

IEA COUNCIL ANNUAL MEETING

June 3-4, 1989

Noordwijk, Holland

COUNCIL 4

#### MINUTES

#### i. ATTENDANCE

#### Members Present:

#### Officers:

Ilkka Kuorinka, Finland, President Hal W. Hendrick, USA, Secretary General Brian Shackel, UK, Treasurer Harry Davis, USA, Immediate Past President

#### Committee Chairs:

Ian Noy, Policy and Planning
Pieter Rookmaaker, Education and Training
Ogden Brown, Jr., Science and Technology
Walter B. Kleeman, Jr., Publications
Ilkka Kuorinka, Awards
Martin Helander, Promotion and Public Relations

#### Federated Society Representatives:

Belgium Ergonomics Society: Kamiel Van Wonterghem

Ergonomics Society (UK): Kay Coombes

Heather Ward

Human Factors Association of Canada/Association Canadienne d'Ergonomie: Paul Stager

Human Factors Society (USA):

Ogden Brown, Jr. Martin Helander

Andrew Imada

Walter Kleeman, Jr. (Alternate)

Japan Ergonomics Research Society: Munehira Akita

Nederlandse Vereniging Voor Ergonomie: Ernst Koningsveld

Pieter Rookmaaker



Nordic Ergonomics Society:

Agnes Saaby Tuulikki Luopajarvi

Rollish Ergonomics Society: Leszek Pacholski

Societe d'Ergonomie de Langue Française (SELF):

Hugues Monod

Alain Wisner (Alternate & IEA '91 Congress Organizer)

The Ergonomics Society of Australia: Margaret Bullock

#### Federated Societies Not in Attendance:

Brazilian Ergonomics Association \*
Gesellschaft fur Arbeitswissenschaft
Hungarian Society for Organisation & Management Science
Societa Italiana di Ergonomia
Southeast Asia Ergonomics Society
Yugoslav Ergonomics Society
Osterreichische Arbeitsgemeinschaft fur Ergonomie
Human Ergology Society, Japan (Affiliate Member)

\* Technically, the Brazilian Ergonomics Association is not yet a member as the association has not yet paid its first year's dues.

A total of 22 persons were present, of which 19 were voting members (Note: The Immediate Past President is a non-voting member of Council.) Walter Kleeman substituted for Martin Helander as an HFS voting member on June 4th. Several other Council members had to leave early on the 4th, so the total number of voting members reduced to 17 by the afternoon.

#### II. REPORTS

#### A. Officers' Reports:

1. President. See attached report.

Ilkka Kuorinka opened the meeting by welcoming the attendees and introducing the new members of Council: Andrew Imada (USA), Margaret Bullock (Australia), Agnes Saaby (Denmark), Kay Coombes (UK), and Heather Ward (UK).

2. Secretary General. See attached report.

Hal Hendrick requested that council members assist the Secretary General's office in obtaining updated lists of their respective federated society officers, addresses, phone numbers and, where applicable, telex and fax numbers by contacting their society Secretaries on this matter when they return home from the Council meeting. Hal also noted that several federated societies had not sent substitutes for absent members and encouraged those present to be sure and arrange for an alternate representative when ever they are unable to attend an annual meeting of Council. Hal also indicated that he would write to the federated societies and encourage them to appoint alternates.



#### 3. Honorary Treasurer. See attached report.

Brian Shackel reported that the IEA, while not rich, is in sound financial condition with adequate funds to support current and planned activities.

#### B. <u>Committee Reports</u>.

#### 1. Policy and Planning Committee. See attached report.

Following presentation of his report, Council commended lan Noy on the outstanding job that he had done in revising and updating the official documents of the IEA, including wording associated with the action items on the current meeting agenda.

#### 2. Education and Training. See attached report.

Following presentation of his report, Pieter Rookmaaker was requested by Kay Coombes to add developing an international code of ethics as an agenda item for P & P Subcommittee 1, Accreditation and Certification. This suggestion was supported by Council and accepted by P. Rookmaaker.

#### 3. Science and Technology. See attached report.

Following presentation of Ted Brown's report, Alain Wisner requested that Ted personally contact S & T Subcommittee Chairs about the seriousness of actively participating in the planning of the 1991 Triennial Congress. T. Brown noted that he had already done this once, and agreed to follow-up periodically between now and the 1991 Congress. He noted additionally, that he was working on replacing subcommittee chairs and members who were not assuming an active role; Ted requested that the IEA Council members personally contact S & T subcommittee members from their respective societies, impress on them the importance of active participation, and determine if they were willing to make the necessary commitment or should be replaced by their federated society.

#### 4. Publications Committee. See attached report.

In addition to presenting his report, Walt Kleeman noted to Council that he was not taking on a new three year term as Chair of the Publications Committee because of greatly increased work commitments.

#### 5. Awards. No written report.

Ilkka Kuorinka reported that this committee was now constituted and, in addition to himself as Chair, consists of Harry Davis and Roy Yates (invited). This committee will begin its work on the awards selection process for the 1991 Congress in the near future.

#### 6. Promotion and Public Relations. See attached report.

Following Martin Helander's report, several members of Council suggested that, in addition to seeking Sustaining Members, the P & PR Committee also seek/coordinate seeking support for specific conferences from Industry. Action Item 8e in M. Helander's report: Martin will follow-up with individual societies and with WHO. Item 8f was deferred by Council



to the Publications Committee for follow-up study and action. The other action items in the report were taken up under the "Action Items" portion of the agenda.

#### C. Special Report on Coordination with WHO.

Munehira Akita reported that JERS had sent a letter to the President of WHO as had been requested at the Sydney meeting by Council. He further reported that the Director General of WHO had responded (see attached letter). Council requested that JERS continue direct contact, including topic of coordination on development of ISO standards through WHO.

#### D. Southern Africa Society Status Report.

H. Hendrick reported that additional information had been informally requested by several federated societies concerning the extent to which this was truly a *Southern* Africa Society as opposed to a *South Africa* Society---particularly as it is regarded by ergonomists and related professions in the Southern Africa countries other than South Africa. Ilkka Kuorinka reported that he has requested Harry Davis, Immediate Past President of IEA to conduct additional information gathering in these Southern Africa countries while he is on a private trip this Fall. IEA will not cover his expenses to Southern Africa, but will cover his expenses while traveling in several of these countries outside of South Africa on IEA business. Actual expense to IEA is expected to be small. (Note: Harry Davis is not going. Information will be obtained by correspondence.)

#### E. IEA Sponsored Congresses and Conferences

1. 10th Triennial Congress of the IEA, Sydney Australia, August 1-5, 1988.

Copies of Roger Hall's final report to Council on the Congress were distributed to Council at the meeting. In addition the Secretary General received two copies of a very extensive additional document from the Congress Committee on Publicity and Promotions that should prove extremely useful to future Congress organizing committees. During the meeting Margaret Bullock gave an informal summary report on the Congress to Council. In general, the Congress was highly successful both professionally and financially.

### 2. 11th Triennial Congress of the IEA, Paris, France, July 15-20, 1991.

Alain Wisner informally summarized activities of the Organizing Committee since the Sydney Congress, including the meeting in Paris immediately preceding this Council meeting. (In addition to key members of the organizing committee from SELF, this most recent meeting also included M. Akita, H. Hendrick, B. Metz, and T. Megaw.) A. Wisner reported that the Paris meeting had been highly productive and, among other things, had resulted in selection of the key topics to be emphasized at the Congress. Council Members were requested to review the list of proposed major topics (attached) and to suggest keynote speakers for each. The plan is to have keynote speakers give shorter formal presentations than in the past, and to summarize/integrate the presentations of others on their respective general topics. An initial group of potential speakers was suggested during the meeting by members of Council. A. Wisner requested that additional suggestions be sent to him directly. He also further reported that abstracts would be due on 1 November 1990, and papers in camera ready form by 1 February 1991. Paper length will be either 3 or 4 pages, maximum; final decision on length will be made following discussion with the publisher (most likely, publisher will be Taylor and Francis).



3. 12th Triennial Congress of the IEA, Toronto Canada, August 1994.

Paul Stager summarized progress on the early planning for this Congress. To date, planning and organizing activities are on schedule and proceeding well.

4. 13th Triennial Congress of the IEA, Helsinki, Finland, June 28 - July 5, 1997. See Attachment.

Tuulikki Luopajarvi reported that early planning and organizing activities are on schedule and proceeding well.

5. Third ODAM International Symposium, Kyoto, Japan, July 18-21, 1990.

M. Akita reported on the progress of the planning and organizing activities for this conference. In addition, he noted that the date for submission of abstracts will be slipped to the fall of 1989 to allow at least 90 days after the second call for papers is distributed; this second call will be sent to all federated societies for distribution.

#### III. ACTION ITEMS

- A. Inclusion of the Immediate Past President of IEA as a non-voting member of Council and the Executive Committee. During the discussion, it was clarified that this proposal makes no provision for travel support to Council meetings from IEA funds. For 17; Against 0; Abstain 2. MOTION PASSED.
- B. Establishment of an "institutional" category of membership. Motion tabled to permit more time for study by the federated societies, and to consider several possible modifications (to be prepared by the P & P Committee in response to discussion at the meeting).
- C. Modification to the IEA fee structure (to permit societies to pay 20% of their current membership fee income as their IEA dues up until such time that this amount reaches the current dues requirement). For 17; Against 0; Abstain 1. MOTION PASSED.
- D. Adopt proposed changes to the basic documents of the IEA (for clarity and consistency; and, where applicable, to reflect those proposed action items which are approved at this meeting.) (Note: This item was not actually taken up until the end of the meeting so that it was clear which of the proposed changes would actually be made as a result of Council's decisions on all of the other action items; each change was reviewed and discussed separately.) The revised and updated basic documents, as approved by Council, will be distributed by the Secretary General's office within the next month. For 17; Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.
- E. Proposed revisions/expansion of the IEA brochure. Referred back to the Publications Committee for further revision and refinement. At the Suggestion of Harry Davis, Council by consensus requested that the words "New World, Old World, Our World" be added under the IEA logo as was the case with the original logo design. The Secretary General's Office will comply on IEA Stationary; the Publications Committee will comply on all future IEA publications.



- F. Discontinue the development of a Directory of Ergonomics Centers (in light of the apparent very small market for it). For 19; Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.
- G. Inclusion of a formal presentation ceremony in all future IEA Triennial Congresses. MOTION PASSED UNANIMOUSLY BY CONSENSUS.
- H. Reinstatement of the Israeli Ergonomics Society. Council voted on the following statement, proposed by Brian Shackel: "Council welcomes the intended re-application by the Israeli Ergonomics Society and empowers the Executive Committee to accept their membership provided that all requirements are satisfied (including dues payment for the current year). The Secretary General was directed to prepare a letter to the Israeli Ergonomics Society, to be coordinated with the Executive Committee, following an early summer visit by Ian Noy with several key members of that Society in Israel. For 14; Against 1; Abstain 3. MOTION PASSED.
- 1. Approval of the request of the Korean Ergonomics society for Affiliate Membership. No action taken as the Secretary General has not yet received a copy of the By-Laws in English, as is required. The Korean Ergonomics Society has reported that they are working on their By-Laws.
- J. Funding of an additional \$2,000 seed money for the conference on Human Factors of Design for Manufacturability and Process Planning (Honolulu, Hawaii, August 9-11, 1990). \$2,000 had previously been approved; this request increases the total to \$4,000. For 17; Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.
- K. Establishment of an IEA third world ergonomics bursary ywith an initial donation of I,500 lbs (approximately \$2,400 U.S.) from the Ergonomics Society. The stipulated (restricted) purpose of the bursury to be to support applied ergonomics projects by professional ergonomists in third world countries. The specific motion as prepared by Brian Shackel: "Council welcomes in principle this proposal and requests that full details be circulated to the other IEA federated societies; and that the proposal be brought up next year (at the IEA Council Meeting) in final form." Motion passed unanimously by consensus. Kay Coombes indicated that the Ergonomics Society will circulate the detailed proposal to the other IEA federated societies for review and comment (and, hopefully, at least several of them also might wish to contribute).
- L. Establishment of an Ergonomics Society of Australia IEA Fund for Sponsorship of Conferences in Developing Nations (with particular emphasis on Southeast Asia and South Pacific regions). 10,000 Suiss Francs from the 10th Congress (Sydney) Organizing Committee has been provided to the IEA for this purpose. Specific motion: "Council welcomes this most generous offer; principles for administration of this fund will be prepared by the Policy and Planning Committee and brought to the next Council meeting for adoption." For 17, Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.
- M. Item M on the agenda (proposed 1st Pan European Ergonomics Conference) was deleted. This Item was intended by the Ergonomics Society to be simply informational at this time.
- N. Policy/Rules on observers from other organizations attending IEA Council meetings. Council agreed by consensus not to change the current policy or rules. The IEA Council meetings will remain closed meetings. As in the past, guests may be invited to attend



specific parts of the meeting to discuss specific action items in which they or the organization they represent have a vested interest or can provide relevant information.

- O. Next Executive Committee Meeting. Several proposals by committee members were considered. The Executive Committee selected Sunday and Monday, January 6-7, 1990 in Quebec, Canada for its next meeting.
- P. Next Council meeting location and date. Council voted for 16, Against 3, abstain 0 to accept the JERS invitation to hold the next council meeting on Friday and Saturday, July 15-16, 1990 in Kyoto, Japan (immediately prior to the IEA sponsored Third ODAM International Symposium).
- Q. Direct Technical Standards Subcommittee to develop standardization project jointly with ILO (See M. Helander's P & PR Committee Report). Referred to the Technical Standards Subcommittee for study and, if appropriate, to develop a detailed proposal for consideration by the federated societies, and by Council at its next meeting.
- R. Direct Science and Technology Committee to appoint an ad hoc committee to develop a list of Ergonomics Projects for WHO (See M. Helander's P & PR Committee Report). For 16; Against 0; Abstain 1. MOTION PASSED.
- S. Request Aging Subcommittee nominate experts to write a report on aging and work capacity for WHO (See M. Helander's P & PR Committee Report). Council modified this proposal to: "Request Aging Subcommittee to explore with WHO a workshop on aging with the results to be published in book form." (Note: Many members of Council expressed the view that the IEA is not empowered to make selective nominations of persons for projects such as this; hence the revised proposal.) For 14; Against 2; Abstain 1. MOTION PASSED.
- T. IEA to be a Cooperating Cosponsor of Interact 90, August 27-31, 1990 in Cambridge, GB. For 17; Against 0, Abstain 0. MOTION PASSED UNANIMOUSLY.
- U. IEA to Cosponsor the Xth UOEH International Symposium and First Japan China Conference on Occupational Ergonomics, July 10-13, 1990, University of Occupational and Environmental Health, Kitakyushu, Japan. For 17; Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.
- V. IEA to Cosponsor, including providing seed money, a World Congress on Ergonomics of Materials Handling: Towards the 21st Century (Note: a request for a specific amount of seed money will be made at the next meeting of Council). For 17; Against 0; Abstain 0. MOTION PASSED UNANIMOUSLY.

#### IV. IEA COUNCIL 30TH ANNIVERSARY DINNER

To honor 30th anniversary of the founding of the IEA, the Council hosted an anniversary dinner following its annual meeting on Sunday evening, 4 June 1989. Former IEA officers were invited to attend. Harry Davis, Immediate Past President of IEA was the dinner speaker. In addition to Harry, other past officers attending were Mr. & Mrs. Bonjer (he is a past President), Al Chapanis (past President) and guest; Karl U. Smith (past officer). Other guests included Ruud and Nancy Pikaar (Ruud was the Marketing Ergonomics Conference Chair) and Paul and Marianne Paymans (Paul is President of the Nederlandse Vereniging voor Ergonomie). The past officers of the IEA in attendance each gave a short presentation on various parts of the history



of the IEA, with a particularly interesting account of an early meeting in the University of Leiden near where we were having dinner that planted the seeds for the beginning of the IEA two years later; Professors Bonjer and Smith both were at that meeting, so gave us a first hand account of it.



Meeting of the council, June 4-5, 1989.

Report of the President

The reorganisation of the association, which was begun 4 years ago has been completed. Adjustments will be made, which allow the Executive Committee to work more effectively and in almost real time.

Long term planning of the functions and key issues of the Association has been initiated. The main emphasis is on, how the Association can serve the member societies more effectively.

Following persons have been invited to chair the IEA Committees and, consequently, form the IEA Executive Committee:

Policy and Planning
Science and Technology
Education and Training
Promotion and Public Relation
Publication

Ian Noy, Canada Ogden J. Brown, USA Pieter Rookmaaker, Holland Martin Helander, USA To be announced later

The operation to engage the World Bank to adopt ergonomics in their projects has been re-evaluated. According to the new strategy, the WB will be approached from national representatives' level. This will be an important mission for the Council members.

Relations with the United Nations Organisations have developed favorably. Collaboration with the World Health Organization will be enhanced. New intiatives towards the International Labor Organization are planned.

Communications between the Association, committees and the member societies are a problem. The Executive Committee seeks continously new or better ways to establish a working system, which would speed up the interaction between the Societies and the IEA. The problem is more organizational than technical.

Membership status will be reported by the Secretary General.

Ilkka Kuorinka





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Committees

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  Road Safety/Transport Canada
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  13th Floor, Area B
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  tel. +1 613 998 2268
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- Education and Training Pieter Rookmaaker Central Advisory Group on Ergonomics Pers. Affairs Department Netherland Railways 3511 EP Utrecht, Holland tel. +31 30 354 455 tlx. 47257 NSUT NL
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#### IEA ANNUAL COUNCIL MEETING

June 3-4, 1989

Noordwijk, Holland

#### SECRETARY-GENERAL'S REPORT

Aside from handling the day-to-day administrative correspondence and related duties, the Office of the Secretary-General has been involved in the following projects:

- (1) Organizing and establishing an updated filing system for the Office of the Secretary-General.
- (2) Establishing a computerized data base for all IEA basic documents. This project will enable the Office to readily update changes as required to any of the basic documents.
- (3) Creating an electronic data base for all IEA address lists, including the IEA Officers, Members of Council, the Executive Committee, the Secretaries of IEA Federated Societies, Federated Society Newsletter Editors, and Information Only lists. In addition, as part of this project, we have requested an updated list of the officers from each of the federated societies. We have also requested an updated copy of the bylaws for each of the societies. Attached is a listing of each society indicating what information has been received. Council members are specifically requested to ask the Secretary or other appropriate officer of their respective federated society to provide the requested information as soon as you return to your country. Updated hard copies of these listings are included in your Council Handbook which was mailed to you in April.
- (4) Ordering and preparing a 3-ring binder for each Council member. As already noted, this project was completed and the binders were mailed to each member in April.

\*Belglum Ergonomics Society\*Brazilian Ergonomics Association\*Ergonomics Society\*Gesellschaft für Arbeitswissenschaft\*Human Factors Association of Canada/Association canadienne d'ergonomie\*Human Ergology Society (Japan)\*Human Factors Society\*Hungarian Society for Organisation & Management Science\*Japan Ergonomics Research Society\*Nederlandse Vereniging Voor Ergonomie\*Nordic Ergonomic Society\*Polish Ergonomics Society\*Societa Italiana di Ergonomia\*Societé d'Ergonomie de Langue Francaise\*The Ergonomics Society of Australia\*Southeast Asia Ergonomics Society\*Yugostav Ergonomics Society\*Osterreichische Arbeitsgemeinschaft für Ergonomie



- (5) Updating various international professional society listings and listings of international meetings. In response to requests, approximately a dozen such listings were updated over the past six months.
- (6) Planning for IEA 1991 Triennial Congress (Paris, France). The Secretary-General has been working closely with Prof. Alain Wisner, Organizing Committee Chair, on the planning for the next IEA Congress. Prof. Wisner is to be commended on his strong, early start in this planning process, and for his excellent organization.

Other actions of the Secretary-General's Office are reflected in the Agenda for the Council meeting (e.g., Korean Ergonomics Society request for membership, Israeli Ergonomics Society request for reinstatement).

Respectfully submitted,

Hal W. Hendrick, Ph.D. Secretary-General

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### D CONTRACTOR

#### STATUS OF FEDERATED SOCIETIES

SOCIETY NAME	BY-LAWS IN FILE Yes/No/English?	LAST UPDATE ON IEA REPS
Belgium Ergonomic Society	Yes - English	12/20/88
Brazilian Ergonomics Association	Yes - English	12/20/88
Gesellschaft Fur Arbeitswissenschaft	No	5/18/88
Association Canadienne d'Ergonomie	No Canada	1/13/89
Human Ergology Society, Japan	Yes	12/20/88
Human Factors Society, USA	No	1/4/88
Hungarian Society for Organization & Management Science	No	None
Japan Ergonomics Research Society	No	1/5/89
Nederlandse Verenining Voor Ergonomie	No	None
Nordic Ergonomic Society	No	3/29/89
Polish Ergonomics Society	No	None
Societa Italiana di Ergonomia	No	None
Societe d'Ergonomie de Française	Yes, not in English	12/20/88
トルッりいと Ergonomics Society of Australia	No	1/10/89
Southeast Asia Ergonomics Society	Yes - English	1/12/89
Yugoslav Ergonomics Society	No	None
Osterreichische Arbeitsgemeinschaft fur Ergonomie	Yes - English	No date

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#### REPORT BY THE HONORARY TREASURER - APRIL 1989

#### Introduction

This has been a year with much less happening, and so my report can be quite short.

#### Membership Fee Position

The current position is given in Annex 1. It should be noted that because of inevitable delays in clearing the previous year I leave the process of reminding Society treasurers until June/July, which is why I do not show any 1989 dues.

The comments I would offer are as follows. I am confident that the arrears from the Nordic, Hungarian and Polish Societies will be paid fairly soon. The Ergonomics Society of Australia and New Zealand (ESANZ) has now divided in that the ESA remains a member of the IEA and there is a new Society being formed in New Zealand which, we understand, is likely to apply for IEA membership before long; no doubt the very satisfactory clearing of all the 10th Congress finances has delayed the ESA Treasurer from attending to the IEA dues, but I am sure this matter will be dealt with quite soon. However, with regard to the Brazilian Society, I am very doubtful that any payment can come for some time; I have received a letter from the former treasurer saying that the very high inflation (up to 100% per month) makes any payment impossible.

#### Financial Statement - Income and Expenditure

This statement to 30 April is given in Annex 2 for US \$\pi\$ and in Annex 3 for Swiss Francs. The contents need little comment, except to emphasise the excellent financial conclusion from the 10th Congress. The seed money was repaid very promptly; eventually the surplus was such that the Congress Committee has not merely paid the full capitation fee on a generous basis but has paid some of the IEA Council Meeting expenses and, most significantly, has donated 10,000 Swiss Francs to establish a special sponsorship fund.

Because the bald record of payments in and out up to a particular date does not give a clear or full view of the general situation, I present an estimated position next.

#### Financial Statement - Estimated Position mid 1989

This statement is given in Annex 4. In the estimated receipts I have included those membership fees which I confidently expect to be paid. Regarding expenditure, I have of course based this on the budget approved by Council and the Executive committee, with some allowance for inflation and travel cost increases.

Therefore, my best estimate at present is a modest running surplus of about US\$ 5,000 to 8,000 depending upon Committee and Officers' costs. I am pleased to be able to report that the US\$ 30,000, proposed last year to be regarded as a capital reserve, has been satisfactorily retained and can reasonably be regarded as such.

#### Conclusion

Thus I suggest to Council that progress is satisfactory and no major changes are needed for the next year.

Professor B. Shackel (Hon Treasurer)



MEMBERSHIP DUES IEA	(at 30	April 1989	))		Annex 1
	1987 - Dues			1988 Dues Arrears	
Ergonomics Society	F2433		629	F2491	658
Ergonomics Society of Australia and NZ	F2215		520		
Gesellschaft fur Arbeitswissenschaft	F2275		550	F2241	533
Human Factors Society USA	\$4250		2716	\$4427	2830
Human Factors Assoc of Canada	\$ 803		255	\$ 735	245
Hungarian Society for Org. & Man. Sci.	F 455		70		
Japan Ergonomics Research Society	F1287		278	F1287	278
Nederlandse Vereniging voor Erg.	F2353		589	F2395	610
Nordic Ergonomic Society					
Osterreichische Arbeitsg.s. fur Erg.	F 313		34	F 331	39
Polish Ergonomics Society	F 975		200		
Societe d'Ergonomie de Langue Francaise	F1459		321	F1495	330
Societa Italiana di Ergonomia	F 855*		170	F 855*	170
Yugoslav Ergonomics Societ	F 375	·	50	F 375	50
Affiliated Societies					
Brazilian Ergonomics Society				,	
Human Ergology Res. Assoc., Japan	F1020*		230	F1020*	230
SF 14140 US + 1875*	\$ 5053	هرد وبرد شد <sub>د</sub> وشد همه همو ودن ودن شد انت		SF 10615 US \$ 5162 + 1875*	5973

<sup>\*</sup> Credited in Bank Account after 30.4.89

Financial Statement - Income & Expenditure US	<u>3 \$</u> 1988/89	Annex 2
International Ergonomics Association per 30 April 1980	<u>U.S. \$</u>	
Balance brought forward - from Statement Augus	<u>23,056,28</u>	
RECEIPTS		
1. Repayment of Seed Money/Conference Surplus	Share	
1986 ODAM Conference — sales of Proceedings 1988 10th IEA Congress — seed (8000)	338.55 8,000.00 8,338.55	8,338.55
2. Membership Fees U.S. \$		
1987&8 - USA HFS 1986,7&8 - Canada	8,676.81 <u>2,165.24</u> 10,842.05	10,842.05
TOTAL RECEIPTS		19,180.60
EXPENDITURES		
1. Seed Money for Future Conferences		
1989 Hawaii (Manufacturing Technology) 1991 11th IEA Congress, Paris France	2,000.00 3,000.80 5,000.00	5,000.00
2. Printing and Mailing Costs		
IEA Newsletter Editor postage IEA Brochure & Publicity Stationery Secretary & Treasurer postage/phone Intern1. Directory of Educational Programs	13.39 242.10 724.35 625.00 1.366.70 2,971.54	2,971.54
2 Tanual Evanças	# \$ / C X + W T	2,771134
3. Travel Expenses	E 554 JE	E 004 4E
Officers & Executive Committee	5,804.15	5,804.15
4. Bank Charges		
On expenses, etc. transfers	249.85	249.85
TOTAL EXPENDITURES		14,025.54
BALANCE		28,211.34

<u>Reconciliation</u>
Balance at Bank 30.4.89 = U.S. \$ <u>28,211.34</u>

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<u>Financial Statement</u> - Income & Expenditure	<u>S.Fr.</u> 1988/89	Annex 3
International Ergonomics Association per 30 A	pril 1989	<u>\$₩. Fr.</u>
Balance brought forward - from Statement Augu	st 1988	22,156.55
RECEIPTS		
1. Repayment of Seed Money/Conference Surplu	s Share	
1988 10th IEA Congress - Capitation Fee		11,525.00
Ergonomics Society of Australia - Special pay to establish ESA Sponsoring Fund for Conferen the S.E. Asia and Pacific Region - Credited in Bank A/C after 30.4.89	ces etc. in	
2. Membership Fees Sw. Fr.		
1985/6/7/8 - Yugoslavia 1987/8 - UK - Netherlands - S.E.L.F. - Japan Erg. Soc. 1988 - Germany - Austria - S.E. Asia Soc.	1,319.71 4,924.00 4,737.17 2,954.00 2,574.00 2,241.00 331.00	
1987/8 - Italy - paid (2038.76) * - Japan Hum. Ergol paid (2040) *	543.00 19,623.88	
Bank Interest	25.70	
TOTAL RECEIPTS	19,649.58	31,174.58
EXPENDITURES		
1. Seed Money for Future Conferences	9.96	8.90
2. Printing and Mailing Costs Stationery	85.99	85.99
3. Travel Expenses Officers & Executive Committee	14,558.80	14,558.80
4. Meeting & Secretarial Expenses Sydney Council	895.09	895.09
5. Bank Charges		
On transfers	287.42	287.42
TOTAL EXPENDITURES		15,827.30
BALANCE		37,503.83
At a conversion rate of 1.65 S.Fr. to \$1 = US	\$ 22,729.59	

Reconciliation



Financial Statement - Estimated Position mid 1989 Annex 4 International Ergonomics Association per 30 April 1989 <u>U.S. \$</u> 28,211.34 Balance brought forward - from Annex 2 - from Annex 3 (by approx conversion) 22,729.59 Total balance in hand - approximate (by Sw Fr to \$) 50,940.93 EXPECTED RECEIPTS 1. Repayment of Seed Money/Conference Surplus 0.00 0.00 2. Membership Fees 1987 - membership fees due - approx. 2,250 1988 - membership fees due - approx. 5,650 1989 - membership fees due - approx. 18,000 Sw Fr 25,900 approx. 15,697.00 Total Expected Receipts 15,497.00 EXPECTED EXPENDITURES As in Jan. 1989 Budget Revised after Executive Committee (attached)

Seed Maney for Conferences	5,000
Printing and mailing	1,200
Officers travel costs	7,200
Working Committees costs	8,200
IEA Awards	1,700
Support for special schemes	6,500
Intern1. Directory Educatn1. Programs	1,400
Secretary General & Treasurer -	
secretary and misc. office costs	3,500
Bank charges	<u>500</u>
	35,200
Total expected expenditures	35,200

ESTIMATED SURPLUS

31,437

#### BUDGET PLAN - JANUARY 1989

#### Estimated Budget for the Year (July-June) 1988-89

This budget plan has been prepared to include the expenditures authorised at the Meeting of the IEA Council in Sydney, Australia, and at the Executive Committee in Denver, Colorado, in January 1989. It also includes some adjustments to allow for inflation and increases in travel costs. As always, the variation in IEA expenditure is considerable, and budgetting is not easy; for example, several types of expenditure may only occur once in three years (eg. conference seed money) and the subsequent repayment with any surplus as income occurs much later. Again, the size of travel costs is very difficult to predict. Less frequent meetings of the Council or Executive Committee, or some officers able to cover costs from other budgets, would improve the position; more frequent meetings than one per annum of each, would worsen it. However, I believe the following figures represent a reasonable middle position for the IEA annual budget.

Estimated Expenditure	<u>U.S. \$</u>
Seed money for conferences - Printing and mailing	5,000.00
Newsletter	300.00
Officers	200.00
IEA brochure	700.00
Officers Travel Costs to Council and Executive	
Committee - 1 of each per annum (allow 6 x 1200) Working Committee costs	7,200.00
Science & Technology	2,400.00
Education	1,600.00
Publications	1,000.00
Policy & Planning	2,200.00
Public Relations & Promotions	1,000.00
IEA Awards	200.00
- 1700 v iv new scheme approved	1,500.00
Special schemes - Slide-Tape presentation	1,000.00
T " VIT extra needed)	5,000.00
" - Guidelines for Congresses -	#86 pe
Metz & Wisner travel expenses International Directory of Educational Programs	500.08
Miscellaneous office costs	1,400.00
Secretarial General - secretary & office costs	500.00
Treasurer - secretary & office costs	2,000.00
Bank charges	1,000.08
wann cha ges	500.00 35,200.00
*Estimated SURPLUS at 30.6.89	
	37,497,00* 72,697.00
Estimated Income (at current subscription basis)	
Balance in hand at 30 April 1989	50,940.00
Repayments of seed money	0.90
Conference surpluses (ESA sponsorship fund)	<b>გ,მ</b> გმ.00
Membership dues from Affiliated Societies	<u> 15,697.00</u>
	72,697.00
*Estimated Surplus - current accounts - 7,497.00	

- capital reserve

- <u>30,000.00</u> 37,497.00



#### Old Business (Action items from Sydney)



- 1. Appointment of individual members to IEA Standing Committees
  Recommendation: no change from present Rules
- 2. Policy on Support of Conferences in Ergonomics Revisions pertaining to the IEA Congress
  - a) bid solicitation
  - b) more detailed guidelines for program organization
  - c) Scince and Technology Committee involvement in technical program
  - d) Outline of IEA requirements, specifically concerning
    - i) logistics and arrangements
    - ii) public relations
  - e) suggested time line

#### Current Business

- 1. Revisions to the IEA Rules, specifically with respect to
  - a) Fees Formula
  - b) Executive and Executive Committee organization
  - c) Past President inclusion on Executive Committee
  - d) Membership categories
  - e) Election procedures
  - f) Representation on IEA Council
  - g) Qualifications for membership
  - h) Other housekeeping



- 2. Revisions to Policy on Committees, specifically
  - a) definition of categories (standing and ad hoc)
  - b) other details (eg., reporting)
- 3. Prepared document outlining the role and responsibilities of IEA Council representatives

  Recommendation: once approved, this should be sent to the president, secretary and Council representative(s) of each member society
- 4. Revised policy and procedures for the Policy and Planning

  Committee to establish a new role and acknowledge the

  responsibility of the Executive Committee (provisional upon acceptance of changes to the Rules)

#### New Business

- 1. Presently considering mechanisms for developing long-term objectives and strategic agenda for the IEA. For example,
  - a) establish ad hoc committee to plan
  - b) organize special workshop, panels, papers, etc.

Respectfully submitted,

Ian Noy Chairman



Council 1989

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Report of the Education & Training Committee (D.P. Rookmaaker)

1. In my letter dated November 16th 1988 to the Federated Societies I informed them about the proposed structure of the Education and Training Committee with 3 Subcommittees according to the IEA-rules (annexe 1).

The proposed Subcommittees are named as follows:

<u>Subcommittee 1.</u> Accreditation and Certification (formerly: Inventory)

<u>Subcommittee 2.</u> Methods of Teaching Ergonomics (formerly: Teaching Methods)

<u>Subcommittee 3.</u> Education Ergonomics in Developing Countries (formerly: Teaching ergonomics for developing countries)

2. The reaction were satisfying. Up to the 15th of May I received about 20 nominations from about 10 different countries.

The distribution was as follows:

#### Subcommittee I:

Total	nominations:	9	;	from	France	lx
					Canada	2x
					Yugoslavia	lx
					New Zealand	1x
					Poland	1x
					Finland	1x
					USA	1x
					Australia	1x

Belgium Ergonomics Society•Brazilian Ergonomics Association•Ergonomics Society•Gesellschaft für Arbeitswissenschaft•Human Factors Association of Canada/Association canadienne d'ergonomie•Human Ergology Society (Japan)•Human Factors Society•Hungarian Society for Organisation & Management Science•Japan Ergonomics Research Society•Nederlandse Vereniging Voor Ergonomie•Nordic Ergonomic Society•Polish Ergonomics Society•Societa Italiana di Ergonomia•Société d'Ergonomie de Langue Francaise•The Ergonomics Society of Australia•Southeast Asia Ergonomics Society•Yugoslav Ergonomics Society•Osterreichische Arbeitsgemeinschaft für Ergonomie





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I proposed as acting chairperson for Subcommittee 1 Dr. Robert Webb (USA). His reaction was positive.

Subcommittee 2

Total nominations: 6; from France lx
USA 2x
Yugoslavia lx
Poland lx
Finland lx

I proposed as acting chairperson for Subcommittee 2

Dr. Jacques Christol (France). I have not get recived an answer.

#### Subcommittee 3

Total nominations: 5 ; from Sweden lx
Yugoslavia lx
Poland lx
Netherlands lx
India lx
(under conditions)

I proposed as acting chairperson for Subcommittee 3 prof. H. Shahnavaz (Sweden). His reaction was positive.

- 3. In spite of those reactions we still lack nominations from some important countries/societies e.g.
  - UK/Erg Society
  - FRG/Arbeitswissenschaft
  - Japan/Jap. Ergon Research Soc.

I strongly urge those Federated Societies who would still like to nominate for some Subcommittees to do so as soon as possible!

In due course I shall be having more detailed contact with the chairpersons in order to start working within the Subcommittee - framework.

4. The most important objectives for the Education and Training Subcommittees during the next three years

\*Belgium Ergonomics Society\*Brazilian Ergonomics Association\*Ergonomics Society\*Gesellschaft für Arbeitswissenschaft\*Human Factors Association of Canada/Association canadienne d'ergonomie\*Human Ergology Society (Japan)\*Human Factors Society\*Hungarian Society for Organisation & Management Science\*Japan Ergonomics Research Society\*Nederlandse Vereniging Voor Ergonomie\*Nordic Ergonomic Society\*Polish Ergonomics Society\*Societa Italiana di Ergonomia\*Société d'Ergonomie de Langue Francaise\*The Ergonomics Society of Australia\*Southeast Asia Ergonomics Society\*Yugoslav Ergonomics Society\*Osterreichische Arbeitsgemeinschaft für Ergonomie



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#### Subcommittee 1

- 1.1 to make an inventory of existing policies and procedures regarding certification and accreditation in the different countries and/or geographical areas; what status do they have?
- 1.2 to discuss and formulate the basic elements of courses in ergonomics/human factors;
- 1.3 to continue and try to finalize activities regarding harmonizing education of ergonomics on post-graduate level within the european hemisphere;

#### Subcommittee 2

- 2.1 to make a survey of existing methods of training and educating ergonomics;
- 2.2 idem of successfull aids for teaching ergonomics;
- 2.3 In line with the survey-activities the subcommittee will pay attention to the development of new training methods and missing links in aids.
- 2.4 Beside that, one can consider the development and promotion of an IEA-course book in ergonomics.

#### Subcommittee 3

- 3.1 to make an inventory what is going on in the field of education and training ergonomics in the different developing countries or areas;
- 3.2 where are the priorities?
- 3.3 to develop specific educational material according to the priorities.

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Utrecht, the 16th November 1988

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To the IEA-Council members c.o. secretaries of the federated societies.

After the council-meeting in Sydney., I like to complete the organizational frame-work of the Education & Training Committee/IEA.

Just like some other Committees (e.g. the Science

and Technology Committee) the optimal and most practicable structure is the one with one E & Tr Committee and some E & Tr subcommittees.

The members of the <u>Committee</u> are the chair-person of the Committee (appointed by the IEA President) and the chair-persons of the different subcommittees (appointed by the E & Tr committee-chair).

The members of the different <u>Subcommittees</u> are experts in that particular field, nominated by the Federated Societies or invited by E & Tr Committee. Mostly the work within the different subcommittees will be realized by written communication. A real "physical" meeting is recommended but mostly for reasons of practicability rather difficult!

As mentioned during the Council meeting in Sydney we will start with three subcommittees for three items as follows:

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#### a. <u>Subcommittee "Inventory"</u>

The first task of this subcommittee is to make an inventory of existing policies and procedures regarding the certification and accreditation in education and training of ergonomics/human factors. That inventory has to be worldwide with special reference to the different Federated Societies. The results of that inventory has to be published by IEA. Another task for this subcommittee is to develop professional standards for different levels of education and training in ergonomics. What should be included and what not?

#### b. Subcommittee "Teaching Methods"

The task and scope of this subcommittee is primarily to catalogue existing teaching material for ergonomics. Secondarily, this subcommittee is asked to stimulate the development of new teaching methods for ergonomics. In particular we have in mind the use of (new) technical resources, integrated into educational and training programmes for ergonomics. The outcome of this has to be gathered in order to provide people and/or organisations with programmes in terms of efficiency and quality.

### c. <u>Subcommittee "Teaching ergonomics for developing</u> countries"

The task of this subcommittee is to deal with all activities related to teaching ergonomics for developing countries or areas. Tremendous efforts are already made in education and training in ergonomics for developing countries. The subcommittee has to prepare a survey of those efforts in quantitave and qualitative terms. That

survey will make clear in what part of teaching ergonomics IEA should stimulate further steps to complete the teaching map or to fill gaps. The subcommittee should then stimulate that activity. Another task for the subcommittee is to be a reference point for all questions related to training and education in ergonomics for developing countries.

I request and urge you strongly to provide me, as acting chairman of the Education and Training Committee, with names of people who are maybe interested in participating in one or more of the mentioned subcommittees. Members of those subcommittees are expected to have knowledge, experience and/or interest, related to the particular subcommittee.

After receiving your reaction (please not later than 15-02-1989). I will send a membership-list for the 3 subcommittees with my proposal for a chairman/convenor.

Please react soon:

If there are still some questions, don't hesitate to ask me!

With best regards,

D.P. Rookmaaker

Chairman Education & Training Committee

c.c. Executive Committee



#### **IEA SCIENCE & TECHNOLOGY COMMITTEE**

CHAIR:

Ogden Brown, Jr.

( h.

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# INTERNATIONAL ERGONOMICS ASSOCIATION

PROMOTIONS AND PUBLIC RELATIONS COMMITTEE Report to IEA Council, June 3-4,1989

#### 1. Updating of address lists.

The address list. for Ergonomics International were slightly modified and some new names were added. The results were submitted to Stephan Konz. It would be helpful if federated societies would keep feeding names of individuals and institutions to this committee. We will then forward the names to the news letter editor

2. Conference on Human Factors in Design for Manufacturability and Process Planning.

The conference is proposed to be held on Hawaii, August 9-11, 1990. Thereby it can be scheduled immediately before The Second International Conference on "Human Aspects of Advanced Manufactuting and Hybrid Automation", which will be held August 12-16. If council prefers the option would be to hold the conference in conjunction with the Paris Conference in 1991. A conference brochure for the Hawaii option is enclosed and the conference budget should be approved.

3. Journal Discount for Federated Societies and Members.
Pieter Rookmaker has negotiated a discount for "International Journal of Industrial Ergonomics". Negotiations are underway with a couple of other journals as well. I propose that all journals be announed together to the federated societies, which may then advertise them in their news letters.

Belgium Ergonomics Society Brazilian Ergonomics Association Ergonomics Society Gesellschaft für Arbeitswissenschaft Human Factors Association of Canada/Association canadienne d'ergonomie Human Ergology Society (Japan) Human Factors Society Hungarian Society for Organisation & Management Science Japan Ergonomics Research Society Nederlandse Vereniging Voor Ergonomie Nordic Ergonomic Society Polish Ergonomics Society Societa Italiana di Ergonomia Societé d'Ergonomie de Langue Francaise The Ergonomics Society of Australia Southeast Asia Ergonomics Society Yugoslav Ergonomics Society Osterreichische Arbeitsgemeinschaft für Ergonomie

#### 4. International Anthropometric Databank.

This project was proposed in July 1988 to ILO and WHO, and both organizations displayed a fair amount of enthusiasm. ILO announced that they were willing to support this project. Mysteriously enough ILO was contacted about 6 months ago by the Bundesanstalt fuer Arbeitsschutz (sp?) in West Germany, and is now jointly with them publishing an Anthropometric Databank. The project is actually finished and the report is ready to be released.

#### 5. Visit to ILO.

ILO was visited in Geneva, May 31, 1989 to explore possibilities for collaboration. I talked to Mr Georg Klisch (Director), Dr Jukka Takala, Head of International Occupational Safety and Health Information Center, and to Dr.K. Kogi. ILO takes a very applied approach to ergonomics. Mr. Klisch, who previoulsy worked for the International Standards Organization (ISO) would like to support IEA for developing ergonomics standards, which can be submitted to ISO. He believes that standardization is the most convincing way of implementing ergonomics. He expressed that, in contrast, collaboration with government bodies is less successful, maybe becausebusiness interest (manufacturers) is not involved, wheras they are in standards development.

Mr Takala presented the CIS information retrieval system. He urged members of IEA to subscribe. I will take the opportunity to circulate some information to coucil members on his behalf. It is possible for individuals to send information to be incorporated in the CIS database. The database is available on CD ROMS. Maybe IEA would be interested in subscribing and offer members access to it.

Dr. Kogi handed over a copy of a report entitled:" Higher productivity and a better place to work". This is a practical approach to implementing ergonomics in the industrial environment, with particular reference to developing countries.

#### 6. Visit to WHO.

WH was visited in Geneva, May 31. I talked to Dr. Thomas Ng, who is the Acting Chief of Program 9.4 - Workers Health. A copy of their program plans is enclosed with this report. Dr. Ng has replaced Dr. ElBatavi. He is anxious to incorporate ergonomics in program

the new Director General of WHO, who is from Japan. However, future funding has not yet been decided.

Compared to ILO, the interest of WHO seems a bit less applied and more scientific. Dr. Ng proposed several cooperative projects for IEA and WHO.

- a. Invite Dr. Ng to IEA Coucil Meetings as an observer.
- b. It would be helpful if IEA could propose a list of ergonomics projects which have relevance for WHO (see attached program). WHO can then bring them up as action items in future planning programs. (There is usually a 3 year delay from proposal to funding).
- c. IEA to nominate an expert who can write a report on Aging and w rk capacity, see page 14. I suggest we nominate an individual who is active in our subcommittee for ageing.
- d. WHO needs to replace Singleton's text with something that is more industrially oriented.
- e. Nominate WHO Collaborating Centers in the area of Ergonomics.

## 7. Recruit sustaining members of IEA

These are organizations that have an interest in the association and support it by the payment of an annual subscription fee. I suggest that a promotional package be developed by the Promotion an and Public Relations Committee. The package will then be sent to council members with the task to approach at least one industry.

#### 8. Action Items

- a. Final approval of conference budget for Hawaii conference
- b. The technical standards sub committee to develop standardization project jointly with ILO
- c. Develop list of ergonomics projects for WHO
- d. Nominate expert to write report on Aging and work capacity for WHO.
- e. Prepare a list of WHO collaborating centers in ergonomics
- f. Prepare aproposal for a WHO text on Ergonomics.
- g. Invite representatives of ILO and WHO to Council meetings as observers.

Martin Helander

# PROPOSAL TO CREATE AN INTERNATIONAL DATABANK FOR ANTHROPOMETRIC MEASUREMENTS

Submitted by the International Ergonomics Association

Contact: Professor Martin Helander

Department of Industarial Engineering

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The International Ergonomics Association is an association of ergonomics and human factrors societies around the world. Developing out of the Ergonomics Research Society, which was founded in 1949, the International Organization has continued to expand and has now a membership of some twenty federated ergonomics societies in both hemispheres, a central secretariat, and an executive council of international representation. It maintains liason with the World Health Organization, the International Labor Office, the International Organization for Standards, and the European Economic Community. Today the IEA totals a membership of about 10,000 individuals, representing some 35 countries. It is organized according to Swiss civil code with headquarters in Zurich.

Ergonomics is concerned with optimizing the efficiency, health, safety, and comfort of people or interactive components of human-machine-environment systems. Known as human factors engineering in some parts of the world, the field is function-oriented, rather than discipline-oriented, and embraces a variety of professionals from different fields.

# Objectives

The objectives of this project is to create an international data bank of anthropometric measures. Anthropometric measures are used in ergonomics for dsign of workplaces, tools, and machines. Typically a design is made flexible, so that it can fit a large range of users from the 5th percentile small user to the 95th percentile large user.

Although there are already existing anthropometric data banks such as the NASA Anthropometric Sourcebook, there is nothing easily available on a global basis. The NASA Soucebook deals primarily with military design problems and includes measures of various "military" populations from a variety of sources and countries. However, there is no civilian correspondence that can be used for design of workplaces, tools and machines. With this type of information, it would be possible to harmonize design to be appropriate for a variety of populations and users. As an exapmle manufacturers of equipment in developing countries have on occasion found it difficult to export their products because they do not fit users in other countries. Conversely, many users in developing countries, who may be smaller in body size, have complained about oversized equipment and use of excessive muscle strength.

This investigation has also a more basic objective, namely to inform individuals around the world about principles in anthropometric design, so that those measures can be effectively used in design of worplaces, and so forth.

The main objective is to bring together existing anthropometric data from different countries around the world. The collection and sorting of data is not a trivial problem. Through a literature search we aware of anthropometric data from about 95 countries. However, some of the data is quite old, some is not relevant for ergonomics design, and some may have been obtained with inappropriate methodology. This study should be sensitive to such limitations and primarlity present data that is current, relevant and accurate.

In addition to the information collected previously, it is necessary to renew contacts with individuals around the world. A plan for the study is given in Figure 1 below.

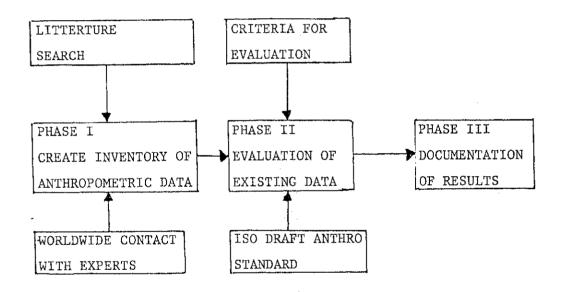


Figure 1. Plan for data collection, evaluation and documentation.

As given in Figure 1, there are three phases of the study:

Phase I: Create Inventory of Anthropometric Databases

PhaseII: Evaluation of Data Bases

Phase III: Documentation of Results.

The difficulties in creating a good data base will be documented in Phase III. We will therefore comment on the proposed contents of the final report. We propose that there be three main sections of the final report: Definition of anthropometric measures and presentation of data tables, Usage of anthropometric data in design, and Methods for taking anthropometric data including determination of sample sizes.

Delinition of anticohometric measures and prescuration of area capter

It is proposed that the measures be taken to conform with the ISO Draft International Standard: "Basic list of Anthropometric Measures", published by ISO/TC 159/SC3. This standard defines some 40 different measures, which are important to ergonomics design.

The anthropometric data could be summarized in table format. Each measure should include but not necessarily be limited to the following parameters: Description of measures, country, population, population size, age of population, year study was performed, average and standard deviation values, and a listing of 5th, 10th, 90th, and 95th percentile, and sex. An example is given in Table 1.

Table 1. Example of organization of anthropometric data. Sitting elbow height, male.

	کے	
ountra	Vear	Population

Country,	Year,	Population, Age,	Average,	S.D.	Perce	ntiles		
			mm	mm	5th	10th	90th	95th
Angola	1972	400 school 7-9	180	15	165	170	190	195
Austria	1965	562 workers 21- steelplant 45	270	20	220	225	300	305
Australi	a 1964	· · · · · · · · · · · · · · · · · · ·	265	18	220	225	290	295
Etc.								

# Usage of anthropometric data in design.

This section of the report explains the relevance of different measures. For example, popliteal height is used to determine seat height, sitting eye height is a good upper limit for location of visual displays, Knuckle height is marker that can be used for locating items in materials handling, and so forth.

Following these practical examples of anthropometric design will be given. This may include a VDT workstaton, a standing workstation at a conveyor line, control and display locations on a NC machine, design of handtoolsm facemasks, and so forth. Some of these calculations are very



sophisticated, and it may therfore be instructive to give these examples.

#### Methods for obtaining anthropometric data.

This section will list the most common type of equipment used for anthropometric study. Reference will be made to the ISO/DIS "Basic List of Anthropometric measures".

One major problem is the calculation of appropriate sample size.

Anthropometric investigations often use sample sizes of several thousand indivuduals. There is no need for this. As long as a random selection of individuals can be obtained, sample sizes can for most practical purposes be reduced to about 50 individuals. The statistical procedures for calculating an appropriate sample size will be given in this section.

Finally there are methodological precautions with the sampling procedures. As an example there may be many different populations in a single country, such as different races or ethnic groups, or groups of workers occupied in a certain job position. The inividuals must be selected so that they are representative of the population studied.

In addition there are mechanical problems associated with the setup of instrumentation, and alternative methods can sometimes be used for generating data. These and other methodological probelems will be discussed in the final section of the Anthropometric Data Handbook.

#### Time plan

It is estimated that this study will require about one man year of undisturbed effort plus secretarial support, see Figure 2.

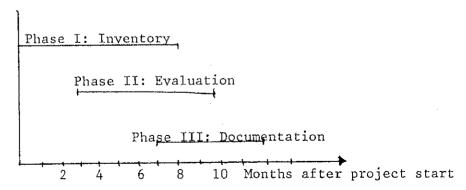


Figure 2. Schedule for project.

It may be appropriate to perform this work at the Geneva office, where there are plenty of resourses for communication, translation and dissemination of results.



Country	Comments
Australia	Only 20 year old data exists
Canada	Enthusiastic support with eleven reports enclosed
	describing anthropometric measurement procudures.
Czechoslovakia	Reference to five publications describing
	Czechoslovak populations
Denmark	Danish measures are not used, rather data from a
	two companies outside Denmark (in USA and Sweden)
Italy	Reference to two enclosed articles, one of which
	is an anthropometric study performed in 1932
Jordan	No data existing. Ergonomics is beeing developed
	at University of Jordan.
Poland	Reference to ten reports describing basic anthropo-
	metric measures of adults and children. The ISO draft
	standard is used as reference.
Singapore	Reference to two enclosed anthropometric surveys
	performed in 1985 and 1986.
Sri Lanka	Reference to six enclosed articles, some of which
	describe anthropometric measures.
Switzerland	Reference to textbook by Grandjean.
Thailand	Describing an anthropometric study of 2,000 Thai workers
	Study was performed for the purpose of workstation design
U.K∓	Listing of 146 references produces by the HSE database.
	Some listings contain U.K. studies.

# IEA Conference on Human Factors Implications of Design for Manufacturability and Process Planning

# Cost Summary

### INCOME

	Projected	<u>Actual</u>
REGISTRATION DINNER GRANTS - ILO TRAVEL GRANTS - OTHER IEA ADVANCE	20,500 2,400 8,000 5,000 6,000	
TOTAL INCOME	41,900	-
EXPENSE	<u>ES</u>	
PROGRAM & PUBLICITY PROCEEDINGS SPEAKER HONORARIUM SOCIAL EVENTS & DINNER REGISTRATION ADMINISTRATIVE IEA CAPITATION FEE (\$20) ILO TRAVEL IEA ADVANCE	4,000 1,500 6,000 5,200 1,600 3,300 2,000 8,000 6,000	
SUB-TOTAL	37,600	
CONTINGENCY (7% OF SUB-TOTAL)	2,400	<u></u>
TOTAL EXPENSES	40,000	
SURPLUS	1,900	



# INCOME DETAIL

	Number	x Price	<u>Budget</u> <u>Total</u>	<u>Actual</u> Total
REGISTRATION LATE REGISTRATION FEES	100 10	200 50	20,000 500	
REGISTRATION TOTAL			20,500	
DINNER	60	40	2,400	<del></del>
GRANTS - ILO TRAVEL GRANTS - OTHER	4 1	2,000 5,000	8,000 5,000	
IEA ADVANCE	1	6,000	6,000	
TOTAL INCOME			41,900	

# EXPENSE DETAIL

			Projected	Actual
PROGRAM & PUBLICITY				
Call for Papers Mail Lists/Lab Brochure Postage	els		300 1,000 400	
Publicity Newsletter/Bul Telephone Final Program	letin Ad:	3	1,500 400	
Layout/Print/F	old		400	
PROGRAM & PUBLICITY TOTA	L		4,000	
PROCEEDINGS  Conference Document (300 pages of Edited Book to be p Taylor and Fra	abstract ublished		1,500 0	
PROCEEDINGS TOTAL		•	1,500	
SPEAKER FEES Speaker Honoraria	8	750	6,000	
SOCIAL EVENTS Reception Coffee Service Dinner	100 400 60	20 3 33	2,000 · 1,200 2,000	
SOCIAL EVENTS TOTAL			5,200	



REGISTRATION  Postage  Badges/Tickets  Posters/Signs  Office Equipment  Personnel	Rental	200 100 200 100 1,000	
REGISTRATION TOTAL		1,600	
ADMINISTRATIVE Postage Telephone Stationary Travel		500 500 300 2,000	
ADMINISTRATIVE TOTAL		3,300	
IEA CAPITATION FEE ILO TRAVEL IEA ADVANCE		2,000 8,000 6,000	
SUB-TOTAL EXPENSES		37,600	

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# 10th Congress International Ergonomics Association 1 – 5 August 1988 Sydney Australia

Secretariat IEA88, PO Box 380, Spit Junction NSW, Australia 2088
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#### REPORT OF THE ORGANISING COMMITTEE

#### TO THE IEA COUNCIL

#### MAY 1989

#### INTRODUCTION

This is the first draft of the final report on IEA88, the 10th Congress of the International Ergonomics Association which was held in Sydney, Australia during the week of 1-5 August, 1988.

It details important aspects of the planning, organisation, promotion and execution of the Congress which will serve as the official record and which should provide useful information for other organisers of IEA Congresses.

The report is made up of several parts, one each on the major areas of activity and which accompany this *Executive Summary* written by the Congress Chairman. Not all parts are available at the time of writing but will be forwarded in due course.

To gain a full understanding of the "organisation" of the Congress it should be read in conjunction with the 1986, 1987 and 1988 Reports to Council; the 1st Announcement, Call for Contributions & Expression of Interest, and Provisional Programme & Registration brochures; and the Final Programme.

The reports to Council show the development of the organisation with discussion of various issues and progress statements including difficulties and proposals. The various brochures show the reality of the organisation at the various stages.

#### THE VENUE

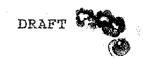
The venue chosen was the Sheraton-Wentworth hotel in downtown Sydney because it offered all the required attributes for an international conference: central location in a major city; suitable rooms for plenary, oral and poster presentations, business and committee meetings, and press interviews; suitable accommodation (top end of range) and close proximity to social and historical attractions. It proved to be a first class venue in all respects.

#### THE DATE

The date was chosen to be approximately the same time of the year as previous IEA Congresses, mainly to suit delegates from the northern hemisphere, especially academics, and to fit in with their possible holiday plans.







No one date will suit all people and it was felt the 1-5 August date and Sydney's mild winter would not deter many local (Australian) delegates. The week of Congress turned out to be a superb, sunny and atypically warm time.

#### AIM & OBJECTIVE

Before embarking on developing the scientific programme, the primary reason for the Congress, it was first necessary to identify the aims and objectives of the Congress and to consider ways in which it could be promoted.

The Aim was To raise and broaden the profile of ergonomics in Australia and to provide an international forum for the exchange of ideas, knowledge and discussion of state-of-the-art developments in ergonomics.

The Objective was To reach as a wide an audience as possible and to encourage them to 'buy' ergonomics in principle and practice. To this end it was necessary to develop a theme and target specific groups of people and market the Congress accordingly.

#### THE THEME

It had originally been decided that there should not be a specific Congress theme but a number of sub-themes to provide more specific foci, hopefully to make the Congress more obviously relevant for employees to be able to attend. However it was soon realised that to properly promote the Congress it was necessary to have a general theme which was consistent with the stated Aim and Objective of the Congress.

The theme chosen was *Designing a Better World*. It was felt that this theme would have broad appeal and allow for appropriate marketing strategies to be developed. It was found that the theme was necessary and appropriate, and did assist in the promotion of the Congress by providing a unifying perspective for both delegates and the media.

#### ATTENDANCE

The official attendance figures for the Congress were:

433	
28	
	461
20	
69	
	89
	50
	600
	28

In all 29 countries were represented. The full breakdown on attendance will be given in a subsequent document entitled Congress Management Report prepared by the Congress Manager.

#### FINANCE



The complete and detailed financial report is given in the accompanying document entitled Report by Congress Treasurer to I.E.A. Council dated 20th May, 1989.

The Congress was a financial success with a surplus of income over expenditure of some \$90,000 AUD. This excludes all advances to the Congress which were repaid in full, and the IEA capitation fee of 25 Swiss Francs per (full) delegate (461 of) which was an item of budgeted expenditure and paid accordingly.

The surplus does include 10,000 Swiss Francs which was subsequently given to the IEA to "establish a fund in the name of The Ergonomics Society of Australia for sponsorship of Ergonomics conferences in developing nations with particular emphasis on the South East Asia and South Pacific regions".

The reason for the large surplus is attributable to a number of factors: greater attendance than the budgeted break even figure of 400 full delegates (due to a large extent to the effective marketing of the Congress); greater proportion of "late" to "early" registrations to that on which the registration fee was based; and greater sponsorship than that on which the registration fee was based.

In hindsight, the deadline for early registration (5 months before) was too early but it was to provide the necessary cash flow and at the same time be a real incentive for delegates (to save \$65 or 12%). It did not prove to be an incentive. All IEA Council members were given the early fee (\$485 AUD) despite when they registered.

It must be remembered that the registration fee must be set 12 months ahead and be based on realistic (and conservative) projections of the attendance, sponsorship and budgeted expenditure for goods and services. As it was, it was not obvious till just before the Congress that the break even point had been reached.

#### SCIENTIFIC PROGRAMME

The scientific programme was as set out in the Final Programme and the Scientific Convener's report will be given in a subsequent document entitled Scientific Programme Report.

The week long programme was broken up into 5 distinct streams or sub-themes: Design, Manual Handling, Health & Safety, Human-Computer Interaction and, Organisational Design and Management. This was to focus on the technical interest groups (Scientific & Technical subcommittees) of the IEA and to facilitate promotion of the Congress. There was a total of 51 scientific sessions plus the General Assembly of the IEA, and the closing ceremony.

Every morning there was a plenary session (with keynote speaker) devoted to one of the five streams followed by five parallel sessions (3 oral, 1 poster and 1 workshop) before and after lunch. Sessions finished at 4:00 pm to allow for IEA, special interest and business meetings, and to allow delegates a break for social and tourist activities. This worked well and was



appreciated by both delegates and groups needing to meet.

The six invited keynote speakers (Corlett, Triggs, Chaffin, Kilbom, Shneiderman and Dray), selected to present the keynote address on the streams, were excellent and very well received.

The scientific programme went extremely well with virtually no hitches due to the excellent organisation by the Scientific Programme committee. The policy of the Congress was that no author could present unless they were registered. This was to ensure that there were no "holes" in the final programme because authors did not turn up. It did cause some caustic comment from two participants in a workshop, due mainly to a breakdown in communication. Overall it was a very successful policy.

The Scientific Programme committee also attempted to raise the status of posters by giving them equal status in the programme, having poster presenters prepare a formal paper for inclusion in the Proceedings, and there being no indication given in the Proceedings as to which papers were given orally or by poster.

The Final Programme, apart from listing the time and place of presentation, gave a page number reference to the associated paper in the Proceedings. It also gave a daily overview of Congress proceedings (incl tours and social events) with a session by session timetable. The pages for each day were colour coded to assist delegates (this colour coding was also used for the name badges of day registrants - indicating the day/s on which they could attend).

Overall organisation of the scientific programme went extremely well with much thought and preparation given to supplying information and guidance to presenters (e.g. instructions for preparing papers & posters, guidelines for preparing 35 mm slides & overhead transparencies, and forms requesting information on the speaker and their audio-visual needs).

The computerisation of presenters' details (paper title, time and place of presentation, registration etc) allowed for efficient and accurate communication with presenters. It appeared to work well.

#### SOCIAL PROGRAMME

The social programme went extremely well with a varied and apparently enjoyable set of activities. The social programme was considered an important and essential complement to the scientific programme, allowing for discussions to be extended into the less formal atmosphere of social events. The social programme convener's report will be given in a subsequent document entitled *Social Programme Report*.

#### PROMOTION AND PUBLICITY

The earliest promotion for IEA88 was conducted at the 9th IEA Congress in Bournemouth in 1985. A special Australian wine, beer and cheese tasting was arranged as a social function, hosted by the approximately 15 Australian delegates. It was a great success and started the "idea" of visiting Australia in 1988 for the then next IEA Congress. The 1st Announcement



glossy brochure was also distributed to all delegates via the Congress satchel.

10,000 Call for Contributions and Expression of Interest brochures were printed and distributed worldwide. Whenever possible "articles" on IEA88 were prepared and distributed to a worldwide network of journals, newsletters etc. This was not always easy or effective as some publications only come out every 3 or 6 months and there is always a long lead time necessary.

As stated earlier the various streams were chosen to better target potential delegates not necessarily in the main stream of ergonomics. The following target areas and groups were identified:

- \* Consumer Ergonomics architects, industrial designers, other designers, planners, consumer groups etc
- \* Manual Handling (Industrial Ergonomics) engineers, safety officers, risk managers, unions, occ. health & safety professionals, trainers, planners, behavioural scientists
- \* Safety and Health same as for manual handling
- \* Computers (and Communications) manufacturers, computer scientists, user groups, consultants, researchers etc
  - \* Organisational Design and Management system, personnel, human resource, operations, and EDP managers, etc

15,000 copies of the Provisional Programme & Registration brochure were printed and most were distributed, in the end in direct mailings to members of associated professional groups in Australia. They were also distributed at the 1987 International Congress on Occupational Health and Safety in Sydney (2000+people) as well as ergonomics conferences in the UK, USA and Yugoslavia - wherever contact could be established and agreement reached. The 1987 HFS conference in New York provided a major avenue to promote TEA88 to the large north American population.

A special *Ergonomics at Work* flyer (4 faces of an A3 folded to A4 sheet) was produced giving newspaper type "headlines" and a paragraph on selected papers accepted for publication in the Congress Proceedings. This proved to be a very valuable tool to draw media attention to the Congress.

As a result a special press briefing took place on the eve (Sunday) of the Congress. The keynote speakers and other notable speakers were interviewed by the press. One of the available meeting rooms was then used as the press room for the whole of the Congress - there was a considerable amount of press coverage, radio and television interviews as well as newspaper articles etc.

Other details of the "marketing" of IEA88 are given in the accompanying document *Publicity and Promotions*. The whole exercise proved invaluable and was the stimulus for a poster presentation on "Marketing Ergonomics in Australia: the IEA88 Story" prepared by the Promotion & Publicity convener.



#### **PROCEEDINGS**

After a great deal of negotiating and bargaining, a special sponsorship/publication deal was struck with Taylor & Francis. For \$12,000 AUD it was agreed that the congress organisers print sufficient copies of a 2-vol, soft back set of Proceedings for distribution to all IEA88 delegates (and members of the Ergonomics Society of Australia) in return for 300 copies in flat sheet form (to be hard back bound by T&F) for sole, after Congress sale. This worked extremely well and the "official" published Proceedings of IEA88 look excellent - perhaps the second volume in a Taylor & Francis series of IEA Congress Proceedings?

The editors wanted the Proceedings to look like a proper "book" and not parallel the Final Programme. This was to treat all papers alike, irrespective of whether they were presented orally or by poster. Also it was felt necessary to have both an author and subject indexes with page references. The contents was grouped into subject areas with individual entries having a cross reference to the scientific Session in which they were presented.

It was because of this cross referencing between the Final Programme and the Proceedings Contents that it was essential that the final timetabling of presentations was tight, and another reason for having presenters registered (by a given date) for the Congress. It made the job difficult (with a lot of mail, faxes and phone calls to determine if presenters were in fact going to register) but in the end it enabled a first class programme and publications.

#### CONGRESS MANAGEMENT

The Congress was expertly managed by the professional conference organiser AGENDA represented by the principal Elizabeth Rich and her assistant Tracey Bailey. Apart from the expert knowledge and experience on which they drew to run the Congress, it was their willingness and dedication to make it a success administratively, financially and socially which allowed the Congress organisers to concentrate on the scientific and policy making aspects of the Congress.

A previously engaged professional conference organiser proved a disaster. This just highlights the difficulty in choosing a good professional conference organiser, despite having put the job out to tender using a set of detailed job specifications.

The use of computerised data base and mail merging facilities proved an invaluable tool in keeping track of speakers' and delegates' records and providing efficient and accurate feedback.

Fuller details of managing the Congress, including registration, administration etc will be given in a subsequent document entitled Congress Management Report.

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### IEA 91 PARIS

#### PREPARATORY MEETING 1st 2nd JUNE 1989

#### LIST OF TOPICS

- I. Technology transfer: including T.T. within a country
- 2. Product ergonomics with special reference to ergonomics design
- 3. Work analysis methods including task and job analysis, workers' activity . . .
- 4. Work risks including: a) implications of technological change for health and safety
  - b) work and stress: behaviour in catastrophic events
- 5. Control of dynamic environment: a) process control, aircraft traffic control: e.g. system reliability
  - b) industrial ergonomics: robotics, automation ...
- 6. Organisational design and management
- 7. Advances in man-computer interaction: new technologies of interfacing, computer aided "tools", A.I., expert system . . .
- 8. Work and time: paced work, flexitime, retirement, shift-work
- 9. Demographic changes with special reference to aging and disabled
- 10. Work and home arrangements for handicapped persons
- 11. Ergonomics practice in relation with unions and management
- 12. International standardization in Ergonomics and international harmonisation of training, certification in Ergonomics



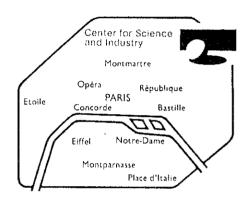
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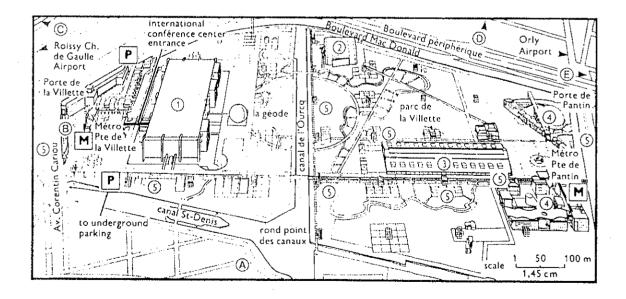
The International Conference Center is open year-round and is located in north eastern Paris at the Porte de la Villette exit from the city's beltway. This makes it an eay 20- to 30-minute ride by car and public transport from the city center and from Charles de Gaulle and Orly international airports.

Underground parking for 1,600 vehicles is available at the Center for Science and Industry with direct access from the conference center.

Conference organizers can reserve the parking spaces they require in advance.

- Center for Science and Industry
- 2 Le Zénith
- La Grande Halle
- La Cité de la Musique
- Restaurants
- A Hôtel Arcade
- B Hotel (opening 1989)
- C Loisirhotel (Porte d'Aubervilliers)
- D Hôtel Mercure (Porte de Pantin)
- E Hôtel Ibis and Hôtel Novotel (Porte de Bagnolet)







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