seconded. The motion passed unanimously.

## **2) Review of SETI sessions at Hyderabad, and upcoming meeting in Glasgow 2008**

The Hyderabad sessions were discussed. Shuch counted 55 in attendance – i.e., the room was full. Vakoch acted as rapporteur in lieu of Rummel, who was not present. Shostak remarked that Shuch ran the session well. Shuch commented that Govind Swarup sent thanks to Shuch for giving his presentation, particularly for dedicating it to the memory of Ron Bracewell.

There was discussion about the audience: there were many students present as usual, and many in the audience were not familiar with SETI. Given that we usually prepare our talks for one another, this is worth noting.

### **b) Candidates for the Pesek Lecture**

It was suggested that Ian Morison would be a good choice for the Pesek lecture next year.

### **c) Billingham Cutting-Edge Lecture**

A new selection procedure, proposed by Allen Tough, the Lecture's sponsor, was relayed by Denning. It follows:

Tough has designated Denning as the coordinator of the series, with a new coordinator to be chosen if/when she is not able to carry out this task. There will be a BCEL selection subcommittee of the PSG, the exact composition of which is to be determined by the coordinator. It will include Tough, Denning (as subcommittee chair), the SPSG Chair (Shostak), and two additional members, who will rotate each year to provide a balance of perspectives. Nominations will open after the annual SPSG meeting, and remain open for one month. (An announcement will be made on the SPSG email list.) Anyone on the SPSG can nominate a candidate; nominations will be made directly to the coordinator. People can self-nominate. Allen Tough cannot be nominated. If a committee member is nominated, s/he may accept the nomination and step down from the committee, or decline the nomination and stay on the committee. The subcommittee will usually meet during the IAA meetings, even though nominations are not yet open. After nominations close, the subcommittee will consider all nominations and their own suggestions. Deliberations should focus on the *ideas*, as well as on the individual speaker *per se*. The committee will deliberate the list of candidates and arrive at a ranking. This will be done privately and by email. Finally, the committee will invite the preferred candidate to give the lecture. If s/he cannot oblige, the committee will move down the list to the second candidate, etc. Once the speaker has been confirmed, the results will be announced to the SPSG. Each year the decision is made afresh. Individuals may be nominated in successive years, however.

**MOTION:** Shuch moved, and Maccone seconded, that the SPSG should adopt the procedure proposed by Tough. There was open discussion. Vakoch said that the procedure seemed appropriate and systematic.

Shuch offered an amendment: that this procedure be followed, and Denning, as designated representative of Tough, have the authority to establish the BCEL selection subcommittee and chair the subcommittee, for as long as appropriate sponsorship remains available. DeBiase seconded. The motion was passed (4 in favour, 1 abstention).

### **3. Publication of papers from past IACs**

Maccone relayed a status report on behalf of himself and Carol Oliver. Maccone has put on CDs all the abstracts of all the SETI Session I talks from 2003-6, and all papers from 2003-6 that reached the IAC in time to be put on the conference CD-ROMs. However, many papers are missing from the conference CD-ROMs, because people don't always upload them in time. Also, there are no papers from Bremen 2003, because a different system was in use.

There was discussion about the issue of different versions of papers. For example, as Maccone pointed out, some 2006 papers are updated versions of 2003 papers, so perhaps we only need to publish the latest versions. However, Shuch noted that for the historical record, earlier versions are important too. DeBiase remarked that with respect to his own work, he would sooner publish just the later versions, as they include some corrections. Vakoch agreed that tracking the historical progression of ideas can be useful, but authors should be able to choose to publish only the later

versions of papers if they prefer. Shostak concluded that authors should be consulted, and congratulated Maccone for his work on this significant task.

Further discussion focused on the publication venue. *Acta Astronautica* and *JBIS* are both options; unfortunately, *Acta* is slow and *JBIS* doesn't take papers until they have been rejected by *Acta*. Additional publication venues for IAA members include *Academy Transaction Notes* (4 pages only, rapid cycle, no peer review).

After further discussion, it was concluded that this was too great a burden for one individual. Vakoch wondered if the SETI Institute could provide administrative help in going through the list to determine which papers had been published. For papers which haven't yet been published, authors could then have a short window for submission. Existing rapporteurs' reports are adequate as referee reports. Action taken: Maccone passed the stack of papers/CDs to Vakoch, to take back to the SETI Institute.

Maccone suggested that we should distinguish between the abstracts and the papers, and that we should publish all the abstracts, and then only some of the papers, as appropriate. Vakoch offered to start the process of administering this. Shostak later noted that initial abstracts and actual papers aren't always the same, and so caution is warranted.

Shuch noted that copyright is an issue, because the Academy's policy is that they get first publication rights. Maccone noted that authors have the option, when submitting their paper for the annual IAC CD-ROM, to choose "Retain Copyright". It was concluded that the Academy's position about their copyright was not clear; Shuch asked, does the CD-ROM/DVD constitute them having exercised their first publication rights? And if they do not publish papers in *Acta Astronautica* within a couple of years, have they then relinquished that right to first publication? Shuch requested that the Chair raise this issue with the Academy, and Shostak agreed.

**MOTION:** Vakoch moved, and Shuch seconded, that, on an ongoing basis, the PSG shall pursue timely publication in *Acta Astronautica* of papers delivered at these meetings and favourably reported upon by the rapporteurs, specifically those meeting these requirements

- a) not having appeared previously in other publications
- b) subject to approval of author
- c) papers as presented at the conference (timely revisions being acceptable)

Discussion ensued concerning the issue of versions, post-rapporteur changes, etc.

Shostak summarized:

- 1) The SETI Institute will be approached in terms of finding administrative support to facilitate the process of publication
- 2) That process will conform to the motion above
- 3) A volunteer is needed to draft the letter to circulate to the SPSG
- 4) SETI II sessions will have to be compiled separately, because Maccone's compilation is only for SETI I sessions.

The motion passed unanimously.

#### **4. Continuing SETI activities within the IAC?**

Invitation from the Chair for discussion. No discussion.

#### **5. Subcommittee reports**

##### **a) Lunar Farside – Maccone**

His current paper (IAC-07-A4.2.05) ‘Protected Antipode Circle on the farside of the moon’ makes a specific, detailed proposal for an area to be protected for scientific purposes. Summary: the scientific argument for a Protected Antipode Circle is clear, but the legal issues and politics are difficult, given the status of the Moon Treaties, and given the growing interest of private (particularly American) corporations in territory on the Moon. What can we do? The IAA is only an observer at COPUOS. So, who can actually speak to the UN/COPUOS? Any country that has representation at the UN. So what we need, in practice, is to have one country, at least, raising the issue with COPUOS, which would then consult the IAA, which could then respond with scientific information such as Maccone’s report. The ultimate result could be a treaty. Obviously this would be a long-term project, and we need to move fast. It would need political action outside the Academy.

Shostak thanked Maccone for his excellent work, as did Vakoch. A brief discussion of the scientific aspects of the proposal ensued.

Next steps were discussed. Maccone described his actions so far; in Paris in March 2007, he discussed the scientific case with J. M. Contant and with Roger Bonnet of COSPAR. Both were supportive. Contant later suggested that a new IAA study group could be formed to produce a position paper for the Academy about the PAC. Maccone submitted a proposal accordingly. (Both he and Shostak are on the relevant Commission.) Proposed members of study team: Maccone, Shostak, Shuch (secretary), Wes Huntress, Bernard Foing (ESA), Leonid Gurvitz, Heino Falcke. The immediate goal of the study is to produce a Position Paper of the Academy to protect the farside of the moon (PAC) for scientific purposes. (See Maccone’s Proposal text for details.) Intermediate goal: the group should report to Commission 1. Final goal: the Academy would submit it to the attention of COPUOS, for inclusion in the new moon treaties. COSPAR would also be informed about the need for the PAC.

In further discussion, Vakoch recommended the inclusion of legal experts. Denning noted that this is an issue of the ‘universal heritage of humanity’, and significant expertise on this question exists. DeBiase suggested connecting with Jim Dunstan, an expert in space law with knowledge of private enterprise, noting that commercial interests and preservation interests are not intrinsically opposed. Commercial interests are not as interested in the far side as they are in the near side, and the private sector / entrepreneurship could help get the infrastructure in place.

There was discussion of how the SPSG can liaise / collaborate with this new study group, and how it might relate to the IAU.

**MOTION:** Maccone moved, and Vakoch seconded, to request that the SETI PSG provide ongoing consultation about technical, legal, and social issues related to the scientific necessity for protecting the lunar farside. The motion passed unanimously.

### **b) Post-Detection Task Group**

There is a meeting scheduled by the Task Group chair, Paul Davies, at The BEYOND Institute, Arizona State, 7-8 Feb 2008. Maccone, Vakoch, Shostak, Shuch, and Denning, amongst others, will attend.

### **c) Transmissions from Earth Subcommittee**

Vakoch encapsulated the history: Roughly four years ago, Michaud stepped down, then Fasan was named chair, then Vakoch became chair, but discussions about Protocols went forward under Michaud's guidance. However, in terms of the subcommittee: no report. The subcommittee has been essentially defunct for some time.

## **6. Transmission protocols: status and next steps**

The current status of this document was discussed. Maccone presented the latest version of the Second Protocol at the March IAA meeting, where it met with approval. Shostak contacted Ed Stone to say that the document should be presented to the IAA and ISSL. Stone recommended contacting Gerhard Haerendel. Shostak also sent it to Les Tennant, who forwarded to Tanja Masson-Zwaan, Secretary of the ISSL. No further information at this time, and no further action required right now from the SPSG.

Shostak presented it on 23 September, here in Hyderabad, to Commission 1. There was only one point of discussion about it in that meeting: that "international consultation" is vague, and perhaps the decision-making body should be specified – but then again, current organizations, even the UN, may be obsolete by the time this provision becomes relevant, so vague terminology is perhaps best.

## **7. Membership**

### **New members**

Maccone and Shuch reported on their initiative regarding new members, the purpose of which is to codify our membership procedures, in a way modeled on the IAA procedures. They presented a draft of the procedures.

Vakoch expressed concern about the demonstration of fluency in English being a requirement as specified in item 8 of the draft, and suggested that rather, we should expand our efforts to include people who do not have fluency in English. Maccone noted that since SETI is very popular around

the world, omitting the fluency requirement could create an undue burden on the committee. Maccone suggested that since the scientific world is generally operating in English, the requirement is fair; Vakoch responded that this describes the scientific community, but this committee can be seen as having a broader remit.

**MOTION:** Vakoch moved, and Shuch seconded, that point 8 be deleted from the draft. After further discussion, the motion carried (3 in favour, 2 opposed). Point 8 will thus be deleted.

**MOTION:** Shuch moved, and Maccone seconded, that the modified process be adopted. Discussion ensued on the subject of the 5-year term for membership. The motion was then adopted unanimously.

### **Selection of Officers**

There was discussion about the duration of terms for officers: Shostak asked whether there was a fixed term, and Shuch and Maccone clarified that no, there is no specification. Shostak asked whether there should be term limits. Shuch suggested a reevaluation every five years for the Chair, and that other officers should serve at the pleasure of the Chair. Vakoch noted that this was an important topic that should be returned to next year. Shostak suggested a subcommittee to develop a proposal on this. Shuch volunteered to create a proposal on this, soliciting recommendations and posting a draft to the website.

Discussion then turned to the issue of the Secretary for the PSG. Guillermo Lemarchand, officially the secretary, has not been able to attend since Rio, and has effectively stepped down. Shuch suggested that the issue should be resolved, and nominated Denning as the secretary. There was discussion of the fact that very few members were in attendance at the meeting, and perhaps this should be resolved by email instead.

**MOTION:** Shuch moved, and Maccone seconded, that Denning should be acting secretary until such time as the Chair has orchestrated and implemented an election procedure. General discussion ensued about the importance of officers attending meetings, and having membership in the Academy. Maccone encouraged Denning to apply for membership. The motion carried (4 in favour, 1 abstention).

### **Recent resignations**

The Chair announced that John Billingham and Michael Michaud have resigned from the PSG.

### **8. New business**

**San Marino Scale.** Shuch reported that the San Marino scale has been revised.

**MOTION:** Shuch moved, and Maccone seconded, that the SPSG adopt the San Marino scale as it now exists or may be modified in the future, as a method for quantifying transmissions from Earth.

Discussion followed: Vakoch objected that the quantification implies greater accuracy than is really possible, and suggested that a qualitative description is more useful. Shuch suggested that the Rio scale has been useful as a way of quantifying, and speaking about, received transmissions. Vakoch noted that he had been equally opposed to the Rio scale.

The motion carried. (2 in favour, 1 opposed, 2 abstentions)

### **Conference on Active SETI**

Shostak revisited last year's motion to set up a conference about Active SETI. He has approached Elizabeth Back Impallomeni but is not sure of her interest. Haerendel is keen for it to happen within the IAA but is not able to take on the organizational burden. Shostak asked who might take this task on if Back Impallomeni declines, and said he will ask the SPSG for further suggestions and will keep us informed.

### **Other business**

Zaitsev noted that Kardashev proposed two years ago to the previous Chair, Tarter, that Zaitsev should replace him on this committee, but nothing has come of this. Shostak noted that this suggestion had not reached him until now.

The meeting was then adjourned.