PUBLICATIONS — A MEANS OF COMMUNICATING SCIENCE

This column carries a series on the constitution, components, achievements, activities and services provided by DESIDOC. Beginning from January 1990, each issue features one of the multifarious activities of DESIDOC, highlighting the achievements in the particular area, the facilities available, the services provided to the users, etc.

DESIDOC functions as the publication wing of DRDO and so the dissemination of information covering the current developments in Defence science and technology forms an important component of its activities. Towards this end, DESIDOC brings out a few periodicals and some adhoc publications. These publications are varied in their scope and presentation and cater to a diverse readership, including research scientists, decision makers, Defence personnel, students and the general public. The popularity of these publications is indicative of the efforts of DESIDOC to inculcate awareness about the applications of Defence science & technology in both the Defence and the civil sectors. The priced publications are available to any one interested in receiving them. Others are for limited circulation and are available only to selected readers. The periodicals brought out by DESIDOC are briefly described below:

Defence Science Journal

Defence Science Journal (DSJ), a primary research journal of DRDO, contains original research papers, review papers and short communications in the various disciplines of science having a bearing on Defence. The Journal, with the high quality papers published in its various issues, brings to the notice of Its readers the research output in Defence

science and technology and the work being done in this area. The Journal is multi-disciplinary in nature and covers the entire gamut of Defence- related subjects, including aeronautics, armaments, electronics, explosives, naval science, food technology, human physiology, computer applications, etc. The Journal, brought out quarterly in the months of January, April, July and October, is available on subscription and has many Indian and foreign subscribers.

Special issues of DSJ are brought out from time to time to provide state-of-the-art on a given topic of current Defence interest. The review articles covered in each special issue are written by experts specializing in a given subject area. Eminent scientists in the respective fields are associated with these issues as Guest Editors. The publication of such special issues have helped not only in highlighting the state-of-the-art on the various selected topics, but also in stimulating further research in the topics covered. The titles of the special issues brought out so far are : ocean optics, food research, high altitude medical research, Ramanna festschrift, signal processing, titanium, explosives, toxicology, computer applications in Defence, gas turbines. III-V compound semiconductor materials and devices, and Prof Suri Bhagavantam commemoration issue.

The papers appearing in DSJ are abstracted/indexed in many international abstracting/indexing periodicals which include Indian Science Abstracts, INSPEC Science Abstracts, Chemical Abstracts, Engineering Index, COMPENDEX, Mathematical Reviews, and BIOSIS.

Popular Science & Technology Series

The Popular Science & Technology (PST) series is aimed at popularizing Defence science and technology among the Defence personnel, students and the general public. Each issue of the series gives comprehensive information on particular topic of Defence interest in popular style. The series creates an awareness of current developments in frontier areas of science and technology and promotes knowledge and understanding of the subject. The text is written by subject specialists and it is profusely illustrated: the treatement of subject is kept at senior secondary school level so as to make it quite comprehensible. Two issues of PST are brought out every year. Each issue in the series is priced at Rs 10 or below. The following issues have been brought out recently:

Night Vision Devices: Describes various instruments that help to see in dark (this publication is out of stock).

Battle with Barnacles: Describes the organisms that cause fouling of ships, the process of corrosion and the countermeasures developed, including the use of various antifouling and anti-corrosive paints.

Computers and Defence Applications: Describes different types of computers, their hardware and software. Highlights their applications, specially in Defence.

Super Vision: Describes the supervisory aspects of management, covering topics pertinent to organizational behaviour.

Electronic Warfare: Outlines definitions, concepts and principles of electronic warfare, electronic countermeasures, and electronic counter-countermeasures. Highlights future trends in electronic warfare.

Satellites: Presents the concept of satellites in a nutshell. Describes various aspects of satellites, including its fabrication, function, and launching. Highlights the Indian and International Space programmes.

The forthcoming issues are: ABC of Toxicology, Missiles, Communication, and Lasers. It is proposed to publish the PST series quarterly.

DRDO Newsletter

'DRDO Newsletter', a bi-monthly house bulletin of DRDO, highlights the major achievements, policies, future plans and related activities of DRDO. The objective is to reduce the communication gap amongst various levels of officers comprising the scientific, technical and managerial staff in various DRDO Labs/Estts.

For ensuring comprehensive coverage on the activities of the laboratories, one scientist from each of the DRDO Labs/Estts has been nominated as the 'local correspondent' for the Newsletter. These correspondents are responsible for the collection and dissemination of information for publication in the Newsletter.

DRDO Samachar

To communicate the activities and achievements of DRDO to the people who are well versed in Hindi, a Hindi version of the news items published in 'DRDO Newsletter' is brought out as a quarterly publication, 'DRDO Samachar.' This has helped considerably in communicating information about DRDO achievements to the jawans stationed in the remote areas. The first issue of the Samachar was published in July 1989.

R&D Digest

'R&D Digest' is brought out bi-monthly to highlight important national and international scientific and technical developments of Defence interest. Information on the latest developments is culled out from a large number of scientific and technical journals received in the Defence Science Library. The publication has served as an important source of information for the Defence Services Staff College entrance examinations. The publication has a restricted circulation.

DESIDOC Bulletin

Current developments in the field of information science and technology are brought to the notice of the information specialists through 'DESIDOC Bulletin,' a bi-monthly house bulletin of DESIDOC. The Bulletin gives information on new products and devices and covers the abstracts of articles in the field of information science and technology, culled out from current journals received in the Defence Science Library. A feature on a topic of current interest in information science and technology is included in each issue of the Bulletin. The Bulletin also covers the activities of DESIDOC, highlighting the services rendered by DESIDOC to its users.

Other Publications

Apart from these publications, DESIDOC also brings out some catalogues and indexes of interest to the users. DESIDOC circulates regularly the list of current accessions to the Defence Science Library, DESIDOC. The Centre has compiled several union catalogues, which include the Union Catalogue of Periodical Holdings of DRDO Labs/Estts and Union Catalogue of Patents held in DRDO Labs/Estts. It has also brought out the list of Holdings of Periodicals in Defence Science Library. Some of the recent, adhoc publications brought out by DESIDOC are:

NACSID Proceedings. Contains the papers presented at the National Conference on Scientific Information for Defence' held during 25 - 26 Feb 1986 at New Delhi. This is a priced publication.

Defence Research & Development - Products, Processes and Technologies. Lists the recent products, processes and technologies developed by various DRDO Labs/Estts. The status of the developments is also given.

Infrastructure

The publication work of DESIDOC is supported by a team of technical editors with good scientific background and sufficient experience in technical editing and specialists in printing. The manuscripts are processed on personal computers and the processed texts are transferred onto the phototypesetter without having to recompose the entire matter again and checking proofs at various levels of composing. This file transfer process has helped considerably to reduce the time gap between the preparation of manuscript and production of publications.

Desktop publishing software packages have been acquired to avoid the manual, time-consuming process of page make-up. The cameraready copies of the pages are produced directly on the laser printer, especially for small publications like circulars, leaflets, handouts, etc.

Computerized Mailing System

The mailing of DESIDOC publications has been computerized. The database of the mailing lists contains around 1500 records. The database, developed using dBase III software, can give selected lists of various categories of addresses like government departments, R&D institutions, public sector units, etc. The search and edit facilities provided, enable updating the database regularly. The mailing lists are taken on self-adhesive mailing labels.

Documentation Cell for Editing

A Technical Editing Cell is being established in DESIDOC to edit the various DRDO publications on request. The Cell aims at providing editorial assistance in the preparation of technical manuals, feasibility reports, state-of-the-art reports, and periodic progress reports on the projects. Several jobs have already been processed under this project.