

# ASME Design Engineering Division

## Minutes of the General Committee Meeting

Spring 1999

S503A McCormick Place  
Chicago, IL

Monday, 3/15/99  
1:23 - 4:00 PM

*Please see attachment DED\_S99:AttGen for names and addresses of attendees. 17 members of the General Committee plus two guests were present.*

### **1 Call to Order**

Chair Velinsky called the meeting to order at 1:23 PM. The meeting began by R. Hirsch presenting a Fellow certificate to long-time DED member E. Feldy. The presentation was met with applause. Chair Velinsky then asked attendees to introduce themselves. *S. Velinsky*

### **2 Approval of Minutes**

The minutes of the Fall 1998 meeting of the General Committee of the Design Engineering Division, held on September 16, 1998 in Atlanta, GA, were approved as submitted. *S. Velinsky*  
*T. Chase*

### **3 Report of Executive Committee**

The Division is benefitting from the strong stock market and wise investing by the ASME Investment Committee. The Division now wants to improve funding of its awards. All Technical and Standing Committees that had submitted funding proposal were approved for operating budgets, as summarized in the minutes of the Executive Committee Meeting; some committees with known needs that did not submit proposals were also provided with funding reserves. K. Kazerounian's proposal to host the 2002 IDETC in Southern New England was approved. *S. Velinsky*

### **4 Technical Committee Reports**

P. Doepker reminded all Technical Committees that they should indicate if they are planning IMECE participation to D. Segalman. *D. Segalman*

#### 4.1 Design Automation

Please see attachment *DED\_S99:DA*.

#### 4.2 Design for Manufacturing

Please see attachment *DED\_S99:DFM*. Attendance at DFM sessions at the 1999 National Manufacturing Week conferences is excellent; attendance reached 71 in one session. DFM conference chairs for the 1999 IDETC, 1999 IMECE, 2000 NMW and 2000 IDETC have been identified. The DFM web site has been linked to the DED home page. The committee is seeking funds for the DFM Best Paper Award at the 1999 IDETC.

*K. Jacobson*

S. Velinsky thanked the committee for its high visibility at all conferences of the DED.

#### 4.3 Design Theory and Methodology

Please see attachment *DTM\_S99:DTM*.

#### 4.4 Education

Please see attachment *DED\_S99:EDU*. L. King asked if papers submitted to IMECE sessions sponsored by the Education Committee could be made available on CD-Rom. D. Segalman responded that this was not possible, but that a printed volume could be made available by submitting ASME 1337 forms to Barbara Signorelli in the ASME Publications Department.

*L. King for  
T. Liberty*

#### 4.5 Fastening & Joining

Please see attachment *DED\_S99:FastJoin*.

#### 4.6 Mechanisms

Please see attachment *DED\_S99:MECH*.

#### 4.7 Power Transmission & Gearing

Please see attachment *DED\_S99:PTG*. The PTG sessions held at the 1998 IDETC were not as successful as hoped due to problems that occurred publicizing the conference and the like; however, the committee utilized the sessions as a good dry run for the 2000 IDETC.

*N. Anderson*

K. Waldron announced that he is negotiating with the Chair of the International Federation on the Theory of Machines and Mechanisms (IFTToMM) on how to assign an ASME representative on gearing to the IFTToMM Technical Committee. N. Anderson noted that this is important because of newly developing international standards on gearing.

#### 4.8 Reliability, Stress Analysis, and Failure Prevention

Please see attachment *DED\_S99:RSAFP*. F. Mistree noted that the Honors & Awards Committee is waiting for a formal proposal for a new RSAFP-related award. D. Segalman responded that E. Sancaktar has negotiated directly with the potential donor an award and taken negotiations as far as he could. C. Hales noted that he will have E. Sancaktar contact F. Mistree concerning this issue.

#### 4.9 Vehicle Design

Please see attachment *DED\_S99:VD*.

## 4.10 Vibration and Sound

Please see attachment *DED\_S99:TCVS*. The committee is directly sponsoring 367 papers, plus indirectly sponsoring 100 MOVIC papers, at the 1999 IDETC. The committee will also sponsor 3 tutorials. No more than 4 sessions are planned for the 1999 IMECE.

*S. Sinha*

Prof. L. Mirowitch of VPI has been selected to receive the 1999 Den Hartog award, and M. Prohl, now retired, has been selected to receive the 1999 Myklestad award.

The 2001 IDETC will be hosted by the committee in Pittsburgh. Five new members have been elected to the committee. C. Pierre of the University of Michigan has been elected to serve as the new representative to Applied Mechanics Reviews for a three year term. The committee has established a web page; the link information will be forwarded to T. Chase for linking to the DED home page.

## 5 Liaison Reports

### 5.1 Headquarters

Please see Attachment *DED\_S99:ASME\_NY* .

*F. Goldfarb*

### 5.2 Systems and Design Group

J. Wesner announced that P. Doepker, division Chair for 1995-96, had received an ASME Dedicated Service Award. He reminded attendees of the creation of the new MEMS sub-division within the group. He suggested that the division may want to consider instituting a Division Intern program. He asked the division to serve as a role model for web development activities.

*J. Wesner*

J. Wesner informed the division of efforts to reinforce the Technical Chapters program. The division has two Technical Chapters in Washington, DC and Schenectady, NY. He suggested that developing Technical Chapters might constitute a task for the Member Interest committee. He clarified that Technical Chapters can be used to build local focus groups. Regional conferences sponsored by Technical Chapters could constitute a source of income for the division.

### 5.3 Journal of Mechanical Design

Please see attachment *DED\_S99:JMD*. Papers statistics are shown in bar graph form on page 2 of the attachment. 191 papers were received in 1998, which is a good match with the approximately 700 pages available for one year. The Journal currently has 11 Associate Editors.

*L.-W. Tsai*

J. Wesner suggested the activities of S. Kota be used as a model for selling more subscriptions to the journal.

### 5.4 Journal of Vibration and Acoustics

Please see attachment *DED\_S99:JVA*. The Journal is doing well. Technical Editor D. Inman's term is completed on 12/31/99. A new Technical Editor has been nominated and forwarded to the Publications Committee.

*S. Velinsky  
for D. Inman*

### 5.5 ASME/IEEE Journal of Mechatronics

B. Ravani reported that a Special Issue on Design is underway.

*B. Ravani*

## 6 Vice Chair's Report

*C. Hales*

### 6.1 Finance

Please see attachments *DED\_S99:Budget*, *DED\_99: Bud\_Ledger99* and *DED\_S99: Bud\_Comm2000*. C. Hales reminded all committees that they must submit requests for payments even after their allocations are approved; few committees are doing so at this time. Some committees who did not make budget requests were allocated reserves of \$500. Attachment *DED\_S99: Bud\_Awds99* summarizes current financing of all awards of all committees of the division.

### 6.2 Long Range Planning

C. Hales listed several topics for which planning is needed: the division's operating structure, globalization, financial operations, awards, increasing the division's visibility, and opportunities for partnering with outside organizations such as the SME Computer Technology & Solutions conference and the National Safety Council.

### 6.3 Special Projects

The Division is now working with *Mechanical Engineering* magazine on developing a "Special Issue on Design"; please see Item 19 below.

## 7 Technical Committee Executive

*D. Segalman*

### 7.1 International Congress and Exhibition (IMECE)

Please see attachment *DED\_S99:IMECE99*. D. Segalman reported that no committees requested any of the special theme sessions made available for 1999; he suspects that the sessions were made available too late to be of interest. The Education Committee now has 7 sessions reserved for IMECE 1999.

### 7.2 Division Calendar

The calendar is currently set up as an integral part of the "Access" database developed by D. Segalman. Procedures for maintaining the calendar depends on whether the associated "Access" database continues to be supported or not.

T. Chase announced that he intends to develop Perl scripts to put divisional rosters on the web; this may also be useful for creating a web-based calendar.

D. Segalman noted that a users' manual would need to be developed to maintain the calendar in either form. S. Velinsky appointed a subcommittee of D. Segalman, T. Chase and B. Ravani to resolve the electronic policies of the division.

### 7.3 Liaison with Technical Committees

All technical committees are healthy. C. Hales suggested that D. Segalman call A. Luscher to see if the Fastening & Joining committee would like any assistance.

## 8 DETC Executive

*K. Waldron*

### 8.1 1998 DETC Wrap-Up

Please see attachment *DED\_S99:DETC98*. F. Mistree noted that hosting the 1998 DETC was *F. Mistree*

a highlight of his and H. Lipkin's last several years in academia. S. Velinsky thanked the chairs for the excellent documentation provided on their conference.

## 8.2 1999 DETC

Please see attachment *DED\_S99:DETC1999*. While the conference was originally planned to span three days, tremendous response has necessitated expanding it to four days. Fifteen parallel sessions are for Monday through Wednesday, while 9 parallel sessions are scheduled for Thursday. Five papers will be scheduled for 18 minutes each to yield 90 minute sessions. The ASME Welcoming Reception will be held on Sunday evening. The University of Nevada at Las Vegas will host a reception on Monday evening. The organizers are planning that registrants will walk to UNLV, which takes about 20 minutes.

## 8.3 2000 DETC

Please see attachment *DED\_S99:DETC2000*. The conference host hotel has been resolved, the chairs are all identified and a calendar for handling papers has been proposed. L.-W. Tsai is encouraging international associations with the conference by inviting other countries to participate. Papers submitted under this plan will be marked with their joint affiliations. L.-W. Tsai is pursuing a competitive outside quote for running the conference. J. Tansey of the Meetings Department has provided him with a planning calendar.

*L.-W. Tsai*

F. Mistree suggested that the papers due date on the draft calendar be extended from January to early February; S. Sinha concurred. T. Chase stated a preference for the proposed January due date.

S. Shepherd inquired as to how a decision would be made between using the ASME Meetings Department or an outside contractor to run the conference. T. Chase agreed to assemble the list of tasks for running the conference for L.-W. Tsai to obtain an outside quote. S. Velinsky asked if September 1999 would be soon enough to make this decision, as the ASME Meetings Department is already accumulating charges associated with this conference. He requested that the list of tasks be assembled within 1 month so an accelerated decision could be made by e-mail or conference call. S. Shepherd requested that references be obtained for the potential outside contractor.

K. Waldron expressed the need to document conference operations for IDETC chairs. S. Velinsky noted that he started such a document and that this draft guide has been used for several years. K. Waldron added that he has assembled a draft manual; he invited comments on it.

L.-W. Tsai noted that he is looking into potential co-sponsorship of the conference reception by Johns Hopkins University. F. Mistree recommended holding a convivium on Monday afternoon at the exhibits for presenting student awards and the like.

## 8.4 2001 DETC

Please see attachment *DED\_S99:DETC2001*. D. Mook announced that Prof. B. Balachandran of the University of Maryland will serve as Program Chair; Prof. J. Wikert will serve as Chair of Local Arrangements and Prof. B. Clark will serve as Vice Chair of Local Arrangements. The conference site, the Lawrence Center in Pittsburgh, is conveniently joined to the Hilton and other hotels. A conference web site is now available.

*D. Mook*

## 8.5 2002 DETC

Please see attachment *DED\_S99:DETC2002*. K. Kazerounian's proposal to host the 2002 IDETC in Southern New England was unanimously approved at the DED Executive Committee meeting earlier in the day. K. Kazerounian noted that 20 universities are located within

*K. Kazerounian*

a 2.5 hour drive of the conference site. Major industries in the area include United Technologies, General Electric and Electric Boat. Green Airport provides low-cost access to the area. Service by Southwest Airlines enables obtaining reasonable air fares without the requirement for a Saturday night stay.

Providence, RI appears to be a more appropriate site for the conference rather than Newport, RI due to the difference in hotel rates: the Westin in Providence is available for only \$110-\$120 per night, while Newport hotels cost \$250-\$260 per night.

## 8.6 2003 DETC

S. Sinha noted that the 2003 IDETC will constitute the 15th Anniversary of the Design Theory and Methodology Conference. The DTM Committee has expressed interest in hosting it in Austin, TX. T. Chase suggested the possibility of joint technical committee sponsorship of the conference, as was done successfully in 1998. S. Velinsky stated the need for formal conference proposals.

## 9 Immediate Past Chair & Advisory Committee Report

S. Sheppard clarified that the Advisory Committee will address the issue of divisional awards at their Fall 1999 meeting in Las Vegas. *S. Sheppard*

## 10 Constitution and Bylaws

The Division submitted their updated Constitution and Bylaws to the Systems & Design Group over a year ago, but no response has been received yet. K.-W. Wang has accepted the chair of the Constitution and Bylaws committee. *S. Velinsky  
for  
K.-W. Wang*

## 11 National Design Engineering Conference

Please see attachment *DED\_S99:NDEC*. ASME sponsored 19 of the 123 sessions comprising the National Manufacturing Week conference. *R. Hirsch*

## 12 AUTOFACT

The AUTOFACT conference of SME will no longer be held; it is being replaced with a “Computer and Technology Solutions” conference. Please see the Executive Committee report for information on the division’s relationship to this new conference. *R. Hirsch*

## 13 Government Relations

Please see attachment *DED\_S99:GovRel*.

## 14 Honors and Awards

Please see attachment *DED\_S99:H&A*. The committee has been very active in identifying several award winners and filling three vacancies on the committee. The wording of the Leonardo Da Vinci Award is being changed to better distinguish it from the Machine Design Award. *F. Mistree*

F. Mistree discussed actions being taken to fund the Outstanding Educator Award. Funding has been enhanced by income from exhibits at the 1998 DETC and donations by tutorial sponsors at that conference. F. Mistree is requesting \$7,457 funding for this award from the Design Engineering Division. He is also seeking \$15,000 in industrial sponsorship for the award.

K. Waldron suggested using simpler formats for awards associated with the DED than the format required by ASME for the Machine Design Award. C. Hales clarified that it is currently difficult to provide guidelines to references on how to prepare nomination letters; for example, instructions for the addressee and preferred length are not now available.

S. Velinsky asked if an operating procedure for Honors & Awards now exists and if we are operating consistently with it. F. Mistree explained how the committee currently operates but was unsure if current methods are consistent with possible operating procedures. S. Velinsky asked F. Mistree if he could document the current procedure and present it for ratification by the DED.

F. Mistree expressed the importance of keeping potential award winner names in confidence until they are fully ratified.

K. Waldron moved to institute a task force to assist in clarifying divisional awards operations. The motion was seconded by R. Hirsch. A short discussion followed. B. Ravani asked if a representative of the TCVS should be included on this task force to represent the awards associated with their committee. S. Velinsky clarified that nominations by the TCVS are forwarded to the DED for approval. The motion was approved unanimously. K. Waldron suggested that methods for selection of members for the awards committee be included in task force discussions.

F. Mistree noted that the Padnos Award presentation did not go smoothly at the 1998 DETC. T. Chase suggested that S. Sinha and L.-W. Tsai contact the Padnos committee in advance to facilitate presentation at the 1999 and 2000 IDETC. S. Velinsky clarified that the division indicated strong support the Padnos Award at the Fall 1998 Executive Committee meeting.

F. Mistree reminded members of the Scientific Formalism for Engineering Design competition, sponsored and funded by the National Science Foundation, to fund student members to attend the 1999 IDETC. S. Velinsky suggested recognizing winners of this competition at the conference.

## 15 International Activities

Please see attachment *DED\_S99:Int*. The committee has developed a list of international conferences of interest to the DED; P. Doepker will submit CA-2 forms to request ASME participation in these conferences. The committee is enthusiastic about TCVS attracting the MOVIC conference to the 1999 IDETC and encourages a continuing association with MOVIC. The committee is interested in working with the Design Education, Design for Manufacturing and Design Theory & Methodology Committees in developing opportunities for international cooperation.

*P. Doepker*

## 16 US Council for the Theory of Machines and Mechanisms

Please see attachment *DED\_S99:USCToMM*. The Tenth World Congress on the Theory of Machines and Mechanisms, the primary meeting of IFToMM, is scheduled for June 1999.

*K. Waldron*

## 17 Fellows Nominating

Please see attachment *DED\_S99:FelNom*. Division members of note recently elected to Fellow

*R. Hirsch*

grade include S. Velinsky and E. Feldy. Congratulations!

## 18 Member Interest / Membership Development

Please see attachment *DED\_S99:MrInt*. R. Hirsch agreed to find contact information for the division's Technical Chapters to forward to the Member Interest Chair. J. Wesner volunteered to explain the motivation of the program to the chair.

## 19 Special Issue of Mechanical Engineering on Design

T. Chase and C. Hales are working with J. Falcioni, Editor of *Mechanical Engineering* magazine, on establishing links between the "Special Issue on Design" and the division's technical committees. C. Hales is writing the forward. The Special Issue is now scheduled for release in the Fall of 1999. The project is a prime opportunity to increase the visibility of the division, especially with industry members.

*C. Hales*

## 20 Publicity / Newsletter

Please see attachment *DED\_S99:Pub*. D. Segalman noted that the division is willing to pay a one-time surcharge for advancing printing of the Newsletter from fiscal year 2000 to fiscal year 1999.

## 21 Information Management

A likely chair for the new Standing Committee on Information Management has been identified; his final confirmation is pending.

*T. Chase for  
D. Storti*

## 22 Student Affairs

R. Hirsch introduced two student winners of the 1998 Student Design Contest: D. McKee of Seattle University and R. Paup of the University of Washington. The contest required designing a quality assurance machine to determine if a specified part is missing a required hole at the end of a product line. The winning machine must sort parts into "good" and "defective" bins in the shortest time with greatest accuracy. The winning machine sorted a specified number of parts in 4.3 seconds with 100% accuracy. The committee congratulated the winners on their accomplishment.

*R. Hirsch for  
R. Sturges*

R. Hirsch announced that D. Alciatore will chair the Student Affairs Committee at the end of R. Sturges' term in 1999. (Note: Following this meeting, this appointment was changed to P. Larochelle.)

R. Hirsch noted that the division could expand its student activities by enlisting student aides from local student sections at the IDETC and the like.

## 23 Old Business

None.

## 24 New Business

S. Velinsky announced that he can make the electronic format of the ASME logo available to qualified members of the division.

C. Hales announced that the Division is considering a proposal for affiliation with the Institute of Safety through Design of the National Safety Council; please see “New Business” of the Minutes of the Executive Committee and Attachment *DED\_S99:ISTD*.

## 25 Adjournment

Chair Velinsky adjourned the meeting at 3:57 PM.

Respectfully submitted,

Thomas R. Chase  
Secretary