

Workshop on Input Preparation for DESIS

DESIDOC initiated work for the implementation of the computer aided 'Defence Science Information System (DESI)'. In order to train the personnel who are expected to prepare the input for the DESIS, a suitable training programme was worked out, and a workshop on 'Input Preparation for DESIS' was organised in DESIDOC from 15 to 21 July 1981. Ten staff members of DESIDOC attended the workshop. In his opening address, Shri S. S. Murthy, Director, DESIDOC, explained the aims and objectives of the workshop and also the vital role the DESIS was expected to play towards meeting the information requirements of the DRDO scientists.

Besides the lectures tailored to the workshop, practical assignments were also given on the usage of thesaurus for picking up the descriptors, and on filling up the data input sheets with various necessary data elements. Details of punching/verification of the data and the fundamentals of database creation and maintenance were also discussed. Visit to the BHEL computer centre at New Delhi was also arranged to acquaint the participants with the working of a computer. Sarvashri Ambrish Kumar, U. R. Sharma and V. K.

Rangra of DESIDOC formed the faculty.

This workshop is expected to be repeated to cover the participants from other DRDO Labs Estts also.

Current Awareness Service

* 120 items of defence interest, scanned from periodical literature, were classified subjectwise and circulated to the Technical Directorates of DRDO and its R&D Labs/Estts through 'DESIDOC LIST.'

* Information on 'Science and Technology in China and Pakistan' was scanned from the daily newspapers and periodical literature and 20 selected items were brought to the notice of top management at R&D HQ.

Reports and patents literature received in the Defence Science Library was scanned and abstracts of 84 technical reports and 62 patents of defence interest were prepared and supplied to DRDO Labs/Estts through the publications 'Defence Reports Abstracts' and 'Patents Information Alerts.'

* 650 items of newspaper clippings covering information on Science & Technology, Defence, and on

DRDO, were made and circulated to the top management in the DRDO.

SDI Service

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

Topic	No.
Armament	2
Armoured Fighting Vehicles	2
Military & Naval Aircraft	2
Military Electronics	2
Military Organisation & Warfare	1
Missile Technology	3
Naval Problems	4
Radar	2

New Acquisitions

87 books and 173 reports, patents, etc, were acquired by the Defence Science Library during June and July 1981.

Publications Loaned

680 publications comprising 224 books, 303 periodicals and 53 reports were loaned to the scientists in the Metcalfe House Complex and also in the other DRDO Labs/Estts.

Information Queries Handled

Information on the following subjects was compiled from the literature and supplied to the indentors on request :

1. Armed helicopter/support aircraft
2. Airborne early warning system
3. Armour
4. Aerial system
5. Technology transfer
6. Ruby crystals
7. Faraday rotation glass

Translation Activities

The following books/articles were translated during June-July 1981.

S. No.	Title/Author	Indenting Unit	Pages Translated
RUSSIAN			
1.	Exterior ballistics by Ya. M. Shapirs, Introduction, Chapters 1 & 8.	IAT, Pune	51
2.	Virial theorem in celestial mechanics by G.F. Khilni [Doklady, LXX (3), 1950, 393-396].	-do-	4
3.	Hydrogenation of titanium alloy wastes by Yu. G. Olesov, <i>et al.</i>	DMRL, Hyderabad	2
FRENCH			
1.	Evolution of aircraft design with auto-controls.	CRE, Nasik	24
2.	Manufacturing and ignition properties reinforced by oxide dispersion.	DMRL, Hyderabad	10
3.	Thermodynamic study of the solid/liquid interface stresses for a binary metallic system Part I.	-do-	7
4.	Interfacial stress of the pure metals Part I.	-do-	5
5.	Study of the powder failure in weapons.	DTD & P (Air), New Delhi	5
JAPANESE			
1.	Aerodynamic characteristics of slender wing-gap-body combinations.	ADE, Bangalore	7
2.	Theoretical study of multiple body interference of rocket.	-do-	9
3.	Large scale computers.	LRDE, Bangalore Dte, Data Processing, New Delhi IRDE, Dehradun	9
4.	MIRA and UTAC	VRDE, Ahmednagar	6
5.	Studies on the flow in supersonic axial-flow compressor rotor, Part I Design of supersonic rotor and radial equilibrium before and after the normal shock.	Residential Technical Office (Engineers), Bangalore	8
6.	Studies on the flow in supersonic axial-flow compressor rotor, Part II Design of shock-in-rotor type rotor.	-do-	8

Reprographic Activity

Reprographic service was provided to the different DRDO Technical Directorates and the R&D Labs/Estts. In all, 6987 pages of various documents were supplied on request during June and July 1981.

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| 7. Production of TV multiadaptor. | IRDE, Dehradun | 18 |
| 8. Adhesive bondability of ethylene ethyl acrylate copolymers grafted with acrylic acid. | NCML, Bombay | 7 |

GERMAN

- | | | |
|---|------------------|----|
| 1. The weapon system of combat tank Leopard 2 : optimal matching of fire power, mobility and protection by K.P. Feiper [Soldat u Technik (9), 1980, 473-475]. | CVRDE, Madras | 3 |
| 2. The development of Leopard 2 by Paul-Werner Krepte [Soldat u Technik (9), 1980, 480-483]. | -do- | 4 |
| 3. The engine of Leopard 2 by Welfqaug Rudert [Soldat u Technik (9), 1980, 492-495]. | -do- | 4 |
| 4. Cost development of complex weapons systems, Example-MRCA/TORNADO [Wehrtechnik (12), 1980, 33-37]. | SA to CAS | 5 |
| 5. Possibilities of further development in respect of combat aircraft engines [Wehrtechnik (1), 1981, 56-64]. | -do- | 9 |
| 6. Effect of metal additives on pressure impulse of air shock waves caused by detonating explosives (Report No. ISLR 103/76). | ERDL, Pune | 36 |
| 7. Studies of rocket fuels by means of labelled substances; testing of life span of polymers | -do- | 72 |
| 8. Performance calculation of rocket propellants and gun powders, Part II [Explosivstoffe (18), 1970, 194-202]. | -do- | 9 |
| 9. Strength of AlZnMgI sheets after regeneration by H.H. Kiethe, Kiel [Aluminium, 56 (7), 1980, 445-448]. | DMRL, Hyderabad | 4 |
| 10. Regeneration measurements on thixotropic coating material by W. Marghardt. [Farbe & Lack, 87 (4), 1981, 262-264]. | NCML, Bombay | 3 |
| 11. Determination of velocity constants and effectivities on decomposition of 22' Azo-bis-iso butronitrile in styrol, N-Vinyl-1-pyrolide and methylnmethacrylate [Die Mekromole-Kulare Chemie, 179 (2), 1978, 387-394]. | DSC, Delhi | 8 |
| 12. Types of protection in explosion protection [Ex. (3), 1958, 54-59]. | TBRL, Chandigarh | 6 |
| 13. Outflow viscosimeter for the determination of viscosity of suspension and pourable explosives by Koch & Freiwald [Ex. (12), 1958, 279-284]. | -do- | 6 |

Cash Awards for Best

DSJ Papers

In order to encourage scientists to contribute high quality research papers and critical reviews to DEFENCE SCIENCE JOURNAL (DSJ), an AWARD of Rs. 500/- each will be made for the best two papers (either research papers or critical reviews) published in each issue of the Journal. Communications in all disciplines of science having a bearing on Defence problems are published in the Journal. Papers of applied nature will be preferred. The review papers should cover the state-of-art in the subject areas of Defence interest.

The Award is open to the scientists/technologists of DRDO, and other organisations as well.

Contributions for publication be sent to :

The Chief Editor
Defence Science Journal
Defence Scientific Information & Documentation Centre
(DESIDOC),
Metcalf House
DELHI-110054

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