

**ANS Fusion Energy Division**  
**Executive Committee Meeting Minutes**  
Sunday, November 11, 2007, 3:00-5:00 pm EST  
Omni Shoreham Hotel, Calvert Room  
Washington, DC

Attendees: Roger Stoller (Chair), Paul Wilson

Attendees by phone: Lee Cadwallader (Sec/Treas), Jeff Latkowski (Past Chair),

Mohamed Sawan, Laila El-Guebaly (newsletter)

Committee members not attending: Farrokh Najmabadi (Vice Chair), Mark Anderson, Patrick Calderoni, Neil Morley, Brad Nelson, John Sethian, Brian Wirth, Minami Yoda

Guests: Rachel Slaybaugh (UW-Madison student), Marie Cronholm (TAMU student)

1. Roger Stoller opened the meeting at 3:09 pm (the agenda is attached). Jeff Latkowski pointed out that we did not have a quorum for voting at this meeting, so issues to be voted upon would be circulated by e-mail after the meeting.
  
2. Lee Cadwallader stated that the June 2007 FED meeting minutes had been approved by e-mail and sent to ANS HQ. The meeting minutes were also posted to the FED website. Roger Stoller asked for a vote of approval of the minutes as one of the issues to be voted upon by e-mail.
  
3. Lee Cadwallader gave the treasurer's report (attached). Presently the FED has roughly \$18.5k. The 4-year rolling budget (attached) was presented and Jeff Latkowski agreed that an estimate of \$8k profit from the 18<sup>th</sup> TOFE meeting was a reasonable amount. The report and the budget will be voted upon for approval by the committee electronically. Roger Stoller asked about the Division financial statement that no budget had been turned in. Lee stated that one had been sent in but never seems to appear on the spreadsheet reports from HQ. Jeff noted the same issue happened in the past. Roger said he will inquire about that.
  
- 4.1 Laila El-Guebaly stated that the draft of the next FED newsletter has been sent out for review by authors and the executive committee. All comments should go to article authors by November 16, and any changes should be made and e-mailed to Laila by November 20. Laila will add the Slate of Candidates from Jeff Latkowski when it is approved. She will check with Neil Morley about any input from the Honors & Awards committee as well. The newsletter should be distributed to the Division and the mailing list the first week of December.
  
- 4.2 Nermin Uckan (FS&T editor) was unable to attend the meeting and she sent a report on the status of the journal (attached). Division members are urged to check that their institution libraries have subscriptions to the journal.

5.1 Lee Cadwallader reported that the FED's \$500 contribution to the 2008 ANS Student Conference was received at TAMU by their conference treasurer, Niki Williams, and Matthew Gidden (Co-Chair) had thanked us via e-mail.

5.2 Ms. Marie Cronholm (TAMU), conference co-chair with Mr. Matthew Gidden, described the upcoming ANS Student Conference, to be held at Texas A&M University in College Station, Texas on February 28 – March 1, 2008. The conference web site is <http://ans.tamu.edu/2008Conference.html>. She stated that Joe Sheppard (President and CEO of STP Nuclear Operating Company) would be the keynote speaker, and Patrick Moore (a founder of Greenpeace who now co-chairs the "Clean and Safety Energy Coalition" that supports nuclear power) will give a plenary talk as well. They are expecting 500 student attendees and perhaps up to 75 recruiters. She requested FED support in several avenues: professional support and mentor attendance, she extended a blanket invitation for FED members to speak on fusion topics, act as judges of papers submitted in the fusion "track" or session of the conference, arrange for institution or vendor display booths for the career fair, send any FED or fusion handout materials we could provide to conference attendees, and provide any funding support we could contribute (she pointed out that most of the divisions give \$500 to \$1,000 to the Student Conference). Roger Stoller and Paul Wilson stated they might be able to attend. Otherwise, there were no expressions of interest from the committee attendees.

5.3 Roger Stoller discussed a request he received from ANS HQ regarding division support of nuclear student attendance at the Sunday evening President's Reception at ANS National Meetings. HQ would like divisions to offer tickets to students. The regular cost to attend the President's Reception is \$75 for professionals. The student ticket (minus bar privileges) would be \$54. Roger stated that it was not all that clear if this is a benefit to students. Rachel Slaybaugh addressed this statement. She explained that many fellow students take offense that they are not invited to the reception and they attempt to find means to attend the reception, which is viewed as the best networking opportunity of the conference since nearly all attendees are gathered in one location in a relaxed setting. Rachel finds it useful to attend. Winter meetings can have up to 200 student attendees these days. ANS HQ believes that mentors can introduce student protégés to colleagues, and students even meet each other during the reception. Roger asked how ANS planned for contributions to work if a division were to give \$54. Rachel explained that the idea was that a division would pay for "x" number of tickets, then HQ personnel would give that amount of tickets to the Division Chair or his designee. Students would seek out the Division Chair and ask for a ticket. The Division Chair would decide who gets a ticket and who does not. The Chair could ask for a resume or student background, and the Chair could introduce the student to colleagues if he chose to do so.

Jeff Latkowski asked if professionals not attending the President's Reception would simply leave their unused tickets with ANS HQ personnel at the registration desk and let students have those tickets. Rachel Slaybaugh stated that this was unacceptable to ANS HQ; they rejected this idea. It was assumed the rejection was based on financial considerations but the actual reason(s) is not known.

Lee Cadwallader stated that he had spoken with a young professional new hire at INL, and he believed that the effort to be included in ANS activities was important for nuclear students. The discussion brought up the point that effort is made to treat fusion students well at fusion conferences. At fusion conferences, the students can work at tasks to earn registration, event tickets, etc. Should the FED support general undergraduate nuclear students or continue to focus on fusion graduate students? The question was not answered. Rachel stated that the Mathematics and Computation Division sponsors 10 to 12 nuclear students to attend the President's Reception at each National Meeting. Roger Stoller decided to make this a question for voting by e-mail.

6. Jeff Latkowski gave an update on the 18<sup>th</sup> TOFE meeting, to be held in San Francisco on September 28-October 2, 2008. He stated that there would be full student participation in this TOFE. The organizers presently are considering 2 or 3 parallel sessions, and two poster sessions will present a total of ~100 papers. There will be a tour of the National Ignition Facility (NIF) and all are welcome to take the tour. The conference banquet will be held at the Sparking Cellars winery. Instead of the ubiquitous conference satchel bag, there will be a TOFE sweatshirt. Jeff stated that there would be a professional development short course held during the TOFE, an evening session, to discuss how to set up experiment work at the NIF and Rochester DOE User Facilities. Jeff also mentioned that he had heard that the IEA fusion neutronics group (part of the IEA Nuclear Technology and Fusion Reactors group) might potentially hold a short workshop during or after the TOFE, so that would be a satellite meeting if that plan unfolds. Often those meetings are held during SOFT conferences, which eases the visa problems of some attendees, so a neutronics meeting is not finalized as a TOFE satellite meeting. The TOFE web site address is [www.18th-tofe.com](http://www.18th-tofe.com); the site has not been developed thus far. The first call for papers has been distributed is posted on the ANS FED web site (<http://fed.ans.org>).

7. Jeff Latkowski presented the slate of candidates for the upcoming election (attached). Dr. Lance Snead (ORNL) agreed to run for Vice Chair/Chair Elect, and there are five candidates running for 3 seats on the committee: Ryan Abbott (LLNL), Hesham Khater (LLNL), Art Nobile (LANL), Wayne Reiersen (ORNL), and Alice Ying (UCLA).

8. Neil Morley did not attend the meeting but after the meeting concluded he sent in an e-mail update on FED awards. His update has been included in these minutes for completeness. Neil communicated with the previous committee chair, Farrokh Najmabadi, about taking over the awards committee chair position. Farrokh will forward all applications from the previous TOFE to Neil Morley as well as any new ones received. A receipt deadline of July 1, 2008 was discussed to be in advance of the TOFE. Neil will contact the webmaster, Mark Tillack, to update the FED website with the current information regarding FED awards.

9. Roger Stoller asked Paul Wilson for an update on the "ITER Quality Assurance" professional development short course that was discussed at the June 2007 FED meeting. Paul stated that he had not worked on this since the June meeting, but that it was still a

possibility. Jeff Latkowski stated that it would be possible to accommodate a short course at the TOFE. There was a discussion about student-relevant workshops to spread information about the status of fusion. Roger stated that several ideas would be interesting. Several ideas were mentioned, including an ARIES review, plasma physics, materials, and other fusion topics. Lee Cadwallader mentioned some flyer or web site posting of summer internships so that interested students knew the application due dates at various fusion institutions would be useful. He will compile that information to put on the FED website.

10. Roger Stoller stated that there were no executive committee decisions made “off-line” since the June meeting.

11.1 Roger Stoller stated that ANS HQ had sent him a questionnaire about the membership allocation funding issue. Presently, the division receives \$1/person in membership from HQ (and the FED presently has about 800 members). The questions ranged from the issue of doing away with the member allocation entirely to increasing the member allocation to \$2/person. The FED treasury is doing well and our income does not depend on the member allocation. Roger met with Lee after the meeting was adjourned and they filled out the questionnaire.

11.2 Roger Stoller gave an update on the ANS Standard Bylaws. ANS HQ has listed the FED as having the standardized set of division bylaws. Some additional work is required to prepare the so-called rules for Division-specific implementation of the bylaws.

11.3 Roger Stoller stated that at the division chair workshop, HQ asked that Public Policy Statements need to be updated. Rachel Slaybaugh also asked about the status of the FED statement. Roger stated he would update it to reflect the current US status in ITER.

11.4 Roger Stoller stated that next June he would have to present the FED status to the ANS Board of Directors. Next April or May, Roger will need some input. Jeff Latkowski stated this was a pre-formatted presentation (HQ provides the data on what to say and how to say it) that lasts roughly 20-25 minutes.

11.5 Roger Stoller gave brief comments on other meetings he attended this week as FED Chair: ANS is looking at how funding allocations are set up for embedded versus stand-alone topical meetings. ANS is considering an on-line toolkit or descriptions of duties, some sort of resource for incoming division officers. Ideas presently are lists of expectations for Chairs, Vice Chairs, Secretaries, Treasurers, lists of meetings they must attend, etc. The ANS President (Donald Hintz) wishes ANS to be more integrated with electric utility companies, get more utility professional employee participation in ANS, more utility employee attendance at ANS meetings. Don Hoffman (ANS HQ) stated that all ANS scholarships are now fully endowed. There has been an issue with ANS HQ Awards being crowded by, or competing with, division awards. More coordination is needed at the Honors & Awards committee level.

Other new items:

L. Cadwallader noted that Mike Diekman of ANS HQ sent out a note to division secretaries about the October 2007 issue of the ANS Globe newsletter. This newsletter describes international activities of the ANS. The newsletters in pdf format can be downloaded at <http://www.ans.org/const/international/ansglobe/>.

12. Roger Stoller closed the meeting at 4:20 pm.

Post-meeting information: Roger Stoller sent an e-mail to the committee members for three items: approve the June 2007 meeting minutes, approve the Treasurer's report and the 4-year rolling budget, and approve the Slate of Candidates. These items were made into motions, were seconded, and the committee voted upon them electronically. There was a majority in favor of each of these three motions. Therefore, the 3 motions all passed in the week following the meeting.

**ANS Fusion Energy Division**  
**Executive Committee Meeting Agenda**  
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1. Call to Order – R. Stoller
2. June 2007 FED Exec. Comm. meeting minutes approval – L. Cadwallader
3. Treasurer’s Report and Budget – L. Cadwallader
4. FED Publications:
  - 4.1 Report on FED Newsletter – L. El-Guebaly
  - 4.2 FS&T Update – N. Uckan
5. Student-related items:
  - 5.1 FED support to the 2008 ANS Student Conference – L. Cadwallader
  - 5.2 2008 ANS Student Conference update – M. Gidden, TAMU
  - 5.3 Additional student support at ANS meetings – R. Stoller
6. Update on the 18<sup>th</sup> TOFE – J. Latkowski or designee
7. FED Slate of Candidates for the 2008 election – J. Latkowski or designee
8. FED awards update – N. Morley
9. Professional development short course at the 18<sup>th</sup> TOFE – P. Wilson or designee
10. Summary of FED decisions made “on-line” since last meeting – R. Stoller
11. Other business
  - 11.1 Task force on member compensation to divisions – R. Stoller
  - 11.2 Standard Bylaws update – R. Stoller
12. Adjournment

**Treasurer's Report**, Lee Cadwallader, Idaho National Laboratory, Idaho Falls, ID  
November 2007

As of September 30, 2007, our division had a balance of \$18,553.00. Our initial balance at the beginning of 2007 was \$19,947.00. Our income for 2007 was \$801 in member allocation, note that the 17<sup>th</sup> TOFE meeting profits were disbursed at the end of 2006. Expenses thus far in 2007 totaled \$2,195. The expenses included \$500 for a cash prize award for the best student paper from the 17<sup>th</sup> TOFE (awarded to Mr. J. Spalding, UCSD, "Longitudinal Tracking of Direct Drive Inertial Fusion Targets"), \$650 in student support (\$500 to support the upcoming 2008 ANS Student Conference at TAMU next spring and \$150 of nuclear student travel support for the ANS national meeting in November 2007), \$195 to set up phone service for the June 2007 Division meeting in Boston, a \$500 contribution to the ANS NEED fund, and a \$350 contribution to the Landis Challenge II (which ANS HQ used for refreshments at a Teacher Education Workshop held during the ANS summer meeting).

Other projected expenses for the remainder of 2007 are the costs for phone service (~\$300) at the FED executive committee meeting in Washington DC in November 2007. No other expenses are anticipated for the rest of the year.

ANS Fusion Energy Division Proposed Estimate for 4-year rolling budget, 2008-2011

<b>Budget funds</b>						
Year	2007 est.	2008	2009	2010	2011	Comments
Carry forward	19,947	18,248 est	12,298	18,848	17,398	
Member allocation	801	~800	~800	~800	~800	
Division income	0	0	8,000	4,500	0	ANS gives the FED \$30/published TOFE paper at embedded TOFEs. Assume 19 <sup>th</sup> TOFE is embedded
Total budget	20,748	19,048	21,098	24,148	18,198	
<b>Budget expenses</b>						
Newsletters	0	0	0	0	0	
Awards, plaques	500	1,500	0	1,500	0	TOFE years, 2 Prof. awards + 1 Student paper award.
National meeting costs	~500	600	600	600	600	Est. \$300 per phone setup at June and November ExComm meetings
FED officer expenses	0	0	0	0	0	
Student support	650	3,650	650	3,650	650	Each year incl. \$500 for upcoming annual ANS Student Conference support. TOFE years have 6 x \$500 for fusion student travel assistance. Donate \$150 to nuclear student travel support to ANS Winter Meetings.
Scholarship/NEED funds	500	500	500	500	500	Typical \$500 NEED donation yearly.
Other expenses	350	500	500	500	500	\$500 "other expenses" are rarely used. 2007 was Landis Challenge II support for a teacher workshop at the June 2007 ANS Summer Meeting
Total expenses	~2,500	6,750	2,250	6,750	2,250	
<b>Closing balance</b>	<b>~18,248</b>	<b>12,298</b>	<b>18,848</b>	<b>17,398</b>	<b>15,948</b>	

Note: Embedded TOFEs generate less income for the FED. 17<sup>th</sup> TOFE in November 2006, 157 papers, gave \$4,710 in Dec. 2006. Assume stand-alone TOFEs held in the fall cannot close their books until spring of the following year.



**News from Fusion Science and Technology (FS&T) Journal**, Nermin A. Uckan,  
FS&T Editor, Oak Ridge National Laboratory, Oak Ridge, TN.

During the past 12 months period (from Oct. 1, 2006 to Sept. 30, 2007), we have received a total of 358 papers. Of the 358 papers, 177 are from North America, 70 are from Asia, 96 are from Europe (including Russia), and 15 are from other countries. During this period we have also received 118 camera-ready papers from the 2006 International Conference on Open Magnetic Systems for Plasma Confinement (OS06), published in FS&T Transactions (Mar07). OS06 papers are not included in paper counts.

In CY2007 (Volumes 51 & 52), FS&T published about 2410 pages with the following breakdown: 875 pages in typeset regular issues; 310 pages in camera-ready regular issue; 790 pages in camera-ready/regular issue Proceedings (TOFE06); and 435 pages in camera-ready Transactions (OS06).

The following special (dedicated) issues have been published in 2007:

- Stellarators (Part 3) – FS&T Jan07 (15 papers)
- NCSX Stellarator – FS&T Feb07 (7 papers)
- Alcator C-Mod Tokamak (MIT) – FS&T Apr07 (14 papers)
- IFE Target Fabrication – FS&T May07 (49 papers, camera-ready)
- EC Wave Physics, Technology and Applications (Part 1) – FS&T Aug07 (23 papers)
- TOFE06 Proceedings (Parts 1 & 2) – FS&T Proc., Oct/Nov 07 (135, camera-ready)
- Open Systems 2006 – FS&T Transactions, Mar07 (118 papers, camera-ready).

The following dedicated issues are planned/under consideration for 2008:

- EC Wave Physics, Technology and Applications (Part 2) – FS&T Jan08 (24 papers)
- MFE Diagnostics (EU, JA, RF, US) – FS&T Feb08 (13 papers, over 500 pages)
- JET Tokamak (EU) – FS&T regular issue (12 papers – to be scheduled)
- ARIES Compact Stellarator Study – FS&T regular issue (12 papers, under review)
- 8<sup>th</sup> Int. Conf. on Tritium Sci. & Technol. 2007 – FS&T Proc. (2 issues, papers due)
- 8<sup>th</sup> Carolus Magnus Summer School – FS&T Transactions (papers due late 2007).

The following issues are in the planning stages for 2009 and beyond:

- JT-60SA (JA-EU Broader Approach) – FS&T regular issue (in planning/preparation)
- DEMO Studies (EU, JA) – FS&T regular issue (in planning/preparation)
- IFE Target Fabrication – selected papers in FS&T regular issue
- TOFE08 Proceedings – FS&T Proc. (in planning)
- IFMIF (EU-JA Broader Approach) – FS&T regular issue (in planning/preparation)
- KSTAR (Korea) – FS&T regular issue (under discussion)
- W7-X (Germany) – FS&T regular issue (under discussion)
- Test Blankets (EU, JA, RF, US) – FS&T regular issue (under discussion/on hold).

FS&T has been offering color printing for special issues for the past several years and recently started offering color online figures for black and white print issues (tested in April 2007 with Alcator C-Mod special issue). All (regular/special) FS&T issues are now color online.

Please check for your library subscription. Electronic access to FS&T is available from 1997-to-current. FS&T tables of contents and abstracts of papers can be accessed at <http://www.ans.org/pubs/journals/fst/>. Individual and library subscribers can access the full text articles at <http://epubs.ans.org/>.

Please send your comments and suggestions on FS&T content and coverage and potential future topical areas that are timely and of interest to <mailto:fst@ans.org>.

**Slate of Candidates for 2008/2009 FED Executive Committee**, Jeff Latkowski,  
Lawrence Livermore National Laboratory, Livermore, CA.

ANS HQ will mail out ballots and the candidate list to all 800 members of the FED early next year. Please remember to vote and return your ballot by postal mail. The outcome of the election will be announced before the next FED Executive Committee meeting in June 2008. The FED nominating committee is always looking for fusion professionals, like those listed here, who are willing to serve the division. If you are interested in becoming active in the division, please contact any Executive Committee member.

We have an excellent set of both inertial and magnetic fusion researchers running for positions in the FED for this election. Their willingness to contribute their time and talents to the division is appreciated by the FED. The current Vice Chair/Chair Elect, Farrokh Najmabadi from the University of California San Diego, will become the FED Chair at the end of the Executive Committee meeting in Anaheim, CA, in June 2008. Lee Cadwallader, from the Idaho National Laboratory, will continue in his position as Secretary/Treasurer, completing his term in 2009. The immediate Past Chair, Roger Stoller, from Oak Ridge National Laboratory, will become the nominating committee chair. The list of candidates for other positions is given below:

Vice Chair:	Lance Snead (ORNL)
Executive Committee (3 members to be elected):	Ryan Abbott (LLNL) Hesham Khater (LLNL) Art Nobile (LANL) Wayne Reiersen (ORNL) Alice Ying (UCLA)

## ANS FED Executive Committee as of November 2007

### FED Officers:

Roger Stoller (ORNL)	(07-08)	stollerre@ornl.gov	Chair
Farrokh Najmabadi (UCSD)	(07-08)	najmabadi@ucsd.edu	VC/Chair-Elect
Lee Cadwallader (INL)	(07-09)	lee.cadwallader@inl.gov	Secy./Treas.

### Executive Committee Members:

Mark Anderson (UW)	(06-09)	manderson@engr.wisc.edu
Patrick Calderoni (INL)	(07-10)	Patrick.Calderoni@inl.gov
Neil Morley (UCLA)	(05-08)	morley@fusion.ucla.edu
Brad Nelson (ORNL)	(06-09)	nelsonbe@ornl.gov
Mohamed Sawan (UW)	(07-10)	sawan@engr.wisc.edu
John Sethian (NRL)	(07-10)	John.Sethian@nrl.navy.mil
Paul Wilson (UW)	(05-08)	wilsonp@engr.wisc.edu
Brian Wirth (UC-Berkeley)	(06-09)	bdwirth@nuc.berkeley.edu
Minami Yoda (GIT)	(05-08)	minami.yoda@me.gatech.edu

### Past Chair:

Jeff Latkowski (LLNL)	latkowski@llnl.gov
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### FED Standing Committee Chairs:

Nominating: Said Abdel-Khalik (Georgia Tech) - Chair  
Honors and Awards: Neil Morley (UCLA) - Chair  
Program Committee: Jake Blanchard (UW) - Chair

### FED Representatives on National Committees:

ANS Publications: Ken Schultz (GA)  
ANS Public Policy: Said Abdel-Khalik (Georgia Tech)

### Editors:

Newsletter: Laila El-Guebaly (UW), Dennis Bruggink (UW)  
Fusion Science and Technology Journal: Nermin Uckan (ORNL)

### Liaisons to other organizations and ANS divisions:

ANS Board: Gary Gates (Omaha Public Power District)  
MS&T: Ken Schultz (GA)  
IEEE: George Miley (UIUC)  
RPS: Ham Hunter (ORNL)

### FED Webmasters:

Mark Tillack (UCSD) - FED Website  
Dennis Bruggink (UW) - UW Website