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Mr. Alfred S. Dickson He is in a

P.O. Box 13, S.12 Victoria, Australia

Dear Mr. Dicksont

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To hel to him here on 900 62

I enjoyed our pleasant evening last week. I shall be looking forward to the next one and in the meantime, I shall certainly broach the possibility at home of a visit by one of our youngsters and hope that we can reciprocate at an appropriate time.

I am enclosing a copy of the proposal I told you about, which has to do with setting up a fund to be supported by industry that will make grants for research in the developing countries. Just as a matter of interest, I also enclose a copy of the letter, which is more or less a form with which I have been addressing myself to industry. It would be something if you could arouse the interest of Bowaters or other Australian industries, in coming to the support of an activity of this sort.

So that the package may be a little bigger and to fill you in on the background, I am sending a copy of the last Annual Report of my own foundation and another brochure describing, to some extent, the kinds of grants we have been making which are the inspiration for the Fund for Overseas Research Grants and Education.

It is interesting that the privately operating foundation is such an almost exclusively American phenomenon. There are a couple of foundations of private nature in England and, I believe, an occasional one is in existence in other countries. The latter however, seem to be devices for protecting a family fortune rather than for using it in philanthropic activities. From my experience, and from the record of the activities of foundations in this country, I think it is clear that they serve a very excellent purpose in a way that no government agency could successfully do. Would it not be a very fine thing if, in similar fashion to the Nutrition Foundation, the National Vitamin Foundation and FORGE - if

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it ever gets established - a private, industry-supported fund could be established in Australia to provide grants in aid of research and scholarship in various areas of education including, perhaps, some non-science work?

By way of illustrating an opportunity to support someone on your local scene who is doing important pioneering research, I refer again to my friend Grote Reber, one of the leading early names in radio astronomy, who is still actively doing outstanding work.

Grote has set up an antenna outside of Hobart,
Tasmania on which he has already begun to get promise of
revealing and significant data. I have suggested that he get
in touch with you while en route to Tasmania from this
country. He has been visiting us here to receive a couple
of major awards and an honorary Doctorate of Science. I
enclose a reprint of material issued in connection with Reber
on the occasion of his receiving the doctorate from Ohio
State University.

Dr. "Taffy" Bowen in the Sydney office of the C.S.I.R.O. and, I believe, most of the people in the Melbourne office of that organisation, know Reber and his work. How good it would be if Bowaters or one or two other private corporations were to make his task easier. Research Corporation has been helping him and he has been putting in a good deal of his own money. C.S.I.R.O. has apparently extended itself considerably to advance his work.

Just in case Reber does not manage to get in touch with you as he passes through Melbourne, and should you be interested in making his acquaintance otherwise, his address is C.S.I.R.O., Stowell Avenue, Hobart, Tasmania.

Sincerely,

Alfred Kelleher

## A PROPOSAL FOR INDUSTRY SUPPORT OF RESEARCH IN UNDERDEVELOPED COUNTRIES

PROPOSED, that a consortium of American corporations, especially those with significant overseas markets and affiliations, finance an independent foundation which will provide grants for research in science and engineering in Latin American, Asian and African universities.

The program and the opportunity to make it possible represent a genuine challenge to American free enterprise.

American business firms have individually generously met their obligation to support education and research in our colleges and universities. With a vital stake in the growth of strong free economies in the newly developing nations, private business also has a legitimate concern to foster strong science and technology programs in their universities and colleges. The proposed grants program offers an attractive means of response.

There are obvious implications for education, economic development and world equilibrium in a program of grants in aid of research aimed principally at younger scholars, that is supported by American business out of enlightened self-interest, as well as its broadly developed sense of responsibility. There is particular logic in this for private businesses which derive profit from overseas activities.

The concept of an autonomous foundation supported by industry, to make grants in support of academic research, is not new. The Nutrition Foundation and the National Vitamin Foundation in the United States are examples of such organizations. Founded and supported by groups of corporations engaged respectively in the food and pharmaceutical industries, these foundations have operated successfully and independently for years, financing the research efforts of college and university professors.

Relatively modest contributions from the top twenty or thirty American corporations engaged in foreign operations who may later be joined by other private business organizations, would make possible the formation of an Industry Fund for Overseas Research Grants and Education. This organization would initiate and sustain a grants program of vital importance to the universities of the emerging countries of the world. Such an autonomous foundation -- free from influence of any one of its sponsors on individual grants, and free from the propaganda stigma sometimes associated with government grants -- constitutes an ideal response to a specific, recognized need. It provides a unique opportunity for the American business community to engage itself directly in the struggle to maintain our free society.

#### NEED FOR THE PROGRAM

Small individual grants to aid research in the universities of the newly developing nations are much needed. Present programs of government and of most large foundations provide support at top echelon levels or, in keeping with older traditions of foreign universities, finance the research of principal professors. Such funds do not often filter down in meaningful portion to the junior faculty to permit them to pursue their own research interests effectively. In many cases, the senior men themselves, though they may have general support, frequently do not have modest sums for needed supplies or for student stipends.

Many of the junior faculty in particular in the overseas universities have received excellent training at graduate level in the United States and Europe. They are capable of contributing significantly through independent research to the advancement of scholarship in their fields and to the training of students.

Although private foundation and government programs provide many fellowships and scholarships for foreign students to study in American universities, those who return home on completion of their advanced training are too often forced to seek work or do research outside their own universities. Too many are reluctant to go home at all because of inadequate support there for individual research.

It is vital a program be developed to help these capable scholars in underdeveloped countries do research of their own in their own institutions. Grants made in terms of local capabilities, dignity and self-respect will help directly to develop independent science and technology in the countries where they are placed.

#### GUIDELINES FOR THE PROGRAM

We may visualize how the grants program will function by considering from among many effective foundation examples that of the Cottrell Grants of Research Corporation which was active among United States colleges and universities from 1945 through 1960. The Cottrell grants, seldom in amounts over \$3,000 or \$4,000, were aimed at stimulating new research, with particular emphasis on promising younger scientists who had yet to achieve public stature and recognition. The grants were a major factor in the development of significant scientific programs and academic stimulation in our colleges and universities after the last war. Essential to their success was personal contact with the faculties in science, effected through visits of qualified field representatives who gained first-hand knowledge of needs and capabilities of individual professors and an understanding and appreciation of the institutional environment affecting research.

The proposed new foundation's program should begin in science and engineering, though it should certainly not be confined to basic research. Applied or developmental work will be much more appropriate in many situations. Formal proposal, review and approval procedures for grants may be adapted from existing examples. As the foundation's activities become established, it may be in order to consider broadening the program to cover other areas than science and engineering.

It is recognized that particular care must be exercised in dealing with foreign grants to avoid abrading the personal sensitivity of senior faculty men, administrators and public officials. While the program must remain private and independent, it must also avoid conflict with national interests of any of the countries involved. A great responsibility for exercising mature judgement in these matters will rest on the foundation's representatives at all levels.

In all events, the program must be kept flexible in concept and in specifics to meet the different circumstances of foreign educational institutions.

## SCOPE OF THE PROGRAM

Presently, probably no more than from 150 to 200 educational institutions in the geographical areas of our concern would come within the scope of the foundation's activities. In terms of capable faculty, trained in modern science with reasonable prospect of doing effective research, the number may be smaller.

However, the number of people with graduate training in science and engineering is rapidly increasing in these countries. During the academic year 1960-61, there were 21, 404 foreign graduate students enrolled in American colleges and universities. The medical sciences accounted for 1, 767; another 3, 636 were in engineering; and 4, 943 were studying in the natural and physical sciences.

It is clear that a substantial number of the faculty in science and engineering of institutions in the underdeveloped nations have been trained at United States universities within the past ten to fifteen years. Many have trained in Canada and Europe. From this potential pool of research talent, it would be possible to initiate a modest but significant experimental program of grants within the first year of operation of the foundation for overseas research grants. Within five years, as results of earlier years are studied and as the program is expanded, a level of up to 36t active grants or more per year would be attained, with amounts ranging from a few hundred to some thousands of dollars, probably averaging close to \$4,000 a year.

In its first year the foundation probably should concentrate on one geographical area, perhaps Latin America, or a few countries there, to gain first-hand experience. With that experience, and increased staff, additional areas would be encompassed until the program reaches its objective of sponsoring local research in developing countries throughout the world.

# THE ORGANIZATION

Organization of the foundation could be largely modeled on the Nutrition Foundation.

The Board of Trustees would consist of representatives of supporting companies, and scientists, educators and others representing the public interest. To assure autonomy of the program, corporate members probably should constitute a minority. The Board would have final responsibility for policies, grants, achievement of objectives and other matters affecting the success of the foundation.

The Board would exercise continuing control through an Executive Committee to be chosen from Board members.

The President or Chairman of the foundation, a figure of stature in the scientific or academic world, would probably not be a full-time, paid official at the outset. However, as chief executive officer he will be responsible for carrying out the policies of the foundation in such a way that its objectives will be accomplished.

The Executive Director, principal operating officer, would have major responsibility in implementing and administering the grants program. He should be a man of wide background in the foundation field, specifically with grants in science and technology; he should be familiar with grants procedures in institutions of higher education and experienced in dealing with university officials.

Program associates, or representatives, under the supervision of the Director, should have or be able to gain quickly a familiarity with attitudes and customs of the countries in their areas, and an understanding of the research capabilities among faculties of local academic institutions. The success of each grant will depend to a large degree on the representative's accurate assessment of local factors and his talents for dealing with sensitive people and situations. It may be very desirable, where possible, to involve local scientists in this function.

A Grants Advisory Committee would be made up of eminent scholars in the fields of research to be supported by the foundation and by other technical or academic leaders. It would review and recommend action on all grant applications referred to it by the Director, with decisions and recommendations to be finally reviewed by the President and Executive Committee.

Legal Counsel, until there is a requirement for resident counsel, could best be furnished through an outside law firm.

## THE BUDGET

Cost of administration of the grants program may be approximately forecast using as a guide the experience of other foundations with similar structure and operations.

Tentative estimates are provided in an attached budget sheet. Because of the nature of the proposed foundation, it is certain that its administrative costs will be high in relation to the grants total.

# Steering Committee

- D. W. Bronk, President, Rockefeller Institute
- S. A. Goudsmit, Prof. of Physics, Brookhaven Labs.
- J. W. Hinkley, President, Research Corporation
- J. R. Killian, Jr., Chairman, M.I.T.
- C. Glen King, President, Nutrition Foundation
- E. R. Piore, Vice-President, Research & Engr., I.B. M.
- W. O. Roberts, Director, Nat. Center for Atmosph. Research

Alfred Kelleher Secretary