

TECHNICAL LITERATURE OF THE OFFICE OF TECHNICAL SERVICES (OTS) AND RELATED SERVICES*

By JAMES KANEGIS, Chief
Chemical Section, OTS, Department of Commerce, Washington 25, D. C.

FUNCTIONS

The Office of Technical Services (OTS), a part of the Business and Defense Services Administration of the Department of Commerce, was established in 1945 as the Office of the Publication Board. By executive order it then was assigned the task of expediting the flow of government scientific and technical information to the public. Shortly thereafter, however, with the close of World War II, it was assigned another urgent but corollary function of obtaining, processing, and disseminating enemy-developed scientific and technical information with all possible speed.

This was a formidable task and OTS, with its limited staff, had to concentrate all its energies in that direction. While much of the processed material constituted in-file documents and industrial reports which our investigators deemed important enough to acquisition or copy, a significant percentage represented surveys by trained U.S. investigators and scientists. These reports were of substantial value to American science and industry and are still being ordered from OTS.

All this time it was recognized that the American public was not benefitting sufficiently from its own investment in government-sponsored research and development (R&D). The reports covering such R&D needed much greater dissemination than they were having at that time. More and speedier declassification was being urged and agreed upon.

OTS already had the responsibility for initiating, developing and implementing a program which would further these objectives. Accordingly, as Federal research expanded in scope and importance, and as useful enemy research findings dwindled, emphasis on OTS report coverage correspondingly reoriented itself rather rapidly and pointedly from enemy-sponsored R&D to our own, so that for some years now this emphasis has been almost exclusively on U.S. Government-sponsored report literature.

The Department of Defense and its contracting agencies are now turning out many thousands of R&D unclassified reports annually, while agencies such as the Atomic Energy Commission (AEC), the National Aeronautics and Space Agency (NASA), etc., are also making important contributions. These agencies, while they do some research in their own laboratories, depend largely upon universities, industrial and research laboratories, and even other countries

which have reasonably qualified research groups. Such research is called sponsored.

Practically all U.S. sponsored research is being covered by reports. Under present regulations, as these become publicly available they are moved into the OTS collection. There they are organized, catalogued, and publicized through the OTS monthly publication, the U.S. Government Research Reports (USGRR). The USGRR will be discussed in more detail later.

TRANSLATIONS

With the advent of the Soviet Union as an important contributor to the world's growing mass of scientific knowledge, the problem of disseminating such information to U.S. science and industry also has become significantly acute. The Russian language is not too well known in the United States and Russian periodicals themselves do not receive adequate circulation here.

In an effort to solve some of the more complex problems relative to the dissemination of Russian technical literature, a foreign technical information program was inaugurated in OTS in July, 1958. Its approach, while somewhat related to the earlier approach in disseminating German technological information after World War II, has a number of significant differences. The present program involves the collection, processing, and dissemination of abstracts and complete translations of Russian and, to some extent, translations of other foreign scientific and technical publications.

However, just as with the German language documents of former years, OTS does not now attempt to translate documents on its own. Among the program's significant activities is its publication program for the announcement and dissemination of English abstracts of all articles presently appearing in one hundred Soviet scientific journals, translated sections of Referativnyy Zhurnal, the Soviet abstract journal, and Scientific Information Report, a semimonthly review of scientific, technological, and medical research in Russia, Hungary, China, and other Soviet Bloc countries prepared by the Central Intelligence Agency.

The availability of translations generally is announced in the OTS semimonthly abstract journal, Technical Translations (TT) which began publication with the January, 1959, issue. TT is prepared in cooperation with the Special Libraries Association Translation Center. It

*Presented before the Division of Chemical Literature, ACS Cleveland Meeting, April 6, 1960.

lists and abstracts all translations of books, monographs, scientific articles, and periodicals which are available from OTS, the Special Libraries Association Translation Center, the Library of Congress, cooperating foreign governments, commercial translating agencies, or other private sources. TT also lists translations which are presently in process by Government agencies, private organizations, and some 75 foreign scientific periodicals which are translated on a cover-to-cover basis, together with the names and addresses of the translators and their subscription fees. Each issue is indexed by author, journal, subject, and translation number. Cumulative indexes are issued twice a year.

In its first full year of operation, 1959, TT listed about 10,000 commercial and government translations. The first three months of 1960 have been marked by greater coverage of material in TT than in any previous three month total -- as would be expected from a rapidly expanding activity. TT now covers roughly 600 reports per issue, or 1200 per month. Subscriptions to TT are continuously increasing and now total some 2300, as compared to 5000 for the USGRR, the other regular publication of OTS.

GOVERNMENT REPORTS--ACQUISITIONS

Since 1945 OTS has collected over a quarter of a million reports for its PB collection. Together with other collected reports discussed later this collection is considered by many to be the world's largest of non-confidential technical information. It is now covering roughly 900 reports per monthly issue.

Generally speaking, there are two acquisition processes for these reports. One involves automatic receipt of material from cooperating government agencies and their contractors; the other involves either receipt from issuing agencies at a specific request from OTS which, in turn, had been asked to take such action, or from selective approaches involving current order media which OTS systematically scans for just this purpose.

As for automatic receipt of reports this accounts for most OTS acquisitions. We find that it takes approximately six weeks for material originally submitted to OTS to be processed and entered into our USGRR as PB reports. As for orders for R&D reports not presently PB reports most such requests, even though they be for documents several years old, are scheduled for immediate order and assigned PB numbers as quickly as possible after receipt.

In selecting reports from current order media, those not in the OTS collection which

meet our criteria for acquisition are immediately placed on order. Occasionally OTS staff members themselves initiate requests for documents.

We try to have as complete coverage on reports as is humanly possible -- despite the great diversity of sources for these reports. At present we find that we are covering at least 85% of all the suitable reports listed in the Armed Services Technical Information Agency's Technical Announcement Bulletin (TAB), even before ordering missing ones. We do not attempt 100% coverage, as many of these reports are in military science, non-technical progress reviews, etc. These, even under normal automatic acquisition routines, would be rejected for PB coverage.

Reports are submitted to OTS either as single or as multiple copies. Single copy documents are submitted to OTS technologists. They decide whether they may properly be entered into the OTS collection and, if so, prepare abstracts suitable for use in the USGRR. They also will recommend for or against printing at OTS expense. This latter step is based upon what they conceive to be anticipated demand for the document in question; for, if the ultimate demand is not large enough a loss results for OTS. Congressional mandate insists that OTS' printing or trust fund be self-perpetuating, one to be maintained through sale of documents it has selected for printing. The cost of such documents is kept at a minimum. About 15% of all PB reports are made available in printed form for about a year or two after they have been announced in the USGRR.

Reports not sent to OTS in multiple stock or not finally printed are sent to the Library of Congress where they may be ordered in photocopy or microfilm form from their Photoduplication Service at stipulated prices. These are cited in the USGRR along with the printed reports. All the reports are suitably catalogued, indexed, abstracted and priced. Printed reports are ordered directly from OTS.

As for receipt of multiple copies of agency reports these usually are furnished from an overrun of the original printing by the originating agency or its contractor. Of the printed stock sold by OTS, approximately 75% is obtained in this way; the remainder are selected for printing by OTS.

USGRR--COVERAGE

For some time now a separate section of USGRR has been devoted to unclassified AEC reports which OTS began acquiring and selling in 1950. The AEC collection presently consists of approximately 27,000 research reports. Although listed only by title in USGRR, all their

reports are abstracted and indexed in AEC's semimonthly abstract journal, Nuclear Science Abstracts.

In addition to AEC and the Department of Defense reports OTS has increased its coverage of other agencies considerably in the past year or two. It is now citing research reports of civilian agencies such as the NASA, the Federal Aviation Agency, the Office of Saline Water, the National Bureau of Standards, etc.

The degree of interest in PB and AEC reports may be gleaned from the fact that the number purchased in 1955 was about 90,000. At present this has been increased to some 300,000 a year. This represents a sale value well over a half million dollars. It must be remembered that AEC and PB documents cover several billion dollars of government R&D annually, and therefore they represent a very handsome dividend to the public for this tremendous investment.

The USGRR now incorporates many more indexes per issue than it did previously. Presently, it contains a table of contents covering some twenty classifications, a short list of printed reports sold directly by OTS, a systematized list of all the PB reports, and a similar breakdown of the AEC reports, a source index listing the research groups involved, a subject index and a number index. This latter covers numerical coding of the documents by agency as well as by PB number. A cumulative index which provides consolidations of all PB indexes that have appeared in the separate issues is published every six months.

PUBLICITY AND CIRCULATION

While USGRR and TT are excellent media for announcing new OTS acquisitions and translations, OTS uses other media as well. For example, it turns out about 400 press releases per year covering the OTS reports. These are sent selectively to some 1200 clients, including the trade and technical press, businesses, and associations. Distribution is based on some 50 subject categories.

OTS also publishes a Technical Report Newsletter, a monthly digest of Government and other research reports containing technical developments for industry, particularly small plants.

Recently a number of organizations and abstracting journals have started covering PB reports. We may mention the National Association of Corrosion Engineers, Biological Abstracts, and Chemical Abstracts as examples. Chemical Abstracts itself is selectively covering suitable areas by using abstracts directly as they appear in the USGRR. The areas include biochemical and physics borderlines.

One important means by which the USGRR, TT, indexes, and certain reports and translations are made more readily available to the general public is through placement in depository libraries throughout the country. In addition to these libraries the Department of Commerce has field offices in 33 cities. They cover the same material and give ready reference and service to the public. A listing of these offices may be had on request.

SUBSCRIPTIONS

The subscription price to USGRR increased only slightly in the years of its existence despite its vastly increased size and scope. The present price is \$9.00 annually. TT is \$12.00 annually. Both are purchased through the Superintendent of Documents, Government Printing Office, Washington 25, D. C., and not through OTS.

SERVICES

An obvious OTS service concerns identification and citation of its reports and translations. Requests for such service are very numerous and varied. On the more difficult ones OTS maintains a staff of specially trained technologists to backstop the librarians and searchers.

OTS augments its referencing program by developing bibliographies on its holdings and listings. These may be informal -- for a rather limited or specialized demand, or formal -- for a more general demand. These latter are printed to simplify and expedite processing of inquiries. Thus far, several hundred printed bibliographies have been prepared, of which some hundred are still in print. Those who wish to do their own searching are invited to visit OTS and conduct such searches through its card indexes. PB reports may be inspected without charge at the Library of Congress.

With such a vast storehouse of technical information at its command, it was only natural that the agency responsible for carrying out the Government's foreign programs, namely, the International Cooperation Administration (ICA) would look toward OTS for backstopping. For the past ten years OTS has conducted a Technical Inquiry Service under which it has provided answers to over 10,000 technical inquiries from overseas. OTS also prepares and publishes for ICA a Technical Digest which presents a selection of condensed summaries from technical and trade periodicals, from books, research reports, and other media, all of which describe in detail work methods, manufacturing processes, and business and industrial techniques.

OTS naturally is interested in improving its service to the public where possible. It is presently investigating the feasibility of furnishing at a nominal fee a more detailed bibliographic service on all its reports. This would be over and beyond the present type of search and would involve detailed and authoritative search of PB reports, U.S. owned patents, and translations listed in TT.

NATIONAL INVENTORS COUNCIL

OTS maintains another division concerned with inventions, the National Inventors Council. The Council is a civilian agency charged with the task of bringing to the attention of the military any inventive ideas of potential value to national defense. It also refers to other Government departments or agencies any invention which might contribute to the national welfare. The Council was originally established in 1940 in the belief that many firms and individuals with creative ideas did not know how to approach the Government with their ideas. As a result, the Council has processed many inventions which have contributed greatly to the development of military equipment. Current membership of the Council includes more than a score of distinguished American inventors and scientists drawn from many diverse fields. All members serve without pay.

While the Council does not limit its fields of interest, it does periodically issue lists of Inventions Wanted by the Armed Forces. Its latest list, dated November, 1959, contains 320 new problems and notes cancellations of 135 others. In releasing new problems periodically it hopes to learn of new leads and developments which may not be known to military researchers. It strongly encourages fresh approaches, ideas, and techniques.

GOVERNMENT-OWNED PATENTS

OTS also is responsible for publicizing the availability of government-owned patents, whether generated through civilian or defense agency activities. This it does through its Patent Abstract Series. Each abstract published in this series covers the essentials of one such patent. Over 12,000 are presently in the OTS collection.

If a person is interested in one of the patents he can obtain a copy from the Commissioner of Patents for 25¢. If he wants a license to use the patent he addresses a request to the Government agency administering the patent as shown in the Patent Abstract Series. Many firms are successfully manufacturing products using processes based on these patents. A great many more, of course, have been aided considerably in their own research objectives by having knowledge of these patents.

This series is composed of seven books covering about eight wide industrial classifications, and the series is periodically supplemented. OTS is hoping these supplements can be made into annual issues. The books and supplements have all been prepared for OTS under contract. They all have PB numbers and are available at a nominal fee. Chemical products and processes presently are covered by one book and two supplements. An original book plus supplements also exists on ceramics, paper, rubber, textiles, wood, and other products and processes.

COMMODITY STANDARDS DIVISION

Two series of standards are issued by OTS through its Commodity Standards Division. These are "Commercial Standards" and "Simplified Practice Recommendations." They are established as a service to business, for general use by the public, and not for purposes of government regulation or control.

Commercial Standards were undertaken in 1928 to establish definite quality levels for certain commercial products so as to make them more acceptable to the trade, and to promote sound commercial practices in their manufacture, marketing, and application. They are established in joint cooperation of all interested segments of industry, distributors and users, and are undertaken only through specific request by responsible groups. Industry endorsement is necessary and the use of the standards is voluntary. More than 200 Commercial Standards have been issued thus far.

Simplified Practice Recommendations set forth the sizes, kinds and types of specific manufactured articles that are in greatest demand, as one means of reducing the cost of production and distribution. In some cases these recommendations are combined with commercial standards. In any case, however, as with standards, they are not established until accepted by representative organizations in all branches of industry. More than 250 products are included in the present list of recommendations.

TRADE ASSOCIATION DIVISION

As the Government's center of information on all types of non-profit business organizations, this Division for over 40 years has been encouraging and aiding the growth of mutual-aid associations of businessmen. Thousands of new organizations have been formed in recent years and the scope of their services to members and the general public has widened tremendously. The larger ones provide from 20 to 30 types of services, from accounting and advertising to technical research and transportation problems. The Division publishes periodically an important directory of such trade associations and professional societies.