

file

January 28, 1960

Dr. Otto Struve
Director
National Radio Astronomy Observatory
P. O. Box #2
Green Bank, West Virginia

Dear Dr. Struve:

At the last meeting of the NRAO Departmental Chairmen, a question was raised about the use of NRAO facilities by commercial firms. Charles Dunbar has kindly furnished me copies of two documents.

A vote of the Executive Committee of the AUI Trustees, December 7, 1950, reads as follows:

VOTED: That the Director be and he hereby is instructed that, in determining whether to accept proposals from private industry involving the use of the corporation's facilities, he should ordinarily be guided by the following general standards:

1. The suggested project must be of general interest and technical importance;
2. An appropriate charge should be made for use of facilities;
3. The project must be such as to require the use of the unique facilities of the corporation;
4. The project must not interfere with the current work of the corporation's own staff, except insofar as cooperation of the staff is deemed appropriate;
5. Freedom to publish results must be reserved.

An abstract of an AEC Policy on Industrial Cooperation, dated May 17, 1954 is enclosed. The last paragraph, page 4, seems to me to be a fair statement of our situation at NRAO.

Perhaps this matter should be taken up again at our February 15 meeting. I think NRAO should develop a policy statement covering

the following items:

1. Arrangements. We must be careful to define the line between strictly commercial interests and the research program of a qualified scientist employed by a commercial firm. If I recall correctly, an astronomer employed by Convair wanted to work with the 85-foot telescope last summer. Should he come on the same basis as a visiting scientist from a University? In any event, paragraphs 5 and 5 of the AEC policy I would change to make the NRAO Director responsible.

2. Funding. Paragraph 8 of the AEC document applies except sub-paragraphs c and d. Also see paragraph 14.

3. Patents. As provided in our NSF contract. This may be a troublesome point and I think Charles Dunbar and others with more knowledge than I should comment on this.

4. Publication of Results. As in paragraph 12 of the AEC document.

5. Endorsements. Certainly neither the NRAO or the NSF would want to be used in a manner to imply endorsement of a commercial product merely because it had been developed or tested at NRAO. If NRAO should decide to purchase the product, then the manufacturer could follow the pattern already employed by others, i.e., that NRAO purchase and use of his product was, in fact, an endorsement.

Sincerely,

RME

Richard M. Emberson
Assistant to the President

Attach.

cc: FJCallender
JWFindlay
DSHeeschen
CFDunbar
LRBurchill
LVBerkner

THIS COPY FOR

May 17, 1954

INDUSTRIAL COOPERATION - ATOMIC ENERGY COMMISSION POLICY

The Atomic Energy Commission has issued a "Policy on Industrial Participation in Atomic Energy Commission Facilities." This document is of interest to Associated Universities, Inc., from both the historical and the managerial standpoint.

As to the former, it can fairly be said that much of the Commission's new policy dates back to work done by Capt. Conrad and Dr. Heworth in 1948 and 1949. Language contained in a letter from Dr. Heworth to Mr. Van Horn dated May 3, 1949 is not far removed from some appearing in the present document. It was later decided to put no pressure on the Commission to approve an industrial cooperation policy for Brookhaven, but rather to allow a policy to evolve through a case by case process.

In 1952 the New York Operations Office became interested in the formalization of a policy for Brookhaven, and after extended discussions one was prepared and, in April, 1953, submitted to the Commission through its Division of Industrial Development.

To the dismay of everyone directly concerned, the Commission concluded that instead of a policy for Brookhaven, there should be a general policy on the subject applicable to all national laboratories and other Commission-supported institutions. The present document, copies of which are available on request, is the result of this decision and of a great deal of work by the staffs of the national laboratories and the Commission.

A summary of the policy follows: The numbered paragraphs below correspond to paragraphs in the document itself.

POLICY OF ATOMIC ENERGY COMMISSION

on

INDUSTRIAL PARTICIPATION IN ATOMIC ENERGY FACILITIES

1. The present limited cooperative activities at the various national laboratories should be continued and expanded.
2. Although the policy is intended to provide guidance for all Atomic Energy Commission facilities, differences between them with respect to purposes, organization, etc. are recognized.
3. The policy covers all arrangements for research and development between AEC financed research facilities and private organizations, where these arrangements are financed by private funds. It is applicable to arrangements with both industrial firms and nonprofit

institutions. Examples are as follows:

- a. The conduct in AEC-owned facilities of research and development work completely financed by private organizations with their own or AEC facility personnel;
 - b. Continuing Oak Ridge School of Reactor Technology (OSORT) and other approved arrangements with private organizations agreeing to assign employees to AEC facilities for long term educational and training purposes;
 - c. Approved technical consultation by AEC facility employees on atomic energy matters, under the auspices of the facility.
4. The production and distribution of radioisotopes and provision for irradiation services will continue in accordance with existing procedures.
 5. All arrangements other than minor inquiries and services are to be formalized in contracts subject to normal Atomic Energy Commission review.
 6. An industrial project will be approved only if it does not unduly interfere with the Atomic Energy Commission program, and if it will promote industrial utilization of atomic energy. Approval will be by the Director of the Division of Reactor Development, or some other division director, if more appropriate.
 7. All contracts must require submission of technical reports covering the work.
 8. Proposals must conform to the following criteria:
 - a. The non-Government participants would expend their own funds for the work undertaken, compensating the AEC on a basis which would assure recovery to the Government of all costs;
 - b. Non-Government participants will be permitted to make a contribution to the personnel required for the program when it is in the best interest of the program and is consistent with the overall objectives and management of the facility;
 - c. The work must require the use of AEC facilities and/or services which are unique and are not available elsewhere. It is the intent of this criterion to encourage industry to set up its own facilities at the earliest practicable date;
 - d. Activities under the proposed program may involve those portions of the AEC facilities engaged in weapons research or development, provided that such activities are essential and

make a substantial contribution to the industrial participation program, and do not interfere with the paramount objective of assuring the common defense and security;

- e. The work must be in keeping with the general character and purposes of the AEC facility concerned, and it must not unduly interfere with the AEC-supported program of the facility. All private programs undertaken must be subject to the AEC's overall budget ceilings and manpower limitations.
9. With respect to patents, an equitable balance must be achieved between public and private interests.
10. All contracts for research and development projects (including nuclear power) shall contain an invention disclosure clause under which the contractor shall retain (1) an exclusive (except as against the Government and its accounts) irrevocable royalty-free license with the sole right to grant sublicenses for all purposes other than use in the production of fissionable material or atomic energy, and (2) a non-exclusive irrevocable royalty-free license for use in the production or utilization of fissionable material or atomic energy. This latter provision is in anticipation of an amendment of the Atomic Energy Act to permit patent rights in the use of inventions for the production of fissionable material.
12. All contracts shall require reporting to the Commission of all research results and reservation of publication rights to the Commission, subject to a reasonable time to file patent applications.
13. No private organization shall use the name of the Atomic Energy Commission in such a way as to imply endorsement.
14. Charges for technical work or services shall be on the principle of recovery of all costs, direct or indirect.
15. All technical consulting under approved agreements by AEC establishment personnel with private organizations on atomic energy matters carried on under the auspices, cognizance, and supervision of the establishment shall include the provisions governing patents hereof with respect to inventions and discoveries made or conceived in the course of consultation.
16. The Atomic Energy Commission will continue to assist industry in becoming acquainted with technical facts and potentialities. Oak Ridge School of Reactor Technology will be the main Atomic Energy Commission educational activity.
17. Appropriate public announcements will be made of the new policy.
18. Subsequent public statements will be issued with respect to industrial participation.

Just what effect the new policy will have on operations at Brookhaven remains to be seen. One unfortunate development has been the imposition (temporarily only, we hope) of a requirement that contracts of the sort contemplated be referred for approval to the Washington office of the Commission. This is bound to result in delays. The language of paragraph 3 is certainly broad enough, if literally applied, to cover the work carried on by members of university faculties, notably at the cyclotron. We are taking the position that in these cases there is no contractual arrangement between Brookhaven and a university as an organization, and that the faculty members and graduate students who come here, although privately financed, are in actuality doing work which is part of the Brookhaven program and which we would be glad to do ourselves, had we money and personnel available. The provisions with respect to disclosure of inventions contained in paragraph 10 are highly desirable from our point of view and should eliminate what has been a source of argument with every industrial organization with which we have had dealings. The requirement in paragraph 14 that all costs be recovered probably enunciates a sound principle, but one which will be extraordinarily difficult to apply in practice, and which may result in a very substantial increase in the scale of charges for use of the nuclear reactor, which is the research facility principally involved in arrangements of this kind. The Commission has indicated that charges will be expected to include AEC overhead at all levels from Washington down, Brookhaven general and administrative costs, and amortization of the facility used. Paragraph 15 is quoted in full because we do not fully understand what it means. We will explore this matter further with the Commission.