



NEWSLETTER

Operational Research Society of New Zealand (Inc.)



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COUNCIL NOTES

Notes from Council Meetings held 29 March and 20 April 1972.

1. The Auckland Chairman, Mr B.R. Slocombe and the Canterbury Chairman, Prof. A.D. Brownlie were co-opted to the new Council at its first meeting.
2. The following sub-committee appointments were made; others will be made later:

SUB-COMMITTEE	CONVENER	MEMBERS
Constitutional	Prof. G.A. Vignaux	Prof. A.D. Brownlie, Mr D.C. Cook, Prof. L.F. Jackson, Mr B.R. Slocombe.
Education	Dr H. Barr	
International Affairs	Prof. L.F. Jackson	
Membership	Mr L.E. O'Brien	
National Events	Mr P.D. Bearsley	Mr D.C. Cook, Prof. G.A. Vignaux.
Public Issues and Awareness	Mr G.E. Dickinson	
Publications	Mr J.L. Scott.	

3. The Constitution was discussed and the President said he and the Constitutional Sub-Committee would be attending to the modifications required and desired with the formation of Branches.
4. Mr O'Brien is co-ordinating the production of O.R. Publicity articles for 'Industrial Development'.

NOTICES

1. O.R. Ireland 1972

Any member who is thinking of attending the 6th I.F.O.R.S. Conference in Dublin, August 21-25 please contact the O.R.S.N.Z. Vice President.

2. Mr D.A. Evans
Mr W.P. Foster
Mr M.F. Wright (Wellington)
Mr W.G. Marriott (Auckland)
Mr J.C. Silvester (Wellington)

Would anyone knowing the current postal addresses of any of the above members, please inform the Hon. Secretary, P.O. Box 904 Wellington or telephone Wellington 58769 Ext. 58.

BRANCH NOTES

1. Canterbury

The talk by Prof. H. McCallion, Mechanical Engineering, University of Canterbury, on "An Adaptive System for Materials Control and Machine Shop Scheduling" was well received by close to 50 people at their March meeting. Students of various University Departments provided a large contingent. The problem discussed by Prof. McCallion dealt with deriving a system for day-to-day scheduling of batches of Diesel engine parts through a shop of over 300 machines grouped into about 60 centres.

Through simulation, queue times and hence total production lead time are forecasted which then provide information needed for initiating new parts batches. Starting dates respond thus to forecasted queue times and machine load factors - hence the adjective "adaptive".

Furthermore, the program also provides each machine centre every half-shift with a job priority ranking. To find the best dispatch rule for the particular production set-up, a large number of different dispatch rules were evaluated by simulation for various machine load factors. Dispatch rule based on least idle time (difference between batch due time and remaining machine time) seemed to provide best overall performance.

The next meeting of the Branch will be on June 7th (See "Meetings/Conferences" in this Issue for more details").

2. Wellington

On 29 March an inaugural Wellington Branch Committee was elected. The Branch has officially been in existence since the constitution of the Society, but until now the affairs of the Society in Wellington have been conducted directly by Council. Office bearers elected at the meeting were:

Chairman:	D.C. Cook
Hon. Sec-Treas:	P.C. Gini
Committee Members:	Dr R.R. Allen, Messrs A.H. Milkop and C.W. Walker, Miss K.M. Watson.

An initial question to be resolved will be the form the Branch meetings are to take, and their venue. At the first general meeting of the Branch alternatives were suggested to the traditional evening meeting:- luncheon meetings, early evening meetings with buffet meal, and joint meetings with other societies. The Committee is planning to hold meetings regularly each month, and arrangements for possible speakers are being studied. Details of forthcoming events will be published when they are finalized.

AUSTRALIAN O.R. SOCIETY

The Australian O.R. Society (A.S.O.R.) was formed on January 1, 1972 with Branches in N.S.W., Victoria, A.C.T., South Australia and Western Australia. Each Branch may have Chapters under its control e.g. the Sydney Chapter of the N.S.W. Branch.

I have just received copies of A.S.O.R.'s Constitution and By-laws from a colleague in Sydney. I have extracted a few items which may be of interest.

Grades of membership are similar to our own. They have, however, one additional grade: The Fellow Member. "A Fellow shall be a person who has made distinguished contributions to the knowledge or application in any field of O.R. or has given outstanding service in furthering the Objects of the Society". He is elected by Council and is entitled to use the letters "F.A.S.O.R." to identify himself.

Each Branch Executive, having received nominations from their Chapters, appoint delegates to the Council. The number of delegates appointed depends on the number of Branch Members.

Only Full Members can be members of Council or of Branch or Chapter Executive Committees. Current Subscriptions are:

Full members	\$8
Associate members	\$6
Student members	\$4
Associate Institutions	\$15

Council has the right to dispel anyone whose professional conduct has "gravely violated generally accepted standards of ethical professional behaviour". Council also keeps current "a public risk policy to the value of not less than \$100,000 to cover the activities of the Society". Model building in Australia must be a risky business!

MEETINGS/CONFERENCES

1. The next meeting of our Canterbury Branch is to be held at 6.00 pm. on Wednesday 7th June in E2 Engineering Building, University of Canterbury, Ilam site. The speaker will be Mr T.A. Lusk, Ph.D. who is currently a student in the Electrical Engineering Dept. at the University. His topic will be "Management of Hydro Reservoirs in the New Zealand Power System".
2. The National Computer Conference and Exhibition will be at Massey University, 16-19 August. Along with the presentation of contributed papers, there will be sessions on Computers and Management, Computer Education, the Invasion of Privacy and Human Engineering and the Computer Image. Keynote speaker will be Mr Paul Armer, an authority on the effects of Computers on People
3. The Wellington Branch of the Royal Society of New Zealand have announced their 1972 Programme. Addresses to be given during the year include:
"The Changing Role of Scientific Research for New Zealand consequent upon Britain's entry to the E.E.C.", to be delivered on June 28 by Mr A.M. Ward, Chairman, National Research Advisory Council and on September 27, Dr R.W. Willet of the Department of Scientific and Industrial Research will speak on "Metrication: How and Why?".
4. A Decision Theory Conference is to be held "sometime in the period July/September of 1973" under the aegis of the NATO Science Committee. The Conference will concentrate on decision theoretic methods. Further information can be obtained from the Editor (John Scott, C/- N.A.C., P.O. Box 96, Wellington. Phone 43-440 Ext 883).

NEWSLETTER/JOURNAL : FORMAT OF CONTRIBUTIONS

To help improve the looks of the newsletter please attempt to use the following format when writing articles, letters etc;

1. Summary
2. Introduction
3. The "meat"
 - 3.1.
 - 3.2.
 - 3.2.1
 - 3.2.2
 - 3.3.
- 4.

The heading at the top of the contribution should be in underlined Capitals and centred in the middle of the page. For other headings use small letters (underlined if required) toward the left hand margin.

Attempt to find a typewriter with lettering about the size and shape as that used here and use A4 size paper with single spacing.

Leave the pages unnumbered so that page numbering, consistent with the articles place in the newsletter/journal, can be added just before printing.

If you have a bibliography put it at the end and use square brackets when referring to it, e.g. [1] would refer to the 1st item in the bibliography. If you want to make reference to a note at the bottom of the page, then use round brackets, e.g. (1).

Appendices including Computer listings, output, intended mathematical derivations, tables etc. are to be placed at the end.

The above are merely guidelines. You may decide to purposely use a different format and of course this is quite acceptable but if you decide to do this, please bear in mind the overall look of the magazine.

CONSTITUTIONAL AMENDMENT BY POSTAL BALLOT: A PROPOSAL

At the February Council meeting the Council discussed the possibility of introducing postal voting into the proceedings of the Society, in particular to the process for amending the Constitution. Council reserved its position on the matter to get comments from members and decided to experiment to see if Newsletter discussion could be promoted to test whether members' effective participation by means of written public communication could be facilitated or was practicable. The Hon. Sec. was asked by Council to write this note for the Newsletter; it should not be interpreted as necessarily representing the Council's views both because Council reserved its position and because the composition of Council changed at the A.G.M.

The Society now has a significant proportion of its membership outside Wellington. These non-Wellington members are effectively disenfranchised by the present voting provisions. Although these members could under the present Constitution cast proxy votes at general meetings this would not be real participation as they would not be able personally to take part in the discussion and argument at these meetings. Nor can they be informed about candidates for office since nominations are made at an A.G.M. itself and there is no provision for prior nomination. Proxy voting is a rather blunt and insensitive instrument, however it is available at present as a safety valve.

Some might suggest that postal voting on motions to amend the Constitution would not allow proper discussion or the delicate adjustment of motions by means of amendments and the kinds of compromise which can be achieved in face-to-face discussion. Perhaps these particular disadvantages could be reduced in magnitude and a thorough ventilation of ideas ensured by the following two stage process. Firstly relevant reports, evidence, opinion and argument together with an outline of the proposals (including draft motions) could be presented to members in the Newsletter by the proposers. Members could then be invited to contribute to discussion in the Newsletter. After a suitable period finalised motions and advocacy could be presented to members by the proposers with a further invitation to debate in the Newsletter before the actual postal vote is taken. The above would not be a rapid process and there would be a danger of members losing interest because of this. Hopefully however, it would be a case of trading speed for increased participation by members. It would be appropriate for the President to administer the discussion, rather than the Newsletter Editor, as this task would be similar in function and Constitutional responsibility to chairing a general meeting. Unfortunately the procedure described could be quite expensive in terms of publication and voting costs.

To provide something concrete for members to discuss the following suggested draft constitutional amendment is presented. It covers only further amendment of the Constitution because other amendments, which it is desirable to have the whole membership discuss and vote upon, could be dealt with by postal vote if it or a version of it were passed at a special meeting. The draft amendment is similar to the one introduced by the President and discussed at the February Council meeting. Paragraph 9 of the constitution to become:

"This Constitution may be amended only by a 2/3 majority (comment same majority provision as in existing Constitution) of votes cast in a postal ballot conducted by the Secretary and administered by the President. The Secretary shall, upon the written request of Council, (comment changed provision: is the President), a branch committee (comment new provision), or any ten members of the Society, (comment existing provision), arrange for such a postal ballot. The

request shall incorporate the draft motions and they and the closing time of the poll shall be published within 4 weeks of receipt. The closing time of the poll shall be 5 p.m. on the day 26 weeks (comment arbitrary; to allow time for the Newsletter discussions) from receipt of the request.

The motions in their final form shall be supplied by the original requesters to the Secretary 16 weeks before the close of the poll, and they shall then be published within another 4 weeks. If such finalised motions are not received by the Secretary by the due date the draft motions shall be deemed to be the finalised ones.

Reply-paid voting papers incorporating the finalised motions shall be despatched to members by the Secretary at least 3 weeks before the close of poll.

Votes received in the Society Post Office box up to the close of poll shall be counted by 2 members of the Society appointed by the Council for the purpose. The results shall be published within 4 weeks of the close of poll.

The President shall have full discretion and control over the editing and publication of Newsletter discussion relating to the motions."

It may be that it would be sufficient to have only the first sentence or two of the suggested draft amendment actually incorporated in the Constitution, leaving the detailed procedure to be put in a by-law or left to Council to specify.

Members are invited to address their comments for publication to the President in the first instance. The Constitutional Subcommittee (of Council), of which the President is Convener, could then consider such comments with a view to recommending to Council that a constitutional amendment along the above lines be put to the membership at a special meeting.

B.K. Campbell
Hon. Sec.
72 May 15

MAIL VOTING and COUNCIL ORGANISATION

28th April, 1972

Professor Vignaux,
Department of Information Services,
Victoria University of Wellington,
WELLINGTON.

Dear Professor Vignaux,

I would like to raise a few points about the present set-up of ORSNZ which have bothered me for some time. The present set-up of ORSNZ still reflects a strongly parochial character. This was perfectly suitable when only an insignificant portion of our membership was located outside Wellington. One could then easily overlook the fact that by concentrating the entire operation in Wellington, those few members not located in Wellington were essentially excluded from participating in the running of ORSNZ or voting in elections. This allowed for a very smooth and efficient operation based largely upon close personal contacts.

However, with ORSNZ losing its parochial character, as indicated by the formation of two branches and increased membership outside Wellington, corresponding changes in the organizational set-up have to be made. Let me bring out some difficulties of our present set-up.

Clearly, we want to keep ORSNZ as a society of members rather than as a society of branches. However, by having officers elected at an AGM held in Wellington, members outside Wellington are not only denied their right to vote, but are also virtually denied the possibility to run for office, since any chances of success depend on the good will of some Wellington members to move and second his nomination. Members outside Wellington therefore have no or little say in running the national society. This could very easily lead to the branch becoming the predominant part of their association with ORSNZ and we could end up becoming a society of branches by default. It is obvious that these voting and election procedures should not continue for much longer. In fact, it should not even be a question of letting one of those AGM's decide whether the ORSNZ should go over to mail voting. Clearly, such a decision should be taken by the entire membership. If voting and elections by mail are adopted, then AGM's would become a thing of the past, since no matter where they are held they always exclude those not living in the close vicinity. My first proposal is thus that the membership be presented with the facts of our growth

pains and polled on whether or not to abolish AGM's and have all matters to be decided by the membership handled by mail voting. I note that at the February 10 Council meeting, the president introduced a draft constitutional amendment of a similar though not so sweeping change. I also note that the secretary has so far not taken up this issue in the Newsletter as instructed by Council.

Mail voting will however, also mean that frequent ORSNZ Council meetings as you know them now would become impractical, since Council membership is likely to be more evenly distributed over New Zealand. There would probably at most be one or two such meetings a year; but in this instance, travel costs incurred by Council members could then be re-embursed by ORSNZ. As a consequence of reducing the number of Council meetings to say one a year, the running of the organization also has to be completely restructured to allow for contacts, discussions, and decision making by mail. My second proposal is thus that Council immediately sets up an ad hoc committee to work out a detailed proposal for this new mode of operation of Council and its sub-committees. Valuable guidelines and hints could be obtained by studying how other organizations such as the British O.R. Society or ORSA and TIMS run their business. Without being facetious, I would even suggest that this ad hoc committee be not constituted by Wellington members only, but by members from all branches and that they engage in a first-hand experience of discussing the issues and coming to agreements that will lead to a proposal all by mail. They will then appreciate the problems much better than if they work in a vacuum and on the basis of hear-say.

May I suggest that to start off the discussions of the changes needed to the organization, this communication is published, with our without editing on your part, in the coming Newsletter, inviting the membership to voice their opinion in writing to Council?

If you feel that you would rather not act on these proposals, I would appreciate if you would let me know as soon as possible what steps members not located in Wellington can undertake to have this issue brought before Council and before the membership.

Yours sincerely,

Hans G. Jaellenbalt

Notes on the Australian Society in this issue may be of interest.



Operational Research Society of New Zealand (Inc.)

MINUTES

of the

ANNUAL GENERAL MEETING

Held on 1972 March, 29, 7.30 p.m. at the State Services Commission, Manchester Unity Building, 126 Lambton Quay, Wellington.

PRESENT

Prof. G.A. Vignaux (Chair)	Dr. H. Barr
Mr. N.R. Banfield	Mr. P.D. Bearsley
Mr. B.K. Campbell	Mr. D.C. Cook
Mr. G.E. Dickinson	Dr. P.K. Foster
Prof. L.F. Jackson	Mr. M. Kimble (N.Z.I.M.)
Mr. A.R. Kirkham	Mr. R.J. Latimer
Mr. C.B. Lusk	Mr. A.H. Milkop
Mr. J.L. Scott	Mr. C.W. Walker
Miss K.M. Watson	

1. APOLOGIES

Mr. K.W.J. Angwin	Mr. J.F. Boshier
Mr. D.J. Bull	Mr. H. Bulder
Mr. M.D. Camden	Mr. P.J. Courtney
Mr. R.S. Ducat	Mr. J.A. Jordan
Mr. C.J. Kirkham	Mr. W.F. Moxon
Mr. L.E. O'Brien	Mr. M.D. Turner

These apologies were accepted. (Campbell/Jackson).

2. MINUTES OF THE LAST A.G.M.

The Minutes, as circulated, of the A.G.M. held 1970 November 23 were taken as read and confirmed as a correct record. (Campbell/Cook).

3. ANNUAL REPORT

In moving the adoption of the Annual Report as circulated, the President explained that the A.G.M. had been delayed because it had originally been intended to modify the Constitution at this time. In particular to expand and clarify the provisions relating to branches. He said that resolution of the differences between the desire to have the Society as a society of individuals and the desire to provide suitable autonomy for branches had taken longer than expected but that the issues were becoming resolved. The financial arrangements had been finalized.

The President emphasised the main points in the Report and mentioned that the membership was now 225 compared with 204 at 71 Oct 1. He said that with the development of branches the Society would become much more of a New Zealand national society.

The Report was adopted.

4. FINANCIAL STATEMENT

The Hon. Treasurer explained that the payments made by the Society had been presented in two different ways in the Financial Statement: by output or function and by input or item.

Speaking about particular entries in the Statement the Hon. Treasurer stated that the Bellman dinner and lunch were cheap from the Society's point of view with an expenditure of \$581 and receipts of \$500, that the effective balance was now \$319 compared with \$486 at 71 Sep 30 (he remarked that the balance would of course increase when subscriptions were set and collected) and that outstanding subscriptions were about the same as the previous year.

The Financial Statement was adopted (Milkop/Cook).

5. MATTERS ARISING FROM THE MINUTES OF THE LAST A.G.M.

No matters were raised.

6. LECTURE PRIZE

The Convener of the Council Programme Subcommittee (Mr. Cook) explained that while a number of excellent full length papers had been presented during the year to 71 Sep 30, they had been presented by Full Members, who were precluded from being awarded the Prize under the present rules. Hence no prize was to be awarded at this A.G.M.

Mr. Cook suggested that now that branches had been formed there might be a need to change the system. This was left for the incoming council to decide.

7. SUBSCRIPTIONS

The Hon. Treasurer proposed the following subscription structure on behalf of Council:

	Near a Branch	Other
Full	\$5	\$4
Associate	\$4	\$3
Student	\$1	50c.

The Hon. Treasurer explained that this was the same as the previous structure except that there would now be provision to charge more to those near any meeting centre and that there had been a separate levy for IFORS. He said this levy would no longer be necessary as the International Abstracts would be charged for separately at a rate set by Council (\$2.50/ year at present). He mentioned that IFORS had increased the Abstracts charges last year. He said that he would interpret 'Near a Branch' as meaning within a radius of about 20 miles of a meeting centre.

After an assurance from the Hon. Treasurer that he considered the subscriptions would be adequate the structure as proposed was adopted. (Milkop/Jackson).

8. ELECTION OF OFFICERS AND COUNCIL MEMBERS

The following nominations were made:

President:	Prof. G.A. Vignaux	(Kirkham/Cook)
Vice-President:	Prof. L.F. Jackson	(Cook/Latimer)
Hon. Secretary:	Mr. B.K. Campbell	(Milkop/Walker)

Hon. Treasurer:	Mr. A.H. Milkop	(Campbell/Barr)
Council Members:	Dr. H. Barr	(Dickinson/Walker)
	Mr. P.D. Bearsley	(Cook/Milkop)
	Mr. D.C. Cook	(Milkop/Jackson)
	Mr. G.E. Dickinson	(Barr/Cook)
	Mr. L.E. O'Brien	(Campbell/Kirkham)
	Mr. J.L. Scott	(Barr/Bearsley)

In each case the number of nominations equalled the number of vacancies so the nominees were declared elected.

9. ELECTION OF HON. AUDITOR

Mr. P. Hasselberg (Milkop/Campbell) was re-elected to this position.

10. ADDRESS BY THE OUT-GOING PRESIDENT

Prof. G.A. Vignaux gave an address entitled "What is the Society For?" (Sec. note: address will be published in full separately.) His address considered the way the Society might go in the future and the decisions which will have to be taken. He suggested a systems analysis of the Society to look at its objectives and the design of suitable structures for achieving those objectives. The President spoke about the branch structure, services for members, education for o.r., education for the users of o.r., relations with other societies and the question of a professional society.

11. GENERAL BUSINESS

Bellman Visit

Mr. Milkop said that attendances at the O.R. Day had been up to 130 and yet after 1000 invitations had been sent out for the dinner to selected people only 89 had attended. This had disappointed the Programme Subcommittee.

Mr. Milkop drew attention to the generosity of the N.Z. Dept. of Electricity which had basically funded Dr. Bellman's visit.

Society Structure

Several members suggested that the Society could learn from the experiences of other societies in this matter. For example the N.Z. Institute of Public Administration, the Institute of Chemistry, the Chartered Institute of Transport and the Engineering Institutions.

The meeting closed at 9 p.m.



(B.K. Campbell)
Hon. Sec.
1972, April 17