

# NEWSLETTER

December 2001

Operational Research Society of New Zealand (Inc.)  
PO Box 6544, Wellesley St. Auckland, New Zealand  
<http://www.orsnz.org.nz>

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*Notice Of Annual General Meeting of the ORSNZ, page 14*

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## An interview with Lawrence Wein

*by John F. Raffensperger*

JR: Larry, thank you very much for your time. I appreciate your agreeing to an interview for the ORSNZ Newsletter

LW: My pleasure.

JR: Before I started recording, you were just talking about the Conference, how we give so much time to the students, and I said we could probably have a refereed conference if we didn't. So I think this is a conscious choice of previous conference organizers to do this kind of thing. I'd be interested in your opinion,



especially in regards to how we might respond to the INFORMS publication policy regarding previously published work. What do you see as a trade off on serving students versus having a well-done refereed conference?

LW: I think it depends partly on what the goals of the conference are. I would think that the main goal is to maintain a sense of cohesion and community for New Zealand OR. Another possible goal is to produce a proceedings for archival purposes. Given the many journals out there, I don't see this as a compelling goal. An alternative reason to review and publish proceedings papers is to screen the talks, particularly if you cannot accept a large fraction of talks. However, it seems to me you could do that with a much shorter book of abstracts, perhaps three-page abstracts, that gives the key results. My gut feeling is that it would be preferable to publish a book of abstracts, thereby avoiding the copyright issues. The only downside might be if there are people who are

submitting full-length papers here who otherwise wouldn't submit a full-length paper elsewhere. In those cases, you could publish full-length papers. But I'm not sure what the history of this conference is. Have you had refereed papers?

JR: To my knowledge, the ORSNZ conference papers have never been refereed.

LW: Were they refereed this year?

JR: Well, I proof read them. This is the first time I've organised this conference, and everyone told me this was the first time anyone had even read the papers. It doesn't seem like much of a leap from proof reading to refereeing. You just get some help. So it could become a refereed conference. But then a refereed conference may not provide much of a service to the students.

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Newsletter publication dates are March, June, September, and December. Submissions deadline is the 15th of the month for the following month's issue. Send submissions by email to the Newsletter editor, John F. Raffensperger, [newsletter@orsnz.org.nz](mailto:newsletter@orsnz.org.nz).

LW: Which I think is pretty important. It is nice that you provide students with such good exposure at the conference.

JR: Tell us about your role as Editor in Chief in *Operations Research*. How do you get to become an editor-in-chief?

LW: I was asked. Actually about 6 years ago, I was asked by the search committee to apply for the *Management Science* editorship. I said no, because I didn't feel qualified to assess the papers that do not include mathematical modelling, which now represents a significant fraction of the papers. About 3 years ago, I was asked by the search committee to apply for the editorship of *Operations Research*. I initially told them no, thinking that it would be too much work, but then I discussed it with my wife, and decided I had said no too quickly. I realized that it was an important job for which I was reasonably qualified, and so a few days later I called back and said yes. I wrote a short application letter and was offered the job.

JR: So you consider yourself a math modeller?

LW: I consider myself an applied mathematician who works on various decision problems.

JR: I have noticed a trend in management science, at least in certain places, where people seem to be downplaying the mathematical aspects of OR and trying to raise the qualitative aspects. Have you seen such a trend?

LW: In manufacturing, which is the area I am most familiar with, there has been a big trend in the US and elsewhere towards incorporating game theory into the various operations models, such as inventory and queuing models. These papers focus on more strategic issues than the traditional operational issues addressed by these models. Indeed, a year or two ago, the *Management Science* area editors wrote a short statement to the effect that they were seeking only papers that addressed strategic issues, and did not want a lot of heavy math in them.

JR: So how does one get to become an area editor or associate editor or referee?

LW: Essentially by being asked. I became an associate editor at *Management Science* and *Operations Research* and *Annals of Applied Probability* by being asked by the area editor. And then I was asked to be area editor by the editor. Associate editors choose referees,

usually based on their knowledge of the area or on the references in the paper.

JR: What are the typical reasons that a paper is returned for changes?

*...all papers are returned for changes...*

LW: Well, all papers are returned for changes – I have never heard of a paper getting into *Operations Research* or *Management Science* without some revision, but I think maybe your question was more about what are the reasons for rejection?

JR: Are they mostly stylistic, complaints that there not enough numerical results, or disorganization?

LW: All of the above. Typically about 15-20% are accepted eventually. My goal when I was associate editor, area editor, and editor, was to make sure at the end of the first round for almost all of the papers that, even if it is well-crafted and the results are correct but doesn't meet the standards of the journal for a variety of reasons, it is either rejected or it is clear what needs to be done in order for it to be accepted. Otherwise one can get into difficulty after a second round, after another long review process, after a lot of effort on the revision, that the reviewers and author still don't see eye to eye, and it's a painful situation. So it's important in the refereeing process that that's avoided.

JR: Why does the review process take so long?

LW: I think it is because people for the most part put things on the back burner. It's a little bit like MRP systems, where self-fulfilling prophecies become actual lead times. With the new *M&SOM* journal, Lee Schwarz gets phone commitments for each report and essentially hand-delivers everything himself. This superhuman effort has achieved remarkably short lead-times. So this shows that it's possible in our field. At *Operations Research*, our delays have come down considerably during Pat Harker's tenure and my tenure. I have a tardy paper review process in place. It's really geared for the right tail of the distribution. I think people don't mind if they get their papers back in 3 months, 4 months, or 5 months, but when you start getting into eight months or a year or a year and a half, then authors justifiably get

upset. In our process, I eventually get on the phone to the referees and make a deal, where they either produce a report by a particular date, or just bow out gracefully, but they can't just say they're going to do it and not do it.

JR: That sounds reasonable. What kind of work to do you have on your desk right now. I see stacks of paper. Are they submissions to OR?

LW: No, no. Most of that is sitting at MIT with my managing editor. Those are all papers on percolation theory. I am working on a medical problem with Bob Langer's lab in the chemical engineering department at MIT, on designing drug clusters. You put a drug cluster upstream from an organ in the body and the idea is that it would slowly release the drug and clog up the artery and then it would disintegrate and pass into the organ, and that would provide more targeted treatment rather than just taking a pill or doing intravenous injection. This can be viewed as what's called a percolation problem on a three-dimensional lattice. So this morning I was learning about fractal dimensions and radius of gyration for three-dimensional clusters.

JR: So this is not high school mathematics.

LW: No, unfortunately. But there has been so much progress made in this field that it won't be hard to provide the medical people with simple and nonobvious insights.

JR: You're moving to Stanford? Can you tell us about your new role there?

LW: It's very similar to my old role at MIT. I'm going to miss MIT. It was an agonizing decision that we spent a good 6 or 8 months thinking about it. I grew up in Massachusetts but view Stanford as the only lateral move from MIT for the kind of things I do. The decision largely came down to the weather. Anne has what you call here in New Zealand chilblains and she really doesn't like Boston winters – they haven't been kind to her hands and feet. And I've had 40 winters in New England and that's enough for me. And that's where we met, at Stanford, so we know what we are getting into – and we both enjoy it there. To get back to your question, Stanford Business School was in an expansion mode, and each group received a license to hire one senior faculty. So it was clear they weren't looking for a department head or any kind of administrator, which is good because – despite being head of the

Management Science Area at Sloan - I am not interested in University administration at this point in my career. My role there is basically the same as at MIT. I'll be teaching the same MBA operations class that I did at MIT for thirteen years, and I'll just keep doing research. The majority of my work these days is in medicine, and they are not asking me to revert back to manufacturing.

JR: What do you see as relevant and important management science for this country? What type of OR work should we New Zealand academics be looking at?

LW: First, I think the top researchers in New Zealand have thought this out pretty well. Moreover, I don't know the country as well as the people who have been living here. So my comments are geared for the students or younger people who might be looking for some direction. Some of the key areas seem to be agriculture, forestry, energy, and Air New Zealand, where from what I can see OR has had a long tradition here. I think it's good for younger people to reflect on what the big issues facing this country are that are amenable to operations research analysis. For example, I think the whole genetically modified food debate is absolutely critical to this country. I'm not putting forth an opinion as to which way they should go, but a good combination of hard models and soft models, which some people in this country seem to favour, could probably shed some light on what strategies might be useful. That's one example.

The America's Cup is another vital issue for this country. I know Andy Philpott has been working on this, and a couple of years ago, I called up Andy from the States and asked him to send a paper to *Operations Research* on this.

As a third example, I've noticed a few things in the paper and on TV related to medicine. I read that New Zealand is sending cancer patients to Australia for treatment. Also, on the "Breakfast" TV show, I saw that Auckland has changed its radiation schedule from 5 weeks to 4 weeks and have increased the dose sizes, so they can reduce the waiting lines. This latter problem is very amenable to analysis by queuing theory and tumour modelling. It is an interesting issue of efficiency versus equity: they are trying to treat more people and be more equitable, but at the same time they are being less efficient with each person. And there's data

out there that can shed light on this. There's data on tumour growth while a patient waits in line, there's data on tumour cure as a function of the radiation schedule and tumour size, and there is data on toxic complications as a function of the radiation schedule. In particular, the new dosing schedule has the potential to increase toxic complications a year to 18 months down the line, when the so-called "late tissues" experience toxicity. Hopefully the head of oncology at Auckland has looked at the data and understands this. But this is a problem that an OR person could help out on.

JR: So you just bought this house in Palo Alto? Is that sorted out?

LW: Yes, we closed on it at the end of last month.

JR: Tremendous! So how did you and Anne meet?

LW: Well, we were in the PhD programme together at the Operations Research Department at Stanford. I remember the first time we met. They had an opening reception for the Ph.D. students. Near the end of the evening, I noticed her near the food table, and I walked over to introduce myself, hoping to make a good first impression. I found out later that she was in shock over the exchange rate, and at how expensive food was in the US, so she was running around grabbing the left over raw vegetables and putting them in plastic bags. So, to my dismay, she barely acknowledged my existence. But we became good friends during the first year, and became romantically involved at the end of the year.

JR: At least her accent must have been memorable for you.

LW: Yes, it certainly charmed me.

JR: Well, I've run out of questions. Do you have any final comments?

LW: Yes, I'm really enjoying my year here.

JR: We're enormously grateful to have you.

LW: I'm looking forward to the Conference and seeing everyone.

JR: We're looking forward to your plenary! Thanks very much.

LW: Thank you, Fritz

*John F. Raffensperger*

## ORSNZ CONFERENCE TWENTY NAUGHT ONE

The University of Canterbury's Department of Management is pleased to host Conference TWENTY NAUGHT ONE of the Operational Research Society of New Zealand.

### Editor's Report on Proceedings TWENTY NAUGHT ONE

Wow!! To all Authors Twenty Naught One, thanks for making a great Conference!

*John F. Raffensperger*

### Sponsors TWENTY NAUGHT ONE

The Conference Organising Committee is very pleased to announce that the corporate sponsors of the TWENTY NAUGHT ONE include PA Consulting (principal sponsor), Charles River Associates (principal sponsor) and Aoraki Corp.

We are gratified to be in partnership with these excellent firms.



### ORSNZ Hans Daellenbach Prize

To honour the considerable contributions of Emeritus Professor Hans Daellenbach to OR/MS in New Zealand, the ORSNZ has established the ORSNZ Hans Daellenbach Prize. The purpose of this award is to elicit, recognise, and reward outstanding examples of management science and operations research in New Zealand, and to encourage their dissemination in the international literature. Candidates for the prize must be members of ORSNZ. The Prize is accompanied by a \$1,000 honorarium, and winners must give a plenary address on their relevant work at the ORSNZ conference in the year of the award. The Prize is awarded every two years, at most.

The inaugural Prize will be presented at the 36<sup>th</sup> Annual ORSNZ Conference in Christchurch, late in 2001.

I have much pleasure in announcing that the unanimous decision of the prize panel is to award the Prize to **Professor David Ryan**, of the Department of Engineering Science, University of Auckland for his focussed and groundbreaking body of work on scheduling problems, and its application to crew scheduling in the New Zealand airline industry. This is an excellent example of the kind of theoretical and applied work that this award is designed to recognize. David's work has also received international recognition, as evidenced by many prestigious publications in the top OR/MS journals.

*Congratulations, David!*

Congratulations David, we are all looking forward to hearing your plenary in Christchurch.

*Les Foulds, President, ORSNZ,  
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## Letter from the President



It is conference time so, as promised, I'm going to comment on trends, as I see them, that have manifested themselves in the 36 ORSNZ conferences to date. Many of the directions are also reflected in the changing nature of the

Society's Newsletter and its past journals. These include, somewhat predictably, a broadening and internationalization of content, less expository articles, and more joint authorship.

At our conferences there has always been a nice balance of the theoretical and the applied, the deterministic and the stochastic. Certainly the divisions between these categories seem less sharp than at some conferences overseas. Indeed, some papers at each ORSNZ conference appear to possess an impressive mix of all four characteristics. There has always been a number of papers dealing with challenges in the New Zealand public service sector; especially in energy, telecommunications, traffic, and health. There is also a tradition of interest in forestry and finance. OR techniques related to logistics,

scheduling, networks, queuing, simulation, and inventory have usually been reported, especially mathematical programming theory and practice.

It is no surprise that later trends include an increase in the number of papers on OR education, manufacturing, operations management, soft approaches, spreadsheets, and decision making software. But there are now more qualitative societal issues being addressed than in the past, and a significant widening of the scope and complexity of the problems being analysed. Gratifyingly, and in sharp contrast to many overseas conference papers, our proceedings are invariably filled with well-written papers that are comprehensible to most OR practitioners.

Since 1992, the Young Practitioners' Prize papers have appeared in the proceedings. It has been comforting to those of us who care about the future of the Society to note that they have been consistently of an extremely high standard. It was at about the same time as the introduction of the YP Prize that the number of conference papers as a whole shot up. For instance, in 1989 the proceedings comprised 53 pages, in 1990 there were 142 pages, and in 1992 there were 218 pages. For the last 10 years the number has settled to around 300.

*Celebrate the 36th Annual  
Conference!*

The attending body has always been friendly and quite close knit. As such, I've personally found the annual ORSNZ jamboree to be one of the highlights of my year. It is always well-run, harmonious, and chock -full of interesting papers, and a painless way to learn about new fields and developments.

So I invite you to celebrate the 36<sup>th</sup> Annual Conference of the Operational Research Society of New Zealand.

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<http://www.mngt.waikato.ac.nz/systems/les/les.htm>*

# Managing Business Operations: How NZ Organisations Can Get Better and Better

By David J. Robb, [d.robb@auckland.ac.nz](mailto:d.robb@auckland.ac.nz),  
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The following is an extract from an article that appeared in the Sept 2001 issue of *The Univ. of Auckland Business Review* (Vol.3, No.2). <http://www.business.auckland.ac.nz/uabr/>. Used with permission.

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When undertaking inventory consultancy, I'm often asked to find the least damaging way to cut stock by a certain percentage, even before any analysis is undertaken. Whether or not these directives are attributable to a hidden agenda or possible cashflow problems, a consultant worth his/her salt should challenge such preconceptions.

Enormous gains are often to be had in terms of profits, both short- and long-term, from increasing inventories in at least some areas. Such a strategy, unlike mechanisms such as price competition, leads to increases in market share "by sleuth". It requires extensive time for competitors to respond to, particularly with the long lead times experienced by many New Zealand firms.

The devil remains in the details, however. Aggregate performance is a function of performance in multiple segments (e.g., product groups, regions and customers), each with a unique performance frontier.

Companies seeking excellence must jettison the notion that "one size fits all". They must exploit tailored policies, taking into account customer or product (group) importance/criticality and associated costs and benefits.

Over the years I've found companies insisting on:

- identical "service level" for all products (typically "95 per cent!");
- identical "month's cover" or safety stock for all products;
- identical treatment of uncertainty for all activities in a project;
- identical process improvement effort (set-up time reduction, preventive maintenance) for all

activities;

- identical fraction of every product or production run checked (quality control);
- products being designated totally make-to-order or totally make-to-stock (and not allowing for a mixed policy).

It may be parsimonious, but this naivety inevitably leads to sub-optimal performance, especially in New Zealand where we have wide product ranges relative to the market size and long (and often highly variable) lead times for many goods, coupled with very high demand uncertainty.

I'm convinced that an underlying reason for poor or non-existent segmentation is lack of analytical skills. Some managers scurry for cover when faced with anything more than an average.

*...this naivety inevitably leads to sub-optimal performance...*

It appears that neglecting risk when considering return is a problem not confined to naive players in financial markets. When managers segment, taking uncertainty into account (and that means considering measures including standard deviation or mean absolute deviation) is vital for improving performance.

## Business Intelligence

Few deny the pervasiveness and growth of uncertainty in business decision-making, but how many firms are investing in methods designed to cope in such circumstances? I am convinced (and lament the fact) that most New Zealand businesses have not yet caught on to business "smarts" available in technologies such as decision analysis, scenario planning, and simulation modelling. Why shouldn't New Zealand businesses take a leaf out of the book of Team New Zealand, which exacted so much from computer simulation of yacht performance? Despite hundreds of simulation packages being available to assist managers (see [www.promodel.com](http://www.promodel.com) which even provides packages for given industries such as healthcare, manufacturing and distribution, or [www.palisade.com](http://www.palisade.com) for spreadsheet add-ins, or the survey by Swain (2001)), very few implementations exist in New Zealand. Perhaps the only published work of simulation of business operations in this country is Henderson

and Mason (1999), which describes the development of a model to assist St John Ambulance managers to determine stationing and dispatch policies for ambulances in Auckland. Few managers are even aware of the decision support tools for optimisation of spreadsheet packages available right at their desktops.

Our deficiencies in “doing strategy” extend to a paucity of “doing the numbers”, perhaps due to a lack of skills in mathematical and statistical modelling in New Zealand management. We neglect developing and nurturing these capabilities to our peril.

As argued earlier, New Zealand firms face decision making in environments with very high levels of demand-side uncertainty, but often respond in a simplistic way, e.g., treating all products in the same manner. To some extent, enterprise resource planning packages (such as provided by *GEAC, Oracle, Peoplesoft* and *SAP*) provide mechanisms to cope in these circumstances (provided they’re tuned to the New Zealand environment and appropriate performance metrics, such as fill rate, are used!). But taking into account supply-side uncertainty (delivery reliability) of vendors is relatively unknown territory for this kind of software. Several years ago, Scott Panel and Hardware, which regarded itself as too small to warrant an ERP package, invested in a system to do just this. It now considers the reliability of supplier delivery in its decisions as to when and how much to order.

#### References

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David J. Robb, [d.robb@auckland.ac.nz](mailto:d.robb@auckland.ac.nz)

## Canterbury News

We’re glad to have everyone here for the Conference! Welcome to Canterbury.

Exams are done. The honours students have escaped, but only after completing successful projects.

Grant Read and Stephen Batstone has been working on our alumni programme. They are building up a list of alumni over the past 25 years, with over 100 people on it so far, and are still on the hunt for more. There is still a “missing persons” list!

They will be trying to get alumni opinions on the worth and value of the Canterbury MSCI Honours Programme, using a mail survey. This will be initially discussed at the Canterbury Reflections at Conference Twenty Naught One.

Stephen and Mark Stewart are defending their title in Canterbury’s Interdepartmental University Fun Run. The goal is to complete a 3 kilometer course as close to the predicted time as possible. The predicted time must be submitted beforehand. Last year, they set the all-time record of having five people within an absolute deviation of seven seconds from the predicted time. They are taking a minimum variance diversification theory approach, by having people run separately rather than together.

Stephen claims to be nearly finished with his PhD.

Hans Daellenbach has continued his book-publishing ways. Descriptions below!

*Systems Thinking and OR/MS Methods*, H. G. Daellenbach and D.C. McNickle, REA Publications, 2001, 313 pages

*Systems Thinking and OR/MS Methods* is the companion text to *Systems Thinking and Decision Making*. The latter shows how the traditional approaches to analysis and problem solving based on cause-and-effect and reductionist thinking need to be supplemented with systems thinking, a mode of seeing the world in systemic terms.

*Stephen claims to be nearly finished with his PhD.*

This new text briefly reviews these concepts and then explores the implications of constraints

on decision choices, uncertainty of outcomes, and multiple objectives within a systems thinking framework. This led to the study of a number of OR/MS methods and tools.

However, the emphasis is not on the methods or tools themselves, but on the additional insights gained. The material of the original 1994 Wiley text has been expanded to include an introduction into risk analysis and system dynamics. It also includes an extensive glossary and index.

*Informed Student Guide to Management Science*, H. G. Daellenbach and R. L. Flood, editors, Thomson Learning, expected publication date April 2002, approx. 360 pages

This is the third in a series of student guides. It contains over 300 short reviews and essays (300 to 500 words) on all topics, concepts, methods and tools that a management scientist might come across, from 'ABC classification' to 'zero-sum games', covering both hard and soft OR, written by 68 contributors from all over the world. Prominent names are R.L. Ackoff, Scott Armstrong, Valerie Belton, Paul Keys, John Mingers, Jonathan Rosenhead, Clay Whybark, and the local talents of Stephen Batstone, John Brocklesby, Ian Brooks, John Buchanan, Diane Campbell-Hunt, Bob Cavana, Deb Chattopadhyay, Shane Dye, Arun Elias, Jeff Foote, Les Foulds, John Giffin, Don Houston, Ross James, Victoria Mabin, Don McNickle, V. Nilakant, John Raffenerger, Grant Read, David Ryan, Jay Sankaran, R. Sridharan, Mark Stewart, Anastasios Tsoularis, John Vargo, and P. Venkateswarlu. The intended audience are first and second year university students who are just embarking in an OR/MS curriculum, and students and managers from other subjects who would like to get a meaningful, but succinct summary, that enhances their understanding without drowning them in detail. Although not intended as a competitor to the Gass and Harris *Encyclopedia of OR/MS*, it compares favourably with it and is more comprehensive on many topics, without losing itself in mathematics. It also costs only a fraction (about 30 pound sterling) of the latter.

*John F. Raffensperger*

## Wellington News

The Wellington Branch has continued to attract speakers who made good, relevant and interesting presentations.

*Bruce Benseman...it is difficult to imagine the operational research scene without him.*

In August, Bruce Benseman, who has been part of the operational research scene for such a long time, it is difficult to imagine it without him, presented a paper entitled "Practical OR - Spreadsheets versus specialist packages." As usual he presented his paper with a combination of practicality and wit.

He discussed the management of a large numerical problem and posed the questions: "Do you grab your Excel spreadsheet for its instant charting, sorting, filtering and pivot features? Or do you dust off your OMNI, SIMSCRIPT or SAS package, for its algebraic modelling, powerful subroutines, debugging and documentation ability? What might influence your decision?" His answer was that it would depend on your problem, your deadline, your skills, and your budget. He illustrated his talk with recent scheduling and forecasting projects in the Cement and Aviation industries, that he personally had been involved in as a consultant.

In September we were treated to a seminar by Tony Vignaux, which he decided to give on a specific operational research topic, rather than to reminisce on his career. His talk was entitled "An ounce of Analysis - or a metre of Maths?" and his slogan was a quotation from Conan Doyle "*It is a capital mistake to theorize before one has data.*"

He told us that although there is much truth in Sherlock Holmes's adage, he would introduce us to a sort of general-purpose theory which, if used **before** starting to process data, can save time and cost in calculations, measurements, and simulations.

The technique he described is dimensional analysis and many will know about it from school. It is not well-known in our discipline so he gave us an introduction to this intriguing (did he say miraculous?) technique. He described cases where he had found it to be useful and others where it has proved of little or no value at all.

We were lucky that Professor Lawrence Wein, of the Sloan School of Management, MIT, was able to come to Wellington in October. He



covered two topics at his seminar, both in the medical field:

- dynamically allocate kidneys to candidates on the transplant waiting list;
- formulating and analysing a compartmental mathematical model for the accumulation in the brain, cerebrospinal fluid and blood of the beta-amyloid protein throughout the course of Alzheimer's treatment.

In the first problem, he considered how to dynamically allocate kidneys to candidates on the transplant waiting list. An approximate analysis of an optimal control problem leads to a dynamic index policy. Simulation results demonstrate that, relative to the organ allocation policy currently employed in the United States, the dynamic index policy increases the quality-adjusted life expectancy and reduces the mean waiting time until transplantation, for all six demographic groups under consideration.

In the second problem, he told us about how he and his team had formulated and analysed a compartmental mathematical model for the accumulation in the brain of cerebrospinal fluid and blood of the beta-amyloid protein throughout the course of Alzheimer's treatment. Results suggested that production inhibitors are likely to reduce the beta-amyloid levels in all three compartments. In contrast, agents that ingest monomers off of polymers, may also reduce beta-amyloid burden in the brain, but may produce little change in - or even transiently increase - CSF and plasma beta-amyloid levels.

*“It is a capital mistake to theorize before one has data.”*  
*Sir Arthur Conan Doyle*

Because Professor Wein's topics could be of interest to people involved in resources allocation in the medical field and to medical practitioners, we invited staff and students from the medical school, polytechnics, as well as staff from the health boards and Ministry of Health. About a third of the twenty or so participants came as a result of these special invitations.

In December, for our final event for the year, the Wellington Branch will be hosting Professor Stein Wallace from the Centre for Advanced

Study - Norwegian Academy of Science and Letters. We are looking forward to hearing him.

Vicky Mabin and John Davies on the Wellington Branch committee have done a sterling job by organising venues, teaching aids, catering, &c. Thanks to them and also to Fritz Raffensperger and Andy Philpot for their part in arranging for us to have the opportunity of hearing Professor Laurence Wein, and Professor Stein Wallace. It's a great team and great to be part of it.

We now have a list of almost a hundred "Friends of the Operational Research Society of New Zealand," i.e. nonmembers who have asked or agreed to be on our regular email contact list. They are mainly managers and senior staff who know something about operational research, who realise that it's a useful management tool, and want to know more and to make contacts. The Wellington Branch is pleased to be able to invite them to our meetings, offer them hospitality, and to let them see what we do. Throughout this year we have made a point of promoting membership of the Operational Research Society and the annual conference with the material we have sent out.

*David Boland, Chairman, Wellington Branch*

## Waikato News

John Buchanan attended the November INFORMS conference in Miami, where he and Jim Corner presented two papers in a session on Philosophical Approaches to Multiple Criteria Decision Making. Now that INFORMS have only one conference a year, it is large and somewhat impersonal. Also, despite having some 36 parallel sessions, the conference papers tended to focus on very minor or detailed issues and solve narrowly defined problems.

The 'big picture' presentations were typically confined to the plenary sessions and to some practitioner presentations. Tom Magnanti, the Dean of Engineering at MIT, gave an excellent presentation on Engineering Frontiers and Challenges for the OR/MS profession. Engineering is shaking off some of its traditions and moving more into areas such as bio-engineering and tiny technologies and, interestingly, new educational technologies. MIT have adopted an open course approach where they are moving to putting all courses on

the web, with no restrictions on access. Such an approach, according to Magnanti, underscores the value of the university experience.

*Hurricane Michelle...  
... a lone surfer.*

Hurricane Michelle clipped the Florida coast, so the traditional image of Miami Beach was somewhat maligned, at least for the time of the conference. Although there was, for a time, a lone surfer.

*John Buchanan, jtb@mngt.waikato.ac.nz*

## Auckland News

Exams are over now in Auckland, and so most of our students are out in the workforce putting their Engineering skills to work. Our final year students are taking their first tentative career steps, while the rest are clocking up practical hours towards their degrees. We have 3 students working in the department over summer on various OR projects.

*Golbon Zakeri is now the  
proud mother of a little boy,  
Yusef*

Auckland has been a hive of oral activity, with top-quality talks by both our final year students, and more recently, excellent seminars by Lawrence Wein, Garrett van Ryzin and Stein Wallace. There have been two branch meetings this semester.

Golbon Zakeri is now the proud mother of a little boy, Yusef; they're both doing well. Andy Philpott is heading off to Australia to see long time collaborator Eddie Anderson, while Andrew Mason is off to the UK for a PhD examination. David Ryan is about to head off to the UK on sabbatical. His term as Head of Department has come to an end after 7 long years of dedicated service. He leaves the department in very good shape for our new head, Prof Mike O'Sullivan, to continue the good work. Talking of O'Sullivan's, Mike's son, Michael, has just arrived in NZ to join the department. Michael completed an OR masters in Engineering Science, followed by a PhD at Stanford. We now 7 OR staff of various persuasions in Engineering Science, with a further position currently being filled.

## Membership in the INFORMS Education Forum

Membership in the INFORMS Education Forum is \$10 (free for students). To join, click on "About INFORM-ED" in the INFORM-ED homepage, <http://www.informs.org/inform-ed/>, and "How to Join INFORM-ED." Or send an email to [armann.ingolfsson@ualberta.ca](mailto:armann.ingolfsson@ualberta.ca).

## Just A Thought

*Excerpt of an email from INFORM-ED*

Our university recently issued a request for proposals for Honors Program seminars. In a nutshell, these are one-hour courses in which the student can be exposed to a topic to which he/she might not otherwise be exposed. In looking at past offerings, I was appalled by the dearth of technical-related courses. Everything was liberal arts. Not even the business school got in the act. To fill the void, I volunteered to offer a seminar - basically "optimization for non-optimizers."

I suppose my point is this. We pride ourselves on our love for teaching, as well we should. And, while we're at it, we should realize that our audience extends beyond our own building on campus - K-12, non-engineers, other faculty members, etc. They all could benefit by knowing just a bit more about what we do.

*Mike Racer, INFORM-ED Newsletter Editor,  
mracer@memphis.edu*

## ORSNZ Web and Email

Visit <http://www.orsnz.org.nz> to get contact information for members, details of upcoming events, access to global OR resources, copies of our newsletters, papers from our conference proceedings, and lots more.



Have you checked our web page recently?

*Andrew Mason, webmaster@orsnz.org.nz*

## J'1 of Applied Systems Studies

Special Issue: Real Life Applications of Nature Inspired Combinatorial Heuristics. This special issue will ONLY accept papers on real life applications of Nature inspired heuristics in combinatorial problems.

Potential authors should adhere to the "Guidelines for Contributors" of JASS, which can be found at <http://www.unipi.gr/jass/>. All the submissions for this special issue should be sent to the Guest Editor at the address shown below. Electronic submission preferred. Submissions due March 1, 2002.

*Dr. Hussein A. Abbass, [abbass@cs.adfa.edu.au](mailto:abbass@cs.adfa.edu.au),  
<http://www.cs.adfa.edu.au/~abbass/JASS/>*

## 5<sup>th</sup> Int'l Congress on Industrial & Applied Maths, ICIAM 2003

ANZIAM is hosting, and AustMS is underwriting, the fifth International Congress on Industrial and Applied Mathematics at Darling Harbour over 7-11 July 2003. At this Congress, four prizes will be awarded by the International Committee for Industrial and Applied Mathematics. Details of these prizes can be found at <http://www.iciam.org>.

The Executive of ANZIAM believes that one or more Australasians should be nominated for some of these awards. This message is to prompt you (especially if you are a member of ANZIAM) to visit the given website, think of colleagues who satisfy the stated criteria, and consider following through with a nomination.

Please let the ANZIAM Secretary know the names of possible nominations by 31 October, via [anziam\\_sec@austms.org.au](mailto:anziam_sec@austms.org.au)

*Dr. W. Summerfield, Honorary Secretary,  
ANZIAM, [william@maths.newcastle.edu.au](mailto:william@maths.newcastle.edu.au),  
School of Mathematical & Physical Sciences,  
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## Meetings Calendar

**29 Nov - 1 Dec 2001, ORSNZ CONFERENCE TWENTY NAUGHT ONE**, University of Canterbury, Christchurch, New Zealand, <http://www.orsnz.org.nz/conf>.

29 Nov-2 Dec 2001, IEEE International Conference on Data Mining, San Jose, California, USA, <http://kais.mines.edu>.

10-13 Dec 2001, MODSIM 2001 Conference, Australian National Univ., Canberra, Australia, <http://cres.anu.edu.au/~tony/modsim2001.htm>

4-6 Jan 2002, International Business and Economy (IB&E) Conference 2002, San Francisco, California, U.S.A. Email Edwin Duerr at [the-duerrs@att.net](mailto:the-duerrs@att.net) or Yim-Yu Wong at [yywong@sfsu.edu](mailto:yywong@sfsu.edu).

12-15 Feb 2002, First International Conference on Autonomous Intelligent Systems (ICAIS), Deakin University, Geelong, Australia, <http://www.icsc-naiso.org/conferences/icaais2002>

18-20 Feb 2002, Sixth International Research Conference of Quality, Innovation and Knowledge Management, Sunway Lagoon Hotel, Kuala Lumpur, Malaysia. <http://www.monash.edu.au/oce/qikconference>

2-5 Apr 2002, 31st Annual Meeting of Western Decision Sciences Institute, MGM Grand, Las Vegas, Nevada, USA. Submission deadline 1 Oct 2001. <http://misnt.calpoly.edu/wdsi>

1-6 Jul 2002, 2nd International Conference On The Teaching Of Mathematics (at the undergraduate level), Island of Crete, Greece. <http://www.math.uoc.gr/~ictm/>

7-10 Jul 2002, 7th International Conference of the UKSS, Systems Research & Practice in the Knowledge Age, University of York, England. Abstract submission: 15 Jul 2001. Email: [UKSSConference2002@hotmail.com](mailto:UKSSConference2002@hotmail.com).

7-12 Jul 2002, Algorithmic Number Theory Symposium V, University of Sydney. ANTS-V will be held at the School of Mathematics and Statistics of the University of Sydney and will be organised by the MAGMA Computational Algebra Group. [ants5@maths.usyd.edu.au](mailto:ants5@maths.usyd.edu.au), <http://www.maths.usyd.edu.au:8000/u/ants5>.

7-11 Jul 2003, 5<sup>th</sup> International Congress on Industrial & Applied Maths, Darling Harbour, Australia, <http://www.iciam.org>.

31 Jul - 2 Aug 2002, International Conference on Project Management, Marina Mandarin Hotel, Singapore. Abstract submissions close on 15 December 2001. Merlin Toh, Conference Secretariat Nanyang Technological University, email: [ProMAC2002@ntu.edu.sg](mailto:ProMAC2002@ntu.edu.sg), <http://www.ntu.edu.sg/MPE/ProMAC2002>.

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ORSNZ web site: <http://www.orsnz.org.nz>. Email: [secretary@orsnz.org.nz](mailto:secretary@orsnz.org.nz).

To apply for membership or buy subscriptions, see the application form on our web site, and mail it to: Membership Secretary, ORSNZ, PO Box 6544, Wellesley Street, Auckland, NZ.

## Notice of Annual General Meeting of the ORSNZ

Date: Friday 30 November, 2001.

Time: 18:00 – 19:00

Place: Riccarton House, 16 Kahu Road, Christchurch.

### Agenda

- Apologies (to lfoulds@waikato.ac.nz).
- Minutes of last AGM, held in 2000 (Attached as Appendix 1).
- Matters arising from the Minutes.
- President's Report (attached as Appendix 2)
- Honorary Treasurer's Report (Attached as Appendix 3).
- Venues of Future Conferences (Attached as Appendix 4).
- Election of Officers (the President will vacate the Chair for this item).
- Other business.

*Apologies*  
*(to lfoulds@waikato.ac.nz)*

## APPENDIX 1: MINUTES OF THE THIRTY-FIFTH ANNUAL GENERAL MEETING

**Date:** Friday 10<sup>th</sup> December 1999  
**Time:** 5:02pm to 6:29pm  
**Venue:** MSB 1.01, University of Waikato

**Present:** Andrew Philpott (President), John George (Vice-President), Philip Neame (Hon Treasurer), Kerry Mayes, Kevin Broad, Mark Johnston, Shane Dye, Catherine Rivers, Ross James, Mark Craddock, Curt Hjorring, Vicky Mabin, Les Foulds, John Buchanan, John Raffensperger, Nicola Petty, Grant Read, Yu Hayakawa, Tiru Arthanari, Alastair McNaughton, Ray Hoare, Gary Eng, John Crequer, John Paynter, Jay Sankaran.

### 1.0 APOLOGIES

Apologies were received from Hans Daellenbach, Bob Cavana, Chuda Basnet, Tony Vignaux, Tapas Sarkar, David Robb, Lukas Visagie, Grant Read (late) and Vicky Mabin (late).

### 2.0 MINUTES OF PREVIOUS AGM

A. Philpott proposed that the minutes of the previous AGM (as sent out to all paid-up members) be accepted as true and correct. Seconded: C. Rivers. Carried unopposed.

### 3.0 MATTERS ARISING FROM THE MINUTES OF PREVIOUS AGM

J. Raffensperger re-raised points 7.3 and 7.4 of the 34<sup>th</sup> AGM (lowering membership rates for students, and free membership after graduation). A. Philpott pointed out that student members are eligible for 1 year's membership at student rates after graduation. Matter dropped.

### 4.0 PRESIDENT'S REPORT

The President's report was sent out to all members with the notice of the AGM. A. Philpott summarized this to the meeting.

L. Foulds raised the matter of the timing of the conference. Deferred until further business.

G. Read suggested thanks to Andy Philpott for the job so far. Seconded by J. Raffensperger.

V. Mabin raised the issue of troubles getting a quorum at council meetings.

A. Philpott: There has been much email between council members and concensus reached before meetings.

J. George: Conference calls?

V. Mabin: Prefer email.

G. Read: Chairing a conference call meeting would be tough, but if there was a major issue, council could consider it.

A. Philpott: If it works as is, why change?

L. Foulds: What is a quorum?

A. Philpott: 4 or 5 [Note: It is 5 – Phil.]

V. Mabin: Email discussions worked well, but we may need to formalize the system – put to AGM that we accept this?

M. Craddock: Could email all members of ORSNZ.

A. Philpott: Would often be boring...

After much debate, A. Philpott moved that “in future, people physically at council meetings will make a provisional decision. All council decisions will be ratified via email to entire council, and accepted by simple majority, provided a quorum of votes is received.”

G. Read: Concept of quorum is out of date.

K. Mayes: It's in the constitution – need to be careful.

A. Philpott moved that “we defer discussion of quorum to next AGM in order to allow constitutional change.” Carried without dissent.

## 5.0 TREASURER'S REPORT

The financial report for the 1998-99 financial year was sent out to all members with the notice of the AGM.

In addition, prior to his departure, Shane Henderson prepared the following report on the 1998 conference, which was presented by A. Philpott in his absence (the notes are S. Henderson's).

### **Profit/Loss Statement for the 33rd Annual Conference of the ORSNZ**

<i>Income</i>			
Conference Fee - Member	36	\$175.00	\$6,300.00
Conference Fee – Non-Member	5	\$205.00	\$1,025.00
Conference Fee - Student	18	\$75.00	\$1,350.00
Late Fees	11	\$20.00	\$220.00
Dinner Guests	3	50	\$150.00
Accommodation			\$329.00
Air NZ YPP Dinner Sponsorship			\$300.00
Hoare Res. Soft. Sponsorship			\$225.00
<b>Total Income</b>			<b>\$9,899.00</b>
<i>Expenses</i>			
Dinner Cruise			\$3,948.80
YHA Accommodation			\$305.00
Printing – Proceedings			\$-
Other printing			\$50.30
Catering	Lunch		\$2,761.53
	Brkfast		\$248.83
	Social		\$225.00
Misc			\$83.10
Stale Chq for Brkfast written back into books			\$(105.25)
<b>Total Expenses</b>			<b>\$7,517.31</b>
<b>Profit/Loss</b>			<b>\$2,381.69</b>
<i>Conference Related Items Not Included in the Above</i>			
Proceedings (190 copies)			\$2,648.64
Travel Grants			\$490.00
YPP Prize – sponsored by Air NZ			\$1,000.00
Folders – sponsored by Hoare			Unknown

#### Notes:

1. The 1998/99 annual report lists \$10,271.20 total expenses (\$600 paid in 1997/98).
2. This matches the above if the proceedings expense of \$2,648.64 is included in expenses, and the stale cheque is not included (it was written back in after the end of the financial yr).
3. The 1998/99 annual report lists \$9,599.00 as total income.
4. The 1998/99 annual report lists the \$300 Air NZ Sponsorship separately from the conference.
5. When this is taken into account, the total incomes match.
6. Total registered attendees 59.



G. Read suggested that the relation between the conference profit/loss statement and general accounts was not clear.

A. Philpott said that council will review the conference profit/loss statement at a later date.

J. George moved that the AGM accept the financial statement.

Seconded by L. Foulds.

Passed without dissent.

## 6.0 ELECTION OF OFFICERS

<b>Position</b>	<b>Nominee</b>	<b>Nominated</b>	<b>Seconded</b>
President	A. Philpott	L. Foulds	V. Mabin
Vice-President	J. George	G. Read	V. Mabin
Secretary	J. Sankaran	J. Raffensperger	J. Paynter
Treasurer	P. Neame	J. George	K. Mayes
Council (Membership)	T. Arthanari	A. Philpott	P. Neame
Council	R. James	G. Read	N. Petty
	B. Cavana (unsure of acceptance – dropped)	V. Mabin	
	J. Buchanan	A. Philpott	
	L. Foulds	A. Philpott	J. George
	K. Mayes	G. Read	P. Neame
	C. Rivers	A. Philpott	
	Y. Hayakawa	A. Philpott	
	S. Dye	C. Rivers	J. Raffensperger

[Note: I've assumed that a nomination/proposal from the chair doesn't need seconding. The constitution doesn't appear to mention seconding at all, so I think this is fine – Phil]

A. Philpott proposed that all accepting nominees be elected to those positions. Carried unopposed.

## 7.0 SUBSCRIPTION RATES

A. Philpott suggested that subscription rates should be held at the same level as for the previous year. This was carried unopposed.

## 8.0 OTHER BUSINESS

### 8.1 2000 Conference

A. Philpott: Provisional agreement from VUW to host next year's conference. Raised the question of whether it should be held in December as in 1999, or in August as in previous years.

J. Buchanan: Worked quite well this year, saw no reason not to hold it in December again.

Y. Hayakawa: Would need to fit in with VUW's timetable.

V. Mabin: December busy time – for those with families and for industry.

J. George: Commented that there were few students this year

G. Read: Liked Dec, after marking etc

S. Dye: Also after student projects completed.

G. Read: Suggested student papers could perhaps be accepted later – abstract in proceedings, student papers in separate handout?

A. Philpott: End Nov/early Dec?

J. Raffensperger: Marking end Nov

R. James: Fri/Sat okay?

It was generally accepted as okay.

N. Petty: Dec 1 & 2.

Y. Hayakaya: Seems okay.

A. Philpott proposed Dec 1 & 2 as provisional dates. Accepted without opposition.

## **8.2 Name/Future of Society**

A. Philpott commented that B. Cavana had wanted to raise the issue of broadening the scope of the society, including the possibility of changing the name. Also suggesting we investigate an ORSNZ deal on “Interfaces”

A. Philpott: Many members of INFORMS anyway, but “Interfaces” good for practitioners.

C. Rivers: Suggested changing the name would be a sign of failure.

V. Mabin: Need to offer a better service for members instead.

N. Petty: Need to attract good students. Could perhaps design a website to promote OR to high school students – attract the top maths students to OR.

V. Mabin: Could have links to all related departments/courses with OR content.

J. George: What does “broadening focus” mean – to what subjects?

A. Philpott: Unsure of what B. Cavana meant – management?

J. George: If we lose focus, we lose where we’re going. He opposed that, and the name change.

G. Read: Critical element – services. Members should get newsletter (very good these days!), proceedings and “OR/MS Today”

J. Sankaran: Should be more support for special interest groups or clusters e.g. one day conference in operations management?

G. Read: Web/email lists of special interest groups.

N. Petty: Send people a year of newsletters, “OR/MS Today” for free

R. Hoare: Offered access to his list of names of New Zealanders interested in quantitative analysis.

A. Philpott: Agreed to discuss this further later.

L. Foulds: Could send newsletter unsolicited to many businesses.

V. Mabin: How much would this cost? Need to select businesses carefully.

M. Craddock: Need to grow into people doing OR, not by merging with other groups.

A. Philpott: The website idea is good. Also like the “OR/MS Today” idea, but unsure of expense. He will investigate that and R. Hoare’s idea.

## **APPENDIX 2: ORSNZ President's Report 2000**

### **Membership**

The current membership (at the time of writing) of the ORSNZ is as follows:

	This year	Last year
Corporate Members	5	6
Corporate Sponsors	2	0
Life Members	2	1
Corporate Representatives	10	9
Standard Members	82	74
Overseas Members	12	9
Members (No branch)	11	
Retired Members	3	3
Student Members	35	24
<b>Total People</b>	155	147

The membership of ORSNZ is slowly growing. This year we allocated a portion of our resources to a membership drive. Our corporate sponsors Hoare Research Software sent out a number of copies of OR/MS Today to targeted individuals and companies on their mailing list. At Auckland we focussed on a drive for student membership, with an ORSNZ welcome function in the first week of the year and a social and seminar at the year end.

### **Finances**

The finances of the ORSNZ are in a healthy state. The Society made a net income of \$6911.48 in 1999/2000. This indicates that the Society should be spending more on services to its members. Support of student activities (especially travel) is to be encouraged. It is hoped that ORSNZ Branches will take a more active role in spending the surpluses in the coming year. The Society will pay for expenses incurred in ORSNZ branch activities.

### **ORSNZ Conference**

The 34th ORSNZ Conference was held at the University of Waikato. This returned a small profit to ORSNZ. We are indebted to the Waikato Committee, in particular Les Foulds, John Buchanan, Chuda Basnet, and Jim Corner for their role in making this such a successful event. The ORSNZ Conference for 2000 is in Wellington. The provisional sequence for the next three ORSNZ Conferences is shown below:

2001 University of Canterbury

2002 University of Auckland

2003 University of Waikato

### **Visitors**

In 2000 there were no nominations for ORSNZ Visiting Lecturer. The Council is currently seeking nominations for Visiting Lecturers for 2001.

### **ORSNZ Newsletter**

Along with the annual conference, the Society's Newsletter is a key service provided by ORSNZ to its members. Since 1997/98 the editorial role has been carried out by a team of people based in Wellington. They are to be congratulated for regularly producing a Newsletter of a very high standard.

### **Council**

Since the last AGM, there have been no formal Council meetings. There has been a some informal email correspondence.

### **Web News**

The home page for the ORSNZ has URL

*<http://www.esc.auckland.ac.nz/Organisations/ORSNZ/>*

### **Constitutional Change**

The ORSNZ is currently conducting a postal ballot to ratify a Council decision to change the Constitution to allow a Council quorum to be formed using electronic mail. The results of this ballot will be published in the March Newsletter.

Andy Philpott

## APPENDIX 2

### THE REPORT OF THE ORSNZ PRESIDENT FOR 2001

#### Membership

The current membership of the ORSNZ is as follows:

	This Year	Last Year
Corporate Members	3	5
Corporate Sponsors		2
Life Members	2	2
Corporate Representatives	5	10
Standard Members	82	82
Overseas Members	12	12
Members (no branch)	12	11
Retired Members	4	3
Student Members	41	35
Total People	158	155

Even though it has been offset by an increase in student membership, the loss of corporate membership is disturbing. It is, of course, desirable that all membership category numbers increase. To this end incentives have been offered to sign up new members. It is hoped that funds can be found in the foreseeable future for the production of posters and a brochures.

#### Finances

At first glance, it appears that the Society made a loss of \$3958.27 in the last financial year, after a surplus in the preceding year of \$6911.48. However, if all tardy payments had been made in the right year, the surplus of the preceding year would have been \$2624.23, resulting in a surplus this year of \$328.98. In either case, the Society had a closing balance of \$32198.18. It has been known for some time that the Auditor has encouraged the Society to reduce its reserves. To this end, the Visiting Lecturer stipends were increased in value, the Grants-in-Aid for student conference attendance were increased, and, for the first time, the Daellenbach Prize was awarded and a Summer Vacation Project was funded. However the relatively large reserve does not highlight the fact that the ongoing expenses of the Society are beginning to exceed revenues. For this reason, a budget for the Society was devised for the first time. A study of it made financial decision making far more straightforward. Some of the decisions are reflected below. It is planned to construct, at the appropriate juncture, a budget for each forthcoming financial year.

#### Conferences

The 35<sup>th</sup> ORSNZ Conference was held in Wellington. The Council would like to thank the Organizing Committee, including Yu Hyakawa, John Davies, Bob Cavana, Kerry Mayes, James Wiley, Tricia Lapham, Sophie Lum, and Linda Walker for their splendid work in making it such a success. The 2001 conference venue is Christchurch. The cycle of the past four years suggests a provisional sequence of future sites:

Auckland in 2002,  
Hamilton, in 2003,  
Wellington, in 2004 (being the 40<sup>th</sup> anniversary of the founding of ORSNZ),  
Christchurch, in 2005.

### **Visitors**

The Visiting Lecturers funded by the Society in 2001 were Professor Larry Wein (Stanford, USA) and Professor Stein Wallace (Molde, Norway). The Council is soliciting nominations for 2002.

### **Newsletter**

The base of operations of the newsletter moved from Wellington to Christchurch during the year. The Council is grateful that the high standards that the Wellington group inherited from Hans Daellenbach for this vital service to members were maintained, and are being sustained by the Christchurch group.

### **Council Meetings**

Meetings were held in July and November, 2001. At the July meeting, the processes concerning sponsored visiting lecturers, branch and conference cost reimbursement, and the Summer vacation project were formalized. The decisions made at the November meeting will be discussed at the AGM and subsequently published in the next newsletter.

### **The ORSNZ Hans Daellenbach Prize**

This prize will be awarded for the first time at the 36<sup>th</sup> conference in Christchurch this year. This is a prestigious and joyous event for the Society. The Council will seek nominations for the next award in 2003.

### **The Summer Vacation Project**

For the first time, ORSNZ constituted a mechanism to donate some OR expertise over the summer. This was the Summer Vacation Project, for which applications were called in July.

### **Membership Database Development and the Documentation of Society Processes**

There has been a pressing need for some time to alleviate the burdens of the Treasurer and the Secretary by improving the ORSNZ membership database. The Society would also function more efficiently if its major activities and the portfolios of its officers were documented. An endeavour has been begun to make these goals a reality.

### **The Council, The Presidency, and the Future**

It is gratifying to learn that most Council members are willing to remain in office in 2002. My first year as President has been hectic. I would like to thank all members, especially those on the Council, for their patience and support as I learnt the ropes. As there is likely to be a quorate core of Council Members in Hamilton, I am happy to continue, if elected, as President in 2002.

Les Foulds  
President  
ORSNZ

**Statement of Receipts and Payments  
of the Operational Research Society of New Zealand (Inc)**

**Year: 1st July 2000 - 30th June 2001**

<b>Receipts</b>	<u><b>2000/2001</b></u>		<u><b>1999/2000</b></u>	
<b>Conference</b>				
1999 Conference	177.35		14,486.50	
2000 Conference	7,530.00	<b>7,707.35</b>	-	<b>14,486.50</b>
<b>GST<sup>1</sup></b>				
Refunds	380.03	<b>380.03</b>	16.24	<b>16.24</b>
<b>Other Receipts</b>				
Interest	1,286.14		968.64	
Newsletter advertising	-	<b>1,286.14</b>	112.50	<b>1,081.14</b>
<b>Subscriptions</b>				
Corporate	480.00		1,160.00	
Individual	3,675.00		3,955.00	
Journal etc	-		64.64	
Past Years	985.00	<b>5,140.00</b>	975.00	<b>6,154.64</b>
<b>Total Receipts</b>		<b>14,513.52</b>		<b>21,738.52</b>
<b>Total Payments</b> (see next page)		<b>18,471.79</b>		<b>14,827.04</b>
<b>Excess of Receipts Over Payments</b>		<u><b>- 3,958.27</b></u>		<u><b>6,911.48</b></u>
<b>Cash Balances</b>				
<b>Opening Balance</b>		<b>\$36,156.45</b>		<b>\$29,244.97</b>
<b>Closing Balance</b>		<b>\$32,198.18</b>		<b>\$36,156.45</b>
<b>Change in balance</b>		<b>-\$3,958.27</b>		<b>\$6,911.48</b>

Kevin Broad, Hon. Treasurer

**Report to the members of the Operational Research Society Of New Zealand**

The Operational Research Society Of New Zealand is responsible for the preparation of the attached receipts and payments statement.

I have examined the accounting records of the Operational Research Society Of New Zealand. This included agreeing opening and closing bank balances to bank statements and a review of receipts and payments recorded. The above Statement of Receipts and Payments for the year 1/7/00 - 30/6/01 is in agreement with the accounting records which, from my review, have been properly kept.

Control over income and expenditure prior to its being recorded is limited, and there can be no practical audit procedures to determine the effects of this limited control.

Based upon my review, and subject to the limitations mentioned above, nothing has come to my attention that indicated that any of the information disclosed is incorrect.

Dr. Paul Rouse, Hon Auditor, Ph. D. C.A.

<b>Payments</b>	<b>2000/01</b>		<b>1999/00</b>	
<b>Branch Expenses</b>				
Auckland	-		-	
Wellington	168.75		190.80	
Christchurch	-	<b>168.75</b>	-	<b>190.80</b>
<b>Conference Expenses</b>				
1999 Conference	4,287.25	-	8,063.67	
2000 Conference	8,261.63	-	-	
2001 Conference	340.00	<b>12,888.88</b>	-	<b>8,063.67</b>
<b>Education</b>				
Visitor Program	-		1,092.95	
Project and Paper prizes	1,000.00		1,000.00	
Student travel grants	271.00	<b>1,271.00</b>	-	<b>2,092.95</b>
<b>GST</b>				
Payments	-	-	1,805.17	<b>1,805.17</b>
<b>IAOR</b>				
Stationary and postage	-	-	24.45	<b>24.45</b>
<b>Society Memberships</b>				
Royal Society of New Zealand	-	-	281.25	<b>281.25</b>
<b>Journal</b>				
OR/MS Today purchases	594.96		-	
Postage & stationary	25.10	<b>620.06</b>	43.00	<b>43.00</b>
<b>Newsletter</b>				
Postage	429.41		712.90	
Packing and administration	538.94		354.38	
Printing and Design	496.06	<b>1,464.41</b>	518.23	<b>1,585.51</b>
<b>Secretarial</b>				
Annual Report	117.65		-	
PO Box rental/redirection	215.00		210.00	
Postage, packing & stationary	1,311.31	<b>1,643.96</b>	223.05	<b>433.05</b>
<b>Treasury</b>				
Bank Charges (not VISA)	2.50		32.50	
VISA	228.98	<b>231.48</b>	212.19	<b>244.69</b>
<b>Miscellaneous</b>				
Misc	100.00	<b>100.00</b>	62.50	<b>62.50</b>
<b>Website</b>				
Domain Name	83.25	<b>83.25</b>	-	-
<b>Total Payments</b>		<b>18,471.79</b>		<b>14,827.04</b>

Notes: (1) Above figures include GST whenever GST applies.



## Treasurer's Notes on the ORSNZ Financial Report 2000-2001

The first pair of columns in the financial statement summarises transactions for the year from 1/7/00 to 30/6/01. The second column pair is for the preceding year. The effective funds available at the start of the period were \$36,156.45. The effective funds at the end of the period were \$32,198.18. This is a shortfall of receipts over expenditure of \$3,958.27.

The payments were somewhat inflated from costs that should have been made in the 1999-2000 financial year. These include \$2363.50 for the 1999 Conference dinner and \$1923.75 of postage and printing costs of the 1999 Conference Proceedings. Adjusting for these costs results in an excess of receipts over expenditure of \$328.98. However, it is important to note that there are other less significant receipts and payments that suffer from similar time lags e.g. subscriptions from past years.

Kevin Broad  
Hon. Treasurer

## APPENDIX 4

### **Venues of Future Conferences**

It is self-evident that, for planning and preparation purposes, the venue of the next ORSNZ conference must be known well in advance. Periodically, schedules of future hosts have been agreed. While time has soon made a mockery of them, and the following proposal will sooner or later doubtless suffer the same fate, these cycles of cities have been nonetheless useful in the short term. However, it is in the interests of the Society to be somewhat opportunistic regarding syndicate conferences and creative venues. For instance, the early conferences were a part of the NZ Stats Assn conferences (which happened again in 1994 in Palmerston North). The 1978 Christchurch conference was moved to May so that it could be allied to the Australasian Maths Teachers Conference. Other years have seen alliances with APICS, APORS (in Melbourne) and MODSIM.

While bearing in mind the above, Les Foulds would like to propose the “North-to South” cycle of the last four years to be repeated indefinitely, except when there are cogent reasons for departure:

The conference to be held annually, over two days, beginning on the last Friday in November at:

Auckland in 2002,  
Hamilton, in 2003,  
Wellington, in 2004 (The 40<sup>th</sup> Anniversary of ORSNZ),  
Christchurch, in 2005, and so on.

Members at Auckland have indicated their willingness to host the conference in 2002.

There is a majority of Hamilton members’ acceptance of the above cycle. This is significant, as it widens the base of regular hosts.

It is hoped that other centres, such as Palmerston North and Dunedin, will become possibilities.



**OLZAR**