SCIENTIFIC LIAISON OFFICES

A Report from Washington

By Dwight E. Gray

At the present time some eight foreign nations maintain official scientific liaison offices in this country. Six of theserepresenting Australia, Canada, the Netherlands, New Zealand, South Africa and the United Kingdom-are located in Washington; the other two-for Denmark and Swedenare in New York although the representatives do much of their work in Washington. Now there are fashions in words just as there are in automobile styles and women's hats, and the word "liaison" is one which reached the full flower of fashionableness during World War II. As a result it has been tossed about with considerable abandon ever since. It has been my impression that its use almost always raises two questions in people's minds; one is "How do you spell it?" and the other is "Just what does it mean?". The purpose of this account is to answer the second query with regard to the liaison application mentioned above.

Stated generally, the *primary* responsibility of each scientific liaison officer is simply to serve as fully as he can the needs of science and technology in his own country as they relate to science and technology in the United States. Specifically, this involves him in the following principal activities:

- Maintaining the closest possible personal contact with U. S. scientists, scientific institutions, and technological developments.
- Obtaining technical information—particularly unusual publications and unpublished reports—of interest to scientists and engineers at home.
- Disseminating to U. S. scientists information regarding scientific and technical activities in the home country.
- Obtaining prompt and comprehensive answers to technical questions received from home agencies and individuals.
- Assisting official scientific visitors from his own nation in making travel arrangements, lining up appropriate interviews, scheduling inspection and study tours, and so forth.

The above outline may appear to imply that the work of a foreign scientific liaison officer is strictly a one-way-street activity as far as benefits are concerned. Actually, however, although the flow is predominantly toward the officer's home country, the system does have important two-way aspects. The very process of carrying out the duties listed brings the liaison representative into contact with U. S. scientists and technical groups who are interested in and wish to know about scientific work going on in his home country. Consequently, the scientific liaison office becomes a kind of official junction point through which technical information funnels in both directions. In other words, the scientific liaison officer plays somewhat the role of a catalyst, promoting mutually beneficial scientific "reactions" between his own nation and the United States. The catalytic analogy perhaps can be carried a step farther. The liaison officer tries to remain "unchanged" by the operation in the sense that once he has put the interested parties in the two countries in touch with each other he steps out of the picture as quickly as possible.

Two examples chosen from recent activities of the Australian office will serve to illustrate the two-way feature of scientific liaison. A request from Melbourne concerned a species of fly allegedly found in the state of Sonora, Mexico. The requestor had heard that this fly deposits its eggs in the blood vessels of the inner ear of rabbits in that region with fatal consequences to the "depositee". The Australian scientific liaison office was asked for information as to the exact identity of the parasite and whether it is a significant factor in controlling the Sonora rabbit population. Flow of information in the reverse direction is exemplified by a request from a California college professor regarding a newlypublished Australian book which he thought he might want to use in his classes. The liaison officer sent him a copy of the volume on loan to permit him to make his decision and informed him of the publisher and price in case he did wish to adopt it. It should be stated that these two cases are far from representative as far as importance of information is concerned; they do illustrate, however, the dual flow feature of the service. Actually the sum total of requests received by a scientific liaison officer takes him into almost all phases of pure and applied science.

The preceding general description of the duties of a scientific liaison officer applies to the representatives of all eight of the countries mentioned previously. Two other points which they have in common are worthy of particular mention. The first is that all scientific liaison officers, including Heads of the Missions, are themselves scientists or engineers. The second, which is closely related to the first and, it seems to me, of equal or greater importance, is the fact that every liaison officer comes specifically from some scientific or technical group or organization in his own country. For example, the Head of the Canadian Office, a physicist, represents the National Research Council of Canada in addition to being the accredited Canadian government scientific liaison officer; the official Swedish liaison representative, an electronics engineer, comes from the Swedish Academy of Engineering Sciences; and so on. Thus, the scientific liaison representative has a scientific, as well as a government "home base" and as a result undoubtedly achieves a highly desirable scientist-among-scientists status that might not result if he were known only as the agent of a government department. This is a point to which the United States perhaps should give important consideration in setting up its proposed foreign scientific liaison program.

Having considered somewhat abstractly the duties and functions of all scientific liaison representatives, let us turn now to the administrative organization of the specific liaison offices of the eight nations listed at the beginning of this account.

Of the eight nations maintaining full-time scientific liaison missions in this country, five are members of the British Commonwealth and are loosely affiliated to form what is called the British Commonwealth Scientific Office—usually referred to simply as BCSO. The five groups composing BCSO are as follows:

- United Kingdom Scientific Mission (which is part of the Department of Scientific and Industrial Research), headed by W. A. Macfarlane, a chemist with particular interest in fuel, from the Ministry of Fuel and Power in Great Britain.
- Canadian (NRC) Scientific Liaison Office, headed by J. D. Babbitt, a physicist from the National Research Council of Canada.
- Australian Scientific Liaison Office, headed by T. C. Bell, an agricultural scientist from the Commonwealth Scientific and Industrial Research Organization.
- New Zealand Scientific Liaison Office, headed by V. Armstrong, a fuel technologist from the New Zealand Department of Scientific and Industrial Research.
- South African Scientific Liaison Office, headed by D. R. Masson, a chemical engineer from the South African Council for Scientific and Industrial Research.

It will be noted that the special fields of the Mission Heads embrace a considerable variety of scientific subject content. This is supplemented by the areas of specialization of additional members of the United Kingdom group which include metallurgy, physics, radio, organic chemistry, and others.

The BCSO came into formal existence in July 1944 when it was recognized that the nations which now comprise it, all of whom already were maintaining one or more scientific liaison representatives in the United States, had many problems in common and could profit mutually from some kind of affiliation. For some time after its organization the BCSO

was concerned almost entirely with war-related scientific research and development. At present, however, the military phase is a minor fraction of its work.

The BCSO operates administratively somewhat like the British Commonwealth as a whole. It has no director or top administrative group to whom the member Missions are responsible. A House Committee, composed of the Heads of the Missions with the chairmanship rotating, directs affairs of common interest including procurement of documents and equipment, arrangement of travel for staff members and accredited visitors, oversight of the general "housekeeping" activities incident to staffing and maintaining the joint offices, and so forth. On matters of specific interest to its own nation, however, each Mission is autonomous and answerable only to its own government. The system is perhaps roughly analogous to that occasionally set up voluntarily by a group of U. S. newspaper reporters working on the same major assignment. To achieve faster and more complete coverage they may agree to divide the labor and pool their findings on certain phases of the story while retaining the right to act entirely independently on matters of peculiar interest to their particular employers or where competition between papers is involved.

The Netherlands Scientific Liaison Office is located at the Netherlands Embassy and is headed by H. Polak whose subject specialty is applied physics. He is associated with the Technical Documentation and Information Center of the Netherlands and serves also as technical adviser to the military and naval attachés. The Center is basically government supported although with participation by the Netherlands Central Organization for Applied Scientific Research (a semi-official group representing some 47 technological laboratories) and the Federation of Netherlands Industries (comparable to the U. S. National Association of Manufacturers).

The chief scientific liaison representative for Sweden bears the title of Technical Advisor to the Swedish Embassy and maintains his office in New York. The post is held at present by G. Hambraeus, an electronics engineer who comes from the Royal Swedish Academy of Engineering Sciences. The liaison work is supported through the Academy—principally by the government but to a minor extent by Swedish industries.

The scientific liaison work of Denmark in the United States is carried on by A. Hansen who is located at the office of the Danish Consulate General in New York and bears the title of Industrial Attaché. Mr. Hansen is an engineer and reports to the Federation of Danish Industries. The regular liaison work is supported by the Danish government with the Federation bearing some of the expe.. of participation in large meetings or exhibitions.

The Netherlands, Swedish, and Danish scientific liaison officers collaborate to some extent in a manner similar to that described above for the five members of the British Commonwealth. Although their offices are separate they coordinate with each other on visits to exhibits and demonstrations and in this way achieve to a limited degree a division of labor which is mutually beneficial and has the effect of broadening the scope of the work of each.

Dwight E. Gray, of the Library of Congress' recently organized Science Division, has agreed to report for this journal events in the national scene likely to be of particular interest to physicists. Dr. Gray was in charge of the American Institute of Physics' study of physics abstracting, concluded last year. An Ohio State physics PhD, he has been associated variously with the Underwater Sound Laboratory at Harvard, the Applied Physics Laboratory at Johns Hopkins, and with the AEC.