

ASME Design Engineering Division

Minutes of the Executive Committee Meeting

Spring 1999

S503A McCormick Place
Chicago, IL

Monday, 3/15/99
8:30 AM - 1:12 PM

Please see attachment DED_S99:AttExec for names and addresses of attendees. All members of the Executive Committee plus 13 guests were present.

1 Call to Order

Chair Velinsky called the meeting to order at 8:30 AM.

S. Velinsky

2 Approval of Minutes

The minutes of the Fall 1998 meeting of the Executive Committee of the Design Engineering Division, held on September 16, 1998 in Atlanta, GA, were approved as submitted.

*S. Velinsky
T. Chase*

3 Chair's Report

S. Velinsky

3.1 Action Item Report

The action items included in Attachment *DED_F98:Act* of the Fall 1998 minutes were generally completed. Chair Velinsky inquired about the following items:

Item 6 (C. Hales & F. Goldfarb) : Sub-accounts to improve tracking of divisional accounting have been formed.

Item 7 (F. Goldfarb) : Including the previous 4 year registrants to the DETC on the Division's newsletter mailing list has not yet been implemented.

Item 15 (T. Chase & K. Waldron) : Chairs for the Design Engineering Technical Conferences have been identified for the year 2000 conference.

Item 24 (S. Sheppard) : Coordinating the Division's awards is complex and not yet resolved.

3.2 Long Range Planning

Chair Velinsky submitted a Long Range Plan to the Systems & Design Group on schedule. The Design Engineering Division was the only division to submit their plan on time.

3.3 Task Force on Meetings & Publications

Chair Velinsky was invited to join a Task Force on Meetings and Publications chaired by T. Conry (Chair of the COE Committee on Budget). The Task Force will work with the ASME Meetings Department on improving accountability in a way that is not overly burdensome in overhead.

J. Wesner commented that Governor A. Kurzenhauser is advocating for a more customer service oriented approach.

4 Treasurer's Report

C. Hales

4.1 General Accounting

The Division's Custodial Account as of 3/10/99 is summarized in Attachment *DED_S99:Budget*. Please do not directly compare the current year balance of \$161,998 with the FY 1998 balance of \$147,336 as FY 1998 is not yet complete.

Attachment *DED_S99: Bud-Ledger99* details payment authorizations to date for FY 1999.

4.2 Committee Funding, FY 2000

Attachment *DED_S99: Bud-Comm2000* is a summary of funding requests received from technical and standing committees. The requests are characterized as "Operational" and "Projects". Operational costs include the costs of mailings, teleconferences, newsletters and the like. Projects address one-time expenses such as web development costs, seed money for initiating new awards¹ and the like. C. Hales recommended that technical committees who did not submit an explicit request be allocated \$500 as a reserve this year. The affected committees would then be notified as an incentive.

A discussion of proposals ensued. Results of brief discussions are included in the final funding summary below. Two discussions warrant more extensive summary:

- The Design Education Committee submitted a Project request for \$3000 in addition to the project request approved in the summary table. The unfunded request addressed travel for high school teachers to attend paper sessions at the IMECE addressing design or manufacturing.

The Division expressed support for the idea. However, R. Hirsch noted that such funding would be a candidate for funding through the ASME Development Fund. He further noted that the Committee should clarify that the request is a feasibility study, as normal Development Fund projects are expected to be funded through another source after two years. If the Development Fund request is denied, the Division expressed willingness to re-consider the request by e-mail or phone.

J. Wesner further noted that the request may be addressable through a standing effort of ASME to bring in teachers from surrounding schools to ASME conferences.

- The Reliability, Stress Analysis and Failure Prevention Committee submitted a request for \$500 to initiate a student design contest. The Division approved the request on the

¹Please note that awards must be approved by all relevant ASME committees.

condition that the contest must be approved by the ASME Committee on Contests before it is announced.

The following committee funding was approved by the Executive Committee:

Design Automation: \$500 operational

Design Education: \$300 operational + \$2000 projects (travel for students participating in the Student Design Competition)

Design for Manufacturing: \$200 operational + \$800 projects (support for activities in 3 conferences)

Design Theory & Methodology: \$1000 projects (web site development)

Fastening & Joining: \$500 operational (incentive)

Mechanisms: \$1000 operational (teleconferencing)

Power Transmission & Gearing: \$500 operational (incentive)

Reliability, Stress Analysis & Failure Prevention: \$300 operational + \$700 projects (\$200 preparation of committee achievements + \$500 initiation costs of an RSAFP-based student design contest: see note above)

Vehicle Design: \$500 operational (incentive)

Technical Committee on Vibration & Sound: \$1000 operational + \$500 projects

National Design Engineering Conference Committee: \$100 operational

Fellows Nominating Committee: \$50 operational

International Activities Committee: \$2000 projects

Honors & Awards Committee: \$1000 operational (travel for awardees who can't self-fund & aren't participating in conference)

Membership Development: \$500 operational (incentive)

Student Affairs Committee: \$500 operational (incentive)

US Council for Theory of Machines & Mechanisms: \$2440 operational (annual dues)

4.3 Awards Funding

Attachment *DED_S99: Bud_Awds99* summarizes the awards associated with the Division and their account numbers where appropriate.

The Machine Design and Triodyne Safety Awards are endowed awards, which are assigned budget numbers of the form 600-XX-XXXX by ASME. (The minimum endowment allowed for any award is \$25,000.) The Abbott and Design Automation Awards have exclusive custodial accounts assigned explicitly to them. The Freudenstein Award monies, controlled by the Mechanisms Committee, are currently scattered between three different accounts. The Design Engineering Student Contest funding of \$4500 per year is charged directly to the DED custodial account.

A discussion ensued. C. Hales recommended that the nominating procedures for DED awards be clarified. D. Segalman suggested that the Division establish a subcommittee, including two

members of the Executive Committee, to make recommendations on divisional Honors & Awards procedures. B. Ravani noted that part of the Divisional revenue could be used to endow all awards if a suitable plan were developed. C. Hales clarified that Technical Committees were welcome to delegate monies earned through tutorials sponsored by them to awards related to their committee.

5 Immediate Past Chair's Report

Past Chair Sheppard reported that an Advisory Committee Meeting will be held at the 1999 IDETC in Las Vegas. Two agenda topics are of particular interest. First, Honors & Awards procedures will be discussed. Second, ways to engage junior members of the division at a time in their career when service activities are not considered toward their promotion will be discussed.

S. Sheppard

Prof. Sheppard raised the possibility of reinstating a divisional reception at the IDETC, as implemented previously by A. Serig and recommended by K. Ragsdell. No decision was reached.

Prof. Sheppard announced that she is developing a monograph on engineering education that may be of interest to the Division.

6 Liaison Reports

6.1 Headquarters

Please see attachment *DED_S99:ASME_NY*. F. Goldfarb's updated address is included on that attachment. He requested that only one of his two previous e-mail addresses (*goldfarb@asme.org*) be used in the future. The new director of Technical Affairs is Jim Reffelt.

F. Goldfarb

6.2 Systems and Design Group

J. Wesner announced that P. Doepker had received the prestigious ASME Dedicated Service Award.

J. Wesner

J. Wesner informed the division that a great deal of discussion is occurring at the Group level on the Meetings and Publications Departments.

J. Wesner requested that the division participate in a final effort of the group to promote the ASME Technical Chapter program. Any local section having more than 25 members belonging to one division are candidates for a Technical Chapter. The popularity of the program has been limited to date; if the current initiative is unsuccessful, it will be closed. Two Technical Chapters currently exist for the Design Engineering Division. C. Hales suggested that we forward this information to the Membership Development Chair for potential action.

J. Wesner asked the division if they should consider implementing a Leadership Development Initiative similar to that available at the group level. Possibly an intern could be provided with conference travel funding or the like as an initiative to participate in the Division.

J. Wesner noted that the division should start preparing a new nominee for Group Vice President in preparation for the completion of the term of L. Hobarock after two years.

L.-W. Tsai requested that the group develop on-line paper submission and approval procedures.

The division thanked J. Wesner for his many efforts in its interests.

7 Executive Committee Reports

7.1 Technical Conferences

K. Waldron

7.1.1 1998 DETC Wrap-Up

Please see attachment *DED_S99:DETC98*. The total excess revenue generated by the conference was \$31,701.

*K. Waldron
for H. Lipkin
& F. Mistree*

7.1.2 1999 IDETC

Please see attachment *DED_S99:DETC99*. The conference now expects 950 papers, a large increase over earlier estimates. As a result, the conference has been expanded to a fifth day. The program has been matched to the Alexis Park facilities by scheduling 15 parallel sessions on Monday through Wednesday and 9 parallel sessions on Thursday. Each session will be 90 minutes in length, accommodating 5 papers at 18 minutes each.

S. Sinha

UNLV will host the conference reception. S. Sinha added a leather bag for each registrant and student travel funding to the conference budget. A short course and tutorial program is being arranged; it may be necessary to charge a room fee as part of the tutorial fee. S. Sinha noted the importance of an advance program to publicize the conference.

S. Velinsky asked if rooms will be available for committee meetings on Sunday; S. Sinha felt that they would but will confirm this. B. Ravani suggested that S. Sinha add rental of a cellular phone for use by the chair during the conference to the budget. S. Velinsky commended S. Sinha for combining the MOVIC conference with the IDETC; he noted that the international organizers should be made to feel welcome.

An extensive discussion ensued about the conference publications. B. Ravani suggested that if the division shares in the Publications financial risk, they should also share in the profit. S. Sinha announced that Technical Publications would be providing computers for reading the conference CD ROM, so PC rental would not need to be budgeted this year.

P. DiVietro gave a cost summary of IDETC publications for previous years and a cost forecast for 1999. Only about \$20,000 worth of Proceedings are typically sold following the Conference, which is many fewer than printed. An Index was put up on the web for the 1998 Atlanta IDETC, but few people utilized this resource; therefore, this will not be done in 1999.

The Publications budget includes a charge for Marketing Services attending the conference. This charge includes travel of headquarters staff, salary of local people, shipping and the like. J. Wesner protested that the marketing expense does not pay for itself. P. DiVietro nevertheless felt that Publications must have a presence at the conference including a booth and a display. A long discussion followed. P. DiVietro expressed concern about adequately financing Publications expenses, while J. Wesner expressed concern over the Publications Department's unwillingness to flex.

T. Chase moved that the conference Publications charge be reduced to \$105 with the DED Custodial Account assuming full risk up to \$20 per 680 budgeted registrants, with the understanding that any profits realized would be split between the Custodial Account and Publications. The motion was seconded by B. Ravani and unanimously approved.

The 1999 IDETC conference budget was passed with conditions for minor tuning.

Later in the meeting, P. DiVietro returned with follow-up information from the Publications Department. First, S. Velinsky thanked P. DiVietro for providing spread sheet information on the division's conference publications. P. DiVietro then announced that the Publications Department agreed to the Publications charge of \$105 for the 1999 IDETC with no responsibility to the division for a minimum number of registrants. However, the Publications Department will not share 1999 IDETC conference publications profits with the division. J. Wesner commented

that he believes that the Publications Department should be willing to share profits in the future.

7.1.3 2000 IDETC

Please see attachment *DED_S99:DETC2000*. The hotel and all conference chairs have been finalized, as listed in the attachment. Johns Hopkins University may co-sponsor the conference reception. A draft Call for Papers was released in January 1999; Prof. Tsai asked that all chairs check the proposed deadlines.

L.-W. Tsai

Prof. Tsai is arranging to have some sessions feature papers co-sponsored by international groups and to publicize this in the program. He will discuss this further in the General Committee meeting.

Prof. Tsai is working on obtaining a quote for running the conference from Betah Associates, Inc. as an alternative to working through the Meetings Department. To do so, he must provide Betah with an accurate list of services that Betah would provide. S. Velinsky proposed obtaining an outside quote as a negotiating tool and discussing the results in the September Executive Committee meeting. Prof. Tsai has received a planning calendar from Meetings Services to use as a start. However, he requested help from the Division in preparing a comprehensive list of services provided by Meetings Services. T. Chase agreed to spearhead this effort and have the proposed list checked by B. Ravani and H. Lipkin.

7.1.4 2001 IDETC

The 2001 IDETC will likely be held at the Lawrence Center in Pittsburgh, although the conference must be coordinated with the renovation of this site. Prof. B. Balachandran of the University of Maryland will serve as Program Chair. The CA-1 form for the conference has been signed and forwarded to F. Goldfarb. Carnegie Mellon University or the University of Pittsburgh are potential reception sites.

D. Mook

J. Wesner inquired if the local section will be contacted to participate in the conference; D. Mook replied that an organizing committee member had been designated to do that.

7.1.5 2002 IDETC

K. Waldron announced that an alternate proposal had been submitted by Notre Dame University to hold the 2002 IDETC in Chicago. However, the new proposal was withdrawn with the intent of proposing Chicago as the site of the 2004 IDETC. K. Waldron moved that the Southern New England site proposed by K. Kazerounian be approved; the proposal was unanimously accepted.

*K. Waldron
for
K. Kazerou-
nian*

7.2 Technical Committee Operations and IMECE

D. Segalman

7.2.1 Technical Committee Operations

D. Segalman announced that Technical Committees are in very good health. The Design for Manufacturing Committee has a new Chair: K. Jacobson. The Reliability, Stress Analysis and Failure Prevention Committee is in the process of developing a proposal for an award associated with their committee. Vehicle Design has requested a fourth session at the IMECE. The Technical Committee on Vibration and Sound is active and well organized.

7.2.2 1999 IMECE

Please see attachment *DED_S99:IMECE99*. D. Segalman and the Technical Committee on Vibration and Sound stated their dissatisfaction to IMECE organizers about withholding sessions

from the Technical Committees. The sessions were released too late to obtain papers, so those released had to be used as panel sessions. DED participants felt that the IMECE organizers had erred in assuming that industry prefers panel sessions.

K. Waldron asked the motivation for withholding sessions. P. Doepker replied that this practice was driven by divisions requesting sessions that they did not actually use.

7.3 Finance

Vice-Chair Hales noted that most Finance concerns are covered by the previous Treasurer's Report. He clarified a minor misunderstanding in a proposal for funding the Outstanding Design Educator Award prepared by F. Mistree: funding for the award from "Tutorials" from the 1998 IDETC is exclusively comprised of tutorial organizers who volunteered income from their tutorial to be contributed to the award.

C. Hales

K. Waldron moved that funding for the Design Educator Award be addressed by the Finance Committee. The motion was seconded by C. Hales. A vote was not taken.

7.4 Advisory

Please see the Immediate Past Chair's Report above.

7.5 DED Journals

7.5.1 Mechanical Design

Please see attachment *DED_S99:JMD*. Prof. Tsai announced that the Journal is very healthy at present. The number of papers submitted is nearly ideally matched to the available pages. The Journal currently has 11 associate editors, while two more candidates have been proposed.

L.-W. Tsai

7.5.2 Vibrations and Acoustics

Please see attachment *DED_S99:JVA*. D. Inman is completing his term as Technical Editor. He has nominated L. Bergman of the University of Illinois to be the next Technical Editor. The DED held a phone election to approve D. Inman's nomination in October and November; L. Bergman was unanimously approved. D. Inman forwarded L. Bergman's nomination to the Board on Communications, who will interview him at the 1999 Summer Annual Meeting. Prof. Bergman has agreed to attend division meetings to report on the Journal.

7.5.3 ASME/IEEE Journal of Mechatronics

The Journal has received a set of papers for their "Special Issue on Design". They are now under review, although obtaining reviews has been difficult. B. Ravani asked if the Mechanisms Committee would be willing to accept some papers on Mechatronics for review under their review structure. The editors will meet in Detroit on May 15, 1999.

B. Ravani

7.6 National Design Engineering Conference (NDEC)

Please see attachment *DED_S99:NDEC*. ASME organized 19 of the 123 scheduled sessions. The sessions were not categorized by the old conference titles as they were last year, such as National Design Engineering and Plant Engineering. Rather, sessions were categorized by discipline, such as "Design / Mechanical Engineer". All but one of the ASME sessions were listed in this category; the category included 45 sessions in total.

R. Hirsch

Within the division, 10 sessions were contributed by Design for Manufacturing, 3 sessions by Education and 1 by TCVS.

Outside of ASME, no other session organizing organization with a logo sponsored more than four sessions.

7.7 AUTOFACT

The Society of Manufacturing Engineers (SME) had proposed reorganizing the conference formerly known as AUTOFACT jointly with ASME. Toward that end, SME had committed \$50,000 to ASME in 1999 for using their name in association with the conference for one year. \$10,000 of this amount was designated to the division (with the Manufacturing Division also receiving \$10,000).

*R. Hirsch &
C. Hales*

A meeting between W. DeVries, ASME Senior Vice President for the Council on Engineering, and the head of SME resulted in proposal of the following four actions to accommodate the new conference in the future:

1. ASME terminate their participation with the Reed Expositions based National Manufacturing Week Conference in Chicago.
2. ASME propose equivalent compensation for their participation in the above conference.
3. The Design Engineering Division move the IDETC from its current Fall time slot to March.
4. ASME combine with SME to organize a replacement conference for AUTOFACT entitled "Computer Technology Solutions Conference".

The division was informed of these proposals through phone conversations between W. DeVries, C. Beardsley (ASME Managing Director of Engineering), R. Hirsch and C. Hales. C. Hales protested that they would require the approval of the full DED Executive Committee.

C. Hales proceeded to contact P. Bocks, Chair of the Computers & Information in Engineering (CIE) Division, and J. Lee of the Manufacturing Division. He noted that CIE stood to potentially benefit from this affiliation, as it would provide an analogue to DED's participation in National Manufacturing Week. While the proposed Computer Technology Solutions Conference dates conflict with the 1999 DETC, the CIE division could potentially send different people to the two conferences.

As a result of these discussions, the CIE and Manufacturing divisions will put in proposals to W. DeVries for participation in the new conference. However, DED was still asked to respond to the four proposed actions above.

C. Hales suggested that the DED support the conference by way of papers and positive feelings toward SME. S. Velinsky clarified that the \$10,000 committed to the DED to date was based on the last AUTOFACT and not on future commitments. R. Hirsch added that the initial funding was specifically for an agreement to use the ASME logo for the last AUTOFACT; sponsorship was by the Design Engineering and Manufacturing divisions. The division has fulfilled its commitment for that conference.

SME is supposed to provide all three relevant divisions with an information package on the new conference.

D. Segalman moved that the DED answer "Not at this time" to all four actions proposed above, that the DED offer encouragement and support to the CIE and Manufacturing divisions for participation in the new conference, but that the DED take no responsibility in the new conference. The motion was seconded by C. Hales and unanimously approved.

B. Ravani noted that the Computer Technology Solutions Conference could comprise an opportunity for an exhibition related to one of our conferences. However, C. Hales clarified that this conference will not exhibit with the DETC, as the location is limited to Detroit.

D. Segalman moved to transfer \$5,000 of the \$10,000 received for the last AUTOFACT to the CIE division. The motion was seconded by C. Hales. A discussion followed. K. Waldron

expressed concern over transferring funds without clearly defining the intent. R. Hirsch suggested that the division offer financial support to CIE if they request it. S. Velinsky asked if the division might want to contribute sessions to the new conference, which could result in further funding. R. Hirsch clarified that no agreement exists for future support at this time. S. Velinsky asked if CIE would share profits from this conference with the division as we do at the DETC. C. Hales stated that an exchange of \$5,000 would make it clear that all three divisions (CIE, Manufacturing and Design Engineering) are working with SME. R. Hirsch noted that the existing agreement stated that we would have the opportunity to approve the new name, which was never done. At the end of this discussion, D. Segalman withdrew his initial motion.

D. Segalman then moved that the DED provide \$5,000 seed funding for participation in the Computer Technology Solutions Conference to the CIE division. The motion was seconded by C. Hales. C. Hales then requested that S. Velinsky write a letter to the CIE chair explaining the funding with a cc to C. Beardsley and W. DeVries. The motion was unanimously approved.

8 Old Business

None.

9 New Business

9.1 Institute for Safety Through Design (ISTD): Proposal for Affiliation

Please see Attachment *DED_S99:ISTD*. T. Libertiny introduced a proposal by the ISTD to team with the Design Engineering Division for seeking project funding. He then introduced B. Main, President of Design Safety Engineering, Inc. and a member of the ISTD Advisory Committee, and W. Christensen, Project Manager of ISTD.

*T. Libertiny,
W. Christensen
& B. Main*

W. Christensen described the organization and goals of ISTD. Their philosophy is to encourage industry to consider safety early on in design, and to develop materials for engineering schools on safety, health and environment for use during the normal curriculum. The ISTD is funded by contributions from companies and individuals. The Institute has a planned sunset date of 2005.

The ISTD has held several symposia. As a result, they have developed guidelines for what a student should know about safety in design. The culmination of this effort is a task-based hazard analysis and risk assessment software named "designsafe". Also, ISTD held a conference entitled "Benchmarks for World Class Safety through Design" in 1997; a second 1.5 day conference is being planned for the year 2000. A book on Safety through Design is being produced by the ISTD to address a gap in design for safety in the literature; it will come to market in July 1999.

A discussion ensued. C. Hales noted that ASME activities in safety should be increased, as new laws on design will heavily affect members of the division, possibly adversely. He added that the division needs time to think about ISTD's detailed proposal.

J. Wesner asked if ISTD was also working with the Safety and Risk Analysis Division; T. Libertiny replied affirmatively. B. Ravani asked if the division should have a committee on safety; D. Segalman noted that the Reliability, Stress Analysis and Failure Prevention Committee already fills that role. S. Sheppard commented that Design for Safety matches the "Design for XXX" template used by some committees of the division and asked where it best fits. S. Velinsky noted that a new committee devoted to this endeavor could be formed but that a standard proposal for a new Technical Committee would be required to do so.

R. Hirsch asked if an agreement was necessary, or whether the DED could just go ahead and work with the ISTD. B. Main replied that the ISTD was seeking a more formal agreement.

W. Christensen added that a formal agreement would give continuity to ISTD's efforts. R. Hirsch noted that if the DED enters into an ISTD agreement, COE approval will also be required.

T. Chase noted that National Manufacturing Week would provide a potential venue for holding the Safety through Design Benchmarks II conference sessions.

C. Hales moved that the Design Engineering Division follow up on the ISTD proposal and agree to work with ISTD, within the organization of the National Safety Council, on its implementation with the Design Education Technical Committee serving as the current lead for DED efforts. R. Hirsch clarified that the COE meets in June and November, so DED actions in this regard would need to be coordinated with that calendar. C. Hales' motion was seconded by B. Ravani. J. Wesner commented that anything legal in any proposed agreement would need to be examined and approved by ASME Headquarters. C. Hales clarified that our work with ISTD must state its link with the National Safety Council. The motion passed unanimously.

9.2 Web Based Publications

S. Velinsky announced that the Systems & Design Group formed a task force on the web and how to leverage it. Purchasing publications from the web is being discussed. The CIE lead on this effort is P. Bocks (CIE Chair), so he suggested that interested members contact her to participate.

B. Ravani clarified that this effort is independent of ASMENet. He asked how the division should develop a vision for distributing publications from the web. J. Wesner suggested bypassing conference CD/ROM publications in favor of web based publications. S. Sinha noted that the DETC CD information is already available on the web through the Comdex service.

10 Adjournment

Chair Velinsky adjourned the meeting at 1:12 PM.

Respectfully submitted,

Thomas R. Chase
Secretary, 1998-99