

Office of Technical Services of the

By Dwight E. Gray

IS MY INVENTION for disintegrating army tanks at several hundred yards any good? What is the best adhesive to use in laminating leather to glass when the product is to be used in a warm, humid climate? What technical reports are available on the refractive indices of transparent plastics? These particular queries, as far as I know, are imaginary, but they serve to illustrate the kinds of questions to which J. Horace Taxpayer can obtain answers from the Office of Technical Services (OTS) of the U. S. Department of Commerce. Before discussing these services separately, let us look briefly at the genealogy and present organization of the OTS.

The responsibilities of the Department of Commerce include collecting, supplying, and disseminating information of value to the manufacturing industries of the United States. In the past, such information was largely in economics and closely allied areas and included little or nothing of a technical or scientific nature. Following World War II, however, it became urgent that some means be found to provide industry, and particularly small business, with an avenue of access to that portion of the vast fund of technical information developed through government-supported research, which was subject neither to military security classification nor to trade secret restrictions. Consequently, in 1945, an Office of the Publication Board was established in the Department of Commerce by presidential directive and given the mission of providing for the release of these kinds of technical data.

A little later, the Department set up the Office of Technical Services to be the implementing agency which would carry out this mission for the Board; at the same time, certain existing Department of Commerce operations of an allied nature also were placed under the administrative cognizance of the new office. Mr. John C. Green, Executive Secretary of the Board and formerly Chief Engineer of the National Inventors Council, was named director of the OTS in which capacity he continues to serve. The basic legislation under which the OTS now operates is Public Law 776 of the 81st Congress which authorizes this clearing house for technical information with responsibility "to make the results of

technological research and development more readily available to industry and business, and to the general public." Under this law the Secretary of Commerce is directed to take the necessary steps to accomplish three goals which briefly are as follows: (1) collecting, recording, and cataloging such technical information as may be available from domestic and foreign sources; (2) making this information available to a wide variety of agencies and to the general public through such media as abstracts, bibliographies, indexes, and so forth; and (3) within the limits of his authority and with competent advice, effecting removal of restrictions on the dissemination of scientific data, to the extent consistent with national security, where such release would be to the benefit of industry and business.

The three hypothetical questions posed in the first paragraph of this article are roughly indicative of the three principal types of technical service offered by the OTS. Of these, the third, which concerns technical and scientific reports, probably is the one of greatest professional interest to the readers of *Physics Today*. Theoretically, the Library Section of the OTS receives copies of all technical reports which (a) originate from government-supported research and development programs and (b) carry no military security classification—that is, either are unclassified or have been declassified. Although the actual coverage is not quite this complete, it does include a large fraction of the documents meeting the above criteria. Some 300 of these reports are listed in each monthly issue of the OTS publication, *Bibliography of Technical Reports*. A wide range of subject matter in the various scientific disciplines is covered. For example, topics of obvious physics relevancy under which items have been listed in recent issues include, among others, aerodynamics, chemical engineering, communication equipment, electronics, engines, fuels, general physics, generators and motors, instruments, metals, meteorology, nuclear physics, and structural engineering. The information presented for each document includes the complete citation, a brief abstract or annotation, and the purchase price in one or more of the three forms in which reports so listed can be obtained—printed copies, photostats, or microfilms. Reports are

Department of Commerce

The Commerce Department is obliged by law to accumulate technical information of all sorts and to make it available to the public. Its Office of Technical Services has been assigned these responsibilities. A brief picture of the OTS in action is provided in the following article.

selected for listing in the *Bibliography* primarily with a view to serving the needs and interests of industrial laboratories where, in general, applied experimentation is predominant over basic research. However, the two overlap to such an extent and are so genealogically related that much of fundamental scientific interest is included in the documents made available in this manner by the OTS. The *Bibliography* can be obtained on a subscription basis for \$5.00 per year.

Included in each issue of the *Bibliography* is a four-page digest of outstanding technical reports available to companies and laboratories from Federal and other non-confidential research sources. In this publication, which is called *The Newsletter*, special emphasis is placed upon the items of interest to small business firms. A recent issue, for example, carried brief notes on documents dealing with such subjects as powder metallurgy, paper manufacture, organic corrosion inhibitors, manufacture of various building materials, preparation of frozen fruit juices, and certain industrial developments stemming from armed services studies. *The Newsletter* can be obtained separately at a subscription price of \$.50 per year.

A third periodical publication of physics interest which is available from the OTS on a subscription basis was described in the November 1951 *Physics Today* article on "Dissemination of Technical Information by the AEC." This is the semi-monthly publication *Nuclear Science Abstracts* which is prepared in the Technical Information Service of the AEC but offered for sale at \$6.00 per year through the OTS.

Closely related to the technical reports program described above is the Technical Advisory Service which now operates as part of the OTS although actually antedating it. This Service originally was set up during the war under the Smaller War Plants Corporation of the War Production Board with the mission of assisting the smaller industrial organizations (500 employees or fewer) in ironing out their technical problems. When the WPB went out of existence, the Technical Advisory Service was transferred to the Department of Commerce where it became a part of the OTS. Its engineering staff is organized into chemical, electrical, mechani-

cal, metals, and minerals special projects sections. The inquiries it receives come primarily from industrial sources—although they may be from any organization or individual in or out of the government—and cover almost all of the engineering fields. Answers are sent out in the form of inquiry reports except where the subject matter is believed to be of rather wide interest. In such cases, more complete Technical Division reports are prepared and made generally available. The following random selection from a recent list of these reports gives an idea of the gamut of subject matter dealt with by this part of the OTS: sponge rubber manufacture, industrial uses of grahamite, banana flour, manufacture of toys from sawdust, perfumes and essential oils, manufacture of dry ice, nickel substitutes in electroplating, manufacture of figurines, bonding diamond powder to steel, menthol manufacture.

The OTS activity with the highest "glamor factor" probably is the service offered by the National Inventors Council. This group, which was organized in 1940, "functions in an advisory capacity to the Department of Defense and other departments, agencies, and offices of the Government in evaluating, guiding, and analyzing inventions for the national defense and welfare." Like the Technical Advisory Service, the Council was organized prior to the initiation of the OTS but was incorporated into it when the latter was set up. Council members, who serve without compensation, include outstanding United States inventors, scientists, and industrial research experts, with specialized experience in developing and using inventions, together with the U. S. Commissioner of Patents and a representative from each of the three branches of the Department of Defense.

Anyone can submit an invention to the Council for study as to its possible value to some branch or agency of the Government. The idea is reviewed first by the Council's own staff of engineers who make a preliminary

Dwight E. Gray, a member of the Science Division of the Library of Congress, has been a frequent contributor to these pages. His articles during the past year have dealt for the most part with the scientific functions of the government. A complete list of titles will be found in the Index carried in this issue of *Physics Today*.