

SPUMS ANNUAL SCIENTIFIC MEETING 1990

THE SCIENCE CENTRE FOUNDATION

Ruth Inall

What is a professional organization? Why does it exist and what is its purpose?

All associations, societies and institutes should ask themselves these questions periodically. Basically an organization comes into being because a number of people have found that they share a common interest which cannot be met by any existing group. In the case of "interest" groups this may arise because of new and/or compelling ideas develop which focus on a particular aspect, e.g. conservation concepts. In professional groups it generally occurs when the parent body is perceived, for whatever reason, as not meeting the needs of a new sub-speciality, e.g. the many engineering speciality institutes which have derived from the original institutions of engineering.

The development of a new organization is a bit like human growth and development. There is the conceptual stage, very exciting and full of enthusiasm; next comes the birth with all the usual traumas followed by the toddler stage, teething troubles, etc. The analogy can cover all the stages of human existence. Except for one. For centuries mankind has looked for the elixir of life, to extend human existence past the three score and ten, with minimal success. On the other hand our research can prove more successful when we look for the magic ingredients that enable some organizations to remain valid and active for centuries while others spring up, flower and then die away.

What are these magic ingredients? We do not need to do a great deal of research to answer this riddle. They are leadership, relevance and good management.

There is very little the Science Centre Foundation (SCF) can do about the first to help our organizations. Quite rightly it would be termed "interference" and "meddling" by our member bodies. We can sometimes help with the second by acting as a catalyst, working with a group that is trying to translate its original objectives to meet to-day's demands. However, we can always help the group to achieve better management.

To ensure that the activities of the Science Centre were developed both in depth and in scope to meet more fully the needs of the professional and semi-professional community, the Science Centre Foundation was established and incorporated in New South Wales on 27 May 1981.

However, the benefits to be derived from the provision of a common core of services and facilities for scien-

tific, technical and other professional societies was recognized as far back as 1928. In that year the NSW Government passed legislation granting a parcel of land in Gloucester Street, Sydney, to the Royal Society of New South Wales, the Linnean Society of New South Wales and the Institution of Engineers, Australia. Those bodies were charged with the responsibilities of erecting a suitable building to house the scientific and professional societies of the state.

The building was completed in 1931 but was resumed in the 1970's for the Rocks development scheme. At that time a review was made of the needs of professional and semi-professional organizations. This revealed that while the very few large organizations would no doubt continue to manage their affairs independently, the numerous middle-size and smaller bodies were finding it extremely difficult to administer their affairs efficiently, and to play a significant part in Australia's professional life, without increasing their members' fees to the level where such increase would become counter-productive. The Royal Society of NSW and the Linnean Society of NSW therefore undertook the task of setting up a secretariat to provide these bodies with the facilities whereby operating costs could be shared and management improved. Since the withdrawal of the two societies from this task the SCF has taken over these activities and has been operating independently since 1983.

The Governor-General of Australia is the patron of the Foundation and takes a keen interest in its activities.

The aims and objectives of the Foundation can be summarized briefly as being to assist scientific and technological development by aiding professional and semi-professional bodies to function and develop, to provide liaison within and between the professions both nationally and internationally, to assist individuals in the development of their scientific and technical abilities by appropriate grants, and to encourage the application and dissemination of knowledge in the scientific and technological fields.

It should be stressed that the Foundation does not intend to usurp in any way the activities of the larger well-established professional organizations; it is concerned with the welfare of that large group of medium to small organizations which are of very real importance to the community as a whole.

It has always been intended that the SCF shall have a broad base with a membership drawn from a wide variety of societies and organizations (both professional and industrial) together with interested individuals.

The methods we use to translate these objectives into action are as varied as the member organizations we service. The common denominators are that we explore with each

committee where the greatest need for assistance lies and that we encourage the organization to realize that by joining the Foundation that they have acquired staff varying in skills from executive director to office junior, and to develop a relationship with the secretariat accordingly.

For example, in 1988 the SCF created an award which recognizes that many members put an enormous amount of effort into the development of their organization. Since the development of professional and scientific organizations is the main reason for the Foundation's existence, the board of Governors resolved to mark the bicentenary year with the establishment of the Science Centre Foundation award. This was such a success that it was decided to make this award an annual event.

The award is presented to the elected officer, member or official of an organization which is a member of the SCF, in recognition of dedication and outstanding service to that organization and to the fostering of cooperative relations between organization and the Foundation.

If SPUMS decided to join the Foundation and establish a secretariat the following might happen:

- 1 We can provide a registered office with mail address and telephone. Routine matters can be handled by the staff while the rest is sent on to the Secretary. Files and records can be maintained at the office.
- 2 We can provide assistance with the preparation and attendance at committee meetings.
- 3 We can create a data base and keep it up-to-date.
- 4 We can send out subscription notices, record payments, and send out reminders. We can bank, prepare monthly financial statements, leaving the Treasurer responsible for budgeting and forward planning.
- 5 We can assist the Editors at the word-processing stage, then return the disc for editing and lay-out. We could undertake the sales and advertising tasks.

The tasks I have outlined are basic administrative procedures. However, it is perhaps in helping the Society to look at its objectives and translate these into programmes that we could be most helpful. Relieving executive members of most of their clerical chores will allow available time to be spent on developmental projects. From discussions and reading background material provided, it would appear that a number of areas could be explored:

- 1 An expansion of educational activities such as providing more scientific meetings including those catering for members other than doctors.
- 2 Establish hyperbaric medicine as a recognized part of medical education.
- 3 Establish contact with other medical organizations such as the Postgraduate Federation in Medicine.
- 4 Develop projects in developing countries such as making a video suitable for a teaching aid.

To give some idea as to how to implement for example the first suggestion of educational activities it might be possible to select a small group to put material together for a two-day seminar, then take this to each State and appropriate centres. This would enable wider participation by both members and associates, thus helping them to become more involved with the Society.

My talk to-day has been an attempt to demonstrate how the SCF functions and what we could achieve together. I hope that the opportunity you have given me to-day is not the last time I shall be talking to members of this Society.

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SUBMARINE ESCAPE AND RESCUE

Greg Adkisson

Submarine escape and rescue of the 1990's is a complex evolution involving a variety of different craft, both surface and submersible, and often the co-ordinated efforts of many nations. To appreciate what we are able to accomplish today, it is worth looking back through time to appreciate the work of those that passed before us.

History

The first successful submarine escape on record occurred in 1851. The *Brandtaucher* or *Sea Devil* was a German vessel commanded by Wilhelm Bauer, a corporal in the Bavarian artillery. She was a stubby, narrow beamed vessel of some 35 tons with a very deep draft and motored by a hand turned propeller. She was first sent into action against the Danish fleet which was blockading the harbour at Kiel. The Danish fleet stayed at sea and Bauer's first day consisted of moving about the harbour without seeing enemy action.

Not one to give up easily, Wilhelm set out to sea on the second day determined to sink a ship. Unfortunately, his determination would prove successful but not in the way he imagined. The *Brandtaucher*, on its second submergence, ran out of control and sank in 18 metres of water. Unsure of quite how to handle the situation he discussed it with his shipmates. They were all for staying put, having no idea of how to leave. Wilhelm, however, felt that it was time to return to the artillery and came up with the idea that, by pumping water into the vessel, pressure could be equalized, the hatch opened, and they could all swim to the surface. It