

**MINUTES OF THE
AIAA STRUCTURAL DYNAMICS TECHNICAL COMMITTEE MEETING
Lockheed Martin Missiles and Fire Control, Grand Prairie, TX
19 October 2000**

INTRODUCTION.

The Fall 2000 meeting of the Structural Dynamics Technical Committee (SDTC) was held on 19 October 2000 at Lockheed Martin Missiles and Fire Control (LMMFC) Dallas Operations. Our host, Mr. Ralph Tate, arranged several speakers and a short facility tour for the morning.

Dr. Ken Krall, the Vice President of Engineering, gave an overview of the organization at LMMFC. Dr. Mike Tower, Director, discussed autonomous submunitions. Space program activities, including Space Station Freedom radiators, were presented by Mr. Joe Stoyack. Tactical Missile Systems and Mobile Launch Rocket Systems were summarized by Al Duchesne, Director and Patriot Advanced Capability was presented by Jeff Hovious. Scott Arnold presented the Mechanical Systems organization.

1. CALL TO ORDER.

Mr. Ralph Tate called the meeting to order at approximately 13:15. He welcomed everyone and declared a quorum was present.

MINUTES OF LAST MEETING.

Mr. Ralph Tate submitted a correction to the 4 April 2000 minutes to change the Jefferson Goblet should be sponsored by the SDM Organizing Committee, not the SDTC. Dr. Carlos Cesnik submitted several typographical corrections. Mr. Ralph Tate moved to accept the minutes of the SDTC meeting on 4 April 2000 as amended. Mr. Paul Taylor seconded. The committee voted to accept to the minutes by acclamation.

2. SUBCOMMITTEE REPORTS.

AWARDS.

Mr. Ralph Tate (for Dr. Peretz Friedman) reminded SDTC members to upgrade their memberships. The committee has submitted nominations for recipients of the SDM award.

Mr. Dale Pitt noted the SDM lecture lags the SDM award by a year. The ASME lecture and award are given the same year. Mr. Pitt proposed to have the SDM lecture and award be changed such that they are given the same year. Discussion resulted in a consensus to leave the schedule as is.

EDUCATION.

The Aeroelasticity Short Course will be organized by Dr. Tom Stragnac and the Aircraft Loads will be offered by Mr. Paul Taylor on 20 and 21 April in conjunction with the 2001 conference in Seattle. There is some concern that attendance will be lower than in past years because the courses are offered after the conference due to the Easter holiday on the prior weekend.

PUBLICATIONS.

Mr. Ralph Tate recognized Don Edberg's efforts to write the Year in Review article. He also thanked committee members for submitting information to Don.

SECRETARIAT/TREASURER.

Ms. Sue Janssen circulated a draft roster for redlines.

Dr. Carlos Cesnik suggested a "hot button" for new information on the web page be created. He also requested that the agenda for upcoming meetings be posted on the web page.

The SDTC has approximately \$3500 in our "account." Dr. John Kosmatka will serve as a focal point for ideas on the use of these funds. There are also funds available from the AIAA TAC. Applications can be submitted to Charlie Saff (through Dr. Kosmatka).

LIAISON.

Mr. John Lassiter summarized several items from other technical committees. He will inquire if the Inflatable Structures Working Group intends to become a Technical Committee.

TECH TRANSFER.

No report.

CONFERENCES.

The attendees thanked Drs. Hyoung-Man Kim and Dale Pitt for their hard work in organizing the abstract review for the 2001 SDM. This was an especially challenging year because of the transition to the electronic system.

The new system is good, but still has some problems to be worked. There needs to be "real-time" technical support for the system. The system should provide feedback to the reviewers so they know the status of reviews. Student papers and invited papers should also be submitted to the system so they have tracking numbers. There should be a flag on

student and invited papers to show their special status. These issues will be summarized and Mr. Ralph Tate will take them forward to AIAA.

Mr. Paul Taylor initiated a discussion on the high acceptance ratio of 90%. Why is so much effort expended to review abstracts if so few are rejected? Does this situation also contribute to the increasing number of “no shows?” It was suggested the acceptance rate should be closer to 75% - reviewers should “raise the bar.” One idea to help reviewers was to revise the paper guidelines to require abstracts to include who is the audience and what new information is presented.

There are 89 sessions in the 2001 conference compared to 53 sessions from 2000. This tremendous increase is due in part to the addition of new forums and technical committees. A list of session chairs was presented (see Table 1). If you cannot perform this duty please notify Dr. Hyoung-Man Kim as soon as possible.

The SDTC representatives for the 2002 SDM conference in Denver are Dr. Dale Pitt (primary) and Dr. Lucas Horta (secondary). The group discussed if there should be a Dynamics Specialist Conference (DSC) in the 2002 SDM or the 2003 SDM. This will be further discussed at the next SDTC meeting in the spring.

2. OLD BUSINESS

Video

Ms. Teresa Kinney has prepared an outline for the video/interactive CD. She suggested that using existing material and developing only the “glue” to hold together ideas would greatly decrease the costs associated with the video development. The Education subcommittee needs to develop an itemized budget and plan to present to the TAC. Dr. Yehia M. El-Aini provided some additional video footage to the subcommittee, he will also request permission for our use. Ms. Susan Janssen suggested the “What’s Shaking?” science project material developed several years ago could be incorporated into the project, especially if it is an interactive CD.

Table 1 Summary of SDM Sessions – 2001 Conference

Title	Time	Chairs	# papers
Unsteady Aerodynamics	Monday AM #1	Rudy Yurkovich Chris Pettit	6
Active Control I	Monday AM #2	Don Edberg Reich Gregory	5
Dynamics I	Monday AM #3	Ralph Tate Roy Craig	6
Limit Cycle Oscillations	Monday PM #1	Paul Taylor Wen-Liu Miao	7
Dynamics II	Monday PM #2	C. Hebert Y.T. Chung	7
Space Vehicle Dynamics	Monday PM #3	S. Janssen T. Delis	7
Vibration & Vibration Isolation	Monday PM #4	Mike Tinker S. DiMaggio	7
Aeroelasticity I	Tuesday AM #1	Miles Baker Larry Huttshell	6
Modal Test & Analysis	Tuesday AM #2	Hyoung-Man Kim S. Mahadevan	6
Impact Dynamics	Tuesday AM #3	K. Alvin J. Slater	6
Aeroelasticity II	Tuesday PM #1	P. Friedman E. Reichenbach	6
Active Control II	Tuesday PM #2	K. Griffin M. Smith	6
Dynamics III	Tuesday PM #3	S. Hsu Y. C. Yiu	7
Reduced Order Aeroelastic Models	Wednesday AM #1	P. Beran Pat Goggin	5
Composite Structural Dynamics	Wednesday AM #2	M. Ramesh J.Zweber	5
Rotorcraft Dynamics	Wednesday AM #3	D. Kunz E. Smith	5
Computational Aeroelasticity	Wednesday PM #1	T. Zeiler Dale Pitt	7
System Identification	Wednesday PM #2	K. Patel Edward White	6
Dynamics IV	Wednesday PM #3	L. Horta J. Stroud	6
Aeroelasticity III	Thursday AM #1	Dale Pitt Brian Sanders	5
Nonlinear Structural Dynamics	Thursday AM #2	C. Cesnik J. Wang	5
Buffet Dynamics	Thursday AM #3	D. Worth K. Dotson	6

3. NEW BUSINESS.

SDTC officer rotation was discussed. Currently there is a primary and secondary representative for SDM conferences. The secondary representative becomes the primary for the following year. Similarly the Vice President rotates to President. Mr. Mike Tinker will become President in May 2002. The attendees felt there is no need to increase the scope of this rotation at this time.

Mr. Ralph Tate solicited ideas for new SDTC members. In particular the committee needs younger members and international involvement. The SDTC can have up to 36 members.

Two opportunities for learning more about the AIAA organization are being offered. Technical Committee Leadership Training and a TAC Workshop will be held Saturday and Sunday, respectively, before the conference in April 2001. If anyone is interested, contact Emily Springer (emily.davies@aiaa.org).

6. ADJOURNMENT.

Dr. Carlos Cesnik motioned to adjourn the meeting. Dr. Lucas Horta and Mr. Jerry Miao seconded. The SDTC meeting was adjourned by acclamation at about 16:30. The attendees thanked Mr. Ralph Tate for his hospitality.

7. ATTENDANCE.

Members:

Dr. Carlos Cesnik
Dr. Kirk Dotson
Dr. Yehia M. El-Aini
Dr. Patrick Goggin
Mr. Chad Hebert
Dr. Lucas G. Horta
Ms. Susan Janssen
Ms. Teresa Kinney
Mr. John Lassiter
Dr. James Locke
Mr. Wen-Liu Miao
Dr. Kirit Patel
Dr. Dale Pitt
Mr. Ralph Tate
Mr. Paul Taylor
Mr. Daniel Worth

Dr. Y.C. Yiu

Excused Absence:

Dr. Charles Denegri
Dr. Donald Edberg
Dr. Peretz Friedmann
Dr. Conor Johnson
Dr. Hyoung-Man Kim
Dr. John Kosmatka
Dr. Kurt Nichol
Mr. Ted Nye
Dr. Darryll Pines
Dr. Michael Tinker
Mr. George Wacker
Dr. Thomas Zeiler

Notes:

1. The Chair strictly enforces the attendance rule. Committee participation is solely at the discretion of the committee Chair. If your name is not listed here, please confirm with Chair that your absence is excused.
2. The attendance reflects those who registered on the attendance roster their presence. The Secretary keeps the official attendance on a roster. It is your responsibility to register your attendance and confirm your bios.