

MINUTES OF THE AEROSPACE NUCLEAR SCIENCE AND TECHNOLOGY DIVISION Meeting
AMERICAN NUCLEAR SOCIETY
Galleria One Room, Town and Country Resort, San Diego, CA
Sunday, June 13, 2010 12:00 PM to 2:00 PM

Members Present:

Marty Sattison, INL, Chair (EC)
Dion Sunderland, ANATECH, **Treasurer (EC)** (12:15)
Paul Edelmann, LANL, Secretary (EC)
John Bess, INL (EC)
Steve Wright, SNL (EC)
Andy Klein, Oregon State
Heather MacLean, INL (EC)
Allison Barber (EC) (12:37) Quorum
Ross Radel, SNL (12:58)

Minutes (In Order Addressed, by Agenda Item Number)

1. Call to Order at 12:05 pm

- a. Establish quorum (half of voting executive committee members, 7 of 13). The meeting commenced with only 5 Executive Committee members present. This was 2 voting members short of a quorum, so all actions and motions requiring a vote were postponed until a quorum was present, about a third of the way through the meeting.
- b. Welcome new EC Member – John Bess
- c. Review and approval of agenda. Lacking a quorum, this was put off until later in the meeting. Addition to agenda: electronic conversations between Boise and Shannon. Boise would like to step down from Program Committee Chair position. Agenda Item #8. We will need to add Program Committee Chair to the discussion later in the meeting. **Action Item** for Shannon: take nominations for Technical Program Chair.

2. Topical Meetings

- a. Review of Space Nuclear Systems Forum (Feb 2010) Marty solicited responses from any who attended SNS. Steve Wright had attended, and offered that about 70-80 people attended, half from NASA, and half from DOE. Also in attendance was a congressman (speaker) from northern Alabama. Talked about cancellation of the Constellation program. This was upsetting to many, including the congressman. 100-200 kW plasma engine – VASIMR proponent (Dias - speaker). Commercial company to build plasma engine to boost the space station up. Many presentations on fission surface power system conversations. NASA and the space nuclear community are proud of the progress made in last 6-7 years, Evident in discussions. They were clear about desiring to stay “below the radar” with relatively small budgets. Discussions on “how small can you go?” Low power reactors considered. (LANL, SNL, NASA GRC, JPL all talking about a 1-kW reactor.) Mike Griffin gave dinner speech, enlightening and inspiring to many. He was entertaining and interesting. He does not agree with the course change at NASA. Very political and hard-hitting. Straightforward. He advocates getting NASA’s budget under one single congressional committee instead of two, so as to have better control of direction of agency through control of the budget. Because of the announcement of the Constellation cancellation, the nuclear space community feels that new doors are opening with many opportunities for deep space mission applications in fission surface power, nuclear propulsion, nuclear electric propulsion, etc. Comment was made that it was cold and snowy in Huntsville in February. Steve said that we need a good advocate in NASA, and that we have one in Mike Houts, among several others. Members also discussed the ultimate fate of SNSF, and stated that NETS is intended to replace SNSF. SNSF was held as a transition to NETS.
- b. Report on ANS Student Conference (Apr 2010) Dion reported that there were 4 papers presented in Aerospace Nuclear, and awards were given for best undergraduate and best graduate papers. He disbursed the travel allowances and awards together as one lump sum per award. One student gave two papers of the four. We need to know what to do when the number of students is so limited; how to assign awards, etc. Marty said that awards should be given based on merit, but if we don’t assign an award in any given year, we will fail to meet the criteria of our metrics. We need contingencies. If we allocate funds, we should give out all the allocated funds. We need to do this in equitable and fair fashion. The solution is to get more student participation in our category. We ought to use a mass mailing to our membership, because we have

several hundred student members. Undergraduate award went to: John McCullough... Graduate award went to: Oscar(?) Morales for "Radiation Testing of Stirling..." (**Action item:** Dion is to send email with specific details on student awards to Paul.) Two students arrived at 12:26 to report on the Michigan Student Conference. 665 attendees by far the largest. Previous record 550. 482 students in attendance. Everything ran smoothly. Best papers: Graduate -- Omar Morales from Florida, Radiation Testing of Stirling Alternator Converter. Undergraduate: John McCullough from UNM, similar topic. Good financial support from all ANS Divisions. Next year's student conference will be held in Georgia.

- c. Status of NETS-2011 (Feb 2011) Marty tabled this discussion until the arrival of Ross later in the meeting.

12:45 pm: NETS-2011 discussion. General Chair: Shannon. Technical Program Chair: Marty. General Co-Chair: Mike Houts. John Cassani and Harry Fingers are Honorary Chairs. We may need to provide some assistance to Harry with some expenses. We have 5 tracks, and 10 track leaders. 15 additional program people to help with reviews. Hotel is Albuquerque Marriott. Dates: 7 to 10 February, 2011. We expect around 200 attendees. Abstract pathway is open. National Program Committee was curious about Technical Tours. This is now well defined (Steve Wright). Paul is Technical Tours Chair. In November, we will need to report status to NPC. Marty noted that Ross missed this discussion.

3. Technical Program Report

- a. ANS June Annual Meeting –San Diego, CA (June 2010), including ICAPP We have no sessions at this meeting.
- b. SNSF 2011 (class IV) Not to be held.
- c. ANS November Winter Meeting – Las Vegas (November 2010) Marty committed us to 4 papers, one session. It was noted by Heather that, given a choice of submitting a paper to either ANS Winter or NETS-2011, any member would naturally consider NETS to take precedence.

4. ANS HQ / Professional Divisions Updates

- a. Report from PD Workshop (held Saturday 5- 8p.m.) Marty reported that the workshop was cut short by a President's reception. Not much discussed. Brief history of highlights of Don Hoffman's 10 years as chairman of PDC. Talked about the format of the annual meeting. Now that the Board of Directors meeting is on Saturday, this is a cause for concern because divisions cannot go to the Board with any issues that arise in their meetings which occur after the Board meeting. No solution offered. 12 of the 20 Division Chairs did not like the new arrangement; others were either willing to listen to another way, or were indifferent. Chairs were encouraged to approach their board liaisons with feedback. Jasmina Vujic is our board liaison. Heather said that the Board Liaison roles and responsibilities need to be clearly defined. They need to be available. Liaisons are not always on the division email distribution. They need to effectively voice our concerns and issues. **Action Item:** Marty will discuss this issue with Shannon, the incoming Chair. Allison Barber arrived at 12:37 pm, establishing a quorum. IT planning was on agenda, but Heather commented that this initiative is on hold.
- b. Metrics for 2009 Discussed at Workshop. ANSTD is green on supporting national meetings, white in Class I and II Topicals, white in Membership, white in Communications, green in Society Leadership, green on position statement and reporting. As a society, we are either doing really well, or the standard is not high enough (Marty paraphrasing Don). We are "keeping ourselves off the radar screen with no yellows and no reds – very good." Shannon is "much more on top of this than I was. We should see much more green in the future." Discussion on how we might achieve a green in Communication. Suggestion to write articles for ANS News. We need to stop the reduction in our numbers to go green in Membership. We went from 504 to 501 members of our Division. We were green for the National Meeting due to our embedded topical. Communications is the category where we can most easily make headway toward green.

5. Meeting Schedule for the Week:

- a. Saturday: Professional Divisions Workshop, 5-8 p.m.
- b. Sunday: NPC Screening, 10:00 a.m. – Noon Allison, our Publications Chair, attended. We have received final approval by NPC for our Publications Plan.
- c. Sunday: Bylaws and Rules, 1:30 – 4:00 p.m.
- d. Sunday: Publications, Meetings, Proceedings and Transactions, 9:30 – 10:30a.m.
- e. Sunday: Publications Steering, 4:00 – 6:00 p.m.
- f. Tuesday: Professional Divisions Committee, 4:00 – 6:00 p.m. Marty will attend.

- g. Wednesday: National Program Committee, 4:00 – 7:00 p.m. Marty will attend.

6. ANST Division Bylaws and Rules Update

Marty reported that only 11 Divisions have their Rules and Bylaws in review at HQ. At least five others (including those for ANSTD) were submitted in other than the prescribed two-column format, and are in limbo. They will only be reviewed when they are in the prescribed format. Paul accepted the **Action Item** to reformat the ANSTD Bylaws and Rules.

7. Membership, Honor and Awards Report

- a. ANST membership Marty: We need to do more to reach out to our membership. Primary method is the ANSTD Newsletter. We need to issue it regularly. **Action Item:** Dion said that he would continue to “bug” Marty and Shannon and others for contributions to the Newsletter. General solicitation was made to the EC for contributions from colleagues. Steve said that we need some pieces from NASA people. Dion would like to get some material on the new direction for space nuclear power and propulsion. Marty commented that we should get some EC members from NASA to better plug us into the current efforts in the community. Steve said that JPL representation would also be helpful.
- b. ANST Scholarship and Award Planning Marty said that we do not yet have a scholarship. We need to develop a long-term plan. Revenue from conferences should help to establish the scholarship fund. We also need to think about awards such as lifetime achievement or a specific time span career award (10-20 years, etc.) As outgoing Chair, Marty will now take over the role of Scholarships and Awards Chair from Leo Bobek. Heather noted that Materials Science Division gives out a “literary award” to professionals and students at their luncheon every two years (for journal articles or other achievements), so that is another possible model to consider. Steve Wright said he would like to see more awards go to young professionals or students rather than to “old guys.” Heather said that a literary award can go to anyone at any age. Steve went on to say that early career encouragement is good to keep people in ANS and involved. An awards luncheon at a national meeting was suggested to get good attendance. **Action Item:** Marty will discuss all this with Shannon.

8. Nominating Committee Report

- a. EC/Officer Terms Expiration Schedule Marty is outgoing Chair; Shannon is incoming Chair. Dion and Paul are in their officer positions until next summer. Eric’s term is up in 1 year. Chair and Vice Chair positions can go to a two-year term, if Division chooses. Shannon will have the first two-year term as ANSTD Chair. Marty will be outgoing for two years.
- b. 2011 Election Slate Two officer openings. Nominations needed for Dion’s, Paul’s posts at November meeting. Secretary, Treasurer, and two EC member positions (Eric, Boise terms expiring) require nominations. Technical Program Chair for ANSTD needs to be named to replace Boise. Serves as liaison to NPC. Marty was filling in for Boise. Electronic review system admin responsibility. Getting papers reviewed is a big part of the job. Marty commented that the NETS interval needs to be determined, either annual or biennial. Group discussed that the collective memory has it that we had intended to hold an embedded topical every second year, with stand-alone NETS every two years. Marty accepted the **Action Item** to clarify this with Shannon.

9. Communications and Public Information Report

- a. Website status (**E. Alderson absent**)
- b. Newsletter Dion was hoping to get an issue out before the meeting, but will have to follow up afterward. He would like to go to a quarterly newsletter. He would like to see more content from senior people, reiterating the need for contributions from colleagues. He suggested leaning on our people to get 1 to 1.5 pages typed per piece. Dion went on to say that compact power reactors (Gen-IV) would be a good to focus on, because these are applicable to surface power applications.

10. Treasurer’s Report

We had carry-over from 2009 of \$4872. We had \$1002 of membership allocation (501 members). Income from ICAPP, \$1680. We’ve allocated \$200 to student awards and \$1400 for student support (all disbursed). The total division revenue this year is \$5754. Discussion was focused on ways to increase membership. Steve Wright suggested attracting younger people with “pizza and beer” hospitality suite. Heather suggested getting students more involved in technical sessions with greater responsibility, supporting them with funding as

student assistants. Expected revenue stream from NETS was discussed, with possible applications of funds (Students, awards, etc.)

11. Secretary's Report

Meeting minutes from last November were submitted on time. Our Bylaws and Rules were also submitted on time, by EOY 2009. NETS-2011 planning was well under way by that time, with a series of conference calls and electronic correspondence from February through May of 2010. NETS CFP completed, web site is up, and the registration page is in draft form. PayPal tools are being used for NETS registration.

12. YMG Liaison Report

They (YMG) were to meet the next day, so Heather had nothing to report as yet.

13. BoD Liaison Report

None - Absent

14. Other Business/Roundtable

Marty gave a summary of what we had discussed (for Ross' benefit) to wrap up the meeting. Ross gave a general summary of NETS sponsorship (Lockheed Martin, Northrop Grumman, etc.), with a solicitation for more support and contacts. Ross stated that the corporate sponsorship is challenging. The hotel exhibit capacity appears to be on a healthy plan for success, with space for up to 20 exhibitors. Marty stressed the importance of well-organized exhibition accommodation.

15. Adjourn – Meeting adjourned at 13:38:37 PDT.