

**Minutes of the ANS
Fusion Energy Division
Executive Committee Meeting**

June 4, 2000

**Stratford Room
Town and Country Hotel and Convention Center
San Diego, CA**

Members Present: C. Wong, K. McCarthy, S. Brereton, C. Martin

Members Present via TeleCon: M. Bourham, S. Milora, B. Hogan, J. Blanchard

Others Present or on TeleCon: J. Latkowski, J. Stubbins, R. Raffray, N. Uckan, J. Miller, D. Dudziak, C. Hamilton, D. Youchison, L. El-Guebaly, R. Miller

Executive Committee Members Absent: L. Cadwallader, G. Logan, R. Santoro, Y. Seki, S. Willms

1. Call to Order C. Wong

C. Wong, Chair, called the meeting of the ANS/FED to order at 3:15 p.m. The meeting agenda is provided in Attachment A. A list of the new ANS officers and EC members is provided in Attachment B.

2. Approval of the Previous Meeting's Minutes S. Brereton

The November/99 meeting minutes were briefly discussed, and approval was recommended by members present and by those on conference call.

3. Treasurer's Report S. Brereton

S. Brereton summarized the status of the FED budget (see Attachment C). This year's income includes \$5403 of carryover and \$550 from member dues. We are expecting some income from the October, 2000 topical meeting. Expenses so far in 2000 are \$140 for the 11/99 conference call. We had allocated \$300 for the student conference that took place in March. This was actually deducted from our account in late December 1999 (but we will consider it as part of our student conference support for 2000).

The current account balance is \$5519. Anticipated expenses for the rest of the year include:

- \$2000 for awards: \$1500 of this will be for new awards to be given at the October topical; \$500 has yet to be claimed by J. Wesley for his award given

at the Jun/98 topical. C. Wong indicated he would contact Wesley. Subsequently, Wesley requested that the money be used for student award. His proposal was accepted by FED with thanks.

- \$1500 for student support: \$300 will be given in support of a second student conference this year; \$1200 will be used to support student travel to the topical
- \$410 estimated for the current conference call. Subsequently S. Brereton contacted the hotel and requested a reduced charge for the telephone and line, since they were not ready at the requested time. The hotel waived the fee (it would have been close to \$300). The conference call ended up costing approximately \$182, rather than the estimated \$410.

The ending balance for the year is estimated to be \$3828, including the post-meeting adjustment. The proposed budget was approved by the members present and those on the conference call.

4. Progress on 2000 Fusion Topical in Park City

K. McCarthy

K. McCarthy reported on the status of the 2000 Fusion Topical, which will take place in Park City in October. As of June, 1, the deadline for abstracts, they had received 135. Abstracts were still trickling in, and she expected they might have reached 150. The financial planning for the meeting has been based on 150 rooms at the hotel. The recent budget and travel restrictions have likely played a role in the reduced response to the call for papers. Kathy commented that we are financially on the edge with this conference. She asked all participants in the meeting to talk up the conference, both for papers, and for attendance. We need to make this financially viable, or we won't be given another chance for a standalone topical. She indicated that they would not be able to act on the abstracts before July 1, and so would still be accepting them until that time. She encouraged us to reserve rooms and register soon, so we will have a better idea of how the finances will come out.

C. Wong asked about final paper preparation. There had been complaints about all the information that had been requested of second, third, etc authors on papers - their titles, addresses, etc., and on the required format. He is hoping it will be easier for submission of the final papers, and the requirements will be more conventional.

N. Uckan suggested sending an email to directors of the various lab programs, asking how many people they might expect to send to the meeting. This could give us an idea of attendance.

5. ANS National Activities

C. Wong

C. Wong indicated that he would be making two presentations this week on behalf of FED: one at the professional divisions meeting, and a second at the ANS Board of Directors meeting (see Attachment D). He noted that at every ANS meeting, three divisions are asked to make a presentation to the board.

This gives them a chance to interface with the divisions, and let the ANS Board know what FED is doing. He had prepared a 6 viewgraph presentation (see Attachment D). He indicated that he would use his last viewgraph to ask ANS to support FED in its efforts. He can accept comments on the viewgraphs until Tuesday.

C. Martin asked if C. Wong was anticipating any particular questions from the board. Clement responded that he was expecting some comments on the declining membership. He indicated that he would respond by asking ANS to help make FED and its activities more widely known, and be included in ANS Washington calendar. This should help improve membership, at least some.

D. Dudziak also mentioned that the budget data in the presentation for the board was given in “then year” data, so the reduction in budget is actually more dramatic than shown. J. Stubbins commented that it would be interesting to compare the total ANS membership trends to that of FED.

C. Wong also reported on Generation IV activities in fission. K. McCarthy mentioned that she thought ANS would be quite active in this because J. Lake, ANS incoming President, has been pushing Generation IV. This could be fusion’s competition (although it actually refers to technology 20 years out, which will precede fusion). C. Wong indicated that fusion should have a voice in Generation IV activities – we could contribute in terms of general nuclear policy.

C. Wong also asked of anyone attending the ANS meeting to communicate noteworthy information to S. Brereton for inclusion in the minutes.

6. FESAC and FED Procedure

C. Wong

C. Wong reported that FESAC met in February. They have started to work on an integrated program plan for fusion. C. Baker is leading the effort, and he has a working group and a steering committee to work with him. There is a draft report on the web page (<http://www.vlt.ucsd.edu>). They are urging members to look at this report, as they are looking for feedback. Any feedback reported to Charlie by June 16 can be incorporated. K. McCarthy is on the steering committee. She indicated that the report has been written at several levels: the highest level has been written to address the upcoming administration change; the next level will be used with congress; the next level is for programs (what’s actually being done in the community, and how this supports the goals of FESAC). FESAC will be meeting next in July to talk about the report. They will report to the Secretary in November.

FED needs to develop a formal procedure for interfacing with FESAC. Every year, once newly elected officers and EC members are known, we need to

communicate with FESAC so that we establish proper channels. K. McCarthy indicated that she had already been in contact with FESAC.

At the February FESAC meeting, Bill Stacey presented a white paper on the application of fusion neutrons for actinide burn and waste disposal. Interest in this application is reviving. K. McCarthy mentioned that she had seen a write-up in the periodical "Inside Energy".

7. Student Support Procedure

K. McCarthy

K. McCarthy outlined a proposed procedure on how FED should determine student support for attending topicals (last meeting, we agreed that \$300 was the minimum useful amount to provide to a student). First, FED needs to decide how much total money it can provide to support student attendance at a topical. Then, a notice should be sent to all universities, asking them to submit a request for support. We should consider this as need-based support—i.e. students that would otherwise not be able to attend the meeting without the support. The student must also be an ANS/FED member. Each school should perform the screening and decide which student to recommend sending. Only one student per school would be supported.

J. Stubbins suggested that rather than just one candidate, the universities should submit 3 names, ranked.

We discussed the schedule for notification and submission of candidates. The notification should be sent out at least 4 months prior to the meeting. At least one month should be allotted for the universities to make their judgments. It was suggested that we try to align the schedule with abstract submission for the conference.

We also agreed that there should be some accountability for the support. The students who receive support should provide a 1-2 page write-up on what they did and what benefit they received from attending the conference.

N. Uckan asked why the Honors and Awards committee (Kulcinski) was not making this decision. They decide who receives awards, and they could also determine student support. We agreed that they would be part of the process. If FED establishes a good procedure for selecting the students to support, the Honors and Awards committee could carry it out. However, the Honors and Awards committee membership does not change on a regular basis, and at present it does not represent a good cross section of the community. It would be good to have input from a variety of different people when making these decisions over the years. Since FED changes regularly, it would be important to keep the Executive Committee involved in making these decisions. K. McCarthy will contact J. Kulcinski to discuss this, and they will work on a process for determining student support.

8. FED Honors and Awards

G. Kulcinski

An article on FED Honors and Awards has been placed in the June newsletter. J. Kulcinski will also send out separate announcements, asking for nominations, in a week or two. The deadline for nominations is later this month.

C. Wong added that he thought that J. Kulcinski was doing a good job with the Honors and Awards committee.

9. FED Newsletter

L. El-Guebaly

L. El-Guebaly again has done a great job with the newsletter. The latest was mailed out on May 28. Laila indicated that she had asked M. Tillack to update the website with the latest newsletter. If anyone has items for the next (December) issue, please let her know.

C. Wong asked who the webmaster is. Laila indicated that this is Mark Tillack. FED thanks him for his efforts.

FED also would like to thank Laila for doing such a good job on the newsletter, and for all her time and effort.

10. IFSA '01

B. Hogan

B. Hogan discussed the 2001 Inertial Fusion Sciences and Applications conference (see Attachment E). This is the second, and will be held on September 16-21, 2001, in Kyoto Japan. He was requesting approval to go to the program committee to obtain ANS class 4 support for this meeting. A class 4 meeting does not receive any financial support from ANS, it just uses ANS mailings, etc. IFSA '99 was also an ANS class 4 meeting. It was jointly sponsored by the Canadian Nuclear Society, Fusion Power Associates, IAEA, Japan Nuclear Society, and the Laser Society of Japan, amongst others. It had approximately 350 attendees. Subjects covered included inertial fusion energy, basic science of IFE, ignition and high gain, drivers, target factories, laser interactions with matter, astrophysics, etc. There were 3 co-chairs, representing USA, France, and Japan. This time, JAERI may also be a joint sponsor.

The Edward Teller award will be given out at this time, for an outstanding contribution in the area of inertial fusion. We should expect 2 recipients (averages 1/yr). This award has an endowment now, worth ~ \$20,000. The interest currently provides only enough to pay for the awards. However, it is hoped that in the future, a cash prize will also be given. Since this is an ANS award, FED and the ANS awards committee will have to approve the recipients.

B. Hogan was hoping FED would approve his request for IFSA '01 to be a class 4 ANS meeting, and asked also if someone in San Diego could represent him to make the request of the program committee on Tuesday. K. Mc Carthy pointed out that this would be too early to make the request. Class 4 approvals will be granted no more than 12 months ahead of the meeting. So, the request should be made in November. However, FED could approve it at this time. K. McCarthy moved to approve the sponsorship. The committee approved it. Kathy suggested that B. Hogan fill out the forms now, send them in, stating the intention of getting the approval at the November meeting.

C. Martin asked what IFSA'01 would be doing about papers. The IFSA '99 proceedings were published as book. B. Hogan noted that the host country makes the final decision on how to publish the proceedings.

B. Hogan mentioned that he is the liason to the ANS public policy committee. He wanted to relay back to us that FED is getting good marks for the way we have been updating the information on our policy. Thanks to C. Wong for the most recent update, and to B. Hogan and W. Houlberg for putting it together. L. El-Guebaly asked if the latest policy could be posted on the FED website.

11. Publications

C. Martin

C. Martin reported that ANS has narrowed the set of candidates for editor of Fusion Technology. They are currently interviewing five for the editorship:

- Tom Dolan, IAEA
- Don Dudziak, NC State
- Leon Shohet, UW Madison
- Per Peterson, UCB
- Nermin Uckan, ORNL

He indicated that there would be a vote at 4:30 today (June 4). At that time, they will narrow the set to three, and then recommend these to the ANS President for final selection. The editor will be known next week.

Subsequently, ANS president and the publication committee selected Dr. Nermin Uckan to be the next Fusion Technology Editor.

12. National Program Committee

K. McCarthy

K. McCarthy asked for a new volunteer to be the FED representative to the national program committee. We need one representative and an alternate. She currently is the representative, but will be stepping down. This committee plays an important part in the business of national meetings. We need someone who can attend two meetings/yr. They often meet two

additional times, for paper selection. But, attending paper selection is not so important for FED. C. Martin indicated he would do it. J. Stubbins volunteered as the alternate.

13. Welcome of new officers and EC members C. Wong, K. McCarthy

C. Wong conveyed thanks to the outgoing EC members: G. Logan, R. Santoro, and Y. Seki. FED appreciates their time and effort on the EC. C. Wong welcomed the new chair, K. McCarthy; the new Vice Chair, J. Stubbins; the new Secretary Treasurer, Rene Raffray, and the new EC members: J. Latkowski, C. Hamilton, and D. Youchison.

The new officers received training the day before. They commented that it was helpful, but took longer than it needed too.

We also congratulate our colleague Ken Schultz. He has been elected to the ANS Board of Directors.

14. Other Business

A suggestion was made about changing the time of the FED meeting to an hour earlier. Several people have a conflict at 4 pm. ANS sets the meeting time, so there is not much flexibility, but perhaps changing it by an hour might not be difficult. K. Mc Carthy indicated that she would look into this and at least let ANS know about the conflict.

M. Bourham wanted to discuss the declining membership. We need to turn this around. We discussed the possibility of broadening the scope of FED to fusion energy sciences. This would encourage other types of people to become members. The decline in membership seems very closely related to the decline in the MFE budget. FED needs to demonstrate its value. We need to do some outreach and broaden our appeal. R. Miller asked if FED's membership decline was more or less severe than ANS as a whole. FED is somewhat more severe. We should let physicists know that FED also represents them, and that we are doing good things for them.

L. El-Guebaly suggested that for future meetings, we post any handouts on the website prior to the meeting, or at least email them to attendees. That way, those on the conference call can see what we are talking about.

The meeting was adjourned at 4:40.

Rapid Response Team

C. Wong

Subsequently, at the Professional Division Committee meeting, there were serious discussions on the formation of a rapid response team on different nuclear-related issues or events. ANS headquarters should be able to identify US experts and to receive advice in order to provide accurate technical information and coordinate suitable responses under different situations. There were debates on the need for a technical manager at ANS headquarter and performing drills in order to identify problem areas. No decision was made. In the mean time, division chairs should have the additional responsibility of provide the identification of suitable experts from his or her division when requested.

Attachment A

**ANS Fusion Energy Division
Executive Committee Meeting**

Agenda

June 4, 2000

**Town and Country Hotel and Convention Center
San Diego, CA**

1. Call to order – C. Wong
2. Approval of minutes, November 1999 FED Executive Committee meeting – S. Brereton
3. Treasurer's Report – S. Brereton
4. Progress on 2000 Fusion Topical in Park City – K. McCarthy
5. ANS National Activities – C. Wong
6. FESAC and FED procedure – C. Wong
7. Student support procedure – K. McCarthy
8. FED Honors and Awards – G. Kulcinski
9. FED Newsletter – L. El Guebaly
10. IFSA'01 – B. Hogan
11. Publications – C. Martin
12. National Program Committee – K. McCarthy
13. Welcome of new officers and EC members– C. Wong, K. McCarthy
14. Other business
15. Adjournment

Attachment B

ANS/OFE Officers and Executive Committee List

Chair: Kathryn A. McCarthy (00-01) km3@inel.gov
Vice-Chair: James Stubbins (00-01) jstubbin@staff.uiuc.edu
Secretary/Treasurer:
Rene Raffray (00-01) raffray@fusion.ucsd.edu

Exec Committee:

| | | |
|-------------------|---------|-------------------------|
| James Blanchard | (99-02) | blanchard@engr.wisc.edu |
| Mohamed Bourham | (98-01) | bourham@ncsu.edu |
| Lee Cadwallader | (99-02) | lcc@inel.gov |
| Chris Hamilton | (00-03) | hamiltonc@gat.com |
| Jeffery Latkowski | (00-03) | latkowski1@llnl.gov |
| Charles Martin | (98-01) | charlesm@dnfsb.gov |
| Stan Milora | (98-01) | milorasl@ornl.gov |
| Scott Willms | (99-02) | willms@lanl.gov |
| Dennis Youchison | (00-03) | dlyouch@sandia.gov |

FED Standing Committee Chairs:

| | |
|-------------------------|--------------------------|
| Nominating Committee | Clement Wong (Chair) |
| Honors/Awards Committee | Gerald Kulcinski (Chair) |

FED Special Committee Chairs:

| | |
|----------------------|-------------|
| Membership Committee | Ken Schultz |
|----------------------|-------------|

FED Representatives at National Committees:

| | |
|-------------------|---|
| ANS Publications | Ken Schultz |
| ANS Public Policy | Bill Hogan |
| Program Committee | C. Martin (member), J. Stubbins (alternate) |

Editors:

| | |
|---------------------------|------------------|
| Fusion Technology Journal | TBD |
| Newsletter | Laila El-Guebaly |
| Web site maintenance | Mark Tillack |

Liaisons to other Organizations:

| | |
|---------------|--------------|
| MS&T Division | John Davis |
| ATD | Jim Anderson |
| IEEE | George Miley |

Attachment D

2nd International Conference on Inertial Fusion Sciences and Applications: Request for Class IV ANS Sponsorship

The 2nd International Conference on Inertial Fusion Sciences and Applications (IFSA'01) will be held in Kyoto, Japan on September 16-21, 2001. This note is to request Class IV Sponsorship by ANS for this meeting.

The conference will focus upon energy and basic science applications of Inertial Confinement Fusion (ICF) science and technology. These include, for example, Inertial Fusion Energy (IFE), ignition and high gain target concepts, laser and ion beam power plant driver developments, target factory development, short pulse laser interactions with matter, laser-driven ion accelerator concepts, laboratory astrophysics, high energy density plasma physics, and pulsed power, laser and accelerator driver development.

The 1st International Conference on Inertial Fusion Sciences and Applications (IFSA'99) was held in Bordeaux, France in September 1999. The IFSA Conference is organized under a Memorandum of Agreement (MOA) between Ecole Polytechnique, Palaiseau Cedex, France; the Institute of Laser Engineering (ILE), Osaka University, Japan; and the Lawrence Livermore National Laboratory (LLNL), operating under the Board of Regents of the University of California, US. Each Conference is intended to be financially self-sufficient with all expenses covered by the registration fees and contributions from industry and some government agencies. The organizations of the signers of the MOA accept all financial responsibilities. Supporting organizations (non-financial except for a few) for IFSA'99 were:

- University Bordeaux 1
- Conseil Regional d'Aquitaine
- Conseil General Gironde
- Mairie de Bordeaux
- Commissariat a l'Energie Atomique
- Centre National de la Recherche Scientifique
- Ecole Polytechnique
- Societe Francaise de Physique
- Nuclear Physics European Collaboration Committee
- Institute for Laser Engineering, Osaka University
- Japan Nuclear Society
- Laser Society of Japan
- Japan Society of Plasma Science and Nuclear Fusion Research
- Department of Energy
- Lawrence Livermore National Laboratory
- American Nuclear Society
- American Physical Society
- Fusion Power Associates
- Canadian Nuclear Society
- International Atomic Energy Agency
- ICF Forum

More than 350 scientists and engineers from 19 countries participated in IFSA'99. In a survey of participants, many remarked favorably on the high quality and technical content of the presentations and papers. It appears that every major and most minor organizations doing research relevant to inertial fusion were represented. The program intentionally included both fundamental science (experiments and computations) and the technology of applications like inertial fusion energy. The survey indicated that participants liked the mixture of science and technology. IFSA is the only such meeting where this occurs.

IFSA has three co-chairmen: Dr. E. Michael Campbell, Vice President, Lasers &IFE, General Atomics; Dr. Arnold Migus, Director, Laboratoire pour l'Utilisation des Lasers Intenses (LULI), Paris, France; and Dr. Kunioki Mima, Director, Institute of Laser Engineering, Osaka University. Dr. Mima is the host Co-Chair for IFSA'01. Dr. William J. Hogan, LLNL is the Organizing Chair for IFSA'01 as he was for IFSA'99.

The three largest inertial fusion programs are in the United States, France, and Japan. The Scientific Advisory Board reflects the worldwide efforts in inertial fusion. The SAB has responsibility for setting policy of the Conference. Co-Chairs Dr. K. A. Tanaka, Osaka University, Dr. J. Meyer-ter-Vehn, Max Planck Institute, and Dr. D. Meyerhofer, University of Rochester lead the Technical Program Committee for IFSA '01. Proceedings will be published.

The IFSA'01 will be held at the Kyoto International Conference Hall. It is expected that about 300 persons will attend the week long Conference, scheduled for September 16-21, 2001. In addition to the technical sessions at the University, tours of the short pulse laser facilities at the Advanced Photon Research Center of JAERI's Kansai Research Establishment will be offered. The Conference is entirely self-supporting and financial and local organizing responsibility is assumed by the Institute of Laser Engineering, Osaka University in Japan. Registration fees are established to be sufficient to cover costs. Occasionally industry or other organizations make small donations to cover special events or awards.

The prestigious ANS/FED Edward Teller Award will again be presented at the Conference. This award is given for outstanding work over many years in the field of inertial fusion. Dr. John Nuckolls, former Director of LLNL, is Chairman of the Teller Award Committee. It is expected that there will be at most two recipients in 2001. It is planned that in addition to the medal, a cash award will be presented when the endowment fund established by the ANS before IFSA'99 has sufficient funds. For IFSA'99 the award consisted of the Teller medal mounted on a wooden plaque. The Conference organizers will continue to secure donations from various sources to fund the award. The Fusion Energy Division has accepted responsibility for monitoring this award program. A presentation will be made to the FED Executive Committee and

the ANS Honors and Awards Committee next summer to seek ANS approval of the recipients for IFSA'01.

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