

# DESIDOC

## BULLETIN

Vol I

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### Third Meeting of DRDO Library Information Officers

The Third Meeting of the Officers-in-Charge of Libraries and Technical Information Centres of DRDO Labs/Estts was held in DESIDOC on 5-6 November, 1981 to take stock of the progress made in the implementation of the recommendations made at the earlier meetings and to discuss further steps to be taken for providing better information services to the scientists in DRDO. The Meeting was inaugurated by Prof M Krishnamurthi, CC R&D. 47 officers attended the meeting. Dr AK Sreedhar, Director DSC, Dr IJ Kumar, Director SAG and Capt JJ Baxi, Director WESO also attended the inaugural session.

The Meeting covered the following four technical sessions :

- (a) Resource sharing in DRDO Libraries/TICs
- (b) Augmentation of information services and manpower aspects
- (c) Admin procedures for Libraries/TICs, and
- (d) Information network for DRDO.

Inaugurating the meeting, Prof Krishnamurthi advised that libraries should be so organised to attract scientists to make better use of the library collections. He suggested that adequate efforts should be

made by the concerned to ensure speedy implementation of the recommendations made at the previous meetings and also the present meeting.

Earlier, welcoming the guests and the delegates, Shri SS Murthy, Director DESIDOC thanked Prof M Krishnamurthi for the keen interest and encouragement given by him for the various activities of DESIDOC and observed that the adoption of standard practices by all libraries/TICs in processing information required due attention to facilitate computerization and also for sharing the information. He said that areas like compilation of union catalogues needed urgent attention. A departmental working manual of simplified procedures for Libraries/TICs had been drafted and would be discussed in the ensuing technical sessions.

In the technical sessions, progress made on the recommendations of the earlier Meetings was reviewed and a number of fresh recommendations were made for the overall development of information services in DRDO. The following are the main recommendations made at the Meeting :

1. Labs/Estts contemplating to organise a computerised data-

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### INFORMATION SEARCH

Information on the following subjects/topics was collected from the literature available in the Defence Science Library and supplied to the identors :

1. Measurement of trajectories of Rockets
2. T-22 tanks
3. Bullet Cartridge
4. Cruise missile
5. Naval-craft
6. Salyut-6 experiments
7. Chemical & Biological Warfare
8. Balancing technology of turbine engines
9. Strategic materials.

### SDI SERVICE

SDI Bulletins on the following subjects were prepared and supplied to the concerned Directorates in the DRDO HQ.

| Topic                           | No. |
|---------------------------------|-----|
| Armament                        | 1   |
| Laser                           | 3   |
| Materials                       | 1   |
| Nuclear Weapons                 | 2   |
| Science Policy and Planning     | 1   |
| Armoured Fighting Vehicle       | 3   |
| Military Organization & Warfare | 2   |
| Missile Technology              | 5   |
| Naval Problems                  | 3   |



## PROFESSIONAL ACTIVITIES

### 1. Lectures Delivered

(a) Shri SK Taneja, Scientist B, DESIDOC delivered a lecture on 'Integrated Approach to the Introduction of Microfiche in the Library/TICs' on 30 September, 1981.

(b) Dr HB Kundu of DIWS, Mussoorie delivered a talk on 'Ergonomics' on 9 November, 1981.

### 2. Participation in Courses

(a) Shri VK Rangra, Scientist D, attended a course on 'Productivity Science (PS-12)' from 20 October to 4 November, 1981, organised by DIWS, Mussoorie.

(b) S/Shri BK Nigam, Scientist 'B' and RK Srivastava, SSA attended DRTC Refresher Seminar-13 (1981) from 14 to 17 Oct 1981 conducted by the Documentation Research and Training Centre (DRTC), Bangalore.

(c) Shri OP Gupta, AO, participated in the training programme on 'Manpower and Employment Planning at the National and State Levels' conducted by the Institute of Applied Manpower Research, New Delhi from 18 to 25 November, 1981.

### Library Activities

677 publications consisting of 287 books and 358 periodicals and 32 reports literature were loaned during October and November 1981, within and outside the Defence R&D Organisation. Interlibrary loan facility was availed by the SA to CAS, ISSA, DRDE, DIPAS, CVRDE, DSC and EME.

75 books, 225 reports literature were acquired and accessioned by the Library during October and November 1981.

## TRANSLATION ACTIVITIES

### I. Books/articles Translated

| S. No.          | Title/Author  | Indenting Unit            | Pages Translated |
|-----------------|---|---------------------------|------------------|
| <b>RUSSIAN</b>  |   |                           |                  |
| 1.              | Physical metallography of Titanium by B.A. Kolachev. Chapter 3-Plastic deformation of titanium and its alloys.                                      | DRML, Hyderabad           | 39               |
| 2.              | System of programmes for the calculation of jet engine characteristics by V.I. Yankin. Chapter 2-characteristics of the procedural system.          | CRE, Sunabeda             | 19               |
| 3.              | Synthesis and study of polyesterimides obtained from aromatic tetracarboxylic acid dianhydrides containing ester group by N.A. Adrova <i>et al.</i> | DSC, Delhi                | 4                |
| <b>GERMAN</b>   |   |                           |                  |
| 1.              | Experiment on avalanche control structure on Dorfber Davos.   | SASE, 56 APO              | 13               |
| 2.              | An indirect evidence of tin.  | DRL, Tezpur               | 1                |
| 3.              | On the development of hollow charge.  | TBRL, Chandigarh          | 24               |
| 4.              | Optimization of stability of ballistic rockets.   | ARDE, Pune                | 4                |
| 5.              | Poured explosive charges on 2,4,6-trinitrotoluol base, fundamentals of setting.   | TBRL, Chandigarh          | 23               |
| 6.              | Method for preparing pressed explosives for ammunition or large calibre explosive charges.  | TBRL, Chandigarh          | 14               |
| 7.              | Method for preparing pressed, particularly large calibre explosive charges.   | TBRL, Chandigarh          | 11               |
| <b>FRENCH</b>   |   |                           |                  |
| 1.              | Simulation method for turbojet engines.   | GTRE, Bangalore           | 69               |
| 2.              | Complete detection system for coast guard aircrafts.  | DNRD, New Delhi           | 7                |
| 3.              | Infra-red cameras, principles etc.  | SA to CAS<br>New Delhi    | 11               |
| 4.              | Research in the field of rocket engines with solid propergol.   | ERDL, Pune                | 29               |
| 5.              | Wind tunnel study for courses of separation of airborne loads.  | RTO, Dte of Aero<br>Nasik | 15               |
| <b>JAPANESE</b> |   |                           |                  |
| 1.              | The optimal regulator for anticipated disturbance and its application to aircraft gust alleviation system by Miyazawa M <i>et al.</i>               | ADE, Bangalore            | 9                |



|  |   |    |
|--|---|----|
| 2. The oxidation of 1, 2, 4, 5—tetramethylbenzene under the pressure of oxygen with two or three transition metal salts-bromide catalysts in acetic acid by Nakayara T <i>et al.</i> | DSC, Delhi                                    | 8  |
| 3. Development of HTPB propellant by Fukuma D <i>et al.</i>  | ARDE, Pune                                    | 10 |
| 4. Failure process of composite solid propellants fracture energy by multiply repeated extension test by Shimizu M <i>et al.</i>   | ARDE, Pune                                    | 6  |
| 5. A note of lifting line theory on wings with high aspect ratio in ground effect.   | ADE, Bangalore                                | 7  |
| 6. Thermal expansion coefficients of unidirectional fibre reinforced composites Part II—Experiments on unidirectional CFRP and Epoxyresin.   | ADE, Bangalore<br>DMSRDE, Kanpur              | 7  |
| 7. Basic metal azides for generating N <sub>2</sub> gas to inflate airbags in the case of automobile accidents.  | ERDL, Pune                                    | 4  |
| 8. Small (LS) computer system by Kobayashi A <i>et al.</i>   | LRDE, Bangalore<br>EDP Cell<br>IRDE, Dehradun | 8  |
| 9. Computer in the future by Aizo H.   | LRDE, Bangalore<br>EDP Cell<br>IRDE, Dehradun | 6  |

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- base of scientific information should consult sister Labs/Estts of the same discipline in order to avoid duplication.
- Preparation of Union Catalogue of Specifications and Patents should be taken up.
- Details of technical reports acquired by TICs should be intimated to DESIDOC in a standard format.
- Training should be imparted by DESIDOC for input preparation for DESIS and allied areas. IAT, DESIDOC and ARDE should discuss the means for achieving uniformity in input preparation and output.
- Library and information staff should be exposed to short term training courses in computer programming.
- Heads of Labs/Estts should be authorised to make advance payment for back volumes of periodicals against bank guarantee by dealers.
- Furniture for Libraries/TICs should be treated as special furniture and Heads of Labs/Estts should be authorised to procure directly under normal purchase procedure.
- Powers of Heads of Labs/Estts to write off losses of Library publications should be raised to Rs 5,000/-.
- The total allocation of funds for Libraries/TICs should be made by June each year to facilitate placement of supply orders.

## II. Abstracts Prepared

Twenty-one articles were abstracted from scientific periodicals received in Defence Science Library for dissemination through the quarterly bulletin 'Science Abstracts from Foreign Language Journals.'

### Union Catalogue of Periodicals

Data for compilation of Union Catalogue of periodicals has been obtained from ten more DRDO Labs/Estts. This data covers the holdings upto 1980.

Information about the periodicals subscribed for the year 1981 has been obtained from 22 DRDO Directorates/Labs/Estts.

### Current Awareness Service

Information on scientific developments in China (11 items) and on science and technology in Pakistan (17 items) were disseminated through the two publications,

viz., 'Spot News on China' and 'Science and Technology in Pakistan.'

Information on 'DRDO', 'Defence' and 'Science and Technology' reported in daily newspapers was scanned and 1046 selected items were brought to the notice of top management in DRDO.

### Printing Activity

14 technical papers (173 pages) for presentation at the CDSO conference on 'Clothing and General Stores' held at Kaulalampur, the report of the Chairman of the

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### Reprographic Activity

7800 reprocopies of scientific/technical matters were made and supplied on request to the users. Some of the Labs/Estts which



availed of this facility are, TBRL Chandigarh, DSC Delhi, CRE Sunabeda, SPL Delhi, DRL Tezpur, SA to CAS and SA to COAS.

Forty-nine slides were prepared for SPL and DSC. Audiovisual and photographic facilities were provided 12 times.

#### Technical Films

Two technical films 'What is

Computer?' and 'GI/GO' were screened on 6 November, 1981 for the benefit of participants in the meeting of Officers-in-Charge of TICs/Libraries and DESIDOC staff.

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Commonwealth Standing Committee on Clothing and Equipment Design (20 pages), 'Patent Information Alerts' and 'Science Abstracts

from Foreign Language Journals' (138 pages) and circular letters (42 pages) were printed on the Offset Machine.

'R&D Newsletter,' 'R&D Digest' and some jobs received from CC R&D, Fire Adviser and CASSA were printed on letterpress. About 58 pages involving 521020 impressions were printed during October-November, 1981.

### DEFENCE SCIENCE JOURNAL

The Defence Science Journal is a quarterly publication issued in the months of January, April, July and October.

The Journal publishes research papers in the various disciplines of science and technology which by and large lead to tangible results for direct Defence applications. Review papers which cover topics clearly bringing out the interactions of science and technology with Defence are also included. Short Communications or Research Notes are also accepted for publication in the Journal.

#### Communications and Editorials

Contributions for publication in the Defence Science Journal should be addressed to :

THE CHIEF EDITOR  
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