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# PROBE

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Bulletin of the Probus Club of Bendigo Inc.



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Editor : ALEC CROTHERS (Phone 43 2642)

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**PROBUS CLUB OF BENDIGO INC.**

**President** : ROBERT (Bob) HOLMES

Phone : 43 7634

**Secretary** : BOB CHENERY

Phone : 42 4546

A Special General Meeting is held every 3rd. Wednesday each month at 10.00 a.m. at the Bendigo Club.

All correspondence to the Secretary, 49 Emmett Street, Golden Square, 3555.

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Guest Speaker : Despite the advice in the February edition of "Probe", GRAEME TREWARTHA will address our March meeting. Members are advised that there will be no Speaker in March. Previous experience has shown that our Annual Meeting can severely limit the time available to a Speaker.

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The Speaker at our February meeting, MAX GRIERSON, was introduced by DON KERR and gave us an interesting, thought provoking talk on his subject, Education. He started with a brief history, tracing education back to Mesopotamia and Egypt, and linking education to the development of writing. The need to keep records necessitated the development of writing. With quotations from St. Matthew, Lord Brougham, Mark Twain and Herbert Spenser, he showed us the need and benefits of education.

The impact of other inventions, such as printing, on the growth of education was described. Printing, by producing books much faster than by writing manuscripts, was a spur to formal education, although Disraeli considered that printing was the worst thing to happen to education.

Next Max considered the speed of change, it took 250,000 years for the full development of flint axes, yet 50 years after the Wright brothers aviation had evolved to super-sonic jet flight. A consequence of this type of progress is that huge amounts of information must be stored in a readily accessible form. Changes are now so rapid that 3 or 4 years after Graduation, the modern Engineer has to turn over 50% of his knowledge.

There is need for further change and it must be rapid. For instance the degradation of the environment must be checked before there is no environment at all. The solution to this type of problem often gives rise to new problems. This situation has led to education today being aimed at initiative and lateral thinking. This is the underlying philosophy of the V.C.E., which endeavours to be student-centred.

A final quotation, this time from a contemporary, Dr. Peter Aylyard;

"The future is not a place we are going to, but it is what we are now creating."

ALF RYALL expressed the appreciation of our group for a most stimulating talk.

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**TRIPS AND ENTERTAINMENT :**

**SUNDAY MARCH 22ND. 1992 :** COMBINED PROBUS PICNIC AT ECHUCA

Location : Echuca Harness Racing Club - Echuca - 11:00 am.onwards. Echuca Probus Club have organised this "Special Probus Day". **ALL FOODS ARE ON A B.Y.O. BASIS.** Tea, coffee, etc. and large B.B.Q. will be available. Suggest you bring your own drinking vessels, small folding table and folding chairs. Entertainment and Sing Alongs have been arranged, it will be a great day for fellowship and enjoyment. Coach Capacity : 49 Current Bookings : 42 = 7 vacancies. Depart : Strath Community Centre, Crook Street, at 9:30 a.m. Arrive Home : 5:00 p.m. (Estimated) Coach Fare : \$7.50/person. (Sharing coach with Sandhurst Probus)

**TRIP OF THE YEAR** : 8 Days/7 Nights "FLINDERS RANGES/ROXBY DOWNS" Saturday September 26th. - Saturday October 3rd. (inclusive).

**COST** : \$760.00/person - Includes Accommodation - D.B.B., plus morning and afternoon teas and all entry fees. Full trip itineraries available, either from ARTHUR or HOULDENS TOURS. **CURRENT BOOKINGS** : Full with Emergencies - 3 couples. Those booked on the trip are reminded that **deposits of \$60.00/person are now due & payable** at Houlden's Tours, Bendigo. **Emergencies** : place your name on listing for consideration as vacancies occur.

**WEDNESDAY, MAY 6TH. 1992 - "AUTUMN TRIP TO MT. MACEDON"**

Garden Tours and Lunch Included

A leisurely trip, designed to tour some of the gardens of Mt. Macedon during the Autumn - a great opportunity for Garden Lovers. **COST** : \$21.00/person **INCLUDES** : Coach Fare, a morning "Devonshire Tea", a scrumptious lunch of casseroles, salads, choice of desserts and tea or coffee, also includes entrance fees for Garden Tours. **DEPART** : 9:00 a.m. **ARRIVE HOME** : 5:00 p.m. **Maximum 49.** **Current Bookings** : 49 + 6 emergencies. **PAYMENTS** : at today's meeting, Wednesday March 18th. please.

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## MEMBER PROFILE :

### **ALEC CROTHERS**

Alex was born and grew up in England in a small town (by English standards), Royton, in Lancashire. Up to the time of retirement his career fell neatly into three sections, each close to twenty years long.

The first twenty years were devoted to Education, Primary, Secondary and Tertiary. St. Paul's Church of England School was the first of these. Then by winning a Junior Scholarship, he went to the Grammar School in the neighbouring town, Chadderton. There he won a County Major Scholarship which enabled him to go on to Manchester University. Even with the scholarships it needed generous support from his parents; working class people who had few pennies to spare, to fulfil this part of his education.

At Manchester he enrolled in the School of Physics, which boasts two Nobel Prize winners as past professors, Rutherford and Blackett.

The second twenty years were spent working in industry. During the war period he was employed by the Dunlop Rubber Company, in Birmingham. Among tasks assigned to him, were measurements of thermal conductivity of different rubber mixes; also electrical conductivity, yes electrical conductivity, of rubber, it needs very sensitive instruments. In yet another task he became one of the first workers to use Microwave Heating, it was called Dielectric Heating in those days. The exercise was aimed to develop a method for vulcanising repairs to the tyres of Army vehicles in the field, thus doing away with the need to send repair jobs back to base.

After the Degree was conferred Alec remained in Manchester, working in the laboratories of Tootal, the firm of textile manufacturers. here he met and married Dorothy.

After nine years at Tootal, Alec moved into a completely different field. Joining A.V. Roe, part of the Hawker-Sydeley Group. Here he worked in the Weapons Research Division on the design of guidance systems. This work was much more concerned with Mathematics than Physics and involved extensive use of Analogue Computers. That particular project was the Blue Steel, an air-to-ground missile designed to be carried by the Avro Vulcan and other V bombers.

From there he moved on to the G.E.C. to a branch located at Stanmore just outside London. This work was still concerned with guidance systems and involved with mathematics even more than at Avro.

In September, 1963 Alec arrived in Bendigo where the third twenty year period was completed, at Bendigo Technical College, as it was then. By this time there were four in the family, a daughter and a son making up the number.

Initially the post was in the Mathematics and Physics Department lecturing in both mathematics and physics. Eventually the Department was split into two and Alec became part of the Mathematics Department. In this period he came into contact with and attempted to teach mathematics to the sons of several Probians, including the HOLMES boys, the DINGLES, RALPH MICHELL'S son and also the daughter of ALBY COOPER.

Twenty years later, it seemed long enough to have spent in or job, so our hero decided to retire. Bendigo still seemed a good place to live, so Alec and Dorothy stayed in the town. Fiona and Andrew now married and with children are also living in Bendigo.

Now that they have six grand-children, it looks as if Alec and Dorothy will spend the next twenty years baby-sitting!

