

Minutes

1999 AIAA Adaptive Structures Technical Committee – SDM/ASF

Wednesday, April 14, 1999
St. Louis, MO

Attendance: See attached

1. The meeting was called to order by David Jensen at 6:30 p.m. He distributed an agenda and an attendance sheet. Members and visitors introduced themselves.
2. Approval of the minutes of the last meeting was held pending redistribution. These minutes had been distributed electronically in MS Word 98 format, which some members were unable to read. They will be redistributed in MS Word 95 format.
3. George Lesieutre presented reports on the 1999 Adaptive Structure Forum, and on planning for the 2000 Adaptive Structures Forum. In addition, he thanked all those reviewers, session chairs, and authors for their assistance in making it a successful meeting. The reports are summarized below.

1999 ASF. 60 abstracts received, 55 accepted, 3 rejected, 2 sent to SDTC.
Average abstract score was 1.88; cutoff score was 1.30.
For comparison, cutoff scores for other TCs: Structures, 1.00;
Structural Dynamics & MDO, 1.17; Materials & Design, 1.50.

ASF had 10 sessions, organized as 2 parallel sessions from Tuesday morning to Thursday morning, held in the same 2 rooms. ASF sessions were identified as such in the conference program.

ASF organizers selected the Tuesday plenary speaker.

The ASME Adaptive Structures and Materials Systems (ASMS) Prize and lecture were noted in the conference program.

ASF papers appeared together in the same conference volume.

In summary, the ASF had good visibility and identity as part of the SDM.

2000 ASF. 3-6 APR 2000, Atlanta.

Is expected to be similar to the 1999 ASF in format and layout. There is potential for a scheduling conflict with the SDM Interactive Plenary Session, if it is held late Tuesday afternoon at the traditional time of the ASMS Prize lecture.

There will be several special meetings held in conjunction with the 2000 SDM, including Dynamics Specialists, Inflatable Structures Forum (new), along with the ASF and NDA.

Important dates:

19 JUL 99. Approval date for proposed (formal) special sessions.

2 AUG 99. ABSTRACTS DUE to Freidrich Straub, ASF Technical Chair.

5 OCT 99. Program due to AIAA.

Ideas for an Adaptive Structures short course are being solicited. Please send ideas to George Lesieutre.

Suggestions for session chairs are also welcome. Please send them to Freidrich Straub.

Room in Atlanta will be expensive (\$144 single/\$165 double), and in short supply, so make your reservations early.

4. Publications subcommittee. Tupper Hyde reported that Dianne Brei had organized the appearance of the first Adaptive Structures report in the December issue of Aerospace America. Thanks to all who contributed. Janet Sater reminded submitters and editors to be sure to recognize sponsoring government agencies in such articles. INPUT IS NEEDED for the 1999 issue – please send text and photos (if available) to Dianne or Tupper.

5. International Activities subcommittee. Yuji Matsuzaki submitted a report (attached) *in absentia*. Marc Regelbrugge reported that the 10th ICAST will be held in October, 1999 in Paris. AIAA is a "publicity" co-sponsor. The ASTC approved a motion by Marc Regelbrugge (seconded by Inderjit Chopra) to cosponsor ICAST on a publicity basis. Marc Regelbrugge agreed to serve as the ASTC liaison to ICAST.

6. Congressional Visits Day subcommittee. Darryl Pines reported that on Day 1, congressional technical staffers provided a fairly technical overview of technologies that were likely to be discussed for funding. On Day 2, the discussions were held. The staffers knew which programs were being funded or not funded. Only major programs (>\$50M) were discussed.

Darryl Pines recommended that the ASTC prepare a white paper on smart structures, meet with staffers, and propose a major 5-year program. He offered to lead such an effort on behalf of the ASTC.

7. Liaisons. No report.

8. ASTC web site. David Jensen reported that the AIAA is now able to host TC web sites. He proposes to migrate the ASTC web pages from Frank Abdi's site to the AIAA site. (Secretary's note: Clark Smith of Duke University has agreed to oversee this transfer and upgrade, with Marc Regelbrugge's assistance. Clark Smith will join the ASTC as an associate (young) member at our next meeting. Check out the new site at: <http://www.aiaa.org/tc/as/index.htm>)

9. AIAA Associate Fellow nominations. David Jensen reminded attendees the nominations for Associate Fellow are due 15 APR 99. One can nominate oneself; several endorsements by current AIAA Associate Fellows (or better) are required. Ken Griffin suggested that we publicize the membership grade of the ASTC members so as to further this process of recognition.

10. David Jensen reminded attendees that the annual announcement for TC membership nominations comes out in the summer. On-line forms are available through the AIAA web page.

<http://www.aiaa.org/information/technical/tcnom.html>). AIAA membership is required. People selected for TC membership are informed by the AIAA.

11. Porter Davis requested that those interested in joining the ASME Adaptive Structures and Materials Systems TC send him some biographical information.

12. David Jensen described those TC leadership positions that were available to volunteers. Nominations, discussions, and elections ensued. The results are summarized below.

Vice-Chair (Chair-Elect)	George Lesieutre
Secretary	Lee Peterson
Bylaws	Ken Griffin (chair), Porter Davis, (David Martinez)
Publications	Dianne Brei (chair), Tupper Hyde, Greg Agnes
Webmaster	Marc Regelbrugge (chair)
International	Yuji Matsuzaki (chair), Marc Regelbrugge, Porter Davis
Congressional Visits Day	Darryl Pines (chair), Rob Clark, Gary Gibbs, Vit Babuska
Centennial of Powered Flight	Greg Agnes (chair), Porter Davis
Awards Chamis	George Lesieutre (chair), Inderjit Chopra, Rob Clark, Chris

Short Course possibility to be coordinated with Adaptive Structures Forum (Chopra, Pines, Griffin, Hyde, Kudva, others)

Liaisons	Greg Carman	Materials TC
	John Main	Inflatable Structures working group

Other members interested in acting as liaison to other AIAA TCs should review the list of TCs at the AIAA web site and notify David Jensen of their preferences. In addition, liaisons with other professional societies and conferences would be desirable.

13. Timing of ASF. There was extensive discussion of the proximity of the SPIE (March) and ASF (April) conferences on the calendar, as well as some related discussion concerning ICAST (October) and ASME (November). The important role of the ASF in serving the aerospace structures community was noted, but there was still a strong sentiment for separating the meetings by more time. No obvious solution was apparent, so ideas are still needed. George Lesieutre (ASTC), Janet Sater (SPIE), and Mark Hopkins (SDTC, *in absentia*) agreed to discuss this topic over the next year.

14. The next AIAA ASTC meeting will be announced (perhaps in conjunction with ICAST or ASME). AIAA makes meal allowances for up to two TC meetings per year.

15. The meeting was adjourned at 8:45.

Respectfully submitted by George Lesieutre.

Attendance**ASTC Meeting****April 14, 1999**

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Report from International Activities Subcommittee, ASTC (Yuji Matsuzaki, Chair)

[1] A good news for our group is that the International Union of Theoretical and Applied Mechanics (IUTAM) has finally recognized the topic “Smart/Intelligent Materials and Adaptive Structures” as one of important research subjects in mechanics. The 20th International Congress of Theoretical and Applied Mechanics (ICTAM 2000)* is scheduled to be held in Chicago, USA, on August 27-September 2, 2000. The Congress Committee of ICTAM 2000 selected the topic “Smart Materials and Structures” as one of about seventy topics for Pre-Nominated Sessions on fluid and solid mechanics. The Congress Committee has appointed Professor R.D. James, University of Minnesota, and myself as Chair and Co-Chair for the Session, respectively. This is a big opportunity for us to demonstrate the future possibility of the new emerging technology to the Mechanics Community. Please be sure to submit abstracts to the Congress Secretary-General in order to take an advantage of this opportunity ! It is a great honor and pleasure for me to work with you toward a great success of the Session.

* President of ICTAM 2000 is Professor H. Aref, University of Illinois at Urbana-Champaign. The Congress will be hosted by a consortium of universities including University of Illinois at Urbana-Champaign, University of Michigan, University of Minnesota etc. Please check the World Wide Web (<http://www.iutam.org/> or <http://www.tam.uiuc.edu/ICTAM2000>) for general information including submission of an abstract and an extended summary, etc. They will be accepted from July 1, 1999 to January 17, 2000.

[2] As for nomination of Subcommittee members, there are a few foreign AIAA members who often attended the past ASF/SDM Conferences. For instance, Drs. M. Natori, ISAS, C.K. Lee of National Taiwan University, and F. Nitzsche, NRC of Canada. Hence, I would like to recommend also AIAA members living in the US who frequently participated in adaptive/smart structures conferences held outside of the US, such as Mr. M. Regelbrugge, Dr. V.S. Rao, etc.

[3] Major international conferences held from April 1998 to March 1999 were:

- 1) 4th European Conference on Smart Structures and Materials, Harrogate, UK, July.
- 2) 4th International Conference on Intelligent Materials (ICIM'98), Makuhari, Japan, October.
- 3) 9th Int'l Conference on Adaptive Structures and Technologies (ICAST '98), Boston, Oct.
- 4) 1999 SPIE's Int'l Symposium on Smart Structures and Materials, Newport Beach, March.

[4] Major international conferences to be held from April 1999 to March 2000 are:

- 1) 1999 SPIE's Pacific Rim Symposium on Smart Structures and Materials, Bangalore, India, July 7-10, 1999. (Contact point: upadhya@ada.ernet.in)
- 2) 10th International Conference on Adaptive Structures and Technologies (ICAST'99), Paris, France, October 11-13, 1999. (<http://www.cnam.fr/ICAST99/>)
- 3) Adaptive Structures and Material Systems Symposium, Int'l Mechanical Engineering Congress, ASME, Nashville, November 14-19, 1999. (Contact: washington.88@osu.edu)
- 4) 2000 SPIE's International Symposium on Smart Structures and Materials, Newport Beach, USA, March 5-9, 2000. (Contact point: jsater@ida.org)