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# CONSOLIDATED TRANSLATION SURVEY

Number 123

Through 31 March 1968

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CONSOLIDATED TRANSLATION SURVEY

FOR MARCH 1968

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## CONSOLIDATED TRANSLATION SURVEY

### PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (\*), and when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

Scientific and Technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

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Request for copies of published projects should be made direct to the designated producing organization.

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ACIC - Aeronautical Chart and Information Center  
(see CFSTI)

ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AF

Department of Air Force  
Assistant Chief of Staff, Intelligence  
ATTN: AFCIN-3D  
Washington 25, D. C.

AGI

American Geological Institute  
AGI Translations Office  
2101 Constitution Avenue, NW  
Washington, D. C. 20000

AGU

American Geophysical Union  
1515 Massachusetts Avenue, NW  
Washington, D. C. 20005

AIP

American Institute of Physics  
335 East 45th Street  
New York, New York 10017

ANL - Argonne National Laboratories, Illinois  
(see AEC)

APL/JHU

The Johns Hopkins University  
Applied Physics Laboratory  
8621 Georgia Avenue  
Silver Spring, Maryland 20910

BISI

British Iron and Steel Industry Translation Service  
The Iron and Steel Institute  
4 Grosvenor Gardens  
London, S. W. 1, England

CB

Consultants Bureau Enterprises, Incorporated  
227 West 17th Street  
New York, New York 10011

CFSTI

Clearinghouse for Federal Scientific and  
Technical Information (Formerly Office of  
Technical Services)  
Port Royal and Braddock Roads  
Springfield, Virginia 22151

CTT

Columbia Technical Translations  
5 Vermont Avenue  
White Plains, New York 10600

Derwent Information Service

Derwent Information Service  
Rochdale House, Theobolds Road  
London, W. C. 1, England

DIA

Defense Intelligence Agency  
Washington, D. C. 20301

FP(Inc)

The Faraday Press, Inc.  
84 Fifth Avenue  
New York, New York 10011

FSTC

Defense Documentation Center  
Cameron Station  
Alexandria, Virginia

FTD - Foreign Technology Division (see AF)

HB

Henry Brutcher Technical Translations  
P. O. Box 157  
Altadena, California 91001

HEW - (see NIH)

IEEE

Institute of Electrical and Electronics Engineers  
275 Madison Avenue  
New York, New York 10016

Department of Interior

Department of Interior  
Branch of Foreign Fisheries (Translations)  
Division of International Affairs  
Bureau of Commercial Fisheries  
Room 8015  
Washington, D. C. 20240

IPST

Israel Program of Scientific Translations  
14 Shammai Street  
P. O. Box 7145  
Jerusalem, Israel

JPRS

U. S. Department of Commerce  
Clearinghouse for Federal Scientific and  
Technical Information  
Joint Publications Research Service  
Building Tempo E,  
East Adams Drive, 4th and 6th Streets, SW  
Washington, D. C. 20443

NASA

National Aeronautics and Space Administration  
1512 H Street NW  
Washington, D. C. 20546

NIC

Naval Intelligence Command  
Naval Intelligence Command Headquarters  
NIC-15  
Washington, D. C. 20350

NIH

Circulation Unit  
Readers Services Section  
Library Branch, DRS  
National Institute of Health  
Building 10, Room 5N118  
Bethesda, Maryland 20014

NMS

U. S. Naval Medical School  
National Naval Medical Center  
Bethesda, Maryland 20014

NOO

U. S. Naval Oceanographic Office  
Washington, D. C. 20390

NSRDC

Naval Ship Research and Development Center  
(Code 041)  
Washington, D. C. 20007

NSTIC

Ministry of Defense  
Room 102, Station Square House,  
St. Mary Cray, Orpington, Kent.

ORNL - Oak Ridge National Laboratory (see AEC)

PG

Petroleum Geology  
Box 171  
McLean, Virginia

Plenum Press

Plenum Press, Incorporated  
227 West 17th Street  
New York, New York 10011

Primary Sources

Primary Sources  
11 Bleecker Street  
New York, New York 10012

RSIC - Defense Documentation Center, Redstone  
Scientific Information Center  
(see CFSTI)

USSR

Economic

Agrarian Problem in Iraq, by Sergey Nikolayevich Alitovskiy.

RUSSIAN, per, Agroarnyy Vopros v Sovremennoye  
Irake, 1966, pp 128-173.

\*ACSI J-4234

ID 2204002368

Fifty Years of Development of the Theory of Automatic Control in the USSR, by L. M. Boichuk.

RUSSIAN, per, Avtomatika, No 5, 1967, pp 6-20.

\*Dept of Navy/APL/JHU J-1125

Expansion of Automobile Industry Planned, by N.M. Potapov, 8 pp.

RUSSIAN, per, Avtomobi'lnaya Promyshlennost', No. 12, Moscow, Dec 67, pp. 1-3.

JPRS 44,360

Experience of the Work of the Rzhev Crane-Building Plant in the New Economic Conditions, by V. Ye. Bodrov, 6 pp.

RUSSIAN, journal, Byulleten' Tekhniko-Ekonomicheskoy Informatsii, Moscow, No. 11, 1967, pp. 27-29.

JPRS 44,216

On the Nature and Role of the Transferable Ruble, by A. Rotleyder, 9 pp.

RUSSIAN, per, Den'gi i Kredit, Moscow, No. 12, 1967, pp. 26-31.

JPRS 44,389

The Role of the Foreman in Production, by P. Likhodiy, 10 pp.

RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, 1958, pp. 24-25.

JPRS 44,333

Embezzlement of State Funds by Accountant and Cashier at Motor Transport Management, by A. Kovalev, 7 pp.

RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, Jan 67, No. 1, p. 28.

JPRS 44,333

Design and Construction of Industrial Parks, 5 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 46, Nov 1967, p 21.

JPRS 44077

USSR

Economic (Contd)

Administrative and Accounting Inadequacies of the Motor-Transport System, by N. Fomichev, 6 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 47,

1967, p 15.

JPRS 44074

Bonus Planning Problems, by A. Migralejev, 5 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 49, Dec 1967, p 13.

JPRS 44091

Scientific Organization of Labor in Agriculture, 23 pp.

RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 49, Dec 67, pp. 23-26.

JPRS 44,361

Construction Lagging at Machine Building Enterprises, 6 pp.

RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 50, Moscow, Dec 67, p. 3.

JPRS 44,378

Belorussia Experiments with Production Concentration, by S. Kishkin, 8 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, p 12.

JPRS 44100

Proposals for Integrating Optimum Regional Plans, by A. Bogored, 8 pp.

RUSSIAN, np., Ekonomicheskaya Gazeta, No 50, Dec 1967, p 17.

JPRS 44100

General Resume of Economic and Cultural Development in Dagestan, by V. Spirkin, 11 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, pp 26-27.

JPRS 44100

Requirements for Construction in the Far North, by V. Kolyada, M. Kim, 5 pp.

RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, p 40.

JPRS 44077

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The Status and Prospects of the Interbranch Balance, by V. Kossov, 8 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 51, Dec 1967, pp 15-16.  
JPRS 44078

Chairman of 21st Session of CMEA Discusses 'New Type of Economic Relations Among Socialist Nations', 9 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 51, Dec 1967, pp 40-41.  
JPRS 44080

Interview With Deputy Chairman of the Council of Ministers RSFSR, K.M. Gerasimov, 7 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 3.  
JPRS 44,260

Development of Metals Industry, by V. Perederayev and V. Andreyev, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 8.  
JPRS 44,266

Meeting in Kursk Discusses Problems of Material and Technical Supply, 18 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, pp. 10-12.  
JPRS 44,260

Labor Resources of Armenian Republic, by N. Adonts and V. Kuregyan, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 23.  
JPRS 44,361

Republic-Level Conference of Economists in Vil'nyus, Lithuanian SSR, by I. Kovalenko, and G. Emdin, 12 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, pp. 9-11.  
JPRS 44,333

Ministry of Local Industry of Latvian SSR Under Cost Accounting System, by I. Kovalenko, 6 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 17.  
JPRS 44,200

Union Republic Ministries of Rural Construction Urged to Transfer to New System to Help Ensure Fulfillment of 1968 Plans, by S. Khitrov, 8 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, pp. 18-19.  
JPRS 44,379

USSR  
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Basic Features of the 1968 Plan for the National Economy of the Soviet Union, by A. Lalayants, 10 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, pp. 22-23.  
JPRS 44,333

Suggestions for Improving Coordinated Planning on the Oblast Kray, Autonomous-Republic, and Economic-Region Level, by L. Levina, 7 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, p. 30.  
JPRS 44,333

Standard Planning Methods Still Needed for Trade Organizations, by Ye. Fonarev, 7 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 40.  
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CMEA Session in Budapest, by A. Belyayev, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 42.  
JPRS 44,389

Inter-Type Standardization Introduced in Ul'yanovsk Plant, by P. Druzhinin and A. Sklyarov, 5 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 2, Moscow, Jan 68, p. 9.  
JPRS 44,411

Scientific Research and International Cooperation, 6 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 3, Jan 68, p. 40.  
JPRS 44,389

General Construction Quotas for 1968, by A. Repenko, 16 pp.  
RUSSIAN, per, Ekonomicheskaya Stroitel'stva, No. 1, Moscow, 1968, pp. 3-11.  
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Material Stimuli and the Reproduction of Manpower, by V. Yagodkin Docent, 10 pp.  
RUSSIAN, per, Ekonomicheskiye Nauki, Moscow, No. 12, Dec 67, pp. 20-27.  
JPRS 44,418

Overall Mechanization and Effectiveness of Production in Road Construction, by L. Kvitnitakaya, 7 pp.  
RUSSIAN, journal, Ekonomicheskiye Nauki, Moscow, No. 12, 1967, pp. 49-54.  
JPRS 44,263

USSR  
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Methods of Studying Consumer Demand and the Market Discussed by Communist Nations at Moscow Conference, by F. G. Gurvich, 7 pp.  
RUSSIAN, per, Ekonomiki i Matematicheskiye metody, No 6, Nov-Dec 1967, pp 925-942.  
JPRS 44030

Young Scientists Hold Conference on Economic and Mathematical Methods, by G. Z. Davidovich, 5 pp.  
RUSSIAN, per, Ekonomika i Matematicheskiye metody, No 6, Nov-Dec 1967, pp 947-948.  
JPRS 44100

Capital Investments in Trade, by M. Kozub, 6 pp.  
RUSSIAN, monthly, Ekonomika Sovetskoy Ukrainy, No. 10, Oct 67, pp. 55-58.  
JPRS 44,373

Progress of Ukrainian SSR Since 1917, by P. Rozenko, 12 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No 22, Nov 1967, pp 1-9.  
JPRS 44078

Estonian Wood Carving Industry: An Historical Review, by A. Viires.  
RUSSIAN, bk, Esti Rahvaparane puutoendus ajalooline ulevaade. Esti riiklik kirjastus. Tallinn, Eesti NSV Teaduste Akademia Ajaloo Instituut, 1960, 332½ pp.  
\*CSFTI TT 68-50342

The State Budget of the USSR for 1968, 5 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 3-6.  
JPRS 44,302

The Fulfillment of the Budget Income Plan is the Task of Every Finance Organ, by V. Dementsev, 12 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow 1967, pp. 7-15.  
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Distributive Relationships and Production Efficiency, by S. Sitaryan, 14 pp.  
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A New System of Payments for Design Work, by Ye. Pliskovskiy, and V. Petukhov, 5 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 63-65.  
JPRS 44,302

Economic Work in the Government Insurance Organs of the Tatar ASSR, by G. Tagiyev, 6 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 75-77.  
JPRS 44,302

The Evaluation of the Work of Food and Light Industry Enterprises and the Formation of Economic Incentive Funds, by V. Maslennikov and V. Prokopov, 14 pp.  
RUSSIAN, journal, Finansy SSSR, No. 11, Moscow, 1967, pp. 83-89.  
JPRS 44,302

Proceedings of a Meeting of the Collegium of the Ministry of Finance USSR, 8 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 94-96.  
JPRS 44,302

Planned Measures for Increasing the Production of Oil and Natural Gas in Western Kazakhstan, by A. Isentayev, 5 pp.  
RUSSIAN, np, Kazakhstanskaya Pravda, 8 Dec 1967, p 2.  
JPRS 44102

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Problems in Settling the North Discussed, by Yu. Balakirev, 7 pp.  
RUSSIAN, newspaper, Komsomol'skaya Pravda, 1 Dec 1967, p 1.  
JPRS 44091

Application of Scientific Achievements in Production, by M. Kabachnik, 5 pp.  
RUSSIAN, newspaper, Komsomol'skaya Pravda, Moscow, 9 Jan 68, p. 2.  
JPRS 44,342

A Short Dictionary of Fishery Terms, by A. A. Klykov, 66 pp.  
RUSSIAN, dictionary, Kratkiy Slovar' Rybatskikh Promyslovnykh Sloz, 1959, 79 pp.  
JPRS 44072

Growth of Machine Building and Tool Industry, by A. Ya. Vyatkin, 9 pp.  
RUSSIAN, per, Mekhanizatsiya i Avtomatizatsiya Proizvodstva, No. 11, Moscow, Nov 67, pp. 1-4.  
JPRS 44,185

Economy Hurt by Lag in Ferrous Metallurgy, by M. A. Pertsav, 5 pp.  
RUSSIAN, per, Metallurg, No. 1, Moscow, Jan 68, pp. 1-2.  
JPRS 44,409

Fifty Years of the Soviet Oil Refining Industry, by D. I. Notkin, 14 pp.  
RUSSIAN, per, Neftskhimiya, Vol 7, No. 5, Moscow, Sept-Oct 67, pp. 651-660.  
JPRS 44,410

Developing Oil and Gas Resources, by M. M. Brenner, 9 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No 11, Nov 1967, pp 14-20.  
JPRS 44102

Northern Caucasus Oil Association Converts to New System, by V. B. Nazarov, et al., 8 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No. 12, Moscow, Dec 67, pp. 1-4.  
JPRS 44,377

USSR  
Economic (Contd)

Difficulties of New Economic System in Geological Prospecting, by I. M. Alekhin and V. A. Shein, 5 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No. 12, Moscow, Dec 67, pp. 4-5.  
JPRS 44,377

Brief History of Soviet Economic and Social Progress, by F. Mikhaylov, 9 pp.  
RUSSIAN, per, Partiyaya Zhizn' Kazakhstana, No 11, 1967, pp 42-47.  
JPRS 44078

Improving Soviet Economic Management and Management Personnel Training, by V. Lisitsyn and G. Popov, 5 pp.  
RUSSIAN, newspaper, Pravda, Moscow, 19 Jan 68, p. 2.  
JPRS 44,333

Fundamental Problems Involved in Creating Automatic Control Systems for the National Economy, by K. N. Rudnev.  
RUSSIAN, per, Pribory i Sistemy Upravleniya, Vol 10, No 10, 1967, pp 1-3.  
\*Dept of Navy/APL/JHU J-1135

Basic Terms and Problems in Creating Automatic Systems for Controlling Technological Processes, by I. K. Petrov.  
RUSSIAN, per, Pribory i Sistemy Upravleniya, Vol 10, No 10, 1967, pp 14-16.  
\*Dept of Navy/APL/JHU J-1136

Some Results of State Expert Control of Construction Design for Projects, by I. A. Levin, 8 pp.  
RUSSIAN, journal, Promyshlennoye Stroitel'stvo, Moscow, No. 12, 1967, pp. 5-7.  
JPRS 44,263

Defective Brick Causes Steel Losses at Zaporozhstal', by Ye Karasiyчук, 5 pp.  
RUSSIAN, newspaper, Rabochaya Gazeta, Kiev, 3 Jan 68, p. 3.  
JPRS 44,266

USSR  
Economic (Contd)

The Fishing Industry of Lithuania and Prospects for Its Development, by E. M. Urbonavichius, V. I. Kal'nibolotskiy.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 4-7.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foriegn Fisheries

Revision of the Regulations on the Application of Norms for Load-Transfer Operations at Sea, by I. Gol'dman.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 31-32.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Aspects of Searching and Fishing for Squid, by A. A. Baral.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 39-41.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch, of Foreign Fisheries

Proportions (of Vessels and Operations) in the Ocean Fishing Industry, by Yu. L. Korotkov.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 74-77.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Methods of Profit Analysis, by A. P. Krivososov.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 78-79.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

The Economic Effectiveness of Raising Vegetarian fish in the Volga Delta, by I. D. Miazin.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 80-82.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foerign Fisheries

The Role of Economic Laws in Economic Management, by G. Liberman, 6 pp.  
RUSSIAN, newspaper, Sovetskaya Latvya, Riga, 22 Dec 67, p. 3.  
JPRS 44,334

USSR  
Economic (Contd)

Recommendations Voiced for Improving Incentives on Sovkhozes, by T. Puryшева, 7 pp.  
RUSSIAN, per, Sovetskiye profsoyuzy, No. 22, Moscow, Nov 67, pp. 14-15.  
JPRS 44,351

Planned Wage and Social Benefits, by Yu. Pak, 9 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 12-17.  
JPRS 44091

Labor Productivity in USSR for 50 Years, by L. Kostin, 16 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 18-28.  
JPRS 44091

Organization of Labor and Rest Under the Five-Day Work Week, by P. Sklyarov, 11 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 39-45.  
JPRS 44091

Improvement of Pay Systems in USSR, by Ye. Kapustin, 15 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 63-72.  
JPRS 44091

Development of Forms and Systems of Pay in Industry, by S. Shkurko, 19 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 73-85.  
JPRS 44091

Strengthening of the Public Economy and Growth of Payment for Labor in Kolkhozes, by F. Tabeyev, 12 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 86-93.  
JPRS 44091

Social Development of the Production Collective, by G. Renne, 11 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 132-138.  
JPRS 44091

USSR  
Economic (Contd)

Official Decree on Work of State Trade and Consumer Cooperatives, 13 pp.  
RUSSIAN, np, Sovetskaya Torgovlya, 19 Dec 1967, p 2.  
JPRS 44075

Reducing the Number of Stages in Wholesale Circulation and Movement of Foodstuffs, by A. Folo-  
vnikov, 5 pp.  
RUSSIAN, per, Sovetskaya Torgovlya, No 12, Dec 1967, pp 20-22.  
JPRS 44101

Contract Nonfulfillment Penalties Elaborated, by I. Duel', 5 pp.  
RUSSIAN, np, Sovetskaya Torgovlya, Moscow, 6 Jan 68, p. 3  
JPRS 44,200

Development of Rural Retail Trade in the RSFSR, by M. Denisov, 6 pp.  
RUSSIAN, newspaper, Sovetskaya Torgovlya, Moscow, 11 Jan 68, p. 3.  
JPRS 44,200

Problems of the Economic Reform in Capital Construction, by N. Mikhaylov, 8 pp.  
RUSSIAN, np, Stroitel'naya Gazeta, 8 Dec 1967, p 2.  
JPRS 44077

Methods of Fulfillment of the Five-Year Plan in Construction in the Far East, by I. Klepikov, 6 pp.  
RUSSIAN, newspaper, Stroitel'naya Gazeta, Moscow, 15 Dec 67, p. 3.  
JPRS 44,374

Evaluation of the Building Materials Industry of the Latvian Republic, by N.N. Bolotov, 5 pp.  
RUSSIAN, per, Stroitel'nyye Materialy, No.12, Moscow, Dec 67, pp. 3-4.  
JPRS 44,262

Results of the New Management Conditions, by G.I. Vilinov, et al., 5 pp.  
RUSSIAN, per, Stroitel'nyye Materialy, No. 12, Moscow, Dec 67, pp. 11-12.  
JPRS 44,262

USSR  
Economic (Contd)

Academician Discusses Aspects of New Economic System, 5 pp.  
RUSSIAN, newspaper, Trud, Moscow, 21 Dec 67, p. 2.  
JPRS 44,334.

The Economic Reform in Action at the Cement Plants of the Soviet Union, by A.N. Lyusov, and A.D. Yevdokimenko, 6 pp.  
RUSSIAN, journal, Tsement, Moscow, No. 6, 1967, pp. 1-2.  
JPRS 44,216

Estimate Price Formation and Project Accounting of Expenditures for Construction Procedures, by V. Tolstoy, 15 pp.  
RUSSIAN, per, Vestnik Statistiki, No 11, 1967, pp 36-44.  
JPRS 44077

Statistics on Soviet Trade, 26 pp.  
RUSSIAN, per, Vestnik Statistiki, No 12, Dec 1967, pp 77-90.  
JPRS 44101

50 Years in the Service of the Land of the Soviets, by K. Ya. Sergeychuk.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 4-9.  
JPRS 44475

In the Years of the Soviet Regime, by A. P. Kharazyan.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 46-51.  
JPRS 44475

The Big Changes, by A. M. Malakhiyev.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 52-59.  
JPRS 44475

1967 Moscow Conference on Interbranch Balance, by N. Lagutin, I. Motorin, 5 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 10, Oct 1967, pp 157-159.  
JPRS 44080

New Economic Accomplishments and New Plans, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 3-11  
JPRS 44,184

USSR  
Economic (Contd)

Socialist Division of Labor and Industrial Development of the Union Republics, by Yu. Vorob'yev, 10 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 12-18.  
JPRS 44073

Economic Development of the Ukraine During the Years of Soviet Power, by S. Yampol'skiy, 11 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 19-26.  
JPRS 44073

The October Revolution and Transformation of the Economy of Belorussia, by F. Martinkevich, 8 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 27-32.  
JPRS 44073

Flourishing of National Economy of Uzbekistan, by O. Izhmalov, 9 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 33-38.  
JPRS 44073

Economic Achievements of the Armenian SSR, by A. Arakelyan, 10 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 39-45.  
JPRS 44073

On Changing the Material Consumption of Social Production, by V. Rutgayzer, 16 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 46-55.  
JPRS 44,184

Problems in Improving Efficiency Indices of Social Production, by L. Kochetkov, et al. 9 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 56-61.  
JPRS 44,184

Problems in Optimal Planning of the National Economy, by A. Skryabin, 15 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 62-70.  
JPRS 44,184

USSR  
Economic (Contd)

Improving Management and Planning Under the Economic Reform, by L. Pekarskiy, et al, 24 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 71-84.  
JPRS 44,184

Production Specialization and Labor Productivity, by A. Rogov and V. Chernykh, 12 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 109-115.  
JPRS 44,184

Calculation of the Aggregate Expenditure of Labor, by A. Bugutskiy, I. Bulakh, 12 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 123-129.  
JPRS 44091

Need for Creative Research in Economics, by K.V. Ostrovityanov, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 148-150.  
JPRS 44,184

Population Studies in the USSR, by D. Valentey, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 154-156  
JPRS 44091

Latest Trends in the Distribution of USSR Productive Resources, by N. Batova, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 158-160.  
JPRS 44073

Problems in Forming Material Incentive Fund, by F. Veselkov, 16 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 3-15.  
JPRS 44,300

Imaginary and Actual Reserves in Shift Work, by Ya. Kvasha, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 16-26.  
JPRS 44,300

Problems of Cost Accounting in Operating Industrial Associations, by A. Pevzner, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 27-38.  
JPRS 44,300

USSR  
Economic (Contd)

Forecasting the Demand for New Equipment, by  
A. Konson, 13 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow,  
No. 12, Dec 67, pp. 39-47.  
JPRS 44,334

A Description of Soviet Occupational Categories  
and Training for Workers, by L. Zverev, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 12, Dec 1967,  
pp 59-63.  
JPRS 44091

Main Directions in Improving Prices in Mutual  
Trade Among CEMA Member-Countries, by  
V. D'yachenko, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 64-74.  
JPRS 44,389

Economic Measures for Efficient Use of Water  
Resources, by M. Loyter, 19 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12,  
Moscow, Dec 67, pp. 75-86.  
JPRS 44,270

Assessments of Natural Resources, by Yu.  
Sukhotin, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 87-98.  
JPRS 44,259

Cooperation of CEMA Member-Countries in the  
Intensification of Agriculture, by V. Storozhev,  
14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 99-107.  
JPRS 44,389

Economic Reforms in the Construction Sector  
in the European CEMA MEMBER-Countries, by  
V. Koslov and M. Peral'man, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 108-116.  
JPRS 44,389

"Convergence of the Levels of Economic Devel-  
opment of the Socialist Countries", by  
Yu.N. Belyayev, by B. Mikhaylov, 5 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 140-142.  
JPRS 44,382

USSR  
Economic (Contd)

Industrial and Agricultural Planning Program  
Developed, by A. Klinskiy and N. Lagutin,  
5 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow,  
Dec 67, pp. 150-152.  
JPRS 44,333

Progress of the Economic Reform, by T.  
Khachaturov, 5 pp.  
RUSSIAN, newspaper, Vyshka, Baku 3 Jan 68,  
pp. 2-3.  
JPRS 44,333

New Purchase Prices and Guaranteed Wages  
for Kolkhoz Workers, by V. Yermenko, 6 pp.  
RUSSIAN, journal, Zakupki Selskokhozyay-  
stvennykh Produktov, No. 1, Moscow, Jan 67,  
pp. 30-35.  
JPRS 44,307

Seventh Congress of Producer Cooperatives of  
the Mongolian People's Republic, 16 pp.  
MONGOLIAN, newspaper, Hodolmor, Ulan Bator,  
18 Oct 67, pp. 2 and 3.  
JPRS 44,211

A New Kidskin Factory, by Ta. Mishigdor, 5 pp.  
MONGOLIAN, newspaper, Unen, Ulan Bator,  
10 Oct 67, p. 1.  
JPRS 44,211

Political

The 50th Anniversary of the October Revolution  
and the Contemporary Workers Movement, by  
B. Ponomarev, 36 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 14-34.  
JPRS 44,303

The October Revolution and the Struggle for  
Peace, by Luigi Longo, 11 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 35-41.  
JPRS 44,303

The Ideas of the October Revolution in the  
Arab East, by Khaled Bagdash, 17 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 42-52.  
JPRS 44,303

USSR  
Political (Contd)

Party Leadership is Scientific Leadership,  
by A. Voss, 18 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 71-81.  
JPRS 44,303

The Path of the Soviet Peasant, by T. Mal'tsev,  
16 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 94-103.  
JPRS 44,303

The Influence of the October Revolution on the  
Development of Artistic Thought, by B. Suchkov,  
19 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 116-127.  
JPRS 44,303

Collective Agreement and the Enterprise,  
by G. Moskalenko, 5 pp.  
RUSSIAN, newspaper, Trud, Moscow, 23 Jan 68,  
p. 2.  
JPRS 44,418

International Symposium of Young Socialist  
Social Scientists, by V. Simchera, 6 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 145-147.  
JPRS 44,259

Military

Combating Aerospace Targets, by P. V. Morozov,  
40 pp.  
RUSSIAN, bk, Bor'ba s Vozdushno-Kosmicheskimi  
Tselyami, 1967, pp 2, 97-120, 143, 144.  
JPRS 44083

Engineer Security of the March and Meeting Engage-  
ment of Motorised Rifle (Tank) Battalion, by A.  
P. Balokon' and V. I. Kalayda, 162 pp.  
RUSSIAN, bk, Inzhenernoye Obespecheniye Marcha  
i Vstrechnogo Bova Motostrelkovogo (Tankovogo)  
Batal'ona, 1967.  
\*ACSI J-4202  
ID 2204002268

USSR  
Military (Contd)

Propagandizing the Law of Universal Military  
Obligation, by Col.Gen.K. Grushevoy,  
9 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Dec 67, Moscow, pp. 22-28.  
JPRS 44,268

Improving the Combat Skill of the Missile  
Men, by Col.Gen. A. Shevtsov, 7 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Moscow, Dec 67, pp. 29-33.  
JPRS 44,268

Guarding the Security of the Soviet State,  
by Lt.Gen.V. Fedorchuk, 9 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Moscow, Dec 67, pp. 44-49.  
JPRS 44,268

The Role of Transport in Modern War, by  
Gen.Lt. I. Kovalev, 10 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
Moscow, No. 23, Dec 67, pp. 54-60.  
JPRS 44,268

Approach March and Meeting Engagement of Small  
Tank Units, by N. K. Shishkin.  
RUSSIAN, per, Marsh i Vstrechnyy Boy Tankovykh  
Podrazdeleniy, 1967, 214 pp.  
\*ACSI J-4201  
ID 2204002168

The March and Meeting Engagement of Tank  
Podrazdeleniyas, by N. K. Shishkin, 5 pp.  
RUSSIAN, bk, Marsh i Vstrechnyy Boy Tankovykh  
Podrazdeleniy, 1967, pp 2, 3-5, 215-216.  
JPRS 44083

Fifty Years of the VMF Services, by B.M.  
Volosatov, and V.A. Russov, 10 pp.  
RUSSIAN, per, Morskoy Sbornik, No. 11, Moscow,  
67, pp. 52-58.  
JPRS 44,186

The Regime of the Naval Blockade Under  
Contemporary International Law, L.A. Ivan-  
ashchenko, 10 pp.  
RUSSIAN, per, Morskoy Sbornik, No. 11, Moscow,  
1967, pp. 85-90.  
JPRS 44,186

USSR  
Military (Contd)

Parachute Jumps from Military Transport Aircraft, by K. A. Ovsiannikov, 66 pp.  
RUSSIAN, per, Pryzhki s Parashyutom iz Voyenno-Transportnykh Samoletov, 1964, pp 10-15; 18-21; 24-47; 54-55; 58-65; 82-85; 100-103; 116-119; 130-151; 182-189; 212-213.  
ACSI J-3860  
ID 2901031866

Radar in Antimissile Defense, by A. I. Leonov, 21 pp.  
RUSSIAN, bk, Radiolokatsiya v Protivoraketnoy Oborone, 1967, pp 2, 3-4, 5-17, 127-132, 133-134.  
JPRS 44083

DOSAAF Functions Regarding the Law on General Military Duty, 15 pp.  
RUSSIAN, np, Sovetskiy Patriot, 20 Dec 1967, p 2.  
JPRS 44083

DOSAAF Plenum Fledges Adherence to new Military Law, 8 pp.  
RUSSIAN, np; Sovetskiy Patriot, 24 Dec 1967, p 3.  
JPRS 44083

Second Plenum of the Central Committee of DOSAAF, 12 pp.  
RUSSIAN, np, Sovetskiy Patriot, 24 Dec 1967, pp 3-4.  
JPRS 44083

Watch Officer's Handbook, by A. P. Pronichkin.  
RUSSIAN, bk, Spravochnik Vakhtennogo Ofitsera, 1967.  
\*Dept of Navy NIC

Anti-Tank Training Podrazdeleniya, by Col. A. Loshchilov, 6 pp.  
RUSSIAN, per, Starshina-Serzhant, No. 12, Moscow, 1967, pp. 8-10.  
JPRS 44,417

Atomic-Powered Submarine Design, by V. M. Bukalov and A. A. Narushbayev, 282 pp.  
RUSSIAN, bk, Sudostroyeniya, 1964.  
P500032368-V  
Dept of Navy/NIC Trans No 2498

USSR  
Military (Contd)

Handbook for Autoloader Operators, 7 pp.  
RUSSIAN, per, Transport, 1966, pp 1-9.  
ACSI J-3901  
ID 2204058667

Defense of Nuclear Submarines, by V. F. Droblenkov & V. N. Gerasimov.  
RUSSIAN, bk, Ugroza iz Glubini, 1966, pp 170-177.  
Dept of Navy NIC tr 2525

Manual of International Maritime Law (Part I), by P. D. Barabolya and A. S. Bakov.  
RUSSIAN, bk, Voyenno-Morskoy Mezhdunarodno-Pravovoy Spravochnik, Moscow, 1966.  
Dept of Navy NIC 2500 (a)

Manual of International Maritime Law (Part II), by P. D. Barabolya & A. S. Bakov.  
RUSSIAN, bk, Voyenno-Morskoy Mezhdunarodno-Pravovoy Spravochnik, 1966.  
Dept of Navy NIC tr 2500 (b)

Soviet Marshall Recounts Spanish Civil War Campaign, by K. A. Meretskov, 14 pp.  
RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, No 7, 1967, pp 53-61.  
JPRS 44083

Fundamental Orientation In DOSAAF Functions, by V. Sysoyev, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 12-13.  
JPRS 44,215

DOSAAF Achievements in the Anniversary Year Strengthen the Might of the Fatherland, by G. Shatunov, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 16-18.  
JPRS 44,215

Special Knowledge Needed by Medical Service Personnel, by R. Mordvinov and A. Nazarenko, 5 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 30-31.  
JPRS 44,215

Gomel'skaya Oblast Takes Active Role in Civil Defense Work, by A. Kargin, 5 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 33-34.  
JPRS 44,215

USSR  
Military (Contd)

Civil Defense Exercise Shows Value of Training,  
by Ya. Kantor, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, No. 12,  
Dec 67, pp 16-17.  
JPRS 44,380

Volgograd Mounts Civil Defense Program,  
by A. Nebenzya, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 14-15.  
JPRS 44,380

A Brief Report on Modern Means of Warfare  
Theme Two, by V. Mordvinov, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 18-19.  
JPRS 44,380

Shelters and Covers Part Three, by A.  
Kharkevich, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 20-21.  
JPRS 44,380

Fire Shield of the Soviet Union.  
BULGARIAN, per, Armeyski Pregled, No 11, 1967,  
pp 65-68.  
\*ACSI J-4361  
ID 2204006268

Sociological

Soviet Higher Electrotechnical Education,  
by V.P. Yalyutin, 12 pp.  
RUSSIAN, per, Elektrichestvo, Moscow,  
No. 12, Dec 67, pp. 1-5.  
JPRS 44,261

Reasons for Departure of Youth from Country-  
side Examined, by Aleksandr Yanov, 12 pp.  
RUSSIAN, newspaper, Literaturnaya Gazeta,  
No. 52, Moscow, 27 Dec 67, p. 10.  
JPRS 44,270

Clarification of September 1967 Social  
Insurance Regulation, by G. Simonenko, 6 pp.  
RUSSIAN, publication, Okhrena Truda i Sotsial'-  
noye Strakhovaniya, No. 1, Moscow, Jan 1968,  
pp. 40-41.  
JPRS 44,420

USSR  
Sociological (Contd)

Landscape Promoted as Link Between Man and  
Nature, by V. Dobrokhvalov, 4 pp.  
RUSSIAN, newspaper, Pravda, Moscow, 26 Dec 67,  
p. 3.  
JPRS 44,422

A General Survey of Murmanskaya Oblast, by  
V. V. Pokshishevskiy, et al., 21 pp.  
RUSSIAN, monograph, Severo-Zapad RSFSR,  
"Mysl" Publishing House, Moscow, 1964,  
pp. 593-614.  
JPRS 44,352

Discipline: A Crucial Factor in Organization of  
Social Labor, by N.V. Sviridov, 15 pp.  
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,  
Moscow, No. 12, Dec 67, pp. 11-20.  
JPRS 44,418

Labor Protection Practices in the Construction  
and Building Materials Industry, by I. Kolesnikov,  
5 pp.  
RUSSIAN, per, Stroitel'naya Gazeta, 8 Dec 1967,  
p 2.  
JPRS 44091

Theoretical Problems of Guiding the  
Society, by E.M. Korzheva, et al, 8 pp.  
RUSSIAN, per, Voprosy Filosofii, No. 11,  
Moscow, 1967, pp. 136-140.  
JPRS 44,291

Biographic

I. V. Kurchatov, by I. N. Golovin.  
RUSSIAN, bk, Atomizdat, Moscow, 1967, 109 pp.  
\*ACSI J-4343  
ID 2204005168

EASTERN EUROPE

Economic

- We Must Develop the Technical-Scientific Revolution and Continue to Increase Labor Productivity, by Harilla Papajorgji, 7 pp. ALBANIAN, per, Zeri i Popullit, Tirana, 24 Nov 67, pp. 2-3. JPRS 44,218
- The Trade Unions and the Decree on Increasing Profitability in the Economy, 6 pp. BULGARIAN, per, Bulgarski Profsuyuzi, No. 12, Sofia, Dec 67, pp. 2-4. JPRS 44,190
- Economic Interests and the New System of Management in Industry, by Iliya Vulkov, 12 pp. BULGARIAN, per, Novo Vreme, Sofia, No. 12, Dec 67, pp. 18-27. JPRS 44,257
- Some Problems of the Economic Development of Varna Okrug, by Todor Stoychev, 12 pp. BULGARIAN, per, Novo Vreme, Sofia, No. 12, Dec 67, pp. 96-102. JPRS 44,257
- Problems in the Machine-Building Industry Discussed, by Eliezer Gershonov, 14 pp. BULGARIAN, per, Planovo Stopanstvo i Statistika, No. 9, Sofia, Nov 67, pp. 3-12. JPRS 44,195
- The Proper Establishment of an Award Account in State Economic Associations, by Stamo Zh. Stamo, 11 pp. BULGARIAN, per, Schetovodstvo i Kontrol, Sofia, No. 8, Oct 67, pp. 16-23. JPRS 44,190
- Control Over Compliance With the Foreign Trade System, by Ivan Protich and Boyan Ivanchev, 6 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 5-7. JPRS 44,248
- Some Problems in the Administration and Organization of Foreign Trade, by Docent Ivan Nikolov, 7 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 8-10. JPRS 44,248

Eastern Europe  
Economic (Contd)

- The Legal Aspects of Achieving the Currency Limits Set on Import, by Chudomir Goleminov, 8 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 11-13. JPRS 44,248
- Survey of Opinions on Exchange Rate, by Frantisek Fojtik, 13 pp. CZECH, per, Ekonomicka Revue, No. 12, Prague, 1967, pp. 532-538. JPRS 44,283
- Eliminating Time Gaps in Effecting Economic Ideas, by Bohumil Sucharda, 8 pp. CZECH, per, Nova Mysl, Prague, No. 26, 28 Dec 67, pp. 28-31. JPRS 44,231
- Relationship of Organizations to the State Budget, 6 pp. CZECH, official publication, Sriika Zakonu Ceskoslovenske Socialisticke Republiky, No. 40, Prague, 24 Nov 67, pp. 390-392. JPRS 44,394
- Agricultural Supply and Purchase in 1967, by K. Thiele, 7 pp. CZECH, weekly, Socialisticke Zemedelstvi, No. 52, Prague, 29 Dec 67, pp. 1-2. JPRS 44,201
- Use of Feed from the Central Fund in 1968, 8 pp. CZECH, weekly, Socialisticke Zemedelstvi, No. 52, Prague, 29 Dec 67, p. 6. JPRS 44,201
- The Station Foreman In Railroad Transportation. CZECH, per, Zeleznicar, 29 Apr 1967, pp 2-3. DIA LN 276-68
- The Maritime Revue. FRENCH, per, La Revue Maritime, No 239, Jan 1967. Dept of Navy MIC tr 2528
- Foreign Trade Minister Discusses GDR-USSR Trade, by Horst Solle, 10 pp. GERMAN, per, Aussenhandel, No 11, Nov 1967, pp 1-6. JPRS 44059

Eastern Europe  
Economic (Contd)

USSR Plays Important Role in CEMA Development,  
by J. Brauna and P. Sydow, 10 pp.  
GERMAN, per, Aussenhandel, No 11, Nov 1967, pp 15-  
22.  
JPRS 44059

Opening of the Food Technology Work Conference,  
by Dr. Benecke.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6  
Lebensmittel Technologie Und Verpackung G 2006E),  
p 1.  
\*ACSI J-4326  
ID 2834022567

Rations for Bundeswehr Reserves, by Paul Mueller.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6  
Lebensmittel Technologie Und Verpackung G 2006E),  
p 2.  
\*ACSI J-4326  
ID 2834022567

Effects of the State Council Decision on  
Development of Budgeting and Finances, by  
Walter Kuehn, 5 pp.  
GERMAN, journal, Deutsche Finanzwirtschaft,  
No. 24, East Berlin, Dec 67, pp. S9-S11.  
JPRS 44,190

Circulating Fund Credits for Intercooperative  
Building Organizations, by Dieter Herrmann, 5 pp.  
GERMAN, journal, Deutsche Finanzwirtschaft,  
No. 24, East Berlin, Dec 67, pp. G16-G18.  
JPRS 44,190

West Berlin's Participation in Interzonal  
Trade, 9 pp.  
GERMAN, report, Deutsches Institut fuer Wirt-  
schaftsforschung, Vol 34, No. 50, West Berlin,  
15 Dec 67, pp. 265-168.  
JPRS 44,248

Decree on Establishment of the Bank of  
Industry and Commerce, by Willi Stoph, 20 pp.  
GERMAN, journal, Gesetzblatt der Deutschen  
Demokratischen Republik, Part 2, No. 2,  
East Berlin, 4 Jan 68, pp. 9-16.  
JPRS 44,315

Eastern Europe  
Economic (Contd)

Price Office Statutes Published, 9 pp.  
GERMAN, per, Gesetzblatt der Deutschen  
Demokratischen Republik, Part II, No. 3,  
East Berlin, 5 Jan 68, pp. 17-20.  
JPRS 44,257

Agreement of Legal Status and Privileges  
of Bloc Branch Organizations for Economic  
Cooperation, 5 pp.  
GERMAN, per, Gesetzblatt der Deutschen  
Demokratischen Republik, Part II, No. 7,  
East Berlin, 12 Jan 68, pp. 31-34.  
JPRS 44,357

Non-State Enterprise Financial System Develop-  
ment Measures, by Willi Stoph, 8 pp.  
GERMAN, journal, Gesetzblatt der Deutschen  
Demokratischen Republik, Part 2, No. 117,  
East Berlin, 15 Dec 67, pp. 821-824.  
JPRS 44,315

List of VVB General Directors in the GDR, 6 pp.  
GERMAN, per, IWE-Informations-und Archiv-  
dienst, No. XII/102/1967, West Berlin, 21 Dec  
67, pp. 1-6.  
JPRS 44,274

Information on the VVB Chemical Installations,  
8 pp.  
GERMAN, per, IWE Wirtschaftsdienst, 17 Jan  
68, pp. 3-5 and 24 Jan 68, pp. 3-6.  
JPRS 44,349

Rolling Mill Rationalization Goals, by  
Kurt Singhuber, 8 pp.  
GERMAN, magazine, Neue Huette, Leipzig,  
No. 11, Nov 67, pp. 641-644.  
JPRS 44,348

The Process of International Standardization in  
Maritime Law and Criteria for the Inclusion of  
Rules of International Maritime Law in the Law of  
the GDR, by Rudi Frenzel.  
GERMAN, per, Seeverkehr, No 9, Sept 1967, pp 389-  
392.  
Dept of Navy MIC tr 2529

GDR-USSR Cooperation in Building Processing  
Machines and Vehicles, by Dr. Rudi Georgi,  
5 pp.  
GERMAN, per, Die Wirtschaft, No. 44, East  
Berlin, 1 Nov 67, pp. 13-14.  
JPRS 44,195

Eastern Europe  
Economic (Contd)

Joint Use of Natural Resources Urged for Warsaw Pact Countries, by Igor Koslow, 6 pp. GERMAN, per, Die Wirtschaft, East Berlin, 6 Dec 67, p. 23. JPRS 44,285

Development of Social Insurance and Welfare Income, 8 pp. GERMAN, per, Wochen Bericht, Berlin, No. 4, 25 Jan 68, pp. 15-18. JPRS 44,284

Changes in Management by the Ministry of Metallurgy and Machine Industry, 6 pp. HUNGARIAN, np, Figyelo, Budapest, 13 Dec 67, p. 4. JPRS 44,249

Technical Development Plans for 1968, 6 pp. HUNGARIAN, newspaper, Figyelo, Budapest, 20 Dec 67, p. 5. JPRS 44,249

Enterprise Programs for 1968, 6 pp. HUNGARIAN, newspaper, Figyelo, Budapest, 28 Dec 67, p. 5. JPRS 44,244

Decree on Turnover Taxes and Price Levelling, by Bela Sulyok, 8 pp. HUNGARIAN, newspaper, Magyar Kozlony, No. 92, Budapest 8 Dec 67, pp. 937-940. JPRS 44,219

Decree on the Establishment of Supervisory Boards at Industrial Firms, by Bela Sulyok, 5 pp. HUNGARIAN, newspaper, Magyar Kozlony, No. 95, Budapest, 15 Dec 67, pp. 974-975. JPRS 44,219

Decree on the Organizations and Functions of the Hungarian National Bank, 5 pp. HUNGARIAN, official publication, Magyar Kozlony, No. 96, Budapest, 17 Dec 67, pp. 989-990. JPRS 44,219

Eastern Europe  
Economic (Contd)

Party's Role in the New Economic Mechanism Discussed, by Vera Lajtai, 7 pp. HUNGARIAN, per, Partelet, No. 1, Budapest, Jan 68, pp. 9-15. JPRS 44,257

Hungary's Economic Plan for 1968, by Lajos Rev, 7 pp. HUNGARIAN, per, Tarsadalmi Szemle, No. 1, Jan 68, Budapest, pp. 10-15. JPRS 44,351

Reorganization of the Meat Economy and Related Problems, by Bohdan Jarema, 7 pp. POLISH, per, Gospodarka Miesna, Warsaw, No. 11, Nov 67, pp. 4-7. JPRS 44,347

Polish Heavy Industry Exports to the USSR, by Stanislaw Gruzewski, 8 pp. POLISH, per, Handel Zagraniczny, Warsaw, No. 11, 1967, pp. 437-440. JPRS 44,248

Polish-Soviet Economic Cooperation, by Artur Bodnar, 11 pp. POLISH, per, Investycje i Budownictwo, No 10, Oct 1967, pp 6-9. JPRS 44059

An Appraisal of Equipment Services in Construction, by Franciszek Brzeski, 13 pp. POLISH, per, Investycje i Budownictwo, No. 11, Warsaw, Nov 67, pp. 11-16. JPRS 44,232

Organization of Equipment Administration and Its Effect on Construction, by T. Adamczyk, J. Kowalik, et al, 9 pp. POLISH, per, Investycje i Budownictwo, No. 11, Warsaw, Nov 67, pp. 16-19. JPRS 44,232

Contractual Sales of Bottled Alcoholic Products, 5 pp. POLISH, publication, Monitor Polski, No. 67, Warsaw, 12 Dec 67, pp. 673-674. JPRS 44,363

Eastern Europe  
Economic (Contd)

USSR Assists Polish Petroleum Industry, by Franciszek Wszolek, 18 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 301-309.  
JPRS 44095

USSR Helps Develop Polish Refining Industry, by Bronislaw Taban, 7 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 310-312.  
JPRS 44095

Soviet Crude Oil and Petroleum Products for Poland, by Wladyslaw Szumilas, 7 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 312-315.  
JPRS 44095

Petroleum Industry Achievements and Goals, by T. Boczek, 8 pp.  
POLISH, per, Nafta, No 11, Nov 1967, pp 350-352.  
JPRS 44060

Grain Production Costs and Profitability in Peasant Farmsteads, by Zdzislaw Grochowski, 12 pp.  
POLISH, per, Nowe Rolnictwo, No 20, 16-31 Oct 1967, pp 1-5.  
JPRS 44096

Trawler Operation in the North Sea, by Brunon Noetzel.  
POLISH, per, Prace Morskiego Inst Rybackiego, Vol 12/B, 1964, pp 261-365.  
CFEII TT 66-57058

Achievements of CEMA Coal Industry Commission, by Florian Zajdel, 14 pp.  
POLISH, per, Przeglad Gorniczy, Vol 23, No 10, Oct 1967, pp 509-515.  
JPRS 44060

Thirty Years of Electrification of the Polish National Railways (PKP), by Karol Kuligowski.  
POLISH, per, Przeglad Kolejowy Elektrotechniczny, Feb 1967, pp 33-36.  
DIA LN 167-68

Polish-Soviet Scientific, Technical Cooperation, by Witold Walczewski, 5 pp.  
POLISH, per, Przeglad Mechaniczny, Warsaw, No. 20, 25 Oct 67, pp. 617-619.  
JPRS 44,202

Eastern Europe  
Economic (Contd)

Development of Polish Mining Industry, by Jan Nitrega, 5 pp.  
POLISH, per, Przeglad Techniczny, No 49, 3 Dec 1967, pp 1,6.  
JPRS 44060

Automation of Polish Coal Mines, by Edward Mikula, 5 pp.  
POLISH, per, Przeglad Techniczny, No 49, 3 Dec 1967, p 7.  
JPRS 44060

Potato Industry Goals in 1966-1970, by Jerzy Turski, 7 pp.  
POLISH, per, Przemysl Spozyczy, Warsaw, No. 10, 1967, pp. 3-5.  
JPRS 44,201

Polish Metalworking Machine Tools on Foreign Markets, by Halina Murawska, 8 pp.  
POLISH, paper, Rynki Zagraniczne, No. 126, Warsaw, 21 Oct 67, p. 3.  
JPRS 44,248

Need for Improved National Economy Explained, by Prof. Bronislaw Minc, 5 pp.  
POLISH, daily, Trybuna Ludu, 14 Jan p. 3.  
JPRS 44,219

Future Development of Marine Economy Evaluated, by Witold Strak, 7 pp.  
POLISH, newspaper, Tygodnik Morski, No. 53, 31 Dec 67, pp. 1, 7, and 10.  
JPRS 44,203

New Pension System Discussed, by Jan Glowczyk, 5 pp.  
POLISH, per, Zycie Gospodarcze, Warsaw, No. 50, 10 Dec 67, pp. 1-2.  
JPRS 44,384

Durable Consumer Goods Supply in Urban and Rural Areas, by Krzysztof Krauss, 8 pp.  
POLISH, per, Zycie Gospodarcze, Warsaw, No. 50, 10 Dec 67, p. 3.  
JPRS 44,363

Achievements and Goals of the Communal Economy, by Andrzej Giersz, 7 pp.  
POLISH, per, Zycie Gospodarcze, No. 52/53, 24-31 Dec 67, pp. 1 and 4.  
JPRS 44,203

Eastern Europe  
Economic (Contd)

Production Guidelines for the Engineering Industry, 8 pp.  
POLISH, per, Zycie Gospodarcze, No. 52-53,  
24-31 Dec 67, p. 5.  
JPRS 44,195

Review of 1968 Production, Export Problems,  
by Kazimierz Secomski, 5 pp.  
POLISH, daily, Zycie Warszawy, 30-31 Dec 67,  
1 Jan 68, p. 3.  
JPRS 44,202

Increased Possibilities for Using Computers  
in Processing of Economic Data, by E. Macovei  
and I. Negescu, 9 pp.  
RUMANIAN, journal, Evidenta Contabila, No. 12,  
Bucharest, Dec 67, pp. 9-15.  
JPRS 44,305

More Profits Seen as Incentive to Enterprises,  
by Radu Manescu, 5 pp.  
RUMANIAN, newspaper, Gazeta Finantelor, Vol 15,  
No. 751, 6 Dec 67, Bucharest, pp. 1 and 4.  
JPRS 44,305

Financing and Granting Credit to Investment  
Projects, by M. Diamandopol, 5 pp.  
RUMANIAN, newspaper, Gazeta Finantelor,  
Vol 15, No. 751, 6 Dec 67, Bucharest,  
p. 4.  
JPRS 44,305

More Autonomy for Enterprises in Management  
of Own Funds, by Gheorghe Popescu, 6 pp.  
RUMANIAN, newspaper, Gazeta Finantelor,  
Vol 15, No. 753, Bucharest, 20 Dec 67,  
pp. 1 and 6.  
JPRS 44,305

Operating Process for the Production of Bread by  
the Method Involving the Intensive and Prolonged  
Kneading of Dough, by E. Caibalmos, N. Popescu.  
RUMANIAN, per, Industria Alimentara, No 11, 1967,  
pp 521-523.  
\*ACSI J-4355  
ID 2204006768

Decentralization Emphasized in Economic  
Organization and Management, 12 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47,  
No. 10, Bucharest, Oct 67, pp. 49-56.  
JPRS 44,219

Eastern Europe  
Economic (Contd)

Importance of Work Productivity in Economic  
Planning and Management, by Florin Burtan,  
14 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47,  
No. 10, Bucharest, Oct 67, pp. 57-66.  
JPRS 44,219

Planning Rural Areas, by G. Gusti, 14 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47,  
No. 10, Bucharest, Oct 67, pp. 67-74.  
JPRS 44,219

The Goals of New Policy on Planning and Ad-  
ministration of the Economy Outlined, by  
Mihai Paraluta, 10 pp.  
RUMANIAN, newspaper, Munca, Bucharest,  
28 November 67, pp. 1-3.  
JPRS 44,257

New Requirements for Territorial Organization  
and Rural Planning, by Petre Blajovici,  
20 pp.  
RUMANIAN, per, Probleme Economice, Bucharest,  
No. 11, Nov 67, pp. 3-18.  
JPRS 44,358

The Decisive Role of Agriculture for Econ-  
omic Progress, by N. Belli, 23 pp.  
RUMANIAN, per, Probleme Economice, Vol XX,  
No. 12, Bucharest, Dec 67, pp. 135-150.  
JPRS 44,358

The Place of Rumania in the International  
Division of Labor, by V. Axenciuc, 14 pp.  
RUMANIAN, per, Probleme Economice, Vol XX,  
No. 12, Bucharest, Dec 67, pp. 156-164.  
JPRS 44,385

Foreign Economic Relations of Rumania in the  
Period of Construction of Socialism, by Gh.  
Surpat and N. Ionel, 19 pp.  
RUMANIAN, per, Probleme Economice, Vol XX,  
No. 12, Bucharest, Dec 67, pp. 165-178.  
JPRS 44,385

Party and State Focus on Raising Workers'  
Standard of Living, by Gh. Badrus, 10 pp.  
RUMANIAN, daily, Scinteia, Bucharest,  
29 Dec 67, pp. 1 and 6.  
JPRS 44,394

Eastern Europe  
Economic (Contd)

Development of Rumanian Industry, by Dr. Gh. P. Apostol, 10 pp.  
RUMANIAN, newspaper, Viata Economica, Bucharest, 22 Dec 67, pp. 2,3.  
JPRS 44,315

Development of the Tractor Industry, by C. Mihai, 7 pp.  
RUMANIAN, per, Viata Economica, Bucharest, No. 52, 29 Dec 67, pp. 16-28.  
JPRS 44,195

The Mechanization of Field-Crop Production in Yugoslavia, by Ugljesa Pavlovic, 11 pp.  
SERBIAN, per, Ekonomika Poljoprivrede, No 12, Dec.1967, pp 971-979  
JPRS 44096

The Present Position and Prospects of the Yugoslav Canning Industry(1), by Dr. Nedeljko Cermak, 7 pp.  
SERBO-CROATIAN, per, Hrana i Ishrana, Belgrade, No. 9-10, Sept.-Oct. 67, pp. 555-559.  
JPRS 44,393

Construction in 1967, by Milos Jaric, 13 pp.  
SERBO-CROATIAN, per, Izgradnja, Vol 22, No. 1, Belgrade, Jan 68, pp 2-8.  
JPRS 44,232

The Material Position of the Opstina and the Methods for its Self-Financing, 40 pp.  
SERBO-CROATIAN, per, Komuna, Vol 14, No. 11, Belgrade, Nov 67, pp. 2-17.  
JPRS 44,315

Slovenia, Serbia, Macedonia, Bosnia-Herzegovina, and Montenegro in 1968, 13 pp.  
SERBO-CROATIAN, per, Privredni pregled, Belgrade, 1 Jan 68, pp. 7-8.  
JPRS 44,351

Basic Law on the Contribution for Use of City Land, 5 pp.  
SERBO-CROATIAN, publication, Sluzbeni List SFRJ, No. 51, Belgrade, 20 Dec 67, pp. 117-118.  
JPRS 44,305

Eastern Europe  
Economic (Contd)

Construction Under the Economic Reform, by Milos Jaric, 13 pp.  
SERBO-CROATIAN, per, Tehnika, Belgrade, No. 12, Dec 67, pp. 2049-2056.  
JPRS 44,363

The Banking System Before and During the Implementation of the Economic Reform, by Dzevad Gluhbegovic, 10 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp.1-5.  
JPRS 44,283

Joint Investment and Cooperation Between Yugoslav and Foreign Enterprises, by Dj. Prazic, 7 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp. 10-12.  
JPRS 44,286

Bank Guarantees, by S. Rakocevic, 7 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp. 14-17.  
JPRS 44,283

Poll of Yugoslav Citizens on their Reactions to the Economic Reform, by Mladen Habjanic, 9 pp.  
SERBO-CROATIAN, weekly newspaper, Vjesnik u Srijedu, Zagreb, 3 Jan 68, p. 3.  
JPRS 44,219

Political

Shehu Speech on Skanderbeg Anniversary, by Mehmet Shehu, 18 pp.  
ALBANIAN, newspaper, Zeri i Popullit, 17 Jan 68, pp. 1-3.  
JPRS 44,247

National Nihilism--a Favorable Condition for Imperialist Ideological Subversion, by Docent G. Tsonkov, 9 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 40-46.  
JPRS 44089

Some Aspects of the Collapse of Colonialism, by Todor Poibrenski, 15 pp.  
BULGARIAN, per, Filosofska Misul, Sofia, Vol. XXIII, No. 5, (Sep-Oct.), 1967, pp. 43-54.  
JPRS 44,381

The State and Alienation, by Vasil Zakhariiev, 11 pp.  
BULGARIAN, per, Filosofska Misul, Sofia, Vol. XXIII, No. 5 (Sep-Oct), 1967, pp. 55-63.  
JPRS 44,381

Methods of Development of a Scientific World Outlook in Young People, by Mariya Georgieva, 5 pp.  
BULGARIAN, per, Partien Zhivot, Sofia, No. 18, Dec 67, pp. 17-19.  
JPRS 44,381

Collectivity and Personal Responsibility, by Kiril Ivanov, 13 pp.  
BULGARIAN, per, Partien Zhivot, Sofia, No. 18, Dec 67, pp. 47-56.  
JPRS 44,381

Concerning Systematic and Effective Atheistic Propaganda, by M. Dimitrov, 12 pp.  
BULGARIAN, per, Politicheska Prosveta, Sofia, No. 11, Nov 67, pp. 20-27.  
JPRS 44,231

Limits on the Use of Force in Present International Relations, by Josef Pokstefl, 15 pp.  
CZECH, per, Mezinarodni Vztahy, Vol 2, No 3, Sep 1967, pp 12-21.  
JPRS 44089

Law Concerning the Capital City of Prague. 10 pp.  
CZECH, per, Sbirka Zakonu, Part 42, 12 Dec 1967, pp 410-414.  
JPRS 44089

Law on Elections to the National Assembly, 20 pp.  
CZECH, gazette, Sbirka Zakonu CSSR, No. 43, Prague, 13 Dec 67, pp. 418-425.  
JPRS 44,231

Law on Elections to the National Committees, 23 pp.  
CZECH, gazette, Sbirka Zakonu CSSR, No. 43, Prague, 13 Dec 67, pp. 426-433.  
JPRS 44,231

German Democratic Republic Penal Code of 12 Jan 68, 103 pp.  
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, East Berlin, Part I, No 1, 22 Jan 68, pp. 1-48.  
JPRS 44,384

German Communist View of the October Revolution, by Max Reiman, 8 pp.  
GERMAN, per, Wissen und Tat, No. 11/12, Nov/Dev 67, pp. 2-6.  
JPRS 44,314

Rumania Prepares newer Measures for the Suppression of Hungarians in Transylvania, by Peter Kobanyai, 5 pp.  
HUNGARIAN, per, Uj Hungaria, 15 Dec 1967, p 3.  
JPRS 44089

New Opportunities in the Patriotic People's Front Movement, by Gyula Kallai, 8 pp.  
HUNGARIAN, per, Partelet, No. 1, Budapest, Jan 68, pp. 3-8.  
JPRS 44,231

Tirana Publicizes Polish Party Pamphlet, 56 pp.  
POLISH, pamphlet, Communist Party of Poland Central Committee, Tirana, 2130GMT, 23, 25-30 Dec 67.  
JPRS 44,324

The Concept of the Nation Under Socialism:  
(1) The Concept of the Nation, by A. Gavriila, 18 pp.  
RUMANIAN, per, Analele Institutului de Studii Istorice si Social-Politice de pe Linga CC al PCR, No. 6, Bucharest, Nov-Dec 67, pp. 40-53.  
JPRS 44,357

The Concept of the Nation Under Socialism:  
(2) Common Characteristics of a Nation, by M. Marian, 19 pp.  
RUMANIAN, per, Analele Institutului de Studii Istorice si Social-Politice de pe Linga CC al PCR, No. 6, Bucharest, Nov-Dec 67, pp. 54-65.  
JPRS 44,381

Eastern Europe  
Political (Contd)

Speech of Edvard Kardelj at Central Committee Session Marking the 30th Anniversary of Tito's Accession to the Party Leadership, by Edvard Kardelj, 32 pp.  
SERBO-CROATIAN, broadcast, 28 Dec 1967.  
JPRS 44089

The State and the Party under Socialism, by Predrag Vranicki, 9 pp.  
SERBO-CROATIAN, per, Praxis, No 5-6, Sep-Dec 1967, pp 643-650.  
JPRS 44089

Social Self-Administration and the Socialist Community, by Svetozar Stojanovic, 14 pp.  
SERBO-CROATIAN, per, Praxis, No 5-6, Sep-Dec 1967, pp 680-692.  
JPRS 44089

The Law on Travel Documents of Yugoslav Citizens, 12 pp.  
SERBO-CROATIAN, official gazette, Sluzbeni List SFRJ, No. 53, Belgrade, 27 Dec 67, pp. 1269-1273.  
JPRS 44,357

Czechoslovak Variety of Socialism, by Milan Hubl, 5 pp.  
SLOVAK, per, Kulturny Zivot, Bratislava, No. 1, 5 Jan 68, p. 3.  
JPRS 44,274

Military

Low Altitude Aerial Reconnaissance, by Sp. Spasov, 6 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 105-108.  
JPRS 44097

The Training of Chemical Warfare Squads, by Khr. Kostov, 8 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 52-56.  
JPRS 44097

Nuclear Demolition Bombs in the Barrier System. BULGARIAN, per, Armeyski Pregled, No 11, 1967, pp 122-126.  
\*ACSI J-4361  
ID 2204006268

Eastern Europe  
Military (Contd)

Anti-Tank Weapons, By E. Hill, V. Kadanka, 217 pp.  
CZECH, bk, Protitankove Zbrang, 1961.  
ACSI J-3519  
ID 2213036564

ASW Specialist - Part II, by Rolf Muller, Manfred Adam, 58 pp.  
GERMAN, per, 1966. P500018868-V  
Dept of Navy/NIC Tr No 2486

Modern Development in Ballistic Measurements, by S. Kukler, J. H. DeBruine.  
GERMAN/FRENCH, Einige Neue Ballistische Messgeraete, Commissie Van Proefneming Handleiding Deel XA Hoofdstuk, 22-1b, RvR 194/67.11, pp 157-175, 185-186; 377-378; 3-4.  
\*ACSI J-4438  
ID 2204003668

Characteristic Principles of the Automation of Infantry Weapons, by H. Knoppler, 15 pp.  
GERMAN, per, E. German Militaertechnik Magazine, No 67-1.  
ACSI J-2709  
ID 2204025767

Does the Armored Unit Need an Observation Tank?, by J. Jung.  
GERMAN, per, Kampftruppen, No 5, Oct 1967, pp 134-137.  
ACSI J-3997  
ID 2204060867

Self-Propelled 90MM Antitank Gun, by M. Wasik.  
GERMAN, per, Kampftruppen, No 5, Oct 1967, pp 140-141.  
ACSI J-3997  
ID 2204060867

The Development of the Soviet Standard Battle Tanks -- Part III Conclusion: Battle Tanks of Today, 9 pp.  
GERMAN, per, Militartechnik, No 3, 1967, pp 103-107.  
ACSI J-4039  
ID 2204062267

The Mine Technician, by Rolf Muller, Manfred Adam, 86 pp.  
GERMAN, per, Sperrgast, 1966. P500019868-V  
Dept of Navy/NIC Tr No 2486(A)

Eastern Europe  
Military (Contd)

Cooperation in the Field of the Development of Tactical Missiles, 5 pp.  
GERMAN, per, Wehr und Wirtschaft, No 6, 1967, pp 342-344.  
ACSI J-4030  
ID 2204061367

Mechanized Infantry Squad (MICV) Mechanized Infantry Combat Vehicle, 210 pp.  
GERMAN, bk, Die Panzergrenadiergruppe (SPZ), Oct 1966.  
ACSI J-3669  
ID 2204052367

Soviet Occupation Zone - Military/Army Information on Tank Model T-54 B and C.  
GERMAN, Z-K 52842 SBZ: MIL-H/Angaben zu PZ T-54 B and C, 25 Nov 1966.  
\*ACSI J-4164  
ID 2218680667

Emergency Personnel Decontamination Station Established, by Ferenc Skrobak, 6 pp.  
HUNGARIAN, per, Polgari Vedelem, Supplement, 25 Nov 1967, pp 6-7.  
JPRS 44097

Public Responsibility for Defense of Poland, 54 pp.  
POLISH, official publication, Dziennik Ustaw, No. 44, Warsaw, 29 Nov 67, pp. 339-358.  
JPRS 44,359

Hermetic Sealing as a Means for Mothballing Combat Vehicles, by M. Debicki, 8 pp.  
POLISH, bk, Konserwacja Wozow Bojowych Metoda Hermetyzacji, 1966, pp 182-190.  
ACSI J-4001  
ID 2878044766

Simultaneous Attack, 2 pp.  
POLISH, per, Zolnierski, No 41, 1967, pp 8-9.  
ACSI J-4042  
ID 2204062567

Phantom in Uniform, by May Ontoni Kolacinski.  
POLISH, bk, Zolnierski Wolnosci, Dec 1967, pp 22-26.  
\*ACSI J-4409  
ID 2204007268

Eastern Europe  
Military (Contd)

Materiel Handbook for ABC Defense Instruction in the Troops, 141 pp.  
CROATIAN, handbk, 1960, pp 1-181.  
P500032668-V  
Dept of Navy/NIC Trans No 2517

Material Handbook for ABC Defense Instruction in the Troop.  
CROATIAN, bk, Directorate of Atomic, Biological and Chemical Defense of the Yugoslavian Peoples Army.  
Dept of Navy NIC 2517

The Basic Concepts of Yugoslav National Defense in Case of War, 9 pp.  
SERBO-CROATIAN, per, Narodna Armija, Belgrade, 1 Dec 67, p. 3.  
JPRS 44,242

Sociological

Literary and Artistic Works Lacking in Profound Ideological Interpretation, by Abdurrahim Kyftiu, 12 pp.  
ALBANIAN, per, Drita, Tirana, 12 Nov 67, pp. 1-2.  
JPRS 44,218

Regulation Governing the Tasks, Organization, and Activity of Voluntary Fire Brigades (DPO's) in Bulgaria, by D. Dikov, 9 pp.  
BULGARIAN, per, Durzhaven Vestnik, Sofia, No. 101, 26 Dec 67, pp. 1-3.  
JPRS 44,273

New Curriculums for Polytechnical Education, 10 pp.  
GERMAN, per, SBZ, Cologne, 1 Nov 67, pp. 332-334.  
JPRS 44,284

The Possibilities of Education and Continued Professional Training for Packaging in the GDR, by J. Schubert.  
GERMAN, per, Die Verpackung, No 6, 1967, pp 182-185  
\*ACSI J-4320  
ID 2204004568

Eastern Europe  
Sociological (Contd)

The Weaving Picture in the Manesse Manuscript, and its Alleged Subject, by Richard Stettiner. GERMAN, bk, Das webebild in der manesse-handschrift und seine angebliche vorlage. Verlag von W. Spemann in Berlin und Stuttgart, 1911, 33 pp.  
\*CSFTI TT 68-50350

Interview With Czechoslovak Writer Ludvik Vaculik, by Otto Griese, 5 pp.  
GERMAN, per, Die Zeit, Hamburg, 19 Jan 68, pp. 9 and 10.  
JPRS 44,274

Decree on the Organization and Functions of the Hungarian Chamber of Commerce, 9 pp.  
HUNGARIAN, official publication, Magyar Kozlony, No. 100, Budapest 23 Dec 67, pp. 1057-1060.  
JPRS 44,219

National Feeling, National Pride, and Socialist Patriotism, by Daniel Csatari, 14 pp.  
HUNGARIAN, per, Tarsadalmi Szemle, Budapest, No. 12, Dec 67, pp. 45-57.  
JPRS 44,206

Psychosociological Problems of Work in the Fisherman's Occupation, by Aurelia Polanska. POLISH, per, Prace Morskiego Inst Rybackiego, Vol 13, Ser C, 1964, pp 7-31.  
CFSTI TT 66-57060

Law on Employee's Holidays, 11 pp.  
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Bucharest, Part 1, No. 113, 28 Dec 67, pp. 4-8.  
JPRS 44,304

Literature Under Socialism, by Sveta Lukic, 32 pp.  
SERBO-CROATIAN, journal, Encyclopaedia Moderna, No. 5-6, Zagreb, Sept-Dec, 1967, pp. 16-27.  
JPRS 44,206

The Moral Educational Function of the School and Its Place in Society, by Ante Vukasovic, 35 pp.  
SERBO-CROATIAN, journal, Encyclopaedia Moderna, No. 5-6, Zagreb, Sept-Dec 1967, pp. 282-295.  
JPRS 44,206

WESTERN EUROPE

Economic

Defense Budget for Calendar Year 1968. FINNISH, rpt, 26 Feb 1968.  
DIA 2 831 0050 68

Extension of Exclusive Fishing Rights. FRENCH, rpt, Nov-Dec 1967.  
DIA 5 832 0084 68

Budget 1968 de la Protection Civile, by M. Edouard Charret.  
FRENCH, per, Protection Civile et Securite Industrielle, No 160, Dec 1967, pp 8-17.  
\*ACSI J-4333  
ID 2204005568

The Flexible Bag -- A Simple and Economical Solution to the Problem of Storing Fruit Juices, 2 pp.  
FRENCH, per, Revue Technique et Economique de L'Industrie Alimentaire, No 146, 1967, p 77.  
ACSI J-4041  
ID 2204062467

Evolution of Techniques for the Packaging of Liquids in Spain, by L. S. Canut.  
SPANISH, per, IDE (Informacion de Envaso) Embalaje y Artes Graficas Aplicadas, No 101, Jan 1968, pp 14-18.  
\*ACSI J-4407  
ID 2204007068

The Relationship Between Electronic Data Processing Production Equipment and Personnel in the Future Steel Industry - An Example of Application, by E. Berg.  
SWEDISH, per, Jernkon. Ann., Vol 148, No 9, 1964, pp 649-658.  
BISI 5773

Western Europe  
Political

Danish Marxist-Leninists to Support Leftist Socialists, 5 pp.  
DANISH, monthly, Kommunistisk Orientering, Copenhagen, No. 1, 4 Jan 68, pp. 2-4.  
JPRS 44,298

The French CP and Contemporary Problems, by Waldeck Rochet, 24 pp.  
FRENCH, weekly, France Nouvelle, No. 1161, Paris, 17 Jan 68, Special Suppl., pp. 1-16.  
JPRS 44,398

Communist Analyze the Cause of the "Tragedy", 6 pp.  
FRENCH, np, L'Humanite, 9 Dec 1967, p 2, 11 Dec 1967, p 3.  
JPRS 44085

French Marxist-Leninists Criticize Revisionists, by Jacques Jurquet, 9 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 3, No. 82, 28 Dec 67, pp. 8 and 9.  
JPRS 44,226

French Debate on Socialism Continues, by Marcel Veyrier, 5 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 4, No. 85, Paris, pp. 1 and 4.  
JPRS 44,398

Statutes of the Marxist-Leninist CP of France, 14 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 4, No. 85, Paris, 18 Jan 68, pp. 6 and 7.  
JPRS 44,398

French Debate on Socialism Continues, by Raymond Casas, 6 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol. 4, No. 85, 18 Jan 68, p. 16.  
JPRS 44,398

Pro-Chinese Belgian Communist Party Denounces Sidney Rittenberg, 217 pp.  
FRENCH, weekly, La Voix du Peuple, Brussels, 10 Nov 67, pp. 9-16; 17 Nov 67, pp. 9-12; 1 Dec 67, pp. 9-12; 8 Dec 67, pp. 9-12; 15 Dec 67, pp. 9-12; 22 Dec 67, pp. 9-12; and 29 Dec 67, pp. 9-12.  
JPRS 44,204

Western Europe  
Political (Contd)

Austrian Says Revolutionary Struggle Only Solution, by F. St., 5 pp.  
GERMAN, semimonthly, Rote Fahne, No. 90, Vienna, 1 Jan 68, pp. 6-8.  
JPRS 44,398

GCR Preparing for Eleventh National Congress, 25 pp.  
Italian, bimonthly per., Bandiera Rossa, No. 1, Rome, 1 Jan 68, pp. 1-4.  
JPRS 44,314

Constitution of the Federation of Marxist-Leninist Communists of Italy, 11 pp.  
ITALIAN, monthly, Rivoluzione Proletaria, No. 10, Milan, Oct 67, pp. 5-15.  
JPRS 44,226

Political Line of Federation of Italian Marxist-Leninists, 7 pp.  
ITALIAN, monthly, Rivoluzione Proletaria, Milan, Vol II, No. 12, Dec 67, pp. 1 and 12.  
JPRS 44,226

Italian Theories on Exploitation of Working Class, by Margaret Ellingham, 7 pp.  
ITALIAN, monthly, Rivoluzione Proletaria, Milan, Vol II, No. 12, Dec 67, pp. 5 and 12.  
JPRS 44,226

Military

ABC Defense Problems in the Development and Operation in Covered and Open Vehicles, by A. Koozy.  
GERMAN, Mar 1967.  
ACSI J-3043  
ID 2832030566

Air Cushion Tent, 3 pp.  
GERMAN.  
\*ACSI J-4246  
ID 2834013466

The French Battle Tank AMX-30.  
GERMAN, per, Truppendienst, 1967, pp 420-422.  
\*ACSI J-4323  
ID 2204004868

Western Europe  
Military (Contd)

Description of Torpedo and Mine Transport Installation - DRAKEN Class Submarine, 56 pp. SWEDISH, rpt, Beskrivning Torped-Och Mintransport - Ubatar Typ Draken, Document No SU 3788/62, 9 Jan 1963. P500025568-V  
Dept of Navy/NIC Trans No 2510

Sociological

The Demographic Factor of Social Organization of the Bantu, by E. H. Sonnabend. ITALIAN, bk, Il fattore demografico nell'organizzazione sociale dei bantu. Comitato Italiano per lo studio dei problemi della popolazione Serie I. Arti Grafiche Zamperini and Lorenzi. Roma MCMXXXV - XIV., Vol III, 1935, 398 pp.  
\*CSFTI TT 68-50347

Biographic

Miscellaneous Ichthyological Papers Dedicated in Memory of Achille Valenciennes (1784-1865). FRENCH, bk, Institut Francais d'Afrique Noir, Memoires. Dakar, No 68, 1963, 486 pp.  
\*CSFTI TT 68-50076

AFRICA

Economic

Discussion of Congo(Kinshasa) Fiscal Ordinance Laws, 6 pp. FRENCH, newspaper, Le Courrier d'Afrique, Kinshasa, 11 Jan 68, p. 2.  
JPRS 44,382

Economic Development Program for Great Kabylia, 5 pp. FRENCH, newspaper, El Moudjahid, Algiers, 3 Jan 68, pp. 1 and 3.  
JPRS 44,220

Africa  
Economic (Contd)

Algeria to Improve Fertilizer Situation, 8 pp. FRENCH, newspaper, El Moudjahid, Algiers, 5 Jan 68, pp. 1,3; and 7-8 Jan 68, pp. 1,3.  
JPRS 44,207

Budget Reflects Development Planning, by Saifoulaye Diallo, 9 pp. FRENCH, newspaper, Horoya, Conakry, 19 Jan 68, pp. 1, 3, 4.  
JPRS 44,401

Continuous Economic Growth in Togo, 5 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 320, 16 Nov 67, pp. 6,8.  
JPRS 44,401

1968 Budget and Exploitation of Tambao Mineral Deposits, 7 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 326, 27 Dec 67, pp. 4, 6.  
JPRS 44,220

Malagasy Economy and Trade Balance Improving, 6 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 326, 27 Dec 67, pp. 5 and 8.  
JPRS 44,382

Government Reviews 1968 Sao Tome Budget, by Governor Silva Sebastiao, 9 pp. PORTUGUESE, newspaper, A Voz ie Sao Tome, Sao Tome 16 Dec 67, pp. 1, 3, 4.  
JPRS 44,382

Development of Agricultural Cooperatives in Mali, 7 pp. GERMAN, per, Die Wirtschaft, East Berlin, 3 Jan 68, pp. 28 and 29.  
JPRS 44,382

Political

Various Decrees Issued in Burundi, 19 pp. FRENCH, monthly government publ., Bulletin Officiel du Burundi, Bujumbura, Vol 6, Nos. 10 and 11, Oct-Nov 67, pp. 385-387, 389, 401-405, 411.  
JPRS 44,382

Africa  
Sociological

Cult Among the Toussian of Upper Volta, by J. Hebert and M. Guilhem, 65 pp.  
FRENCH, publication, Anthropos, Freiburg, Switzerland, Vol 62, No. 1-2, 1967, pp. 139-164.  
JPRS 44,401

Rehabilitation of Delinquent Youth, by Alidor Tshimbayi and Joseph Lefebvre, 5 pp.  
FRENCH, publication, Congo-Afrique -- Economie, Culture, Vie Sociale, Kinshasa, Vol. 7, No. 19, Nov 67, pp. 465-468.  
JPRS 44,207

The Psychology of Negritude, by Valentin Y. Mudimbe, 16 pp.  
FRENCH, per, Etudes Congolaises, Vol 10, No. 5, Brussels, Sept-Oct 67, pp. 1-13.  
JPRS 44,220

Spanish Guinea's Decolonization Problems, Solutions Reviewed, by Luis Beltran, 12 pp.  
FRENCH, per, Etudes Congolaises, Vol 10, No 5, Brussels, Sept-Oct, 67, pp. 45-56.  
JPRS 44,220

Cultural and Agricultural Development, by Sekou Toure, 17 pp.  
FRENCH, newspaper, Horoya, Conakry, 27 Dec 67, pp. 1-3; 28 Dec 67, pp. 1,2; and 29 Dec 67, pp. 1-3.  
JPRS 44,207

Toure Sends Message to Dakar Party Congress, by Ahmed Sekou Toure, 7 pp.  
FRENCH, daily, Horoya, 7-8 Jan 68, pp. 1-3.  
JPRS 44,220

The Algerian Housing Situation, by Hadj B., 5 pp.  
FRENCH, newspaper, El Moudjahid, Algiers, 9 Jan 68, pp. 1,3.  
JPRS 44,207

Africa  
Sociological (Contd)

The Chief of the Clan and Family Rights in the Customs of Lower Dahomey, by Adrien Houngbedji, 20 pp.  
FRENCH, per, Revue Juridique et Politique, Vol. 21, No. 4, Paris, Oct-Dec 67, pp. 603-624.  
JPRS 44,220

Problems of Matadi in Congo-Kinshasa, by Elie Nkwata, 8 pp.  
FRENCH, daily newspaper, La Tribune, Kinshasa, 3 Nov 67, pp. 1,2; 4 Nov 67, p. 4; 5-6 Nov 67, p. 3; 7 Nov 67, p. 3; and 8 Nov 67, p. 3.  
JPRS 44,401

MIDDLE EAST

Economic

Iraqi Oil Minister Discusses New Program, 5 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, p. 6.  
JPRS 44,371

Government Oil Agencies in Iraq, 17 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, pp. 8-9.  
JPRS 44,371

The Oil Refining Industry in Iraq, 5 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, p. 10.  
JPRS 44,371

The War Economy, by Isma'il Sabri 'Abdullah, 21 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 26 Dec 67, p. 5; 27 Dec 67, p. 5; 28 Dec 67, p. 5; 29 Dec 67, p. 7.  
JPRS 44,245

Middle East  
Economic (Contd)

The Economics of War and Strengthening of Industrial Production, 19 pp.  
ARABIC, per, al-Ahram al-Iqtisadi, Cairo, 1 Jan 68, pp. 34-43.  
JPRS 44,329

Surplus of Manpower and Emigration of Workers from Egypt, by Raja Abd-al-Malak, 7 pp.  
ARABIC, newspaper, Al-Akhbar, Cairo, 8 Jan 68, p. 3.  
JPRS 44,329

Developing a System for Monetary Supervision, by 'Adel Hafez Ghanem, 8 pp.  
ARABIC, per, Al-'Ann AL-'Ann, Jan 1968, pp 61-66.  
JPRS 44086

Iraq's Five-Year Economic Plan, 7 pp.  
ARABIC, newspaper, al-Jumhuriyyah, Cairo, 27 Jan 68, pp. 20-21.  
JPRS 44,329

The Two Sides of West Bank Industry, by Aron Bacher, 5 pp.  
HEBREW, per, Bamahane, Tel Aviv, 2 Jan 68, p. 23.  
JPRS 44,212

Monthly Review of the Ministry of Labour, Israel.  
HEBREW, per, Review of the Ministry of Labour, Israel, 1968, 450 pp.  
\*CSFTI TT 68-50303/1-12

Political

Arab National Council Advocated for Armed Liberation of Palestine, by Ihsan Sakr, 6 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 11 Jan 68, p. 5.  
JPRS 44,325

Clarifying Distortions and Falsifications Contained in Nidhal Al-Sha's Article, 12 pp.  
ARABIC, newspaper, Ila al-Anam, Beirut, 14 Jan 68, p. 3.  
JPRS 44,329

Middle East  
Political (Contd)

Growth and Development of Security Departments in Canal Zone, by Ibrahim Al-Fahham, 11 pp.  
ARABIC, per, Al-'Ann AL-'Ann, No 40, 1968, pp 47-54.  
JPRS 44086

New Sytle of Egyptian Diplomacy, by Mahmoud Thuhni, 6 pp.  
ARABIC, per, Rose al-Yusuf, 25 Dec 1967, pp 4-5.  
JPRS 44068

Role of Arab Intelligentsia on the Palestine Question, 6 pp.  
ARABIC, per, Ath-Thawrah, Damascus, 11 Jan 1968, p. 3.  
JPRS 44,329

Center-EDA Cooperation in Municipal Elections, 6 pp.  
GREEK, newspaper, To Vima, Athens, 10 Jan 68, pp. 1,7.  
JPRS 44,245

Military Rule in Shekham (Nablus), 11 pp.  
HEBREW, per, Haarets, 15 Dec 1967, pp 6, 7, 10.  
JPRS 44086

An East German Communist in Solidarity With the ICP, 5 pp.  
HEBREW, daily, Kol Ha'am, Tel Aviv, 29 Dec 67, pp. 2 and 5.  
JPRS 44,212

Problems of Attaining Peace With Neighboring Countries, by Ruth Lubitch, 7 pp.  
HEBREW, newspaper, Zo Haderekh, Tel Aviv, 27 Dec 67, pp. 4 and 7.  
JPRS 44,245

Military

Military Matters to be Subject of Yemen Defense Minister U.A.R. Visit, by Ahmad Nafi', 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 10 Jan 68, p. 5.  
JPRS 44,325

Middle East  
Military (Contd)

A Profile of General Rabin, by Benjamin Landau,  
6 pp.  
HEBREW, per, Bamahane, Tel Aviv, 2 Jan 68,  
pp. 6 and 7.  
JPRS 44,212

An Interview With General Chaim Bar-Lev,  
9 pp.  
HEBREW, per, Bamahane, Tel Aviv, 2 Jan 68, pp.  
10 and 11.  
JPRS 44,212

Achievements of the Israeli Ordnance Corps,  
by Benjamin Landau, 6 pp.  
HEBREW, weekly, Bamahaneh, Tel Aviv,  
9 Jan 68, pp. 8 and 9.  
JPRS 44,325

Prolongation of Military Service in Israel,  
by Yosef Eshkol, 8 pp.  
HEBREW, weekly, Bamahaneh, 16 Jan 68, pp.  
6-7.  
JPRS 44,325

The Meaning of Military Discipline, by M. Piyi,  
6 pp.  
HEBREW, per, Maarakhot, Nov 1967, pp 5-8.  
JPRS 44086

Parachute Training in the IDF, by Rafal, 8 pp.  
HEBREW, per, Maarakhot, Nov 1967, pp 9-12.  
JPRS 44086

Geographic

Contemporary Iraq.  
RUSSIAN, bk, Sovremennyy Irak, 1966, 175 pp.  
\*ACSI J-3847  
ID 2204056667

Middle East  
Sociological

A Survey of Graduates of Schools of Commerce,  
12 pp.  
ARABIC, per, al-Ahram al-Iotisadi, Cairo,  
1 Jan 68, pp. 28-34.  
JPRS 44,245

Reporting Crimes Committed Against State  
Security, by Salah Nassar, 7 pp.  
ARABIC, per, Al-'Amm Al-'Amm, No 40, Jan 1967,  
pp-55-60.  
JPRS 44086

A Comparative Study of Crime in Cairo, by Mahmoud  
al Siba'i, 15 pp.  
ARABIC, per, Al-'Amm Al-'Amm, Jan 1968, pp 149-161.  
JPRS 44086

Jeune Afrique Interviews French Author on Arab  
Intellectuals, 7 pp.  
FRENCH, per, Jeune Afrique, 24 Dec 1967, pp 44-  
46.  
JPRS 44086

Selected Bibliography of Israel Educational  
Materials.  
HEBREW, per, Selected Bibliography of Israel  
Educational Materials, Vol 3, Nos 1-3, 1968.  
\*CSFTI TT 68-50446/1-3

FAR EAST

Economic

Raising Capital for Village Dispensaries, by  
Do Trung Dam, 6 pp.  
VIETNAMESE, per, Duoc-hoc, No. 11, Hanoi,  
Nov 67, pp. 2-4.  
JPRS 44,228

Train and Improve Scientific-Technological  
and Economic Management Cadre, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 1-5.  
JPRS 44,391

Far East  
Economic (Contd)

Science and Technology Must Serve Local Industry, by Doan Dinh Hoe, 16 pp.  
VIETNAMESE, per, Tin-tuc Hoat-dong Khoa-hoc, Hanoi, No. 10, Oct 67, pp. 8-15.  
JPRS 44,198

Political

Literature and Art Unit Bombards China's Khrushchev, 9 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, No 12, 10 Aug 1967.  
JPRS 44241

Lo Jui-ch'ing's Evil Doings in Literature and Art, 7 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, No 12, 10 Aug 1967.  
JPRS 44241

Lu Ting'i's Work in Literature and Art Attacked, 5 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, Nos 13 & 14, 10 Sept 1967.  
JPRS 44241

T'ao Chu Accused of Attempting to Seize Power in the Arts, 6 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, Nos 13 & 14, 10 Sept 1967.  
JPRS 44241

Chou Attacks '16 May' Group, 6 pp.  
CHINESE, np, Chu-ying Tung-fang Hung, 1 Oct 1967.  
JPRS 44241

The Indonesian Government Under Fascist Rule, 5 pp.  
CHINESE, per, Chung-kuo Hsin-wen, 3 Nov 1967, pp 8-9.  
JPRS 44085

Far East  
Political (Contd)

Struggle for Seizure of Power in Army in Tibet, 6 pp.  
CHINESE, journal, Hung-t'ichun Chan-pao, No. 5, Lhasa, 8 Sept 67, pp. 1-6.  
JPRS 44,278

October Revolution Commemorated, 10 pp.  
CHINESE, np, Jen-min Jih-pao, 5 Nov 1967.  
JPRS 44241

China's Khrushchev Repudiated, 8 pp.  
CHINESE, np, Jen-min Jih-pao, 18 Nov 1967.  
JPRS 44241

The Two-Road Struggle in the Countryside, 17 pp.  
CHINESE, np, Jen-min Jih-pao, 23 Nov 1967.  
JPRS 44241

Chou Urges Kwangtung Factions to Unite, 7 pp.  
CHINESE, per, Kung-nung-ping Chan-pao, No 18, 14 Nov 1967.  
JPRS 44241

Great Alliances Meet with Resistance in Canton, 6 pp.  
CHINESE, per, T'i-yu Chan-pao, No 13, 30 Oct 1967.  
JPRS 44241

The 'Counterrevolutionary' Wuhan Coup, 16 pp.  
CHINESE, per, Wu-han Kang-erh-szu, No 38, 22 Aug 1967.  
JPRS 44241

Indonesia, the Sleeping Volcano, by Jacques Decornoy, 20 pp.  
FRENCH, per, Le Monde, 1 Dec 1967, pp 1-2; 2 Dec 1967, pp 2; 3-4 Dec 1967, p 4; 5 Dec 1967, p 2; and 6 Dec 1967, p 2.  
JPRS 44085

Martin Kuester Reports on Vietnam, by Lt. Commander Martin Kuester, 22 pp..  
GERMAN, per, Volksarmee, East Berlin, Nos 46-51, 20 and 27 Nov 67, and 4, 11 and 18 Dec 67.  
JPRS 44,238

Far East  
Political (Contd)

Comrade Kim Il-Song's Great 10-Point Political Program, 17 pp.  
KOREAN, newspaper, Nodong Sinmun, P'yongyang, 18 Dec 67, p. 2.  
JPRS 44,255

Prepare for Unification of the Fatherland, 9 pp.  
KOREAN, newspaper, Nodong Sinmun, P'yongyang, 23 Dec 67, p. 1.  
JPRS 44,255

Let Us Follow the Example of the October Revolution, Develop Revolutionary Heroism, and Be Determined to Fight and Defeat the U.S. Aggressors, 9 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 1-6.  
JPRS 44,225

The Great October Revolution Shows the People the Road to Liberation, by Ho Chi Minh, 8 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 10-18.  
JPRS 44,225

Forward Under the Glorious Banner of the October Revolution, by Le Duan, 27 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 19-41.  
JPRS 44,225

Speech by Truong Chinh at 4 November Hanoi Ceremony Commemorating 50th Anniversary of October Revolution, by Truong Chinh, 23 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 42-60.  
JPRS 44,225

Phum Van Dong Speech at 7 November Reception Given by Soviet Ambassador Shcherbakov, by Pham Van Dong, 9 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 61-68.  
JPRS 44,225

Far East  
Political (Contd)

Let Us Resolutely Take the Road of the October Revolution, by Le Than Nghi, 14 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 69-80.  
JPRS 44,225

The Great Achievements of the Soviet People During 50 Years of Building Socialism and Communism, by Nguyen Tho Chan, 10 pp.  
VIETNAMESE, per, Hoc Tap, No. 11, Hanoi, Nov 67, pp. 81-87.  
JPRS 44,225

We are Endeavoring to Effectively Implement the Lines and Policies of the Party Central Committee in the Concrete Conditions of Hung Yen, by Le Quy Quynh, 18 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 41-53.  
JPRS 44,391

Strengthening the District Echelon and Building a "Four Good" District Committee, by Le Van Lanh, 9 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 54-60.  
JPRS 44,391

Internal Unity is the Key to Progress in the Movement in Dong Trieu District, by Nguyen Thanh Nam, 7 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 63-67.  
JPRS 44,391

Strengthening Leadership and Organizing Achievement Guidance in the District Committees, by Hoang Le, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 67-71.  
JPRS 44,391

A Great Pride and a Strong Source of Stimulation, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 72-75.  
JPRS 44,391

Far East  
Political (Contd)

The Spirit of the Kwangchow Commune's  
Armed Forces Will Never Die, by Tran Huy  
Lieu, 7 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 76-80.  
JPRS 44,391

Nhan Dan Holds a Forum With Hanoi Workers,  
9 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
17 Dec 67, p.2.  
JPRS 44,400

The Air Defense Forces and People's Air  
Force Are Determined to Shoot Down Many  
American Aircraft, 7 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
31 Dec 67, p. 3.  
JPRS 44,289

Important Developments of the American Move-  
ment Against the War of Aggression in Viet  
Nam, by Quang Thai, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
31 Dec 67, p. 4.  
JPRS 44,289

Raise the Revolutionary Banner of the Pro-  
letariat, by Nguyen Cong Hoa, 7 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi,  
3 Jan 68, p. 2.  
JPRS 44,228

One Year of Broad, Continuous, and Vigorous  
Struggle, by Quang Thai, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
4 Jan 68, p. 3.  
JPRS 44,289

Do Everything to Completely Defeat the Aggressive  
U.S. Pirates, 5 pp.  
VIETNAMESE, newspaper, Quan Doi Nhan Dan,  
Hanoi, 19 Dec 67, pp. 1 and 4.  
JPRS 44,210

Plan for Study of Party Documents, 14 pp.  
VIETNAMESE, monthly per, Tuyen-huan, No. 11,  
Hanoi, Nov 67, pp. 1-7  
JPRS 44,217

Far East  
Political (Contd)

The October Revolution, 23 pp.  
VIETNAMESE, per, Tuyen-huan, No. 11, Hanoi,  
Nov 67, pp. 35-48.  
JPRS 44,217

Military

Develop the Proud Tradition of Our Army, by  
Lt Gen. Song Hao, 22 pp.  
VIETNAMESE, newspaper, Quan Doi Nhan Dan, Hanoi,  
19 Dec 67, pp. 1-3.  
JPRS 44,210

Specifications for Air Raid Defense Measures  
in the General Schools, 7 pp.  
VIETNAMESE, per, Tap San Giao Duc Cap I,  
Hanoi, No. 2, 1967-68, pp. 12-14.  
JPRS 44,210

Sociological

Overestimations of Farther Distance in Depth  
Perception, 15 pp.  
JAPANESE, per, Japanese Journal of Psychology,  
vol 27, 1965, pp 204-208.  
\*ACSI J-3958  
ID 2204060167

Achievements in Public Health, by Nguyen  
Thanh Nghi, 5 pp.  
VIETNAMESE, newspaper, Suc Khoe, No.75,  
Hanoi, 10 Dec 67, p. 1.  
JPRS 44,288

Progress of the Level II and Level III Schools  
During the Next Three Years, by Le Dai Ly,  
6 pp.  
Vietnamese, per, Tap San Giao Duc Cap II - III,  
No. 1, 67-68, pp. 5-8, 41.  
JPRS 44,210

Far East  
Sociological (Contd)

Directive on the 2-Year Plan for Building Up Level II and Level III General Schools, 16 pp.  
VIETNAMESE, per, Tap San Giao Duc Cap II-III, Hanoi, No. 8, 1966-1967, pp. 3-12.  
JPRS 44,289

Applying "Learning While Working" Program in Colleges, by Nguyen The Hung, 10 pp.  
VIETNAMESE, per, Tin-thuc Hoc-t-dong Khoa-Hoc, No. 10, Hanoi, Oct 67, pp. 3-7.  
JPRS 44,198

LATIN AMERICA

Economic

Josue de Castro Writes on Brazilian Economy, by Josue de Castro, 10 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 3, Nov-Dec, 1967, pp. 44-53.  
JPRS 44,406

Development of Cuban Commercial Shipping, 11 pp.  
POLISH, per, Technika i Gospodarka Morska, 1966, pp 290-292.  
ACSI J-3957  
ID 2204060067

Improvement Noted in Economy in 1967, 9 pp.  
PORTUGUESE, per, Jornal do Brasil, Rio de Janeiro, 31 Dec 67, Sect 1, p. 23.  
JPRS 44,237

New Highway an Economic Boon to Southwest Brazil, by Artur Almora, 7 pp.  
PORTUGUESE, newspaper, Jornal do Brasil, Rio de Janeiro, 14 Jan 68, p. 16.  
JPRS 44,328

New Gasoline-Rationing System Explained, 6 pp.  
SPANISH, newspaper, Granma, Havana, 3 Jan 68, p. 6.  
JPRS 44,306

Latin America  
Economic (Contd)

The Merin Lagoon Regional Project, by Eduardo Paysse Gonzalez, 6 pp.  
SPANISH, per, Marcha, Montevideo, 22 Dec 67, p. 8.  
JPRS 44246

Analysis of Chile's Economy in 1967, by Coriolano, 11 pp.  
SPANISH, per, PEC, Santiago de Chile, 19 Jan 68, pp. 4-5.  
JPRS 44,392

Economic Progress Reported in the Provinces, 10 pp.  
SPANISH, Vea, Santiago, 28 Sept 67, pp. 27-29.  
JPRS 44,246

Political

Bolivia Ripe for Guerrilla Warfare, 6 pp.  
ENGLISH, magazine, Tricontinental, No. 1, July-August 67, pp. 41-46.  
JPRS 44,406

Carlos Lechuga: Laos and US Imperialism, by Carlos Lechuga, 9 pp.  
ENGLISH, magazine, Tricontinental, No. 2, Havana, Sept-Oct. 67, pp. 41-53.  
JPRS 44,406

Profile of Brazilian Communist Carlos Mari-gheila, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 2, Sept.-Oct 67, pp. 155-162.  
JPRS 44,406

Jose Carlos Mariategui: Ethics and Socialism, by Jose Carlos Mariategui, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 3, Nov-Dec 67, pp. 20-27.  
JPRS 44,406

Impressions of a Witness at Debray's Trial, by Carlos Nunez, 11 pp.  
ENGLISH, magazine, Tricontinental, No. 3, Nov-Dec 67, pp. 28, 31-41.  
JPRS 44,406

Latin America  
Political (Contd)

The Guerrilla Struggle in Nicaragua, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana,  
No. 3, Nov-Dec 67, pp. 113-122.  
JPRS 44,406

Hunger and Revolution in Latin America,  
by Carlos Rafael Rodriguez, 8 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 8-11.  
JPRS 44,306

Che's Death a Blow to Bolivia's Guerrilla War,  
by Livio Maitan and Sergio de Santis,  
16 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 18-21.  
JPRS 44,306

The Guerrilla Movement in Colombia, by  
Antonio Moscato, 14 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 22-24.  
JPRS 44,306

First Months of New Administration Summarized,  
8 pp.  
PORTUGUESE, per, Jornal do Brasil, Rio de Janeiro,  
31 Dec 67, Sect. 1, p. 4.  
JPRS 44,237

Policy Resolution of Brazilian CP Sixth  
Congress, 16 pp.  
PORTUGUESE, journal, Jornal do Brasil, Rio  
de Janeiro, 31 Dec 67, Sect. 1, p. 16.  
JPRS 44,237

President Costa E Silva's State of the Nation  
Message, 14 pp.  
PORTUGUESE, journal, Jornal do Brasil, Rio de  
Janeiro, 31 Dec 67, Sect 1, pp. 3 and 24.  
JPRS 44,237

Cuban Extols Venezuelan Revolutionary, by  
Javier Rodriguez, 5 pp.  
SPANISH, per, Ehemia, Havana, 12 Jan 68,  
pp. 46-47.  
JPRS 44,306

Latin America  
Political (Contd)

The Story of a Revolutionary Couple, by  
Enrique Lopez Oliva, 7 pp.  
SPANISH, per, Cuba, Havana, Sept 67,  
pp. 38,39,40.  
JPRS 44,246

Lavandero Harshly Criticizes PDC Leadership,  
5 pp.  
SPANISH, per, El Diario Ilustrado, Santiago  
de Chile, 8 Jan 68, p. 2.  
JPRS 44,246

An Appraisal of Betancourt's Last Book,  
by Vitelio Reyes, 7 pp.  
SPANISH, per, Elite, Caracas, 13 Jan 68,  
pp. 43-45.  
JPRS 44,306

Political Parties Beset by Crisis in 1967,  
by Luis Hernandez Parker, 6 pp.  
SPANISH, per, Ercilla, Santiago de Chile,  
27 Dec 67, pp. 4-5.  
JPRS 44,246

Mysterious Letter from Ambassador Tomic, by  
Luis Hernandez Parker, 6 pp.  
SPANISH, per, Ercilla, Santiago de Chile,  
10 Jan 68, pp. 6-7.  
JPRS 44,246

A View of the Revolution on Its Ninth  
Anniversary, 6 pp.  
SPANISH, newspaper, Granma, Havana, 31 Dec 67,  
p. 2.  
JPRS 44,246

Gulf Oil's Geopolitical Dictatorship, by  
Rogelio Garcia Lupo, 8 pp.  
SPANISH, per, Marcha, Montevideo, 15 Dec 67,  
pp. 19,24.  
JPRS 44,246

Government-Church Clique Ousts Podesta,  
by Luis H. Decurgez, 7 pp.  
SPANISH, per, Marcha, Montevideo, 15 Dec 67,  
pp. 20-21.  
JPRS 44,246

Brazilian Writer Advocates Third-World Approach,  
by Harold G. Escardo, 7 pp.  
SPANISH, per, Oiga, Lima, 12 Jan 68, pp. 11-13.  
JPRS 44,237

Latin America  
Political (Contd)

Peruvian Leftist Newspaperman Scores Premier, by Francisco Moncloa, 5 pp.  
SPANISH, per, Oiga, Lima, 12 Jan 68, pp 4 and 31.  
JPRS 44237

PDC Struggle Twelve Years Old, by Dr. Hector Cornejo Chavez, 7 pp.  
SPANISH, per, Oiga, Lima, 19 Jan 68, pp. 8-10.  
JPRS 44,392

Baltra, The Communist Candidate in Chile, 5 pp.  
SPANISH, per, PEC, Santiago de Chile, 22 Dec 67, pp. 7-8.  
JPRS 44,246

Communist Youth Leaders Visit Cuba, 5 pp.  
SPANISH, newspaper, El Popular, Montevideo, 23 Jan 67, p. 4.  
JPRS 44,306

Course Taken by Venezuelan CP Attacked, 32 pp.  
SPANISH, per, Punto Final, Santiago, Supplement, 2 Jan 68, pp. 1-16.  
JPRS 44,237

Cuba Blazes the Trail for America, by Jaime Faivovich, 6 pp.  
SPANISH, per, Punto Final, Santiago, 2 Jan 68, pp. 46,47.  
JPRS 44,306

Colombian Guerrilla Struggle Believed a Failure, by Christian Martinez, 9 pp.  
SPANISH, np, El Siglo, Bogota, 30 Dec 67, p. 2.  
JPRS 44,306

Socialist Party Congress in Chillan, by Aniceto Rodriguez, 5 pp.  
SPANISH, np, El Siglo, Santiago, 4 Jan 68, p. 7.  
JPRS 44,246

Appraisal of Venezuelan CP Aims and Activities, by Corso, 6 pp.  
SPANISH, newspaper, El Siglo, 9 Jan 68, p. 7, and 10 Jan 68, p. 7.  
JPRS 44,306

Latin America  
Political (Contd)

Mexican Communist Refutes Debray, by Gerardo Unzueta, 19 pp.  
SPANISH, np, El Siglo, Santiago, 21 Jan 68, pp. 11-14.  
JPRS 44,246

Current Regime Causes Concern Among the Military, 5 pp.  
SPANISH, np, El Siglo, Bogota, 24 Jan 68, p. 6.  
JPRS 44,392

Political Struggle in Parallel With Armed Struggle, by Gerardo Unzueta, 17 pp.  
SPANISH, np, El Siglo, Santiago de Chile, 28 Jan 68, pp. 11-14.  
JPRS 44,392

Intelligence and the CIA, by Roberto Martinez Caceres and Juan J. Hernandez Guerra, 10 pp.  
SPANISH, newspaper, Verde Olivo, Havana, 3 Dec 67, pp. 16-18; 58-59.  
JPRS 44,237

General Staff Holds Evaluation Meeting, by Yasella, 6 pp.  
SPANISH, per, Verde Olivo, Havana, 24 Dec 67, pp. 9-12.  
JPRS 44,392

Military

Strategy of Urban Warfare, by Abraham Guillen, 133 pp.  
SPANISH, per, Estrategia de la Guerrilla Urbana, 1966.  
\*ACSI J-4261  
ID 2204003068

Latin America  
Sociological

Progress of Public Health Assistance, by G. Hernandez, 8 pp.  
SPANISH, per, Bohemia, Havana, 5 Jan 68, pp. 25-26, 28-31.  
JPRS 44,328

A Survey of Cuban Films Since the Revolution, by Mario Rodriguez Aleman, 7 pp.  
SPANISH, per, Vide Universitaria, Havana, Aug 67, pp. 12-15.  
JPRS 44,237

SCIENTIFIC

Aeronautics

The Theory of Thin Wings in Subsonic Flow, by Sergei M. Belotserkovskiy. 250 pp.  
RUSSIAN, bk, Aug 1967.  
Plenum Press

Testing Aircraft Instruments, by P. I. Bulovskiy, E. M. Idel'sov.  
RUSSIAN, bk, Ispytaniya Aviatsionnykh Priborov, 1966, 351 pp.  
\*FTD-HT-23-163-68C

Balancing Quality of an Aircraft with a Combined Configuration, by S. Yu. Skripnichenko, 10 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 15-23.  
P100029868-V  
FTD-MT-65-72

Camber Balancing of a Delta Wing at Hypersonic Velocities, by Ye. V. Bulygina, 4 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 107-110.  
P100029868-V  
FTD-MT-65-72

Scientific  
Aeronautics (Contd)

Effect of the Number of Rotor Blades on the Characteristics of an Axiradial Compressor, by A. N. Sherstyuk, Ye. N. Zaychenko, 11 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 4, 1965, pp 125-132.  
P100017168  
FTD-HT-66-769

An Approximate Method for Calculating the Parameters of a Detached Bow Wave, by Yu.I. Klimnyuk and A.P. Komarov, 13 pp.  
RUSSIAN, journal, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No. 4, 1966, pp. 81-89. P100006468  
FTD-HT-23-837-67

Experimental Investigation of the Interaction Zone During Injection of a Secondary Jet Into the Main Supersonic Flow, by V. S. Vinogradov.  
RUSSIAN, per, VUZ, Izv., Aviatsionnaya Tekh., No 2, 1967, pp 81-88.  
\*Dept of Navy/APL/JHU J-1118

Aircraft Engine Design, by G. A. Kuz'min, 405 pp.  
RUSSIAN, bk, Konstruktsiya Aviatsionnykh Dvigately, 1962, pp 3-443.  
P100030468-V  
FTD-MT-64-402

Use of Parafoveal Vision to Control Flight Parameters, by N. D. Zavalova, V. A. Ponomarenko.  
RUSSIAN, per, Sb Probl Inzh Psikhol L. Vyp. No 4, 1966, pp 85-92.  
\*FTD-MT-24-37-68

A Device for Directing the Flight of Aircraft, by V. P. Tarasenko.  
RUSSIAN, Patent No 184179, Class 72.  
\*FTD-HT-23-137-68E

Parachute with Automatically Controlled Air Release, by Kamila Ferusova, Klatovy.  
CZECH, Patent No 70724.  
\*ACBI J-4387  
ID 2204006868

Scientific  
Aeronautics (Contd)

Automatic Steering of Airplanes (The Siemens-Automatic Course-Steering Gear), by Von A. Thaus and B. v. Kaull, 8 pp.  
GERMAN, per, Siemens-Zeitschrift, Nov 1934, pp 369-372. P500032768  
Dept of Navy, NIC Tr No 2518

Supersonic Combustion and its Use in Hypersonic Jet Engines, Part II, by Piotr Wolanski.  
POLISH, per, Technika Lotnicza i Astronautyczna, No 12, 1966, pp 8-12.  
Dept of Navy/APL/JHU T-2104

Agriculture

Agrochemical Characteristics of the Soils of USSR, Northern Caucasus Region, by A. V. Sokolov & E. I. Shkonde.  
RUSSIAN, per, Agrokhimicheskaya kharakteristika pochv SSSR, raiony severnogo Kavkaza. -- Akademiya Nauk SSSR, Pochvennyi Institut im. V. V. Dokuchaeva. Izdatel'stvo "Nauka," Moskva, Vol 3, 1964, 367 pp.  
\*CSFTI TT 68-50443

Agrochemical Characteristics of the Soils of the USSR, Transcaucasian Republics, by A. V. Sokolov & E. I. Shkonde.  
RUSSIAN, per, Agrokhimicheskaya kharakteristika pochv SSSR, Respubliki Zakavkaz'ya. -- Akademiya Nauk SSSR, Pochvennyi Institut V. V. Dokuchaeva Izdatel'stvo "Nauka," Moskva, Vol 5, 1965, 320 pp.  
\*CSFTI TT 68-50444

Gossypol and its Derivatives, by A. L. Markman & V. P. Rzhikhin.  
RUSSIAN, bk, Gossypol i ego proizvodnye, Izdatel'stvo pichchevaya Promyshlennost,' Moskva, 1965, 242 pp.  
\*CSFTI TT 68-50335

Windbreaks and Yields, by A. R. Konstantinov & L. R. Struzer.  
RUSSIAN, bk, Lesnye pology i urozhai -- Leningrad, Gidrometeorologicheskoe Izdatel'stvo, 1965, 176 pp.  
\*CSFTI TT 68-50370

Scientific  
Agriculture (Contd)

Management of Forest Parks, by N. M. Tyul'panov.  
RUSSIAN, bk, Lesoparkovoe khozvaistvo -- Moskva, Izdatel'stvo Literatury po Stroitel'stvu, 1965, 173 pp.  
\*CSFTI TT 68-50369

Selection of Late-Flowering Walnuts, by A. F. Zarubin.  
RUSSIAN, per, Oselektsii posodnotsvetuschikh orekhov. -- Akademiya Nauk SSSR. Trudy Inst Lesa, Vol 8, 1951, pp 125-127.  
\*CSFTI TT 68-50410

Role of Mechanical Cultivation in Improvement of Soddy Podzol Soils, by F. I. Levin.  
RUSSIAN, bk, Rol' mekhanicheskoi obrabotki v uluchshenii svoistv dernovo-podzolistykh pochv, Izdatel'stvo Moskovskogo Universiteta, 1965, 127 pp.  
\*CSFTI TT 68-50338

Problem of the Effect of Drainage Depth on the Water-Physical Properties of Peat Soils and Gross Yield, by A. A. Ispolinov, 14 pp.  
RUSSIAN, per, Sb. Nauch. Rabot In-ta Melior, vodn. i bolotn. kh-va, Vol 2, 1953, pp 51-64.  
\*CSFTI TT 68-50434

Greater Control Over Plant Pests and Diseases Urged, by V. Shaykin, 8 pp.  
RUSSIAN, np, Sel'skaya Zhizn, Moscow, 16 Jan 68, p. 2.  
JPRS 44,379

Agricultural Equipment, by An. N. Karpenko & A. A. Zelenev.  
RUSSIAN, bk, Sel'skokhozvaistvennye mashiny, Moskva, Kolos, 1965, 404 pp.  
\*CSFTI TT 68-50339

Expert Knowledge of Grain and its Processed Products, by A. V. Myasnikova & Yu. S. Rall'.  
RUSSIAN, bk, Tovarovedenie zerna i produktov ego pererabotki. Uchebniki i Uchebnye Posobiya dlya Tekhnikumov Sistyemy Zagotovok. -- Izdatel'stvo Kolos, Moskva, 1965, 485 1/2 pp.  
\*CSFTI TT 68-50336

Progress in Mechanization of Agriculture Cited, by A. I. Buyanov, 13 pp.  
RUSSIAN, per, Traktory i Sel'khozashiny, No 11, Nov 1967, pp 3-6.  
JPRS 44109

Scientific  
Agriculture (Contd)

Methods, Results and Prospects of Winter Soft Wheat Breeding in the Ukrainian Steppe, by F. Kirichenko.  
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki, No 7, 1967, pp 46-59.  
\*ACSI J-4302  
ID 2204003868

The Conveyor-Like Corwing of Vegetables on Hydroponics, by V. Dadykin.  
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki, No 7, 1967, pp 65-68.  
\*ACSI J-4302  
ID 2204003868

The Effect of Water Logging of Soil on Transpiration Capacity of Trees, by A. V. Veretennikov, 5 pp.  
RUSSIAN, per, Vliyaniye izbytochnogo-uylazhneniya pochvy na transpiratsionnyuyu sposobnost'drevesnykh rastenii. -- Fiziologiya Rastenii, Vol 11, No 2, 1964, pp 274-278.  
\*CSFTI TT 68-50419

Hardening of Corn Seed, by A. Voronova.  
RUSSIAN, per, Zakalka semyan kukuruzy. -- Nauka i peredovoi Opyt v Sel'skom Khozyaystve, Vol 8, No 4, 1958, pp 37-39.  
\*CSFTI TT 68-50400

Livestock Distribution to Remote Highland Cooperatives, 7 pp.  
ALBANIAN, newspaper, Zeri i Popullit, Tirana, 5 Jan 68, pp.1 and 3.  
JPRS 44,323

Agricultural Production in Senegal, 1966-67, 11 pp.  
FRENCH, bulletin, Bulletin de l'Afrique Noire, Paris, No. 491, 10 Jan 68, pp. 9909-9916.  
JPRS 44,382

Crop and Weather Report, Nov 67, by Dr. D. Krumbiegel, 5 pp.  
GERMAN, per, Feldwirtschaft, East Berlin, No. 1, Jan 68, pp. 47-48.  
JPRS 44,258

Problems of Animal Breeding Expansion, by Jan Malkowski, 14 pp.  
POLISH, per, Wies Wspolczesna, No. 1, Jan 68, pp. 40-50.  
JPRS 44,358

Scientific  
Agriculture (Contd)

Prepacking-A Modern Method for Organizing Meat Production and Sale, by S. Vasile, 3 pp.  
ROMANIAN, per, Industria Alimentara, No 6, 1967, pp 292-293.  
ACSI J-3292  
ID 2204040567

Some Tendencies in the Development of Agriculture, by Dr. Petar Milnovic, 8 pp.  
SERBO-CROATIAN, publication, Glasnik za Poljoprivredu i Zadrugarstvo, Vol 16, No. 12, Belgrade, Dec 67, pp. 15-19.  
JPRS 44,258

The Leading Field Crop -- Corn -- In Kosovo-Metohija, by Eng. Dcbrivoje Stanisavljevic, 9 pp.  
SERBO-CROATIAN, publication, Glasnik za Poljoprivredu i Zadrugarstvo, Vol. 16, No. 12, Belgrade, Dec 67, pp. 39-44.  
JPRS 44,258

The Need and the Possibility for Organized Work in Education in Veterinary Science, by R. Pavlovic and T. Rajic, 5 pp.  
SERBO-CROATIAN, per, Veterinarski Glasnik, Belgrade, 1 Feb 68, pp. 61-63.  
JPRS 44,393

Finar Del Rio and Havana Begin Cane Operations, 6 pp.  
SPANISH, newspaper, Granma, Havana, 8 Jan 68, p. 8.  
JPRS 44,246

Report on Corfo Agriculture and Livestock Programs, 22 pp.  
SPANISH, per, La Nacion, Santiago de Chile, 14 Jan 68, pp. 24, 25, 30.  
JPRS 44,392

The Problem of the Determination of Evaporativity (Maximum Possible Evaporation) from Agricultural Fields, by A. R. Konstantinov & R. N. Oleynik, 19 pp.  
UKRAINIAN, per, Trudy Ukraine Hydromet. Inst., No 41, 1964, pp 135-153.  
\*CSFTI TT 68-50433

Scientific  
Agriculture (Contd)

Firmly Grasp Science and Technology to Satisfactorily Guide Agricultural Production, by Nguyen Van Loc, 10 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 32-40.  
JPRS 44,391

The 1966-1967 Fifth Month Rice Crop, by Bui Huy Dap, 11 pp.  
VIETNAMESE per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 363-368.  
JPRS 44,318

Resolution of the Council of Ministers on the Development of Stock Raising, 12 pp.  
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 371-377.  
JPRS 44,318

Basic Agricultural Problems of North Vietnam, by Dao The Tuan, 12 pp.  
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 377-383.  
JPRS 44,318

Crop Timing in Nam Ha, by Mai Phong, 5 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi, 25 Nov 67, p. 2.  
JPRS 44,238

Discussion of Animal Husbandry, Part VI, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi, 22 Nov 67, p. 2.  
JPRS 44,210

1966-1967 Was Hai Duong's Best Winter-Spring Crop, 5 pp.  
VIETNAMESE, newspaper, Nhan-dan, Hanoi, 18 Dec 67, p. 2.  
JPRS 44,298

Provinces With Outstanding Crop Production for 1967, 9 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi, 1 Jan 68, p. 3.  
JPRS 44,228

Scientific  
Astronomy & Astrophysics

Behavior of Clocks Moving in a Central-Symmetric Gravitational Field, by R. F. Polishuk.  
RUSSIAN, per, Astronomicheskii Zh., Vol 44, No 5, 1967, pp 1104-1113.  
\*Dept of Navy/APL/JHU J-1132

Practical Application of Data Obtained from Meteorological Satellites, by K. Ya. Kondrat'ev.  
RUSSIAN, bk, Leningrad, Gidrometeorologicheskoye Izdatel'stvo, 1966, 454 pp.  
\*CSFTI TT 68-50310

Course in Astrophysics and Stellar Astronomy, Vol II.  
RUSSIAN, bk, Moscow, Gosudarstvennoye Izdatel'stvo Fiziko-Matematicheskoy Literatury, 1962, 684 pp.  
\*CSFTI TT 68-50307

Bibliography of Soviet Upper Atmosphere and Outer Space Studies, 48 pp.  
RUSSIAN, bibliography, Report of the Soviet Space Committee to the 10th Session of COSPAR at London, England, Dec 67, pp. 163-202.  
JPRS 44,343

Magnetic Observatories of Kazakhstan, by Kh. D. Kanonidi, F. N. Yanat'kanov, 10 pp.  
RUSSIAN, per, Vestnik Akademii Nauk Kazakhskoy SSR, Vol 12, No 1, Jan 1966, pp 79-85.  
JPRS 44107

Investigation of Recombination Spectrum N III of Stars and Nebulae, by A. A. Nikitin, 22 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 124-144.  
P100028368-V  
FTD-MT-64-145

Description of Method of Finding Distribution of Eccentricities of Orbits of Visual Binaries, by B. I. Fesenko, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 151-155.  
P100028363-V  
FTD-MT-64-145

Scientific  
Astronomy & Astrophysics (Contd)

Expedition of Astronomers to Region of Active Volcanoes Kamchatka, by V. V. Sharonov, 5 pp. RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 156-158.  
P100028868-V  
FTD-MT-64-145

New Discoveries about Celestial Bodies in 1965, by Hung (No initials given). CHINESE, per, Tien wen ai hao che, No 4, 1966, pp 14-15.  
\*FTD-HT-23-103-68C

The Reduction of Astronomical Observations for Curvature of the Vertical, by K. Ledersteger. GERMAN, per, Schweizerische Zeitschrift für Vermessungswesen und Kulturtechnik und Photogrammetrie, Vol LIII, No 8, 9 Aug 1955, pp 225-239.  
\*ACIC TC-1393

Atmospheric Sciences

Optical Instability of the Earth's Atmosphere According to Stellar Observations, by I. G. Kolchinskiy. RUSSIAN, prt, Akademiya Nauk Ukrainskoy SSR, Glavnaya Astronicheskaya Observatoriya, 1967, 184 pp.  
\*ACIC TC-1395

Vertical Distribution of Atmospheric Ozone, by A. Kh. Khrgian. RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol 7, No 2, 1967, pp 317-322.  
\*ACSI J-4306  
ID 2204004268

Interpretation of the Initial Riometer Observations on Wake Island at the Time of the High-Altitude Burst of 9 July 1962, by S. I. Kozlov. RUSSIAN, per, Kosmicheskie Issledovaniya, Vol 5, No 5, 1967, pp 782-791.  
Dept of Navy/API/JHU T-2108

Distribution of Atmospheric Pressure at Sea Level in the Lake Baikal and Region, by V. A. Krotova, I. I. Lut. RUSSIAN, per, Trudy. AN SSSR, Sibirskoye Otdeleniye. Limnologicheskii Inst., No 10 (30), 1966, pp 14-33.  
\*FTD-MT-24-50-68

Scientific  
Atmospheric Sciences (Contd)

Time and Space Variability of Rainfall Precipitation According to Radar Data, by R. A. Anchugova, T. I. Morozova. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya Trudy, fizika Oblakov i Aktivnykh Vozdeystviy, No 186, 1966, pp 86-92.  
\*ACSI J-4304  
ID 2204004068

Investigation of Glaze and Rime Deposits in the Lower 300-Meter Layer of the Atmosphere, by F. Ya. Klinov. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya, Trudy, Prikladnaya Klimatologiya, No 200, 1966, pp 33-44.  
\*ACSI J-4171  
ID 2204001868

Vertical Distribution of High Winds in the Atmospheric Boundary Layer, by M. V. Zavarina and V. G. Tsvetava. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya, Trudy, Prikladnaya Klimatologiya, No 200, 1966, pp 45-52.  
\*ACSI J-4172  
ID 2204001968

Statistical Characteristics of Cloud Cover, Based on Data Obtained by Aircraft and Terrestrial Observations, by D. M. Sonechkin. RUSSIAN, per, Mirovoy Meteorologicheskii Tsentr Trudy, Sputnikovaya Meteorologiya, No 11, 1966, pp 34-41.  
\*ACSI J-4305  
ID 2204004168

Comparison of the Temperature, Pressure, and Density of the Tentative Standard Atmosphere with the Corresponding Data on the Northern Hemisphere and 30° Latitude ..., by Z. I. Gavrilova. RUSSIAN, per, Trudy, Moscow, Nauchno-Issledovatel'skiy Institut Aeroklimatologii, No 24, 1963, pp 61-65.  
\*FTD-MT-24-56-68

Mean and Extreme Pressure Values, by O. B. Martalova, M. V. Sokolova. RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii, Trudy, No 24, 1963, pp 54-58.  
\*FTD-MT-23-99-68

Scientific  
Atmospheric Sciences (Contd)

A Comparison of the Temperature, Pressure, and Density of the Tentative Standard Atmosphere with the Corresponding Data on the Northern Hemisphere and 30° Latitude Belts, by Z. I. Gavrilova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii, Trudy, No 24, 1963, pp 61-65.  
\*FTD-HT-23-99-68

Experiment in Subdividing the USSR into Climatic Regions for Engineering Purposes, by S. K. Kopelovich.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii Trudy, Voprosy Klimatologii, No 37, 1966, pp 103-117.  
\*ACSI J-4303  
ID 2204003968

The Interconnection of the Zonal Circulation of the Atmosphere of the Northern and Southern Hemispheres, by D. I. Stekhnovskiy, 11 pp.  
RUSSIAN, per, Tsentral'nyy Institut Prognozov, Trudy, Stroeniye Troposfery i Stratosfery i Vzaimosvyaz' Tsirkulyatsii Severnogo i Yuzhnogo Polushariy, No 143, 1965, pp 53-60.  
ACSI J-4174  
ID 2204002068

An Experimental Investigation of the Methods of Measurements of Liquid Precipitation, by A. E. Konstantinov & A. A. Kisilenko, 23 pp.  
RUSSIAN, per, Trudy Ukraine Hydromet Inst, No 41, 1964, pp 163-185.  
\*CSFTI TT 68-50432

Characteristics of Aircraft Contrails in the Kiev Area, by N.M. Mikhaylenko, 7 pp.  
RUSSIAN, journal, Trudy Ukrainskogo Nauchno-Issledovatel'skogo Gidrometeorologicheskogo Instituta, No. 61, Kiev, 1966, pp. 101-105.  
JPRS 44,353

Reasons for the Stable Position of the Asiatic High over Mongolia, by Z. M. Makhover.  
RUSSIAN, per, Voprosy Sinopticheskoy i Aviatcionnoy Klimatologii, No 38, 1967, pp 54-59.  
\*FTD-MT-24-44-68

Scientific  
Atmospheric Sciences (Contd)

Carbonaceous Meteorites, by L. G. Kvasha, 18 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady Na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 44-55.  
P100030068-V  
FTD-MT-64-233

Recent Data about Physical Conditions on Planets of the Terrestrial Type, by D. Ya. Martynov, 33 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta An SSSR, 1963, pp 56-76.  
P100030068-V  
FTD-MT-64-233

Unity and Interconnectedness of Galactic System As Condition of Appearance of Life on Planets, by V. G. Fesenkov, 25 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 77-93.  
P100030068-V  
FTD-MT-64-233

General Conclusions, by A. I. Oparin, V. G. Fesenkov, 4 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta An SSSR, 1963, pp 94-96.  
P100030068-V  
FTD-MT-64-233.

Behavioral & Social Sciences

Certain Methods of Primary Treatment of Sound Information, by V. G. Zaytsev, 6 pp.  
RUSSIAN, Col of Art, AN UKPSHR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 74-79.  
P100028663-V  
FTD-MT-65-551

Scientific  
Behavioral & Social Sciences (Contd)

Analysis of a Cryotron Memory Circuit with many Stable States, by I. D. Voytovyuch.  
RUSSIAN, per, Avtomatika, No 6, 1966, pp 65-69.  
\*FTD-HT-23-145-68

Problems of Teaching Economic and Mathematical Methods Discussed at Conference, by A. V. Orlov, 6 pp.

RUSSIAN, per, Ekonomika i Matematicheskiye Metody, No 6, Nov-Dec 1967, pp 945-947.  
JPRS 44100

Some General Theoretical Principles for the Construction of Learning Perception Systems, by V. A. Yakubovich.

RUSSIAN, per, Kafedra Vychislitel'noy Matematiki i Vychislitel'nyy Tsentr. Vychislitel'naya Tekhnika i Voprosy Programirovaniya, No 4, 1965, pp 3-71.  
\*FTD-HT-23-70-68C

Memory Matrices Using Thin Magnetic Films, by G. P. Zharikov.

RUSSIAN, rpt, Magnitnyye Elementy Vychislitel'noy Tekhniki, Pt 2, 1966, pp 130-134.  
\*FTD-HT-23-93-68

Biological & Medical Sciences

Fluorescence and Phosphorescence of Proteins and Nucleic Acids, by S. V. Konev. 204 pp.  
RUSSIAN, bk, Sep 1967.  
Plenum Press

Geochemistry of Epigenesis, by Aleksandr I. Perel'man. 300 pp.  
RUSSIAN, bk, Sep 1967  
Plenum Press

Distribution of Flora in USSR, by A. I. Tolmachev.  
RUSSIAN, bk, Arealy rastenii flory SSSR. Leningradskii Ordena Lenina - Gosudarstvennyi Universitet iment A. A. Zhdanova. -- Izdatel'stvo Leningradskogo Universiteta, 1965, 189 pp.  
\*CSFTI TT 68-50332

Scientific  
Biological & Medical Sciences (Contd)

Key to Parasitic Nematodes. Spiruraty and Filiariaty, by K. I. Skryabin.  
RUSSIAN, per, Opredelitel' paraziticheskikh nematod - Akademiya Nauk SSSR. Gel'mintologicheskaya Laboratoriya. Izdatel'stvo Akademii Nauk SSSR. Moskva-Leningrad., Vol 1, 1949, 516 pp.  
\*CSFTI TT 68-50330

Proteocephalata. Cestoda Helminth of Fish, Amphibians and Reptiles, by V. I. Freze.  
RUSSIAN, bk, Akad. Nauk SSSR. Gel'mintologicheskaya Laboratoriya. Osnovy Tsestodologii, Izdat. "Nauka", Vol V, 1965, 536 pp.  
\*CSFTI TT 68-50360

Use of Genetical Differentiation of Tissues From Increasing Sugar Content of Sugar Beets, by I. G. Gaevskaya, 12 pp.  
RUSSIAN, per, Ispol'zovanie geneticheskoi raznokachestvennosti tkanei dlya povysheniya sakharistosti sakarnoi svekly. -- Akademiya Nauk SSSR. Inst Genetiki. Genetika-Sel'skomu Khozyaistvu, 1963, pp 451-462.  
\*CSFTI TT 68-50422

The Winter Field Count of Elks in the Forest of the Middle Territory, by P. B. Yurgenson, 8 pp.  
RUSSIAN, per, Akad. Nauk, SSSR. Institut Geografii Otdel'nyi Ottisk. Moskva, Izd-vo Akad. Nauk SSSR, 1963, pp 117-124.  
\*CSFTI TT 68-50385

Mosquitoes (Family Phlebotomidae) Fauna of the USSR. Insects Diptera, by B. E. Bykhovskii.  
RUSSIAN, bk, Akademiya Nauk SSSR. Zoologicheskii Institut. Novaya Seriya. Izdatel'stvo "Nauka", Moskva-Leningrad, Vol 3, No 2, 1966, 390 pp.  
\*CSFTI tt 68-50341

Development of Soviet Roentgenoanatomy, by A.V. Drozdova, 21 pp.  
RUSSIAN, per, Arkhiv Anatomii, Gistologii i Embriologii, Vol 53, No. 11, Leningrad, Nov 67, pp. 3-15.  
JPRS 44,294

Scientific  
Biological & Medical Sciences (Contd)

Twelve Selected Articles From: Biologicheskie Aspekty Izucheniya Vodokhranilishch, Moskva, Izdatel'stvo Akademiya Nauk SSSR.  
RUSSIAN, per, Biologicheskie Aspekty Izucheniya Vodokhranilishch, Moskva, Izdatel'stvo Akademiya Nauk SSSR, 1963, pp 60-77, 78-90, 123-129, 130-142, 178-183, 184-194, 195-200, 201-216, 217-223, 250-257, 270-302, 303-308.  
\*CSFTI TT 68-50389

Biological Basis for Propagation of Woody Plants by Cuttings, by D. A. Komissarov.  
RUSSIAN, bk, Biologicheskie osnovy razmnozheniya drevesnykh rastenii cherenkami. -- Moskva, Lesnaya Promyshlennost', 1964, 293 pp.  
\*CSFTI TT 68-50372

The Studies in the Viability of the Pollen and Stigmata of the Flowers Developing on the Isolated Branches, by S. I. Mashkin.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 45, No 4, 1960, pp 547-551.  
\*CSFTI TT 68-50396/1

Introgressive Hybridization in the Flora of the Baikal Area of Siberia, by E. G. Bobrov.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 46, No 3, 1961, pp 313-327.  
\*CSFTI TT 68-50396/2

Ecology of Flowering and Fruiting of Acer Negundo and its Hybrids, by M. A. Beskaravainaya.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 46, No 8, 1961, pp 1171-1177.  
\*CSFTI TT 68-50396/3

Innoculation of Woody Plants at Their Early Growing Phases, by E. I. Zaar & E. A. Yakovleva.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 3, 1962, pp 371-373.  
\*CSFTI TT 68-50396/4

On the Development of Buds of Different Sexual Differentiation in Forest Trees, by E. G. Minina.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 7, 1962, pp 938-944.  
\*CSFTI TT 68-50396/5

Scientific  
Biological & Medical Sciences (Contd)

"Neoteny" in Acer Platanoides L., by A. N. Krasnitskii.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 10, 1962, pp 1529-1531.  
\*CSFTI TT 68-50396/6

The Structure of the Embryo and the Seedling of Acer Platanoides L., by E. A. Kondrat'eva-Mel'vil'.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 48, No 2, 1963, pp 199-210.  
\*CSFTI TT 68-50396/7

Dwaft Birch in the Tundras of the Archangel Region, by I. A. Perfil'ev.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 48, No 8, 1963, pp 1138-1150.  
\*CSFTI TT 68-50396/8

Microscopic Studies of Spruce and Larch Wood Infected by Woodstaining Fungi, by A. A. Konstantnaya.  
RUSSIAN, per, Botanicheskii Zhurnal, Vol 49, No 1, 1 Jan 1964, pp 105-109.  
\*ACSI J-4414  
ID 2204007768

Fructification of Acer Mandschuricum in Leningrad, by N. E. Bulygin.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 49, No 3, 1964, pp 412-417.  
\*CSFTI TT 68-50396/9

On the Potential Photosynthesis of Spruce Seedlings Under Different Conditions of the Light, by I. V. Katrushenko.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 1, 1965, pp 91-95.  
\*CSFTI TT 68-50396/10

A Comparative Morphological Study of Emerged Seedlings of Some Betulaceae, by I. A. Korchagina.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 3, 1965, pp 335-349.  
\*CSFTI TT 68-50396/11

Parthenocarpy in Betula, Populus and Robina Pseudoacacia, by G. D. Frolova.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 3, 1965, pp 394-396.  
\*CSFTI TT 68-50396/12

Scientific  
Biological & Medical Sciences (Contd)

Epidemiology of Botulism, by T.I. Bulatova, 10 pp.  
RUSSIAN, pamphlet, Botulizm i Yego Profil-aktika, published by the Central Scientific Research Institute of Sanitary Education, Ministry of Health USSR, Moscow, 1966, pp. 22-32.  
JPRS 44,310

Changes of Myoglobin Content in the Heart at Experimental Myocardial Infarction and Atherosclerosis, by R. A. Frol'kis.  
RUSSIAN, per, Byull' Eksp Biol Med, Vol 64, No 10, 1967, pp 19-21.  
HEW-NIH  
1-32-68

Daily Changes of Protein Exchange and of Mitotic Activity of the Cells in the Adrenal Cortex, by A. Iu. Truupyl'd.  
RUSSIAN, per, Byull' Eksp Biol Med, Vol 64, No 10, 1967, pp 83-85.  
HEW-NIH  
1-36-68

Differences Between Tetradontoxin and Novocain in Mechanism of Depressing Action on Frog Skeletal Muscle Fibers, by B.I. Khodorov and Ye G. Vornovitskiy, 7 pp.  
RUSSIAN, per, Byulleten' Eksperimental'noy Biologii i Meditsiny, No. 11, Moscow, Nov 67, pp. 34-37.  
JPRS 44,296

A Natural Interspecific Hybrid in the Genus Juglans, by N. G. Akimochkin, 4 pp.  
RUSSIAN, per, Estestvennyi mezhvidovoi gibriz iz rodu Juglans. -- Byulleten' Glavnogo Botanicheskogo Sada, No 44, 1961, pp 11-14.  
\*CSFTI TT 68-50421

Juglans Species in the "Trostjanev" Arboretum and their Fruiting, by G. E. Misnik, 4 pp.  
RUSSIAN, per, Orekh i dendroparka "Trostyanets" i ikh plodonoshenie. -- Byulleten' Glavnogo Botanicheskogo Sada, No 50, 1963, pp 49-52.  
\*CSFTI TT 68-50420

Five Selected Articles From: Byulleten' Instituta Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii Vodokhranilishch, No 11, 1961, pp 28-32, 37-41, 42-43, 44-48, 61-64.  
\*CSFTI TT 68-50390

Scientific  
Biological & Medical Sciences (Contd)

Four Selected Articles From: Byulleten' Instituta Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii Vodokhranilishch, No 12, 1962, pp 35-38, 50-53, 56-59, 62-64.  
\*CSFTI TT 68-50388

Four Selected Articles From: Byulleten' Instituta Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii Vodokhranilishch, No 13, 1962, pp 24-26, 26-30, 48-51, 57-61.  
\*CSFTI TT 68-50387

Investigation of Plasma Parameters in a Strong Magnetic Field with the aid of Double Electric Probes, I. A. Kovan, Yu. L. Moskin.  
RUSSIAN, bk, Diagnostika Flazym, 1963, pp 237-246.  
\*FTD-MT-24-29-68

Change in Weight and in Moisture of Picea Excelsa and Abies Sibirica Needles in Relation to Their Own Age and the Age of the Tree, by M. D. Danilov, 4 pp.  
RUSSIAN, per, Izmenenie vesa i vlazhnosti khvoi obyknovennoi i pikhty sibirskoi v svyazi s sobstvennym vozrastom i vizrastom derevu. -- Doklady Akademii Nauk SSSR, Vol 61, No 2, 1948, pp 375-378.  
\*CSFTI TT 68-50424

Comparative Biochemical Study on the Contractible Proteins of Striated Muscles at Various Stages of Phylo- and Ontogenesis, by I. I. Ivanov.  
RUSSIAN, per, Dokl Akad Nauk SSSR, Vol 60, No 3, 1948, pp 417-420.  
HEW-NIH  
1-7-68

Seed Treatments for Increasing Field Germination of Seed and Rate of Growth of the Resulting Seedlings, by O. I. Podol'skaya, 3 pp.  
RUSSIAN, per, Povyshenie gruntovoi vskhozhesti semyan i uskorenie rosta seyantsev. -- Doklady Akademii Nauk SSSR, Moskva, Vol 67, No 3, 1949, pp 573-575.  
\*CSFTI TT 68-50426

Scientific  
Biological & Medical Sciences (Contd)

The Influence of Environment Upon Hybrid Walnut Seedlings, by A. M. Ozol & A. F. Zarubin, 4 pp.  
RUSSIAN, per, Vliyaniye uslovii zhizni na izmeneniye gibridnykh-seyantsev orekhov. -- Doklady, Akademii Nauk SSSR, Vol 87, No 2, 1952, pp 287-290.  
\*CSFTI TT 68-50427

The Germinative Energy and Capacity of Seeds of Quercus Rubra and Juglans Regia as Related to Their Position in the Soil, by G. Kh. Molotkovskii, 3 pp.  
RUSSIAN, per, Energiya prorastaniya i vskhozhest' plodov duba i gretskogo orekha v zavisimosti ot ikh polozeniya v pochve. -- Doklady, Akademii Nauk SSSR, Vol 102, No 3, 1955, pp 637-639.  
\*CSFTI TT 68-50428

Influence of Vitamins on Opening of Resting Buds, by S. O. Grebinskii & L. A. Lyukova, 3 pp.  
RUSSIAN, per, Vliyaniye vitaminov na raspuskanie pokoyashchikhsya pochek. -- Doklady, Akademii Nauk SSSR, Moskva, Vol 105, No 6, 1955, pp 1361-1363.  
\*CSFTI TT 68-50429

Biosynthesis of Carnosine by Muscle Tissue in Vitro, by L. G. Razina.  
RUSSIAN, per, Dokl Akad Nauk SSSR, Vol 111, No 1, 1956, pp 161-164.  
HEW-NIH  
1-3-68

Chlorophyll Formation in the Leaves of Tradescantia Guianensis in the Dark, by V. L. Kaler, D. V. Fedyun'kin, 6 pp.  
RUSSIAN, per, AN SSSR. Doklady, Vol 170, No 2, 1966, pp 469-471.  
P100018168  
FTD-HT-67-485

Protogyny in Relation to Functional Male Sterility in Helianthus Annus L., by M. Lazarov, 4 pp.  
RUSSIAN, per, Protoginiya i svyazannaya nei organov u Helianthus Annus L. -- Doklady Bolgarskoi Akademii Nauk, Sofiya, Vol 16, No 3, 1963, pp 309-312.  
\*CSFTI TT 68-50431

Scientific  
Biological & Medical Sciences (Contd)

Effect of Moisture Content of Shoots and Needles on Growth of Pine Branches, by S. A. Mamaev, 3 pp.  
RUSSIAN, per, Vliyaniye vlagosoderzhaniya pobegov i khvoi na rost vetvei. -- Moskovskaya Ordena Lenina Sel'skokhozyaistvennaya Akademiya imeni K. A. Timiryazeva. Doklady TSKHA, Nauchnaya Konferentsiya, Vol 26, No 1, 1956, pp 293-295.  
\*CSFTI TT 68-50399

Importance of Using Cybernetics in Medicine Discussed, by V. Tikhomirov, 6 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 47, Moscow, Nov 67, p. 34.  
JPRS 44,194

Elements of the Theory of Random Pulse Trains, by N. M. Sedyakin, 216 pp.  
RUSSIAN, bk, Elementy Teorii Sluchaynykh Impul'snykh Potokov, 1965.  
ACSI J-3661  
ID 2204052167

The Pneumocardiophone, by R. M. Bayevskiy, V. A. Ivanov, 6 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, Vol 52, No 10, 1966, pp 1273-1275.  
P100016268  
FTD-HT-67-484

Fifty Years of Soviet Physiology, 16 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, No 11, Nov 1967, pp 1269-1281.  
JPRS 44064

Development of Physiology in Siberia during the 50 Years of the Soviet Regime, by Ye. F. Larin, V. A. Pegal', 9 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, No 11, Nov 1967, pp 1281-1287.  
JPRS 44064

Physiological Basis for Establishment of Hardy Forests, by A. I. Akiromsiko.  
RUSSIAN, bk, Fiziologicheskoe obosnovanie sozdaniya ustoychivyykh lesnykh naczahdenii. -- Moskva, Lesnaya Promyshlennost', 1965, 312 pp.  
\*CSFTI TT 68-50371

Scientific  
Biological & Medical Sciences (Contd)

Soviet Labor Hygiene for the Past 50 Years, by A.A. Letavet and A.V. Roshchin, 12 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 3-12.  
JPRS 44,198

Soviet Occupational Pathology for the Last 50 Years, by S.I. Ashbel', et al, 10 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 12-19.  
JPRS 44,198

Labor Hygiene in the Chemical Industry for the Past 50 Years, by A.S. Arkhipov and Ye. N. Marchenko, 7 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 36-40.  
JPRS 44,198

Endothelioma of the Thoracic Portion of the Aorta, by R. E. Kaigorodova.  
RUSSIAN, per, Grudn.-Khir, Jul-Aug 1963, pp 88-90.  
\*Dept of Navy/NMS 1243

The Echinodermata, Vol 1. Echinodermes. Echinides (Echinoidea) No 1. Fauna of Russia and Adjacent Countries, by A. H. D'yakonov.  
RUSSIAN, bk, Iglokozhiya (Echinodermata) Tom 1. Morskoe ezhi (echinoidea) Vypusk 1. Fauna Rossii i soprodel'nykh "stran", Petrograd, 1923, 370 pp.  
\*CSFTI TT 68-50345

The "Introductory Type" of Male Sterility of Trees and Shrubs, by A. Maurin, 3 pp.  
RUSSIAN, per, Introduktsionnyi tip steril'nosti u drevesnykh i kustrinikovykh porod. -- Izvestiya Akademii Nauk Latvialskoi SSR, No 5, 1964, pp 96-98.  
\*CSFTI TT 68-50423

Studies on Biological Methods of Control of Agricultural and Forest Pests (Lectures at the Symposium of Nov 17-20, 1964).  
RUSSIAN, per, Issledovaniya po biologicheskomu metodu bor'by s vreditel'nyimi sel'skogo i lesnogo khozyaistva (doklady k simpoziumu 17-20 novabrya 1964 g.), -- Akademiya Nauk SSSR, Sibirskoe Otdelenie, Biologicheskii Inst, Novosibirsk, 1964, 224 pp.  
\*CSFTI TT 68-50359

Scientific  
Biological & Medical Sciences (Contd)

Explorations of the Fauna of the Seas. IV(XII). Biological Results of the Soviet Antarctic Expedition 1955-1958, by E. N. Pavlovskii.  
RUSSIAN, bk, Issledovaniya fauny morei IV(XII). Rezul'taty biologicheskikh issledovaniy Sovetskoi Antarkticheskoi Ekspeditsii 1955-1958 gg. Akad. Nauk SSSR. Zoologicheskii Institut, Leningrad, 1967, 417 pp.  
\*CSFTI TT 68-50313

Preliminary Results of Soviet Research on Zooplankton and its Luminescence in the Eastern Caribbean, A.S. Artemkin, et al., 10 pp.  
RUSSIAN, bk, Issledovaniya Tsentral'no-amerikanskikh Morey, No. 1, Kiev, Naukova, Dumka Publishing House, 1966, pp. 117-124.  
JPRS 44,254

Megaspore Genesis and Embryo Sac Formation in Pepper (Capsicum), by E. M. Mutafyan, 5 pp.  
RUSSIAN, per, Megasporogenez i obrazovanie zapodyshevogo meshka u pertsy. -- Akademiya Nauk Armyanskoi SSR. Izvestiya, Biologicheskoe Nauke, Vol 17, No 1, 1964, pp 95-99.  
\*CSFTI TT 68-50398

Physiological Effects of Weightlessness, by I. I. Kas'yan, I Kopanov.  
RUSSIAN, per, AN SSSR. Izvestiya, Seriya Biologicheskaya, No 4, 1967, pp 489-501.  
\*FTD-MT-24-36-68

Peculiarities of Physiological Reactions of Pilots During Simulated Egress from a Spacecraft, by D.G. Maksimov et al, 18 pp.  
RUSSIAN, journal, Izvestiya Akademii Nauk SSR, Seriya Biologicheskaya, No. 5, Moscow, Sept-Oct 67, pp. 682-693.  
JPRS 44,209

Ectoparasites from Sand Martin Nest Located on Cliffs of the Dzhydy River Shore (Southwestern Transbaikal), by V. N. Prokop'yev.  
RUSSIAN, per, Izv Irkutsk Gosud Nauch Protivoohum, No 5, 1963, pp 186-187.  
HEW-NIH (Only on Loan)  
1-39-68

Scientific  
Biological & Medical Sciences (Contd)

Sesquiterpenic Hydrocarbons of Resins of Scotch Pine, *Pinus Sylvestris*, by V. A. Pentegova & O. V. Lebedeva, 4 pp.  
RUSSIAN, per, Seskviterpenyve uglevodorody zhivitsy sosny obyknovnoy (*Pinus Sylvestris* L.) -- Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR, Seriya Khimicheskikh Nauk, Vol 1, No 3, 1964, pp 61-64.  
\*CSFTI TT 68-50414

Fifty Years of Soviet Cardiology, by P. Ye. Lukomskiy, 12 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 3-12.  
JPRS 44,404

Space Cardiology and Its Clinical Aspects, by V.V. Parin, 8 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 13-18.  
JPRS 44,404

Achievements of Soviet Cardiosurgery, by G.M. Solov'yev, 6 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 18-22.  
JPRS 44,404

Basic Trends in Research on Biochemistry of the Myocardium, by S. Ye. Severin, 11 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 22-30.  
JPRS 44,404

Research by Soviet Scientists in the Physiology of Blood Circulation, by G. I. Kositskiy, 8 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 30-36.  
JPRS 44,404

Achievements in X-Ray Cardiology in the Fifty Years of Soviet Power, by M.A. Ivanitskaya, 5 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No. 11, Moscow, Nov 67, pp. 59-66.  
JPRS 44,404

Scientific  
Biological & Medical Sciences (Contd)

New Polyamides in Fibers Based on Omega-Amino Acids which Contain Cyclohexane Rings in the Basic Chain, by R. S. Murotova, 11 pp.  
RUSSIAN, per, Khimicheskiye Volokna, No 4, Jul/Aug 1967, pp 69-73.  
ACSI J-3721  
ID 2204053167

Hemangioendothelioma of the Stomach, by E. S. Futorian.  
RUSSIAN, per, Khira, Moscow, Vol 39, 1963, pp 128-129.  
\*Dept of Navy/NMS 1242

Gastric Hemangioendothelioma, by A. I. Bukhman, 4 pp.  
RUSSIAN, per, Khira, Vol 40, Dec 1964, pp 126-127.  
Dept of Navy/NMS 1240

A Rare Localization of Hemangioendothelioma in the Small Intestine, by V. I. Pipiia, 3 pp.  
RUSSIAN, per, Khira, Moscow, Vol 41, June 1965, pp 122-123.  
Dept of Navy/NMS 1237

Conclusion, Weaknesses and Problems of Soviet Surgical Practice, by N. I. Krakovskiy and Yu. Ya. Gritsman, 16 pp.  
RUSSIAN, bk, Khirurgicheskiye Oshibki, 1967, pp 170-191.  
JRS 44066

Use of Chrome Plated and Lacquered Cans for Confectionery Foods, by Yu. N. Mishnev.  
RUSSIAN, per, Khlebopekarnaya i Konditerskaya Promyshlennost, No 10, 1967, p 35.  
\*ACSI J-4318  
ID 2204004368

Recent Pattern Recognition Problems, by V. A. Kovalevskiy.  
RUSSIAN, per, Kibernetika, No 5, 1967, pp 78-86.  
\*FTD-HT-23-155-68

Maximum Oxygen Consumption and Functional State of the Circulatory System Following Simulated Weightlessness, by V. S. Georgiyevskiy.  
RUSSIAN, rpt, Kislorodnyy Reshin Organizma i Yero Regulirovaniya, 1966, pp 225-229.  
\*FTD-HT-23-124-68

Scientific  
Biological & Medical Sciences (Contd)

The Oxygen Regime of the Organism and its Regulation, by N. V. Lauer.  
RUSSIAN, bk, Kislородnyy rezhim organizma i yego regulirovaniye. Kiev, Izdatel'stvo "Naukova Dumka", 1966, 400 pp.  
\*CSFTI TT 68-50302

Short Key to the Bloodsucking Flies of the Fauna of the SSSR, by I. A. Rubtsov.  
RUSSIAN, bk, Kratkii opredelitel' krovososushchikh moshek fauny SSSR. Opredeliteli po Faune SSSR, Ispavaemye - Zoologicheskim Institutom Akademii Nauk SSSR. Izdatel'stvo Akademii Nauk SSSR. Moskva-Leningrad, No 77, 1962, 227 pp.  
\*CSFTI TT 68-50333

The Use of Radioactive Atoms in Forest Research, by F. L. Shchepot'ev & A. I. Pobegailo.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 9, No 1, 1956, pp 22-26.  
\*CSFTI TT 68-50395/1

Cronartium Flaccidum in the Pinus Sylvestris Forests of Southern Yakutia, by A. N. Guseva.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 3, 1957, pp 39-41.  
\*CSFTI TT 68-50395/2

Cunninghamia, by A. V. Nenarokomov.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 5, 1957, pp 88-90.  
\*CSFTI TT 68-50395/3

On Yields of Spruce Picea Seeds, by L. S. Alaev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 10, 1957, pp 75-76.  
\*CSFTI TT 68-50395/4

A Walnut Hybrid in Dublyany Village, by E. I. Zhuravskaya.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 11, No 9, 1958, pp 75-76.  
\*CSFTI TT 68-50395/5

Do Shelterbelts Have a Forest Microclimate?, by S. N. Andrianov.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 11, No 11, 1958, pp 77-78.  
\*CSFTI TT 68-50395/6

Scientific  
Biological & Medical Sciences (Contd)

Breeding for Drought Resistance in Seedlings of Acer Negundo Hybrids, by M. A. Beskaravainaya.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 12, No 8, 1959, pp 79-80.  
\*CSFTI TT 68-50395/7

Anti-Erosional Importance of Shelterbelts in Moldavia, by V. T. Zaitsev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 12, No 12, 1959, pp 71-72.  
\*CSFTI TT 68-50395/8

We Are Growing European Alder on Poor Soils, by I. K. Esipov & A. I. Lisachenko.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 13, No 5, 1960, pp 64-65.  
\*CSFTI TT 68-50395/9

Yields from Shelterbelts in the Kamennaya Steppe, by E. S. Pavlovskii.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 13, No 7, 1960, p 55.  
\*CSFTI TT 68-50395/10

The Effect of Undercutting Roots and of Treating Them with I A A on the Growth of Pinus Sylvestris, by A. I. Baglai.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 15, No 3, 1962, pp 38-39.  
\*CSFTI TT 68-50395/11

Low-Volume Aerial Spraying to Control Forest Pests in the Ukraine, by D. F. Rudnev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 16, No 5, 1963, pp 45-49.  
\*CSFTI TT 68-50395/12

Elster Rust on Siberian Cedar Pine in Southern Yakutia, by A. N. Guseva.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 17, No 11, 1964, pp 51-52.  
\*CSFTI TT 68-50395/13

Forest Soil Science, by N. P. Remesov & P. S. Pogrebnyak.  
RUSSIAN, bk, Lesnoe Pochvovedenie. - Moskva. Lesnaya Promyshlennost', 1965, 324 pp.  
\*CSFTI TT 68-50367

Scientific  
Biological & Medical Sciences (Contd)

The Influence of Seed Pretreatment on Field Germination, by A. A. Danilova.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 2, No 1, 1959, pp 54-56.  
\*CSFTI TT 68-50397/1

Cronastium Quercuum--A Chronic Disease of Pinus Sylvestris Forests of the Amur Region, by E. N. Ierusalimov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 3, No 3, 1960, pp 161-162.  
\*CSFTI TT 68-50397/4

Juglans Madshurica in the North Part of the Central Forest-Steppe Zone, by N. G. Akimochkin.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 4, No 3, 1961, pp 156-158.  
\*CSFTI TT 68-50397/6

The Kinematics of Vibration Cutting, by A. A. Solov'ev.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 5, No 6, 1962, pp 114-124.  
\*CSFTI TT 68-50397/9

The Effect of Swaging and Shaping on Micro-Hardness, Macro-Structure and the Distribution of Deformations in Frame-Saw Teeth, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 6, No 1, 1963, pp 119-126.  
\*CSFTI TT 68-50397/11

On the Types of Resin Production of Pine, by I. I. Orlov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 6, No 5, 1963, pp 147-148.  
\*CSFTI TT 68-50397/10

Urgent Problems of Prosthetics, by V. Barybin.  
RUSSIAN, per, Meditsinskaya Gazeta, Vol 47, No 2, 13 June 1967, p 2.  
Dept of Navy/APL/JHU/ T-2102

A Rare Case of Ixodid Localisation in a Human, by I. V. Shcherbinin.  
RUSSIAN, per, Med Parazit (Moskva), Vol 26, Suppl 1, 1957, p 61.  
HEW-NIH (Only on Loan)  
1-40-68

Scientific  
Biological & Medical Sciences (Contd)

Water Balance and Behavior of Hyalomma Asiaticum Ticks in Desert Areas, by Yu. S. Balashov.  
RUSSIAN, per, Med Parazit (Moskva), Vol 29, No 3, 1960, pp 313-320.  
HEW-NIH (Only on Loan)  
1-37-68

Protective Reactions Against Ticks in Rodents, by N. A. Nikitina.  
RUSSIAN, per, Med Parazit (Moskva), Vol 33, No 2, 1964, pp 141-144.  
HEW-NIH (Only on Loan)  
1-38-68

Paths of Development of Medical Radiology in the USSR, by G.A. Zedgenidze, 7 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 3-7.  
JPRS 44,356

The Fiftieth Anniversary of Soviet Radiobiology, by Ye. I. Vorob'yev, and L.V. Funshteyn, 22 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 8-25.  
JPRS 44,356

Clinical Radioisotopic Diagnostics in the USSR, by V.Z. Agranat, et al, 11 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 26-34.  
JPRS 44,356

Special Results and Prospects of Development of Radiation Therapy in the USSR, by A. V. Koslova, and L.D. Lindenbraten, 24 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol. 12, No. 11, Moscow, Nov 67, pp. 35-52.  
JPRS 44,356

Development of Domestic Radiation Hygiene During the Years of Soviet Power, by P.I. Moiseytshev, 11 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol. 12, No. 11, Moscow, Nov 67, pp. 65-72.  
JPRS 44,356

Scientific  
Biological & Medical Sciences (Contd)

Stages of Development of Clinical Dosimetry in the USSR, by A.N. Krongauz, 10 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol. 12, No. 11, Moscow, Nov 67, pp. 73-79.  
JPRS 44,356

Method of Thinning of Mixed Spruce and Broad Leafed Stands, by L. A. Kairyukshtis.  
RUSSIAN, bk, Metod prorezhivaniya listvenno-eloovykh nasazhdenii. -- Litovskii Nauchno-issledovatel'skii Institut. Lesnogo Khozyaistva Gosleskomiteta pri Gosplane SSSR, Kaunas, 1964, 15 pp.  
\*CSFTI TT 68-50366

Contribution to the Methods of Refractometric Determination of the Plant Cell Sap Concentration, by E. A. Yablonskii, 5 pp.  
RUSSIAN, per, K metodike refraktometricheskogo opredeleniya konts entral'sii kletochnogo soka rastenii. -- Gosudarst-vennyi Nikitskii Botanicheskii Sad. Trudy, Sbornik Rabot po Dendrologii i Dekorativnomu Sadovodstvu, Vol 32, 1960, pp 101-105.  
\*CSFTI TT 68-50412

Interspecies Hybridization of Walnuts, by A. S. Yablokov, 8 pp.  
RUSSIAN, per, Mezhdubidovaya gibridizatsiya orekhov. -- Sovetskie Subtropiki, No 5, 1936. pp 53-60.  
\*CSFTI TT 68-51401

Some Results in the Development of Soviet Industrial Microbiology in the Last 50 Years, by I. L. Rabortnova.  
RUSSIAN, per, Mikrobiologiya, Vol 36, No 5, 1967, pp 811-848.  
\*ACSI J-4415  
ID 2204007868

Advanced Schools and the Training of Microbiologists, by N. S. Yegorov.  
RUSSIAN, per, Mikrobiologiya, Vol 36, No 5, 1967, pp 850-859.  
\*ACSI J-4415  
ID 2204007868

Instructions on Works of Legal-Psychiatric Expertise in the USSR.  
RUSSIAN, per, Ministry of Public Health, USSR, 1955, 7 pp.  
HEW-NIH  
1-18-68

Scientific  
Biological & Medical Sciences (Contd)

Instructions Pertaining to Emergency Hospitalization of Mental Patients who Represent a Hazard to the Public.  
RUSSIAN, per, Ministry of Public Health, USSR, 1961, 3 pp.  
HEW-NIH  
1-20-68

The Principles of the Organization of Medical Assistance to Psychiatric Patients in the USSR. Interregional Seminar of the WHO on Mental Hygiene.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 11 pp.  
HEW-NIH  
1-15-68

The Duties and Program of the Psychoneurological Dispensary. Interregional Seminar of the WHO on Mental Hygiene and the Organization of Psychiatric Services.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Institute of Postgraduate Medicine, 1967, 12 pp.  
HEW-NIH  
1-17-68

Health Propaganda in the Prophylaxis and Treatment of Mental Illnesses. Interregional Seminar of the WHO on Mental Hygiene and the Organization of Psychiatric Assistance, by L. L. Rokhline.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 13 pp.  
HEW-NIH  
1-33-68

Education and Postgraduate Training of Medical Staffs for Psychiatry in the USSR. Interregional Seminar of the WHO for the Organization of Psychiatric Services and of Psychiatric Hygiene, by V. M. Norosov.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 14 pp.  
HEW-NIH  
1-12-68

Fundamental Principles of the Organization of Public Health in the USSR. Interregional Seminar of the WHO on Mental Hygiene and the Organization of the Psychiatric Services, by L. G. Veber.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 17 pp.  
HEW-NIH  
1-19-68

Scientific  
Biological & Medical Sciences (Contd)

Social Assistance to Mental Patients and the Problems of Assessment of Capacity for Work. Interregional Seminar of the WHO on Mental Hygiene and Organization of the Psychiatric Services, by D. E. Melekhov.

RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 21 pp.

HEW-NIH  
1-16-68

The Mammals of the Caucasus, A History of the Evolution of the Fauna, by N. K. Vereshchagin. RUSSIAN, bk, Mlekopitayushchie Kavkaza, Istoriya formirovaniya fauny, 1959.

CFSTI TT 66-51143

The Structure of Pepsin Crystals: Projection of Electron Density at 5.5 Angstrom Resolution, by V.V. Borisov, et al, 11 pp.

RUSSIAN, per, Molekulyarnaya Biologiya, Vol 1, No. 4, Moscow, July-Aug 67, pp. 596-602.

JPRS 44,311

Interaction of Phenol and Aeromatic-Amine Inhibitors in Hydrocarbon-Oxidation Reactions, by G. V. Karpukhina, Z. K. Mayzus.

RUSSIAN, per, Neftekhimiya, Vol 6, No 4, 1966, pp 603-607.

\*FTD-HT-23-164-68

Experience of Dispensary Registration of Neuro-Psychotic Patients, by M. I. Rybal'skiy.

RUSSIAN, per, Opyt dispansernogo ucheta bol'nykh nervno-psikhicheskimi zabolovaniami, 1962, 71 pp.

HEW-NIH  
1-27-68

Fundamentals of Paleontology, RUSSIAN, bk, Osnovy paleontologii, Vol XI, 1964.

CFSTI TT 66-51147

Changes in physiology and size of Ixodidae ticks when Feeding Repeatedly on the Same Animals, by A. A. Kusatov, 6 pp.

RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 288-292.

JPRS 44094

Scientific  
Biological & Medical Sciences (Contd)

Specificity of Coccidia of Hypophthalmichthys Molitrix, Aristichthys Nobilis and Carps, by V. A. Musselius, V. I. Laptev, 8 pp.

RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 333-338.

JPRS 44094

Conference on Toxoplasmosis, by Ye. M. Kheysin, 5 pp.

RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 342-344.

JPRS 44094

Transmission of the Tularemia Pathogen to Homothermal Animals by Ixodes Ticks, by K. I. Kondrashkina, A. D. Luk'yenova, 13 pp.

RUSSIAN, per, Parazitologiya, Vol 1, No 5, Sep-Oct 1967, pp 405-411.

JPRS 44005

On the Soviet Union Game Reservations, by A. G. Bannikov.

RUSSIAN, bk, Po zapovednikam Sovetskogo soiuza. -- Moskva, Izdatel'stvo Myal, 1966, 224 pp.

\*CSFTI TT 68-50393

The Water Capacity of Peats, by A. A. Grebenshchikova.

RUSSIAN, per, O vlagosmnosti torfov. -- Pochvovedenie, No 9, 1956, p 102.

\*CSFTI TT 68-50407

Antifungal Activity of Pentachlorophenol and Salicylanilide, by Yu. P. Nuksha.

RUSSIAN, per, Prikladnaya Biokhimiya i Mikrobiologiya, Vol 2, No 4, 1966, pp 469-474.

\*ACSI J-4365  
ID 2204006668

Fruits From Pollinations, by J. Regia, 3 pp.

RUSSIAN, per, Metakseniyakh u Chernogo Orekh. Priroda, Vol 39, No 11, 1950, pp 59-61.

\*CFSTI TT 68-50415

Anomalous Flowering and Fruiting of Jublans Regia, by A. S. Tus, 2 pp.

RUSSIAN, per, Anomal'noe tsvetenie i plodonoshenie gretakogo orekha. -- Priroda, Vol 47, No 5, 1958, pp 91-92.

\*CSFTI TT 68-50416

Scientific  
Biological & Medical Sciences (Contd)

Use of Blood Hemoglobin as a Therapeutic Preparation, by M. M. Velikina.  
RUSSIAN, per, Problemy Gematologii i Perelivaniya Krovi, No 10, 1965, pp 47-54.  
\*ACSI J-4170  
ID 2204001768

The Radio Ecology of Marine Organisms, by G. G. Polikarpov, 246 pp.  
RUSSIAN, bk, Radiokologiya Morskikh Organizmov, 1964. P500025868-V  
Dept of Navy/NIC Trans No 2511

Radioecology of Marine Organisms, by G. G. Polikarpov.  
RUSSIAN, bk, Radiokologiya Morskikh Organizmov, 1964.  
Dept of Navy NIC 2511

Plants of Northern Siberia and Northern Far East, by A. I. Tolmachev.  
RUSSIAN, bk, Rasteniya severa sibir i dal' nego vostoka, Akademiya Nauk SSSR, Botanicheskiy Institut im V. L. Komarova, Rastitel'nost' Krainego Severa SSSR i ee osvoenie, Izdatel'stvo "Nauka" Moskva-Leningrad, 1966, 221 1/2 pp.  
\*CSFTI TT 68-50340

Two Short Notes on Diving Rates and Swimming Speed of Fish,  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 86.  
\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Prevention and Treatment of Alcoholism, by I. I. Loukomski.  
RUSSIAN, per, Seminar of WHO on Mental Hygiene, 1967, 14 pp.  
HEW-NIH  
1-22-68

Basic Trends in the Use of Cybernetics and Computers in Medicine in Certain Countries, by B. Dmitriyev, 11 pp.  
RUSSIAN, per, Sovetskoye Zdravokhraneniye, No. 12, Moscow, Dec 67, pp. 17-25.  
JPRS 44,355

Scientific  
Biological & Medical Sciences (Contd)

Simultaneous Application of Organic and Mineral Fertilizers, by E. M. Bodrova & Z. D. Ozolina.  
RUSSIAN, bk, Sovmestnoe primeneniye organicheskikh i mineral'nykh udobrenii, Rossel'khozizdat, Moskva, 1965, 141 1/2 pp.  
\*CSFTI TT 68-50334

English Title Unknown, by E. G. Perevalova, S. P. Gubin.  
RUSSIAN, per, Tartu, Universitet, Reaktsionnaya Sposobnost' Organicheskikh Syedineniy, Vol 3, No 1(7), 1966, pp 68-88.  
\*FTD-HT-23-66-68

Permanent Bactericidal Finishes, by L. G. Gusakova and K. S. Viss-Mudretsova.  
RUSSIAN, per, Tekstilnaya Promyshlennost, No 4, 1961, pp 48-49.  
\*ACSI J-4248  
ID 2204002868

Theoretical Basis for Breeding of Livestock, by A. S. Vsyakikh.  
RUSSIAN, bk, Teoreticheskie osnovy plemennogo dela - Izdatel'stvo Kolos, Moskva, 1964, 431 pp.  
\*CSFTI TT 68-50331

The Theory of the Podsolization Process, by V. V. Ponomaryeva.  
RUSSIAN, bk, Teoriya Podsolobrazovatel'nogo protessa - Moskva, "Nauka", 1964, 380 pp.  
\*CSFTI TT 68-50442

Therapy in the Service of Soviet Health, by A.G. Gukasyan, 10 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, Moscow, No. 11, Nov 67, pp. 3-10.  
JPRS 44,223

Fifty Years of Soviet Hematology, by Prof. I.A. Kassirskiy, 10 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, No. 11, Moscow, Nov 67, pp. 15-21.  
JPRS 44,293

Fifty Years of Internal Medicine in Uzbekistan, by E.I. Atakhanov, 6 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, Moscow, No. 11, Nov 67, pp. 29-33.  
JPRS 44,223

Scientific  
Biological & Medical Sciences (Contd)

Fifty Years of Soviet Clinical Gastroenterology, by A. Ya. Gubergrits, 9 pp.  
RUSSIAN, per, Terpevticheskiy Arkhiv,  
Moscow, No. 11, Nov 67, pp. 33-39.  
JPRS 44,223

Theoretical Fundamentals of the Biological Activity of Halogen Compounds, by V. O. Mokhnach.  
RUSSIAN, bk. Theoretical Fundamentals of the Biological Activity of Halogen Compounds, 1968. Plenum Press

Poplars and Their Culture, by P. L. Bogdanov.  
RUSSIAN, bk. Topolya i ikh kul'tura. -- Moskva, Lesnaya Promyshlennost, Ed 2, rev, 1965, 105 pp.  
\*CSFTI TT 68-50374

Expert Knowledge of Foodstuffs: Meat and its Products, by M. M. Danilov.  
RUSSIAN, bk. Tovarovedenie prodovol'stvennykh tovarov myaso i myasnye tovary, Izdatel'stvo Ekonomika, Moskva, 1964, 231 pp.  
\*CSFTI TT 68-50337

Cercariae of Strigeidae and Diplostomatidae, by T. A. Ginetinskaya & A. A. Dobrovolskii.  
RUSSIAN, per, Trudy Astrakhanskogo Zapovednika, Vol VI, 1962, pp 45-89.  
\*CSFTI TT 68-50391

Marine Fouling and Borers.  
RUSSIAN, bk. Akademiya Nauk SSSR. Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 49, 1961, 273 pp.  
\*CSFTI TT 68-50354

Ornithological Research on Government Reservations During Ten Year Period of 1945-55, by P. B. Yurgenson.  
RUSSIAN, per, Ornitologicheskie issledovaniya v gosudarstvennykh zapovednikakh za desyatiletie 1945-55 gg. -- Trudy Problemykh i Tematicheskikh Soveshchaniy ZIN. Pervaya Ornitolozicheskaya Konferentsiya, Vol 9, 1960, pp 48-51.  
\*CSFTI TT 68-50384

Ash (Fraxinus) Pollen (Morphology, Viability), by Z. V. Nikolaeva, 12 pp.  
RUSSIAN, per, Fri'tsa yasnoi (morfologiya, zhidnaya sposobnost'), -- Tashkentskii Gosudarstvennyi Universitet im. V. I. Lenina. Nauchnye Trudy, Vol 204, 1962, pp 115-127.  
\*CSFTI TT 68-50430

Scientific  
Biological & Medical Sciences (Contd)

Report on Foot-and-Mouth Disease in Lambs, by V. A. Shubin.  
RUSSIAN, per, Patomorfologiya zlokachestvennogo yashchura yagnyat - Trudy Vsesoyuznogo Instituta Eksperimental'no Veterinarii, Vol 24, 1961, 6 pp.  
\*CSFTI TT 68-50329

The Problem of the Toxicity of Complex Antigens and Possible Methods of their Detoxication, Report I. Theoretical Premises, by T. G. Vasil'yeva, 8 pp.  
RUSSIAN, bk. Vaktsiny i Syvorotki. Materialy po Proizvodstvu, No 6, 1966, pp 45-50.  
JPRS 44067

Bilateral Resection of the Parotid Glands with Preservation of the Branches of the Facial Nerve, by B. D. Kabakov, 3 pp.  
RUSSIAN, per, Vestnik Khir, Vol 98, No 3, Mar 1967, pp 106-107.  
Dept of Navy/NMS 1239

A Case of Benign Hemangioendothelioma of the Pancreas, by K. B. Zhrud', 3 pp.  
RUSSIAN, per, Vestn Rentgen, Vol 39, No 63, Sept-Oct 1964.  
Dept of Navy/NMS 1238

Development of Methods of X-Ray Diagnosis of Diseases of the Heart and Vessels in the USSR, by Prof. P.N. Mazayev, 9 pp.  
RUSSIAN, per, Vestnik Rentgenologii i Radiologii, Vol. 42, No. 6, Moscow, Nov-Dec 67, pp. 3-8.  
JPRS 44,312

Theoretical Conception of Mortality of Bark Beetles, by I. V. Pan'shin.  
RUSSIAN, per, O teoreticheskoi kontseptsii razvitiya i smerti korozedov -- Vestnik Sel'skokhozyaistvennoi Nauki, Vol 7, No 3, 1962, pp 133-134.  
\*CSFTI TT 68-51402

A Parasite of Rrusts of Cultivated Plants, Tuberculina Persicina (DITM) Sacc, by M. E. Vladimirovskaya, 8 pp.  
RUSSIAN, per, Parazit rabochiny sel'skokhozyaistvennykh rastenii-Tuberculina Persicina (Ditm.) SACC. -- Vestnik Zashchity Rastenii, No 1, 1939, pp 103-110.  
\*CSFTI TT 68-50417

Scientific  
Biological & Medical Sciences (Contd)

Contractile Proteins of the Striated Muscles in Ontogenesis, by B. S. Kasavina.  
RUSSIAN, per, Voprosy Khim, Vol 1, nos 1/2, 1949, pp 298-310.  
HEW-NIH  
1-4-68

Malignant Hemangioendothelioma of the Heart with Metastases to the Lungs, by V. I. Kovalenko.  
RUSSIAN, per, VOF Onkol, Vol 11, 1965, pp 90-91.  
\*Dept of Navy/NMS 1241

Properties of A, B, and Bunyamwera Arbor Viruses, by V.D. Neustroyev, et al, 6 pp.  
RUSSIAN, per, Voprosy Virusologii, No. 6, Moscow, Nov-Dec 67.  
JPRS 44,295

Development of Virus Biochemistry and Molecular Biology in the Soviet Union, by V.I. Tovar-nitskiy, 10 pp.  
RUSSIAN, per, Voprosy Virusologii, No. 6, Moscow, 1967, pp. 643-650.  
JPRS 44,197

Contemporary Data about Ways of Origin of Life, by A. I. Oparin, 26 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 4-21.  
P100030068-V  
FTD-MT-64-233

Special Clothing for Work in Warehouses, by G.A. Kobrits, 5 pp.  
RUSSIAN, per, Zashchita Rasteniy, Vol 12, No. 12, Moscow, Dec 67, pp. 37-38.  
JPRS 44,253

Disinfection of Fur Articles with Methyl Bromide, by A. G. Prischep.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii i Immunobiologii, No 8, 1964, pp 13-16.  
\*ACSI J-4346  
ID 22040C5368

The Importance of Bac. cereus in Human Pathology, by K. A. Akhundova, 8 pp.  
RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 10, Oct 1967, pp 129-132.  
JPRS 44104

Scientific  
Biological & Medical Sciences (Contd)

Fifty Years of Soviet Immunology, by M.A. Frolova, 12 pp.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii i Immunologii, No. 11, Moscow, 1967, pp. 39-45.  
JPRS 44,213

Antigenic and Immunogenic Properties of Staphylococcal Delta-Toxin, by Ye. V. Rusakova, 6 pp.  
RUSSIAN, journal, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No. 12, Moscow, 1967, pp. 114-118.  
JPRS 44,341

The Legal-Psychiatric Significance of Mental Anomalies, Not Excluding Responsibility, by D. R. Lunts.  
RUSSIAN, per, Zh Nevropat Psikhiat Korsakov, Vol 67, No 4, 1967, pp 605-608.  
HEW-NIH  
1-8-68

Autoradiographic Investigations of Nuclei of Root Meristem of Germinating Pea Seeds with the Employment of H<sup>3</sup> - Thymidine, by Yu. F. Bogdanov & A. B. Iordanskii, 7 pp.  
RUSSIAN, per, Radioavtograficheskoe issledovanie yader kornevoi meristemy prorashtayushchikh semyan gorokha s primeniem timidina-H<sup>3</sup>. -- Zhurnal Obshchei Biologii, Vol 25, No 5, 1964, pp 357-363.  
\*CSFTI TT 68-50418

Certain Peculiarities of the Unconditioned Salivary Reflex in Dogs after Conditioned Light and Sound Stimuli of Various Strengths, by L. N. Andreyev, 9 pp.  
RUSSIAN, per, Zhurnal Vysshey Nervnoy Deyatel'nosti, Vol 15, No 3, 1965, pp 433-437.  
P100017968  
FTD-HT-67-456

New Data on the Reproduction of the Polar Bear, by E. IA. Kost'yan, 8 1/2 pp.  
RUSSIAN, per, Zoologicheskii Zhurnal, Moskva, Vol 33, No 1, 1954, pp 207-215.  
\*CSFTI TT 68-50386

Studying the Population and Migration Routes of Reindeer by Means of Aerial Methods, by V. N. Andreev.  
RUSSIAN, per, Issuchenie chislennosti severnykh olenei i putei ikh migratsii s pomoshch'yu aerometodov. -- Zoologicheskii Zhurnal, Vol 40, No 1, 1961, pp 117-121.  
\*CSFTI TT 68-50394

Scientific  
Biological & Medical Sciences (Contd)

Wild Carnivores of Siberia, by S. U. Stroganov.  
RUSSIAN, bk, Zveri sibirskoi khishchnyve. Akademiya Nauk SSSR, Sibirskoe Otdelenie, Biologicheskii Institut, Izdatel'stvo Akademii Nauk SSSR, Moskva,  
1962, 472 pp.  
\*CSFTI Tr 68-50349

Research in Biochemistry of the Nervous System in the Ukrainian SSR Since the Great October Revolution, by A.V. Palladin, 18 pp.  
UKRAINIAN, per, Ukrayins'kyi Biokhimichnyi Zhurnal, Vol 39, No. 5, Kiev, 1967, pp. 460-472.  
JPRS 44,365

In Defense of Our Fish Resources, by G. Vtachev.  
BULGARIAN, per, Priroda, No 5, Sep-Oct 1967, pp 111-116.  
\*ACSI J-4364  
ID2204006568

The Biological Secrets of the Sargasso Sea, by N. Iovchev.  
BULGARIAN, per, Priroda, No 5, Sep-Oct 1967, pp 111-116.  
\*ACSI J-4364  
ID 2204006568

Phonotaxis in Swarming Culex Mosquitoes, by Wang Chang-ling, and Yang K'o-hsuan, 5 pp.  
CHINESE, per, Jen-min Pao-chien, Vol 2, No. 6, June 1960, pp. 296-298 and 340.  
JPRS 44,408

Experiments with Biological Protection of Wood in Mines, by A. Priroda.  
CZECH, per, Ceska Mykologie, Vol 19, No 3, 1965, pp 175-179.  
\*ACSI J-4363  
ID 2204006468

Objective Recording and Evaluation of Physiological Deviations Occurring in Romberg Position and in Hautant Test, by B. Uchytil, 11 pp.  
CZECH, per, Es. Otolaryngologie, Vol XIV, No 2, 1965, pp 70-77.  
Dept of Navy/NMS 1230

Scientific  
Biological & Medical Sciences (Contd)

Effect of Freezing Speed Upon Bacteriological Conditions of Food Products, by J. Arpai & J. Tomisova.  
CZECH, per, Prumysl Potravin, No 11, 1967, pp 567-569.  
\*ACSI J-4322  
ID 2204004768

The Discharge of Poisoned Industrial Waster Waters in Great Britain, by G. E. Eden.  
FRENCH, rpt, Belgian Center for the Study and Documentation of Water, May 1965, No 258, pp 226-232. P500378367  
Dept of Navy/NIC Trans No 2497

Multiple Trauma Victims, by R. Favre and P. Delacroix, 237 pp.  
FRENCH, bk, 1967, 237 pp.  
ACSI J-3720  
ID 2204053067

Characterization of Engymatic Activities in Antigenic Extracts, by J. Uriel Tran Van Ky & F. Rose.  
FRENCH, per, Annales de l'Institute Pasteur 111, No 2, 1966, pp 161-170.  
Dept of Navy NIC tr 2515

Psychosomatic Complications in Some Cases of Severe Total Alopecia, by M. Degossely.  
FRENCH, per, Arch. Belg. Derm. Syph., Vol 21, Dec 1965, pp 257-266.  
\*Dept of Navy/NMS 1245

Seasonal Variations in the Blood Composition of the Dog, Role of the Supraoptical Posthypophyseal System in these Variations, by M. Bonvallet.  
FRENCH, per, C R Soc Biol (Paris), Vol 144, Nos 5-6, 1950, pp 383-386.  
HEW-NIH  
1-31-68

Biological Factors in Ethyl Poisoning Predisposing to Mental Disturbances, by A. Soulaire, 12 pp.  
FRENCH, per, Facteurs biologiques predisposant aux troubles mentaux par intoxication ethylique, 1965.  
Dept of Navy/NMS 1232

Symptoms, Diagnosis and Treatment of Bone Cysts, by J. M. Thomine.  
FRENCH, per, G. M. de France, Vol 2, No ix, 1962, pp 2575-2578.  
\*Dept of Navy/NMS 1247

Scientific  
Biological & Medical Sciences (Contd)

Study of the Induction Mechanism in Syrian Hamster Cells Transformed by SV40 Virus. I. Properties of a Clonal Cell Line, by P. Tournier.  
FRENCH, per, Int J Cancer, Vol 2, 1967, pp 117-132.  
HEW-NIH  
1-24-68

Effect of Various Fixatives on the Permeability and Ultrastructure of the Urinary Bladder of Frog, by S. Jard.  
FRENCH, per, J Microscopie, Vol 5, Nos 31-50, 1966.  
HEW-NIH  
1-9-68

Biological Warfare.  
FRENCH, per, Le Progres Scientifique, pp 103-128.  
\*ACSI J-4345  
ID 2832022167

Design for Card, Accompanying Bottles of Blood, Intended for Pretransfusion Testing of the Sick at Bedside, by A. Jouvenceaux.  
FRENCH, per, Transfusion (Paris), Vol 8, No 3, 1965, pp 259-264.  
HEW-NIH  
1-2-68

The Donors of Rare Blood Groups. Organization of a Central Card File, by J. Moullec.  
FRENCH, per, Transfusion (Paris), Vol 8, No 4, 1965, pp 365-369.  
HEW-NIH  
1-26-68

Mortal Transfusion Accident in an A2 Subject, Due to Anti-A1 Antibodies, by N. Doitchinova.  
FRENCH, per, Transfusion (Paris), Vol 9, No 4, 1966, pp 327-331.  
HEW-NIH  
1-5-68

Experimental Carcinogenesis of the Thyroid in the Rat, by S. M. Milcu.  
GERMAN, per, Acta Biol Med German, Vol 3, No 6, 1959, pp 519-543.  
HEW-NIH  
1-21-68

Scientific  
Biological & Medical Sciences (Contd)

Studies on the Mechanism of Enzyme Induction in Rats and Mice. IV. Influence of Barbitol on the Anterior Pituitary Lobe - Adrenal Cortex System, by W. Klinger.  
GERMAN, per, Acta Biol Med German, Vol 15, No 3, 1965, pp 229-236.  
HEW-NIH  
1-35-68

Use of Several New Human Tumor Strains in Experimental Cancer Research, by D. M. Goldenberg.  
GERMAN, per, Arch Geschwulstforsch, Pt 1, Vol 29, No 1, 1967, pp 1-17.  
HEW-NIH  
1-30-68

Use of Some New Human Tumor Strains in Experimental Cancer Research, by D. M. Goldenberg.  
GERMAN, per, Arch Geschwulstforsch, Pt 2, Vol 29, No 1, 1967, pp 18-35.  
HEW-NIH  
1-23-68

Influence of Soil Micro-Organisms on Dry-Matter Formation and Ash Content of Plant Growth in Nutrient Solutions, by E. Welte and G. Trolldenier, 19 pp.  
GERMAN, per, Arch fur Mikrobiologie, No 43, 1962, pp 138-147.  
P911040268  
AEC-LB-G-2579

Influence of Soil Micro-Organisms on Rubidium and Calcium Uptake in Plants Growing in Nutrient Solutions, by G. Trolldenier, U. Marchwordt.  
GERMAN, per, Arch fur Mikrobiologie, No 43, 1962, pp 148-151.  
P911039668  
AEC-LB-G-2580

Cellular Regeneration in Eccrine Sweat Glands Before and After Stripping, by E. Christophers, O. Braun-Falco, 7 pp.  
GERMAN, per, Archiv fur Klinische und Experimentelle Dermatologie, No 228, 1967, pp 220-226.  
ACSI J-3945  
ID 2204059867

Scientific  
Biological & Medical Sciences (Contd)

The Monomeric -Cyano-Acrylic Acid Butyl Ester, its Characterisation as to Polymerisation Kinetics, and the Development of a Preparation for Surgical Wound Agglutination, by H. Stricker, 10 pp.  
GERMAN, per, Archiv der Pharmazie, No 4, Apr 1967, pp 289-298.  
ACSI J-3651  
ID 2204051967

Modern Processes of Drying Foodstuffs - Their Influence on Quality and Storage, by G. Kluge.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 13.  
\*ACSI J-4326  
ID 2834022567

Preservation of Foodstuffs through Irradiation, by Dr. Diehl.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 29.  
\*ACSI J-4326  
ID 2834022567

Results of Long-Term Storage Tests of Foodstuffs, by B. Hottenroth.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 35.  
\*ACSI J-4326  
ID 2834022567

New Knowledge Concerning Long-Term Keeping Qualities of Stored Processed and Canned Meats and Sausages, by F. Wirth.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 47.  
\*ACSI J-4326  
ID 2834022567

Soldiers Bread, by A. Schulze.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 53.  
\*ACSI J-4326  
ID 2834022567

Scientific  
Biological & Medical Sciences (Contd)

The Advantages of Cold Storage of Canned Food, by J. Gutschmidt.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 59.  
\*ACSI J-4326  
ID 2834022567

Cetaceae; Comparative Anatomical and Systematic Essay, by E. J. Slijper, 36 pp.  
GERMAN, per, Capita Zoologica, Vol VII, 1936. P500018768  
Dept of Navy/NIC Trans 2493

The Cephalopods. Systematics, by A. Naef.  
GERMAN, bk, Die Cephalopoden, Monographie, Fauna und Flora des Golfes von Neapel und der Angrenzenden Meeres-Abschnitte, Zoologischen Station zu Neapel, Berlin, No 35, Pt 1, No 1, 1921, 244 pp.  
\*CSFTI TT 68-50343/1

The Cephalopods. Systematics., by A. Naef.  
GERMAN, bk, Die Cephalopoden, Monographie Systematik, Fauna e Flora del Golfo Di Napoli, Stazione Zoologica di Napoli, Berlin, No 35, Pt 1, Vol 1, No 2, 1923, 718 pp.  
\*CSFTI TT 68-50343/2

Revision of the Palaearctic Yponomeutids with Particular Attention on the Genitals, by G. Friese.  
GERMAN, bk, Deutsches Entomologisches Institut der Deutschen Akademie der Landwirtschaftswissenschaften zu Berlin, Beitrage zur Entomologie, Akademie Verlag, Berlin, Band 10, No 1/2, 1960, 136 pp.  
\*CSFTI TT 68-50348

Theory of Sleep, by C. Von Economo.  
GERMAN, per, Ergebn Physiol, Vol 28, 1929, pp 312-339.  
HEW-NIH  
1-14-68

The Automatic Recording and Analysis of the Movement Activity of Small Experimental Animals, by F. J. Otto, K. H. Rohe.  
GERMAN, per, Examples of Applied Research Yearbook of the Fraunhofer Society, 1966-1967, pp 78-83.  
\*ACSI J-4408  
ID 2204007168

Scientific  
Biological & Medical Sciences (Contd)

Experimental Production of Malaria Crystallina,  
10 pp.  
GERMAN, bk, Monatshefte fur Praktische Dermatologie  
-- Über Experimentelle Erzeugung der Malaria  
Crystallina.  
ACSI J-3942  
ID 2204059767

Plant Protection in Central Europe, by F. Beran.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 97-  
99.  
\*ACSI J-4249  
ID 2204002968

The Importance of Applied Entomology in Austrian  
Plant Protection, by K. Russ.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 100-  
102.  
\*ACSI J-4249  
ID 2204002968

Phytopathological Problems in Austria, by G.  
Vukovits.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 103-  
106.  
\*ACSI J-4249  
ID 2204002968

The Stomatopods, by H. Haiss.  
GERMAN, bk, Stomatopoda, Bronns, H. G. Klassen und  
ordnung des Tierreichs, B nd 5, Abteilung 1.  
Buch 6, Teil II, Akademische Verlagsgesellschaft  
m. b. H., Leipzig, 1938, 175 pp.  
\*CSFTI TT 68-50352

Dosimetric and Radiobiological Experiments with  
Fast Neutrons, I, by K. G. Zimmer, 16 pp.  
GERMAN, per, Strahlentherapie, No 63, 1938,  
pp 517-527.  
P911014768  
AEC NP-TR-1575

Mikrospermae Burmanniaceae and Orchidaceae, by  
H. Solereder & F. J. Meyer.  
GERMAN, per, Systematische Anatomie der  
Monokotyledonen, 11, Heft VI, Scitamineae -  
Mikrospermae, Verlag von Gobruder Borntraeger.  
Berlin, 1930, pp 85-242.  
\*CSFTI TT 68-50344

Statokinetic Abnormalities in Children with  
Retarded Speech, by J. Langova, 4 pp.  
GERMAN, per, De Therapia vocis et Loquellas,  
1965.  
Dept of Navy/HNS 1228

Scientific  
Biological & Medical Sciences (Contd)

Egg, Larval and Young Stages of Teleostei, by  
S. L. Bianco.  
GERMAN, bk, Uova, Larve e stadi giovanili di  
teleostei, Fauna e Flora Del Golfo Di Napoli  
Monogr. 38, Stazione Zoologica Di Napoli, Bardi  
G., - Roma - Friedlander R. & Sohn - Berlin.,  
Nos 1-2, 1931-1933, 454 pp.  
\*CSFTI TT 68-50346

The Histological Changes in the Human Heart  
After Injuries  
GERMAN, bk, Virchows Arch. f. path. anat., Vol  
252, 1924, pages 275-297  
Dept of Navy NIC 2315

Experimental Studies on Local Frostbite Pro-  
duced by Prolonged Exposure to Mild Freezing  
Temperatures, by Hellmuth Botcher, 31 pp.  
GERMAN, per, Virchows Archiv. f. Path. Anat.,  
Vol 312, pp 464-485, 1944.  
P500019268  
Dept of Navy/NIC Trans No 2502

Removal of Radioactive Substances from the Skin,  
by Erich Hampe, 4 pp.  
GERMAN, per, Wehrtechnische Monatshefte, No 11,  
1965, pp 472-473.  
ACSI J-3165  
ID 2204036167

Neuraminic Acid-Containing Mucoids from Human  
Erythrocytes and Their Behavior Towards Various  
Enzymes, by G. Uhlenbruck.  
GERMAN, per, Zbl Bakt (Ref), Vol 177, No 3,  
1960, pp 197-219.  
HEW-NIH  
1-13-68

Birth Intervals and Their Significance for the  
Fertility and Health of Women, by Kh. Mehlan.  
GERMAN, per, Zbl Gynaek, Vol 85, No 24, 1963,  
pp 837-847.  
HEW-NIH  
1-25-68

The Gyro-Relaxation Effect, by A. Schluter.  
GERMAN, per, Zeitschrift fur Naturforschung,  
Vol 12a, 1957, pp 822-825.  
Dept of Navy/APL/JHU T-2100

Activation of Biopterin in the Rat, by H. Rembold.  
GERMAN, per, Z Naturforsch (B), Vol 22, 1967,  
pp 827-830.  
HEW-NIH  
1-34-68

Scientific  
Biological & Medical Sciences (Contd)

Infrared Spectroscopic Investigation of Inclusion Compounds of Urea and Thiourea, by R. Hecke, W. Kutselnigg, 5 pp.  
GERMAN, per, Zeitschrift Fuer Analytische Chemie, Vol 170, No 1, 1959, pp 114-120.  
ACSI J-3163  
ID 2204035967

Notes on the Marine Ostracods of Sweden, by O. Elofson.  
GERMAN, bk, Zur Kenntnis der marinen ostracoden schwedens. Universitet. Zoologiska Bidrag. Uppsala, 1941, 319 pp.  
\*CSFTI TT 68-50351

The Biological Problems of Space Travel, by S. Lukacs, 48 pp.  
HUNGARIAN, per, Az Urrepules es a Tudomany. 1962, pp. 103-150. P100009368  
FTD-HT-66-408

Tihany Institute of Biological Research Celebrates 40th Anniversary, by Janos Salanki, 8 pp.  
HUNGARIAN, per, Magyar Tudomany, Budapest, No. 12, pp. 790-794.  
JPRS 44,397

Impotence as a Complication of Pelvic Fracture, by Ugo de Santis.  
ITALIAN, per, Gazz. Int. Med. Chir., Vol 69, 1964, pp 1213-1217.  
\*Dept of Navy/NMS 1244

Diver Physiology Principles and Observations, by G. Albano.  
ITALIAN, bk, Laboratorio Internazionale di Medicina Subacquea.  
\* Dept of Navy NIC

Physiochemical studies on the human saliva  
JAPANESE, bk, Acta. Med., Fukuoka 35: 279-89, 1965, Igaku Kenkyu  
Dept of Navy NIC 2319

On the Benedenia Seriolae, by Toshikazu Hoshina.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 40-46.  
\*CSFTI TT 68-50600/2

Scientific  
Biological & Medical Sciences (Contd)

Brief Notes on the Japanese Monogenetic Hematodes (Review), by Toshikazu Hoshina.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 47-57.  
\*CSFTI TT 68-50600/4

Larral Cestode (Tetrahyndhidean Larva) Found in the Abdominal Cavity of Cultured Young Yellow-tail, by Kenji Nakajima.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 76-83.  
\*CSFTI TT 68-50600/3

On the Spatial Distribution of Salmon by Means of the Analysis from the Catch of Fish per Unit Net, by Seikichi Mishima.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, Vol 31, No 4, 1965, pp 269-276.  
\*CSFTI TT 68-50600/1

Preference for the Rice Varieties, Sucking Portion of Host, Virus Acquisition in Laodelphax Striatellus (Fallen), by Y. Sonku & Y. Sakurai.  
JAPANESE, per, Chugoku Agricultural Research, No 32, 1965, pp 22-24.  
\*ACSI J-4347  
ID 2253030967

Myxosporidiosis of Japanese Eel, by Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 372-383.  
\*CSFTI TT 68-50600/6

Lentospora - Disease of the Eel, by S. Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 471-474.  
\*CSFTI TT 68-50600/8

Studies on Myxosporidian Parasites of Flat Fishes from Hokkaido, by T. Fujita.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 487-491.  
\*CSFTI TT 68-50600/5

On a Myxosporidian Parasite Found in the Fin of Japanese Eel, by S. Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 28, 1916, pp 271-273.  
\*CSFTI TT 68-50600/7

Scientific  
Biological & Medical Sciences (Contd)

Culture Media for the Cholera Bacteria (From Isolation to Confirmation), by Riichi Sakagaki. JAPANESE, per, Modern Media [Special Publication], Vol 9, No 7, 10 July 1963, pages 6-11. Dept of Navy NIC 2320(a)

Tests of the "Makanishi Culture Medium" for the Isolation Culturing of Cholera Bacteria and Pathogenic Halophilic Bacteria (Kobayashi and Enomoto's Modified Medium (TCBS Agar)), by Toshikazu Kobayashi and Shuji Enomoto. JAPANESE, per Modern Media [Special Publication], Vol 9, No 7, 10 July 1963, pages 16-19. Dept of Navy NIC 2320

Chemical Studies of the Mechanism of Biosynthesis of Thyroxin, by T. Matsuura. JAPANESE, per, Nippon Kagaku Z., Vol 86, No 3, 1965, pp 282-293. HEW-NIH 1-6-68

A Review of Recent Studies on Free Histidine and its Derivatives in the Brain, by S. Tsunoo. JAPANESE, per, Showa Igakkai Z., Vol 27, No 7, 1967, pp 523-535. HEW-NIH 1-1-68

The Seasonal Change of Gonad Weight of Sockeye and Chum Salmon in the North Pacific Ocean, Especially with Reference to Mature and Immature Fish, by Kenji Takagi. JAPANESE, per, Suisan Gakkai Ho., Vol 7, 1937, pp 17-34. \*CSFTI TT 68-50600/11

Preliminary Report on the White Spot Disease in Marine Fish, by Y. SIkama. JAPANESE, per, Suisan Gakkai Ho., Vol 7, 1937, pp 149-165. \*CSFTI TT 68-50600/10

Application of Co Cr Prosthesis for Cases with Resection of Mandible, by Yasunobu Uchida, Toshiro Kanai. JAPANESE, per, Tokyo Medical College Journal. Vol 22, Nov 1964, pp 517-524. \*ACSI J-4338 ID 2204005668

Scientific  
Biological & Medical Sciences (Contd)

Mercurimetric Determination of Thiol Esters, by M. Bronski. POLISH, per, Chemica Analytyczna. Vol 11, No 6, 1966, pp 1153-1157. HEW-NIH 1-29-68

Frozen Fish-Storage. I.A. Method of Quantitative Drip Determination in Frozen Fish, by Zbigniew Podeszewski. POLISH, per, E. Zeszyty Naukowe Wyzszej Szkoły Rolniczej w Szczecinie. No 22, 1966, pp 127-139. \*CSFTI TT 67-56124/89

Sanitary and Epidemiological Defense Against Biological Mass Destruction Weapons. POLISH, per, Lekarz Wojskowy. No 9, 1966, pages 773-775. \*Dept of Navy NIC

A Case of Kasabach-Merritt Sundrome, by Henryk Ficek. POLISH, per, Pediat. Pol., Vol 1, No 40, Dec 1965, pp 1409-1412. \*Dept of Navy/NMS 1246

Toxic Hepatitis in the Course of Anti-Schistomatosis Treatment with Antimonial Agents, by F. G. Alvariz, 15 pp. PORTUGUESE, per, O Hospital. Vol 67, No 3, 1965, pp 451-466. Dept of Navy/NMS 1233

A Brief History of Soviet Veterinary Medicine, by S. Ropic, 16 pp. SERBO-CROATIAN, journal, Veterinarski Arhiv. No. 11-12, Zagreb, 1967, pp. 335-347. JPRS 44,214

Repercussions of Population Explosion in Mexico on the Children, by Andros G. De Wit Greene, 29 pp. SPANISH, per, Revista Medica. 1222 T E, Sept-Oct 1966, pp 42-56. Dept of Navy/NMS 1235

Some Notes on Chondrogenesis of the Trachea and on Irregular Orientation of the Esophagus, by G. Fleischmann. SWEDISH, per, Erlangen. 1820, 48 pp. HEW-NIH 1-11-68

Donor Registration and Electronic Data Processing, by E. Freisleben. SWEDISH, per, Ugeskr Laeg. Vol 127, 1965, pp 1171-1176. HEW-NIH 1-10-68

Scientific  
Chemistry

Handbook of the Physicochemical Properties of the Elements. 850 pp.  
RUSSIAN, bk, 1967.  
Plenum Press Data Division

Organic Insertion Reactions of Group IV Elements, by E. Ya. Lukevits, M. G. Voronkov. 413 pp.  
RUSSIAN, bk, 1966.  
Consultants Bureau

Synthesis of Organosilicon Monomers, by A. D. Petrov, V. F. Mironov, et al. 492 pp.  
RUSSIAN, bk, 1964.  
CONSULTANTS BUREAU

Problems of Geochemistry. Jubilee Collection Dedicated to 70th Anniversary of Acad. A. P. Vinogradov.  
RUSSIAN, bk, Akademiya Nauk SSSR. Institut Geokhimi i Analiticheskoi Khimii imeni V. I. Vernadskogo, Moskva, Izdatel'stvo Nauka, 1965, 688 pp.  
\*CSFTI TT 68-50450

Comparative Effect of Apropidine and Atropine on the Toxicity of Some Organophosphorus Compounds, 4 pp, by K.A. Zaytseva.  
RUSSIAN, per, Farmakologiya i Toksikologiya, Vol 30, No. 5, Moscow, Sept-Oct 67, pp. 597-599.  
JPRS 44,290

Physical Chemistry of the Positron and Positronium, by V. I. Gol'danskiy.  
RUSSIAN, bk, Fizicheskaya Khimiya Pozitrona i Pozitroniya, 1968.  
Plenum Press

Changes in the Optical Characteristics of Phosphors with Change in Base Component Ratio, by V. L. Levshin, E. K. Pirinchiyeva.  
RUSSIAN, per, Fizika Astronomiya, No 5, 1967, pp 17-21.  
ACSI J-3935  
ID 2204059267

Physico-Chemical Basis of the Process of Gluing and Adhesion, by N. I. Moskvitin.  
RUSSIAN, bk, Fiziko-khimicheskie osnovy protsessov skleivaniya i prilipaniya -- Moskva, Lesnaya Promyshlennost', 1964, 248 pp.  
\*CFSTI TT 68-50368

Scientific  
Chemistry (Contd)

Study of the Composition of Terpene hydrocarbon Mixtures by the Method of Gas Liquid Chromatography, by B. K. Baboshin, 2 pp.  
RUSSIAN, per, Issledovanie sostava smesii terpenov-khuglevodivodov metodom gazo-zhidkostnoi khromatografii. -- Girdroliznaya i Lesokhimicheskaya Promyshlennost, Vol 16, No 4, 1963, pp 14-15.  
\*CSFTI TT 68-50413

Oxidation of unsaturated Compounds with Organic Peroxides, by N. Prilezhayev, 43 pp.  
RUSSIAN, per, Journal of the Russian Physical Chemistry Society, Vol 42, 1910, pp 1387-1418.  
.500019168  
Dept of Navy/NIC Trans No 2478

Oxidation of Unsaturated Compounds with Organic Peroxides, by N. Prilezhayev, 16 pp.  
RUSSIAN, per, Khimich. Obshch, Vol XLIII, No 4, pp 609-620  
P500019568  
Dept of Navy/NIC Trans No 2485

Oxidation of Unsaturated Compounds by Organic Peroxides, by N. Prilezhayeva, 47 pp.  
RUSSIAN, per, Khimicheskoye Obshchestvo, Vol 44, 1912, pp 613-647.  
P500032568  
Dept of Navy/NIC Tr No 2520

The Chemical Industry of the German Democratic Republic, by B. M. Berezov, 9 pp.  
RUSSIAN, per, Khimicheskaya Promyshlennost, No 3, 1967, pp 74-77.  
DIA LN 335-67

The Development of the Production of Pesticides in the Soviet Union, by N.N. Mel'nikov, 8 pp.  
RUSSIAN, journal, Khimicheskaya Promyshlennost', Moscow, No. 11, 1967, pp. 870-872.  
JPRS 44,340

Determination of the Heats of Formation of Indium and Gallium Phosphide by the Method of Combustion in a Oxygen-Bomb Calorimeter, by Ye.N. Yermolenko and N.N.Sirota, 2 pp.  
RUSSIAN, per, Khimicheskaya Svyaz' v Poluprovodnikakh i Tverdykh Tselakh, Nauka i Tekhnika, Minsk, 1965, pp. 128-129. P100006668  
FTD-MT-23-534-67

Scientific  
Chemistry (Contd)

Efficiency of Helium Liquefaction Cycles, by I. B. Danilov.  
RUSSIAN, per, Khimicheskoye Mashinostroyeniye, No 2, 1964, pp 5-9.  
\*FTD-MT-24-38-68

Influence of Certain Physicochemical Properties of Petroleum Emulsions on Their Phytocidal and Toxic Properties, by V. S. Lukanina, V. K. Unterberger, 7 pp.  
RUSSIAN, per, Khimiya v Sel'skom Khozyaystve, No 5, 1964, pp 23-30.  
P100017363  
FTD-HT-67-231

The Effect of Fillers on the Thickening Power of Lithium Soaps, by I. G. Fuks, V.V. Vaynshtok, 6 pp.  
RUSSIAN, per, Khimiya i Tekhnologiya Topliv i Masel, No 2, 1966, pp 24-26.  
P100013963  
FTD-HT-67-225

Investigation of the Structure of Cured Epoxy Resins from Equilibrium Swelling and Conversion of the Epoxy Groups, by M. M. Tarnorutskiy and M. I. Tikhonenko, 8 pp.  
RUSSIAN, per, Kolloidnyy Zhurnal, Vol 28, No 6, 1966, pp 876-880.  
AGSI J-3938  
ID 2204059467

Chemical Processes in a Low-Temperature Plasma, by L. S. Polak.  
RUSSIAN, rpt, Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkotemperaturnoy Plazmy, 1965, pp 546-566.  
\*FTD-MT-24-58-68

The Possible Participation of Growth Stimulants and Nucleic Acids in the Mechanism of the Action of Phytochrome, by M.B. Shternberg, 47 pp.  
RUSSIAN, bk, Regulyatory rosta rasteniy i nukleinovyy obmen, 1965, pp 65-102.  
P500019063  
Dept of Navy/NIC Trans No 2317

Scientific  
Chemistry (Contd)

Intense Microwave Radiation from a Dense, Unstable Plasma, by T. H. Jensen, F. R. Scott.  
RUSSIAN, per, Trudy International Congress on Theoretical and Applied Chemistry, 20th, International Symposium on Properties and Applications of Low-Temperature Plasma, Moskva, USSR, 15-17 Jul 1965, pp 17-25, 111-120.  
\*FTD-MT-24-58-68.

Simple Chemical Reactions in Plasmas, by W. Loechte.  
RUSSIAN, rpt, Trudy Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkotemperaturnoy Plazmy, Moskva, USSR, 15-17 Jul 1965, 1967, pp 35-39.  
\*FTD-MT-24-58-68

Experiments and Results of Measurements of Low-Temperature Plasma Conductivity, by A. Kordus.  
RUSSIAN, rpt, Trudy Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkotemperaturnoy Plazmy, Moskva, USSR, 15-17 Jul 1965, pp 229-238.  
\*FTD-MT-24-58-68

Microwave Resonance Measurements of Average Densities, by P. E. Vandenplas.  
RUSSIAN, rpt, Trudy, Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkotemperaturnoy Plazmy, Nizkotemperaturnaya Plazmy, Moskva, Jul 15-17 1965, 1967, pp 303-313.  
\*FTD-MT-24-58-68

Phase Diagrams of Systems of Hydrogen with Titanium, Zirconium, Vanadium and Niobium, by G. V. Samsonov and M. M. Antonova, 10 pp.  
RUSSIAN, per, Ukrainskiy Khimicheskii Zhurnal, Vol 32, No 6, 1966, pp 555-559.  
P100017063  
FTD-HT-23-925-67

Storage of Chemical Substances, by Ka.A. Panafidin, 5 pp.  
RUSSIAN, per, Zashchita Rasteniy, Vol 12, No. 12, Moscow, Dec 67, pp. 35-36 and 37-38.  
JPRS 44,253

Scientific  
Chemistry (Contd)

Electron Distribution in Cations of Triarylmethane  
Dyes and Extractability of Ionic Associates, by  
S. A. Lomonosov.  
RUSSIAN, per, Zh Analit Khim, Vol 22, No 8,  
1967, pp 1125-1141.  
HEW-NIH  
1-28-68

Bactericidal Effect of Sodium Metasilicate, by  
F. A. Shakhbazyan.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii  
i Immunobiologii, No 6, 1962, pp 119-121.  
\*ACSI J-4413  
ID 2204007668

Preparation of Phosphorus Alkyl (Aryl)  
Trifluoromonohydrides, by S. Z. Ivin.  
RUSSIAN, Patent No 181109.  
\*FTD-HT-23-137-68A

A Method for Obtaining Nitric Acid, by  
G.A. Skvortsov, M.M. Karavayev, et al., 2 pp.  
RUSSIAN, patent, Patent No. 183194 (Appl.  
No. 893995/23-26, April 13, 1964,) 2 pp.  
P100007068  
FTD-HT-23-953-67

High Polymer Chemistry and Physics, by  
Cheng-tu Kung & Hsueh Yuan.  
CHINESE, per, High Polymer Chemistry and Physics,  
pp 143-170.  
\*ACSI J-4344  
ID 2204005268

Chemistry in Photography, by H. J. Fijn Van Drecht.,  
DUTCH, per, Chemie and Techniek Revue, Vol 21, No  
13, 1966, pp 457-461.  
\*ACSI J-4358  
ID 2204006068

Characterisation of Enzymatic Activities in Anti-  
genic Extracts from *Aspergillus Fumigatus* after  
Agar Electrophoresis and Immunoelectrophoresis,  
by Tran Van Ky, J. Urial, 17 pp.  
FRENCH, per, Annales de l'Institut Pasteur, Vol  
111, No 2, 1966, pp 161-170. P500023068  
Dept of Navy/NIC Tr No 2515

Scientific  
Chemistry (Contd)

The Analytical Applications of the (t, n) Reaction,  
by J. Adloff, J. Schleiffer, 13 pp.  
FRENCH, per, Bull Soc Chem, No 2, 1966, pp 698-  
703.  
P911042368  
AEC ANL-TR-543

Thermal Decomposition of Barium Oxide Single  
Crystals, I. The Formal Kinetics of the Decom-  
position of Barium Oxide Single Crystals, by  
K. Tohar, H. T. Spath.  
GERMAN, per, Monatschrift fur Chemie, Vol 98, No 5,  
1967, pp 1696-1711.  
\*NASA TT F-11,594

The Effect of Particle Size on the Mechanism of  
Solid State Reactions, by W. Feitknecht, 27 pp.  
GERMAN, per, Pure and Applied Chemistry, No 8-9,  
1964, pp 423-440.  
ACSI J-3749  
ID 2204054267

The Reaction of Fillers with Polymer Solutions,  
by A. B. Taubman, S. N. Tolstaja, 14 pp.  
GERMAN, rpt, Second International Symposium on  
Glass Fiber Reinforced Plastics, Mar 13-17,  
1967, pp D2/1-D2/7. P500019368  
Dept of Navy/NIC Trans No 2504

Reaction Experiments With Mixtures of Active Fe<sub>2</sub>O<sub>3</sub>  
and CaO in the Solid State, by J. Arvid Hedvall  
and S. O. Sandberg.  
GERMAN, bk, Zeitschrift fur anorganische und  
allgemeine Chemie, Vol 240, 1938, pages 15-20.  
Dept of Navy NIC 2496

Optical Investigations on Electrochemically  
Activated and Passivated Metallic Reflectors,  
by L. Tronstad, 48 pp.  
GERMAN, per, Zeitschrift fur Physikalische Chemie,  
Series A, Vol 142, No 4, 1929.  
ACSI J-3507  
ID 2204048067

Chlorates and Perchlorates of Cobalt Ammine  
Complexes, by R. Salvadori, 19 pp.  
ITALIAN, per, Gazz Chim Ital, No 40, Pt 2,  
1909, pp 9-18.  
P911041468  
AEC-TR-6926

Scientific  
Chemistry (Contd)

Inorganic Chromatographic Adsorption, Part I, by Luigi Sacconi, 17 pp.  
ITALIAN, per, Gazz Chim Ital, No 78, 1948, pp 583-589.  
P911041068  
AEC-TR-6924

Inorganic Chromatographic Adsorption - Part II, the Buffering Action of the Surface of Activated Alumina, by Luigi Sacconi, 20 pp.  
ITALIAN, per, Gazz Chim Ital, No 79, 1949, pp 141-152.  
P911041368  
AEC-TR-6925

Ternary Oxides of 3-7-Valent Technetium with Alkalies, by Basil Kanellakopoulos, 33 pp.  
GERMAN, rpt, KFK 197, Kernforschungszentrum Karlsruhe, Feb 1964, 67 pp.  
P911016468  
AEC ANL-TR-539

Method for the Separation of Trivalent Lanthanides from each other or from Yttrium by Partition.  
GERMAN, Patent Specification 1,052,968, Supplement to the Patent 957,478, 9 pp.  
P911040968  
AEC-TR-6922

Spectrophotometric Determination of Titanium in Ferro-Niobium with Diantipyrilmethane, by R. Kajiyama.  
JAPANESE, per, Bunseki Kagaku, Vol 16, No 9, 1967, pp 908-12.  
\*NASA TT F-11,586

Synthetic Stabilizers for Photographic Emulsions, Part 6, The Effect of Phenyltetrazoles on Photographic Emulsions, by K. Murofuku, H. Ichido, 11 pp.  
JAPANESE, per, Kogyo Kagaku Zasshi, No 57, 1954, pp 232-234.  
P911044168  
AEC-TR-6923

The Rate of Quaternization of Pyridine with Dodecyl Bromide in Hydroxylic Solvents, by K. Murai and C. Kimura.  
JAPANESE, per, Kogyo Kagaku Zasshi, Vol. 68, No 11, 1965, pp 2093-2096.  
\*ACSI J-4280  
ID 2204003368

Scientific  
Chemistry (Contd)

Effect of Ethylene Oxide on Some Wood Destroying Fungi, by R. E. Kowalik, I. Sadurska.  
POLISH, per, Acta Microbiologica Polonica, Vol 9, No 1, 1960, pp 67-69.  
\*ACSI J-4357  
ID 2204005968

Control of Butyric Swelling in Fermented Cheeses, by Carol Toma.  
RUMANIAN, per, Industria Alimentara, Vol 18, No 12, 1967, pp 576-580.  
\*ACSI J-4416  
ID 2204007968

Prevention of Fungi Appearance on Sausage Casing Surface, by R. Zivanovic.  
CROATIAN, per, Tekhnologija Mesa, No 11, 1967, pp 314-316.  
\*ACSI J-4321  
ID 2204004668

Earth Sciences & Oceanography

Electrical Properties of Rocks, by Eleonora I. Parkhomenko. 314 pp.  
RUSSIAN, bk, May 1967  
Plenum Press

Problems in Deep Seismic Sounding. 166 pp.  
RUSSIAN, bk, Apr 1967  
Consultants Bureau

Seismic Love Waves, by Zoya S. Andrianova, Militsa G. Neigauz. 91 pp.  
RUSSIAN, bk, Feb 1967.  
Consultants Bureau

Introduction and Acclimatization of Nut Trees in Latvian SSR, by A. Ozol, 3 pp.  
RUSSIAN, per, Introduktsiya i akklimatizatsiya orekov v Letvliiskoi SSR. -- Akademiya Nauk Letvliiskoi SSR. Otdelenie Biologicheskikh Nauk. Biologicheskaya Nauka, Sel'skoma i Lesnoma Khozyaistva, Vol 3, 1957, pp 71-73.  
\*CSFTI TT 68-50404

Western Siberia, by G.D. Rikhter, 6 pp.  
RUSSIAN, journal, Akademiya Nauk SSSR, Institut Geografii, Moscow 1963, pp. 129-134.  
Dept of Navy NOO tr 347

Scientific  
Earth Sciences & Oceanography (Contd)

Processes of Recent Sedimentation in the Bering Sea, by A. P. Lisitsyn.  
RUSSIAN, bk, Academy of Sciences of the USSR  
Dept. of Earth Sciences, Commission of Sedimentation,  
Institute of Oceanology. Izdat. "Nauka" Moscow,  
1966, 584½ pp.  
\*CSFTI TT 68-50315

Brown Forest and Brown Pseudopodzolic Soils in the Northwest Region of the USSR, by S. V. Zonn, 21 pp.  
RUSSIAN, per, O burykh lesnykh i buropsevdopodzolistykh pochvakh Severo-zapada. -- Sbornik Nauchnykh Trudov Estonskoy Sel'skokhozyaystvennoy Akademii, Trudy Po Pochvo Vedeniyu, Tartu, Vol 4, 1966, pp 112-132.  
\*CSFTI TT 68-50445

Genesis of Soils of Western Siberia.  
RUSSIAN, bk, Genezis pochv zapadnoy Sibiri. -- Trudy Biologicheskogo Instituta, Vyp 12, Redaktsionno-Izdatel'skii Otel. Sibirskogo Otdeleniya AN SSSR, 1964, 220 pp.  
\*CSFTI TT 68-50438

Geography and Classification of the Soils of Asia, by V. A. Kovda & E.W. Lobova.  
RUSSIAN, bk, Geografiya i klassifikatsiya pochv Asii. -- Izdatel'stvo "Nauka", Moskva, 1965, 260 pp.  
\*CSFTI TT 68-50439

Geology and Mineral Resources of Cuba, by Yu. M. Pushcharovskiy, 191 pp.  
RUSSIAN, bk, Geologiya i Poleznye Iskopyemyye Kuby, 1967.  
\*ACIC TC-1381

Scheme of the Composite Utilization of Water Resources of the Lena River, by V. F. Yarosh, 8 pp.  
RUSSIAN, per, Gidrotekhnicheskoe Stroitel'stvo, No 1, 1966, pp 1-8.  
\*CSFTI TT 68-50380

Seventh Cruise D/S "OB" 1961-1962.  
RUSSIAN, bk, Glavnoe Upravlenie Gidrometeorologicheskoi Sluzhby Pri Sovete Ministrov SSSR. Arkticheskii i Antarkiticheskii Nauchno-Issledovatel'skii Institute. Trudy Sovetskoi Antarkiticheskoi Ekspeditsii, Tom 44 Nauchnye Rezul'taty i Materialy Nablyudeni Gidro. Leningrad, 1965, 223 pp.  
\*CSFTI TT 68-50312

Scientific  
Earth Sciences & Oceanography (Contd)

Deep-Seated Structure and History of the Tectonic Development of the Vilyuy Basin, by G. I. Shtekh.  
RUSSIAN, bk, Glubinnoye Stroyeniye i Istoriya Tektonicheskogo Razvitiya Vilyuyevskoy Vpadiny, 1965, 124 pp.  
ACIC TC-1221

Mountains of the Central Part of the Queen Maud Land (Eastern Antarctica), by V. I. Bardin.  
RUSSIAN, bk, Gory tzentral'noi zemli korolevy mod - Vostochnaya Antarktida) Glaciology IX Section of IGY Program No 15, Moscow, 1966, 119 pp.  
\*CSFTI TT 68-50314

Geological Factors Forming Gravity Anomalies and Isostatic Disturbances, by A. A. Borisov.  
RUSSIAN, rpt, International Geological Congress, XIII Session, Reports of Soviet Geologists, Problem 12 Isostasy, 1964, pp 57-59.  
ACIC TC-1275

Sown Winter Ranges in the Middle Asia Foothill Deserts (The Experiment of Creation of Artificial Phytocenoses), by N. I. Mechaeva & S. Ya. Prikhod'ko.  
RUSSIAN, bk, Iskusstvennye zimnie pastbishcha v predgornnykh pustynnykh srednei asii (opyt sozdaniya iskusstvennykh fito-senozov). -- Akademiya Nauk Turkmenskoi SSR, Inst Pustyn'/Inst Botaniki, Ashkhabad, 1966, 227 pp.  
\*CSFTI TT 68-50363

Cartography, by L.S. Garayevskaya, 12 pp.  
RUSSIAN, per, Izdatel'stvo Geodezicheskoiy Literature, Moscow 1955, pp. 143-155,  
Dept. of Navy NOO tr 320

Lithogenesis of Plastic Clay Sediments in Seas, by M.M. Yermolayev, 8 pp.  
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, No. 1, 1948, pp. 121-128.  
Dept of Navy NOO tr 355

Some Characteristics of Thermics and Currents of the Sea of Japan, by A.K. Leonov, 21 pp.  
RUSSIAN, per, Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva, Vol. 90, No. 3, Leningrad 1958, pp. 244-264.  
Dept of Navy NOO tr 358

Scientific  
Earth Sciences & Oceanography (Contd)

Microanistropy of Water Saturated Sands, by L. V. Gorelik & A. A. Petrenko, 6 pp.  
RUSSIAN, per, Izvestiya Vessoluznogo Nauchno-Issledovatel'skogo Instituta Gidrotekhniki, Vol 76, 1964, pp 299-304.  
\*CSFTI TT 68-50381

Climatic Ecotypes of Quercus Robur in European Russia, by S. A. Rostovtsev, 34 pp.  
RUSSIAN, per, Klimaticheskie ekotipy duba chereschatogo v evropeiskoi chasti (SSR), -- Vsesoyuznyi Nauchno-Issledovatel'skii, Instituta Lesovodstva i Mekhanizatsii-Lesnogo Khozvaistva, Sbornik Rabot po Lesnomu Khozvaistvu, No 40, 1960, pp 62-94.  
\*CSFTI TT 68-50411

Mechanical Properties of Rocks, by A. A. Skochinskogo  
RUSSIAN, bk, Mekhanicheskie svoistva gornvkh porod. -- Moskva, Izd-vo Akademii Nauk SSSR, Gosudarstvennyi Komitet po Toplivoi Promyshlennosti pri Gosplane SSSR. Institut Gornogo dela im, 1963, 168 pp.  
\*CSFTI TT 68-50377

Modern Trends in the Development of Instruments and Methods for Deep-Sea Investigations, by A.G. Kolesnikov, et al, 12 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protseessov v Okeane, Marine Hydrophysical Institute, Vol 36, Kiev 1966, pp. 3-14.  
Dept of Navy NOO tr 375

Instruments for Measuring Turbulent Pulsations of Current Velocity and Temperature at Great Depths, by A.G. Kolesnikov, et al., 11 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protseessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 15-25.  
Dept of Navy NOO tr 376

Application of Spectrographic Methods in Nuclear Hydrophysics, by B.A. Nelepo, and V.I. Romanov, 5 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protseessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 26-30.  
Dept of Navy NOO tr 377

Scientific  
Earth Sciences & Oceanography (Contd)

Apparatus for Measuring the Intensity of Cosmic Rays at Great Depths, by Yu. N. Vavilov, et al, 6 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protseessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 31-36.  
Dept of Navy NOO tr 378

Gravitational Field of the Atlantic Ocean and its Connection with the Abyssal Structure of the Earth's Crust, by Ye. D. Koryakin.  
RUSSIAN, per, Morskkiye Kavitatsionnyye Issledovaniya, Issue 2, 1958-1960, pp 36-50.  
ACIC TC-1273

Atlas of Hydrological Characteristics of the NW Part of the Black Sea, by K.A. Vinogradov, et al., 15 pp.  
RUSSIAN, bk, Naukovaya Dumka, Kiev, 1966, pp. 1-14 and 79 Charts.  
Dept of Navy NOO tr 362

New Theories of Podzolization and Solodization of Soils, by A. A. Rode, 96 pp.  
RUSSIAN, bk, Novoe v teorii opodzolaniya i osolodeniya pochv. -- Moskva, "Nauka,", 1964, 96 pp.  
\*CSFTI TT 68-50440

Essays from the History of Applied Entomology in Russia, by L. V. Chesnova.  
RUSSIAN, bk, Ocherki iz istorii prikladnoi entomologii v rossii -- Akademiya Nauk SSSR, Institut Istorii Estestvoznaniya i Tekhniki, Izdatel'stvo Akad. Nauk SSSR, Moskva, 1962, 132 pp.  
\*CSFTI TT 68-50362

Characteristics of the Distribution of Water Temperature and Salinity in the North Pacific Ocean, by S. G. Panfilova, 8 pp.  
RUSSIAN, journal, Okeanologicheskiye Issledovaniya, No. 13, Moscow, 1965, pp. 47-54.  
Dept of Navy NOO tr 289

Benthic Biocoenoses of the Western Half of the Black Sea, by K.A. Vinogradov and V.P. Zakutskiy, 4 pp.  
RUSSIAN, Okeanologiya, Vol. VI, No. 2, 1966, pp. 340-343.  
Dept of Navy NOO tr 353

Scientific  
Earth Sciences & Oceanography (Contd)

Keys for Marine Dinoflagellates, by I. A. Kiselev, 281 pp.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR Pantsyrnyye Zhgutikonostsy (Dinoflagellata) Morev i Presnykh VOD SSSR, 1950, pp. 1-280.  
\*Dept of Navy NOO tr 388

Fishes of the Sea of Japan and the Adjacent Areas of the Sea of Okhotsk and the Yellow Sea, Part 1, by G. U. Lindberg, M. I. Legeza.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR. Izdavaemye Zoologicheskim Institutom Akademii Nauk SSSR. Teleostomi XII. Acipenseriformes. Polynemiformes. Izdat. "Nauka" Moskva, No 68, 1959.  
CSFTI TT 67-51392

Fishes of the Japanese Sea and Adjacent Parts of the Okhotsk and Yellow Seas. Part 2., by G. U. Lindberg & M. I. Legeza.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR. Izdavaemye Zoologicheskim Institutom Akademii Nauk SSSR. Teleostomi XII. Acipenseriformes. Polynemiformes. Izdat. "Nauka" Moskva, No 84,  
Pt 2, 1965, 390 pp.  
\*CSFTI TT 68-50361

Basic Studies on Soil Moisture, by A. A. Rode, 664 pp.  
RUSSIAN, bk, Osnovy ucheniya o pochvennoi vlage -- Gidrometeorologicheskoe Izdatel'stvo, Leningrad,  
Vol 1, 1965.  
\*CSFTI TT 68-50441

The Problems and Nature of Investigations of Soils of Bog and Swamp Territories for Purposes of Planning Reclamation by Drainage, by P. G. Fialkovskii & V. I. Shrag, 3 pp.  
RUSSIAN, per, Zadachi i sodержanie issledovaniy pochv bolotnykh i zabolochennykh osushitel'nykh meropiyati. -- Pochvovedenie, No 4, 1955,  
pp 82-84.  
\*CSFTI TT 68-50405

Determination of the Density of the Peat Grounds, by F. R. Zaidel'man, 2 pp.  
RUSSIAN, per, Opreделение ob'emnogo vesa torfyaniistykh pochvo-gruntov. -- Pochvovedenie,  
No 5, 1955, pp 76-77.  
\*CSFTI TT 68-50406

Donets Basin Coal Mining Evaluated, by V. Kipot', 5 pp.  
RUSSIAN, newspaper, Pravda Ukrainy, Kiev,  
6 Jan 68, p. 2.  
JPRS 44,337

Scientific  
Earth Sciences & Oceanography (Contd)

The Water Exchange Between the East Siberian and Chukchi Seas Through Prolif Long--Long Strait, by Yu. A. Gorbunov, 6 pp.  
RUSSIAN, per, Problemy Arktiki, No. 1,  
1957, pp. 35-40.  
Dept of Navy NOO tr 351

On the Geological Nature of the Gravity Anomalies in one of the Sections of the Eastern Ciscaucasus, by B. A. Bryusov, A. V. Dul'nev.  
RUSSIAN, per, Razvedochnaya Geofizika, No 17,  
1966, pp 71-74.  
\*ACIC TC-1384

On the Correlation Between the Accuracy of Anomaly Determination and Network Density in Gravimetric Surveying, by A. K. Malovichko, M. S. Chadayev.  
RUSSIAN, per, Razvedochnaya Geofizika, Issue 17,  
1966, pp 75-81.  
\*ACIC TC-1385

Development of Underwater Research, by A. N. Dmitriyev.  
RUSSIAN, Razvitiye Morskikh Podvondn'Kh Isslyedovaniy, Moscow.  
Dept of Navy NIC 2495

Geological Mapping and Regional Studies, by Ye. T. Shatalov and A.P. Markovskiy, 14 pp.  
RUSSIAN, collection, Razvitiye Nauk o Zemle v SSSR, Moscow, "Nauka" Publishing House,  
1967, pp. 99-112.  
JPRS 44,221

Geology of Coal, by I.I. Gorakiy, 9 pp.  
RUSSIAN, collection, Razvitiye Nauk o Zemle v SSSR, Moscow, "Nauka" Publishing House,  
1967, pp. 261-169.  
JPRS 44,221

Crimean Underwater Scuba Project, by Galina Guseva, 4 pp.  
RUSSIAN, newspaper, Sovetskaya Rossiya, Moscow, 15 Oct 67, p. 4.  
JPRS 44,179

Toxicology of the Rare Metals.  
RUSSIAN, bk, Toksikologiya redkikh metalloy,  
1963.  
AEC-TR-6710

Scientific  
Earth Sciences & Oceanography (Contd)

Structure of the Earth's Crust by Geophysical Data, by G. Z. Gurariy, I. A. Solov'yeva. RUSSIAN, per, Trudy Akademii Nauk SSSR, Geologicheskii Institut, Vol 98, 1963, pp 1-129.  
\*ACIC TC-1394

Old Phosphorites of Asia and Their Genesis, by G. I. Bushinskii. RUSSIAN, per, Trudy Akademii Nauk SSSR, Geologicheskii Institut, Vol 149, 1966, 190 pp.  
\*CSFTI TT 68-50375

Geophysical Explorations in the Soviet Arctic and Antarctic Regions. RUSSIAN, bk, Trudy Arkticheskogo i Antarkticheskogo Nauchno-Issledovatel'skogo Instituta Glavnogo Upravleniya Severnogo Morskogo Puti ministerstva Morskogo Flota SSSR, Izd. "Morskoi Transport", Leningrad, 1962, 112 pp.  
\*CSFTI TT 68-50316

Sixth Cruise D/E "OB" 1960-1961, by A. F. Treshnikov. RUSSIAN, bk, Arkticheskii i Antarkticheskii Nauchno-Issledovatel'skii Institut Trudy Sovetskoi Antarkticheskoi Ekspeditsii. Tom. 39. Nauchnye Rezultaty i Materialy Nablyudeniia Izd. "Morskoi Transport", Leningrad, 1963, 227 pp.  
\*CSFTI TT 68-50311

Permanent Currents of the Northern Barents Sea, by V.P. Novitskiy, 32 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 64, Leningrad, pp. 1-32.  
Dept of Navy NOO tr 349

Some Data on the Water Exchange Between the Barents and Norwegian Seas, by B.P. Kudlo, 6 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 64, Leningrad, 1961, pp. 33-38.  
Dept of Navy NOO tr 350

Water and Salt Exchange Between Kubanskiye Limany and the Sea of Azov, by V.N. Drozdov, 18 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 83, Godrokhimiya Morya, Leningrad 1965, pp. 272-289.  
Dept of Navy NOO tr 374

Scientific  
Earth Sciences & Oceanography (Contd)

Coastal Currents of the Gulf of Riga, by A.N. Baranov, 7 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965.  
\*Dept of Navy NOO tr 383

Investigation of Relationship Between the Field of Atmospheric Pressure and Currents in the Gulf of Finland, by Yu. D. Mikhaylov and M.A. Babanina, 6 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 68-63.  
\*Dept of Navy NOO tr 384

Tables for the Calculation of Components of Maximum Tide Currents, by V.M. Al'tshuler, and Yu. A. Tropeznikov, 52 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, 1965.  
\*Dept of Navy NOO tr 387

The Problem of Hydrology of Coastal Antarctic Water, by B.A. Filippov, 13 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 64-76.  
\*Dept of Navy NOO tr 385

Calculation of the Actual Tide Fluctuations in Harmonic Analysis, by V.M. Al'tshuler, 9 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 96-104.  
\*Dept of Navy NOO tr 386

A Study of the Effect of the Forest on Ground Waters, by N. S. Biryukov, 21 pp. RUSSIAN, per, Issledovanie vliyaniya lesa na gruntovye vody. -- Akademiya Nauk SSSR, Trudy Laboratorii Lesovedeniya, Lesnaya Klimatologiya i Gidrologiya, Vol 3, 1961, pp 115-135.  
\*CSFTI TT 68-50409

The Principle of Dividing Absolute (Gravimetric) Deviations of Plumb Line Into Local and General (Planetary) Tilts, by V.V. Buzuk, 5 pp. RUSSIAN, per, Trudy Novosibirskogo Instituta Inzhenernoy Geodesii, Aerofotos'yemki i Kartografii, Vol. XVIII, No. 1, 1964, pp. 9-13.  
Dept of Navy NOO tr 356

Scientific  
Earth Sciences & Oceanography (Contd)

Methods of Oceanographic Investigations.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 39, 1960, 140 pp.  
\*CSFTI TT 68-50356

Methods of Marine Geological Research.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Tom 44, Izdatel'stvo Akademii Nauk SSSR, 1960, 134 pp.  
\*CSFTI TT 68-50357

Oceanographical Investigations Made by the R/V VITYAZ' in the Northern Pacific According to the International Geophysical Year Program.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Vol 45, 1961, 291 pp.  
\*CSFTI TT 68-50358

Dynamics and Morphology of Sea Coasts.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 48, 1961, 366 pp.  
\*CSFTI TT 68-50355

The Problems of Dynamic Oceanology.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii Tom 52, Izdatel'stvo Akademii Nauk SSSR, Moskva, 1961, 178 pp.  
\*CSFTI TT 68-50353

Distribution of Net-Sampled Phytoplankton as Effected by Hydrological Conditions in the North Indian Ocean, by V. Zernova and U.A. Ivanov, 8 pp.  
RUSSIAN, journal, Trudy Instituta Okeanologii, Vol LXIV, Moscow 1964, pp. 257-264.  
Dept of Navy NOO tr 331

Echo-Sounding Records of Macroplankton Concentrations and Their Distribution in the Pacific Ocean, by K.V. Beklemishev, 33 pp.  
RUSSIAN, per, Trudy Inst. Okeanologii AN SSSR, Vol. 65, 1964, pp. 197-229.  
Dept of Navy NOO tr 343

Scientific  
Earth Sciences & Oceanography(Contd)

Physical Properties of Sediments in the Pacific Ocean, by S. V. Bruyevich & E. Z. Kulik.  
RUSSIAN, per, Fizicheskiye Svoystva Osadkov Tikhogo Okeana, Khimicheskiye Protessy V Morskikh Vodakh I Osadkakh, Trudy Instituta Okeanologii, Vol 83, 1967, pp 153-168.  
Dept of Navy NOO tr 394

Benthos of Gulfs Zaliv Alasheyeva and Zaliv Leningradskiy, by V. S. Korotkevich.  
RUSSIAN, per, Bentos Zalivov Alesheyeva I Leningradskogo, Trudy Sovetskoy Antarkticheskoy Ekspeditsii, Vol 51, 1967, pp 116-124.  
Dept of Navy NOO tr 395

Biological Studies, by V. S. Korotkevich.  
RUSSIAN, per, Biologicheskije Raboty, Trudy Sovetskoy Antarkticheskoy Ekspeditsii, Vol 51, 1967, pp 125-140.  
Dept of Navy NOO tr 396

The Problem of Historical Hydrology of Seas and Oceans, by M.M. Yermolayev, 10 pp.  
RUSSIAN, per, Voprosy Geografii Klimatologii i Gidrologiya, Vol 7, pp. 27-36.  
Dept of Navy NOO tr 346

Thermal History of the Earth, by V. I. Baranov, 24 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Znizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 22-38.  
P100030068-V  
FTD-MT-64-233

Chemical Evolution of Early Organic Compounds of Earth, by G. P. Vdovykin, 6 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Znizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 39-43.  
P100030068-V  
FTD-MT-64-233

Benthic Fauna of the Norwegian Iceland Area as an Indicator of Water Regime, by Z. I. Kobyakova, 6 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 39, No. 3, Moscow, 1960, pp. 321-326.  
\*Dept of Navy NOO tr 390

Scientific  
Earth Sciences & Oceanography (Contd)

Pelagic Larvae of Some Polychaeta in the White Sea, by V.A. Sveshnikov, 12 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 39, No. 3, 1960, pp. 343-355.  
\*Dept of Navy NOO tr 389

The Deep Water Plankton of the Sea of Japan, by M. Ye. Vinogradov.  
RUSSIAN, per, O Planktone Glubinykh Vod Yaponskogo Morya. Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 500-508.  
Dept of Navy NOO tr 397

New Fish Families for the Antarctica, Rpt 2. The Family of Pearl-Eyed Fishes, by A. P. Andriyashov.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 563-566.  
Dept of Navy NOO tr 398

European Eel in Kol'skiy zaliv, by K. G. Konstantinov & V. P. Sorokin.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 621-622.  
Dept of Navy NOO tr 399

Benthos Distribution in the Central and Southern Caspian, by N. N. Romanova.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 6, 1960, pp 811-825.  
Dept of Navy NOO tr 400

On the Assumed Suppression of Invertebrates With a Long Life Cycle in the White Sea, by L. A. Kuderskiy.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 6, 1960, pp 826-831.  
Dept of Navy NOO tr 401

Quantitative Distribution of Benthos in the Eastern Bering Sea, by A. A. Neyman.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 9, 1960, pp 1281-1292.  
Dept of Navy NOO tr 402

Some Biological Observations on the White Whale From the Aircraft, by V. M. Bel'Kovich.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 9, 1960, pp 1414-1422.  
Dept of Navy NOO tr 403

Scientific  
Earth Sciences & Oceanography (Contd)

Vertical Zonality of Fish Distribution in the Upper Bathial of the Sea of Okhotsk, by V.P. Shuntov, 12 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 44, No. 11, Moscow 1965, pp. 1678-1689.  
\*Dept of Navy NOO tr 391

Zooplankton Off the West Coast of the South Caspian, by A.G. Kasymov, 5 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 45, No. 2, Moscow 1966, pp. 172-176.  
\*Dept of Navy NOO tr 392

A New Shark Species in the Tonkin Gulf, by L.N. Besednov, 3 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 45, No. 2, Moscow, 1966, pp. 302-304.  
\*Dept of Navy NOO tr 393

Relationship of Transportation to the Spectral Composition of Irridation, by A. R. Konstantinov & N. I. Goysa, 9 pp.  
UKRAINIAN, per, Trudy Ukraine Hydromet. Inst., No 41, 1964, pp 126-134.  
\*CSFTI TT 68-50435

Problems of Geotectonics in China, by Ch'en Kuo-ta, 183 pp.  
CHINESE, bk, Chung-kuo ta-ti kou-tiao wen-t'i, Nov 1965.  
\*ACIC TC-1382

Characteristics of the Cenozoic and Mesozoic Geological Structure Development and North and South China, by Huang Chen-hui, 105 pp.  
CHINESE, bk, Hua-pei hua-nan chung-sheng-tai hsin-sheng tai ti-chih kuo-tiao ta-chan te-cheng, Jun 1966.  
\*ACIC TC-1383

Analytical Solution of Radial Triangulation with a Stereocomparator, by Hsien lin Liu.  
CHINESE, per, Ta'ie hsi hsiang kao (Acta Geodetica et Cartographica Sinica), Vol 7, No 4, 1964, pp 261-274.  
\*FTD-HT-23-160-68C

Scientific  
Earth Sciences & Oceanography (Contd)

Consideration of the Influence of Near Topographic Masses in Determining Terrain Corrections with Application of Formulas for Numerical Integration, by M. Bursa.  
CZECH, per, Prace Geofysikalniho Ustava Ceskoslovenske Akademie Ved, No 217; Geofysikalni Sbornik, Vol 13, 1965, pp 43-69.  
\*ACIC TC-1396

Study of the Correlation Gravity Anomalies and Elevations in the Territory of the Czechoslovak Republic, by V. Vyskocil, I. Jakubcova.  
CZECH, per, Prace Geofysikalniho Ustava Ceskoslovenske Akademie Ved, No 219; Geofysikalni Sbornik, Vol 13, 1965, pp 87-100.  
\*ACIC TC-1397

Influence of one of the Systematic Errors in the Geographic Latitude Determination on the Form of the Geoid, by Milos Plick.  
CZECH, per, Studia Geoph et Geod, Issue 4, 1960, pp 205-216.  
ACIC TC-1300

Drainage of Bogs and Reclamation of New Land in Finland, by V. N. Gorinski, 3 pp.  
FINNISH, per, Osushenie bolot i osvoenie novykh zemel'v Finlydii. -- Zemledel'ye, Vol 25, No 5, 1963, pp 77-79.  
\*CSFTI TT 68-50403

Foundations in Absolute Differential Geometry of the Earth's Potential Field, by A. Marussi.  
FRENCH, rpt, Bulletin Geodesique, New Series No 14, 1949, pp 411-439.  
\*ACIC TC-1391

Special Report on Leveling and Gravity, by C. F. Bueschlin.  
FRENCH, rpt, Bulletin Geodesique, New Series no 67, 1960, pp 246-298.  
\*ACIC TC-1386

The Rehabilitation of Classical Geodesy and Three-Dimensional Geodesy, by J. J. Levallois.  
FRENCH, rpt, Bulletin Geodesique, New Series No 68, 1963, pp 193-199.  
\*ACIC TC-1389

Scientific  
Earth Sciences & Oceanography (Contd)

Selected Portions from Book: International Yearbook of Cartography, by Edward Imhof.  
FRENCH and GERMAN, bk, Annuaire International de Cartographie (Internationales Jahrbuch fuer Kartographie), 1966, pp 25-31; 33-39, 41-45; 81-90; 103-111; 114-119; 122-135.  
\*ACSI J-4142  
ID 2204001368

Askania Gravimeters Model GS-11, GS-12, Tide Recorder.  
GERMAN, rpt, Askania Pamphlet No 1442d, 1957, pp 3-11.  
ACIC TC-1352

Performance and Capability of Modern Askania Gravimeters, by R. Schulze.  
GERMAN, rpt, Special Publication 1442h, Reprint from Askania-Warte, No 53, 1958, pp 3-7.  
ACIC TC-1353

Comparison of the Bretschneider Relations Concerning the Distribution of the visually-Observed Waves and the Spectrum of the Sea Waves with the Results of the Evaluation of Wave Records from the Helgolander Bucht (Deutsche Bucht), by Jurgen Piest, 7 pp.  
GERMAN, per, Deutsche Hydrographische Zeitschrift, Vol. 16, No. 2, Hamburg, 1963, pp. 57-63.  
Dept of Navy NOO tr 322

Swell in the Atlantic and on the West Coast of Africa, by Prof. Otto Jessen, Ph.D., 10 pp.  
GERMAN, per, Petermanns Geographische Mitteilungen, Vol. 95, First Quarterly, Gotha, Germany, 1951, pp. 7-16.  
Dept of Navy NOO tr 319

On the Problem of Peeling of Heterogeneous Spheroidal Figures of Equilibrium, by Karl Ledersteger.  
GERMAN, per, Schweizerische Zeitschrift fur Vermessung, Photogrammetrie, und Kulturtechnik, No 6, 1966, pp 1-14.  
ACIC TC-1299

Statistical Investigations of Foehn in the Reuss Valley and Attempt at Objective Foehn Forecasting for the Station at Altdorf, by Richard Widner, 56 pp.  
GERMAN, per, Vierteljahrsschrift der Naturforschenden Gesellschaft in Zurich, 4th Quarter Issue, 31 Dec 1966, pp 331-375.  
\*ACSI J-3348  
ID 2204042067

Scientific  
Earth Sciences & Oceanography (Contd)

Gravity Prediction and Adjustment Computation,  
by H. Moritz.  
GERMAN, per, Zeitschrift für Vermessungswesen,  
Vol 90, No 6, Jun 1965, pp 181-184.  
\*ACIC TC-1392

Genetic Soil Types, Subtypes and Categories of  
Hungary: A Systematic List. Sect 2, "A Genetic  
Manual of Soil Mapping Methods," by Darab Katalin,  
90½ pp.  
HUNGARIAN, per, A Genetikus uzemi talajterkepezes  
modszerekorve. ONMI Kiadvanyai. Genetikus Talaj-  
terkepek. Foszerkeszto: Gerei Laszlo. Orszagos  
Mesogazdasagi Minosegvizsgalo Intezet. Ser I,  
No 9, 1966, pp 165-254.  
\*CSFTI TT 68-50437

Dynamic Methods for the Geodetic Application of  
Artificial Satellites, by P. Biro.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 4, 1967, pp 241-249.  
\*ACIC TC-1398

Determination of the Relative Position of Two  
Earth Ellipsoids on the Basis of the Triangulation  
Net, by E. Honyi.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 4, 1967, pp 263-268.  
\*ACIC TC-1399

Hungarian-Soviet Relations in Geodesy and  
Cartography, by Istvan Joo, Odon Bereczky, 7 pp.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 6, 1967, pp 401-405.  
JPRS 44106

Hungarian Genetic Soil Map, by Pal Stefanovits  
& Szucs Laszlo, 75 pp.  
HUNGARIAN, per, Magyarorszag genetikus talajterkepe.  
- ONMI Kiadvanyai. Genetikus Talajterkepek.  
Foszerkeszto: Gerei Laszlo. Orszagos Mesogazdasagi  
Minosegvizsgalo Intezet. Budapest. Ser I, No 1,  
1961, 75 pp.  
\*CSFTI TT 68-50436

The Present State of Knowledge of Carsismo  
and Subterranean Hydrography in Calabria,  
by L. Lacquaniti, 6 pp.  
ITALIAN, per Atti Del XVII Congresso  
Geografico Italiano, 1957, pp 113-123.  
DIA LN 414-67

Scientific  
Earth Sciences & Oceanography (Contd)

Tasks of the Polish Ministry of Shipping in  
1967, by Janusz Burakiewicz.  
POLISH, per, E. Technika i Gospodarka Morska,  
Vol 17, No 1(187), 1967, pp 1-3.  
\*CFSTI TT-67-56124/9

An Experimental Method of Measurements with the  
Gravimeter Askania GS-11 on a Frozen Sea, by  
Tadeusz Chojnicki.  
POLISH, per, Prace Instytutu Geodezji i Karto-  
grafii, Vol 13, Copy 1 (28), 1966, pp 127-141.  
ACIC TC-1333

Expansion of Geological Explorations, by  
Al. Codarcea, 3 pp.  
RUMANIAN, newspaper, Rominia Libera, 30 Dec  
67, p. 3.  
JPRS 44,330

Isomagnetic Charts of Boliva, Reynaldo Salgueiro  
Pabon.  
SPANISH, per, Boletin del Instituto Boliviano del  
Petroleo, Vol 1, No 2, June 1961, pp 27-45.  
ACIC TC-1280

Electronics & Electrical Engineering

Cathode Processes in the Mercury Arc, by  
I. G. Kesayev, 345 pp.  
RUSSIAN, bk, 1964.  
CONSULTANTS BUREAU

Certain Questions of Telemetry of Parameters in  
Systems with Dispersed Objects, by V. I.  
Kurochenko and N. I. Babanin, 21 pp.  
RUSSIAN, bk, AN KIROSSR. Institut Avtomatiki.  
Primeneniye Veskontaktnykh Elementov v Sistemakh  
Avtomaticheskogo Kontrol'va, 1963, pp 1-17.  
PI00030168  
FTD-MT-65-82

High-Speed Immediate-Access Memory with Associa-  
tive Address Selection Equipped with Tunnel Dio-  
des, by Ya. N. Pavlovskiy, R. S. Dokin.  
RUSSIAN, per, AN LatSSR. Institut Elektroniki i  
Vychislitel'noy Tekhniki. Avtomatika i  
Vychislitel'naya Tekhnika, No 14, 1966, pp 123-  
132.  
\*FTD-MT-24-43-68

Scientific  
Electronics & Electrical Engineering (Contd)

Matrix Computer for Calculating Correlation Functions, by O.V. Ulin and V.K. Petunin, 9 pp.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye. Institut Avtomatiki i Elektrometrii. Avtomaticheskiy Kontrol' i Elektricheskiye Izmereniya, Vol. 2, 1964, pp. 78-83. F100008968  
FTD-MT-23-830-67

Certain Informational Criteria in the Control of Multiple-Connected Systems, by K. D. Zhuk, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 8-17.  
F100028668-V  
FTD-MT-65-551

Control Synthesis of Arithmetical Unit of a Digital Computer, by V. I. Kartashev, 8 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 18-25.  
F100028668-V  
FTD-MT-65-551

On One Method of Synthesis of Automatic Multi-circuit Systems, by K. D. Zhuk, 6 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 26-31.  
F100028668-V  
FTD-MT-65-551

Generator of Functions for the Solution of Integral Equations in Electronic Models, by A. F. Verlan', 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 32-37.  
F100028668-V  
FTD-MT-65-551

On One Particular Law of Optimum Control Regarding High Speed Operation, by A. A. Snegur, A. D. Semenyuk, 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 38-42.  
F100028668-V  
FTD-MT-65-551

Scientific  
Electronics & Electrical Engineering (Contd)

Investigation of Optimum (By High Speed Operation) Systems of the Second Order, by D. V. Karachenets, V. V. Kolesnik, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 43-52.  
F100028668-V  
FTD-MT-65-551

Automation of Complicated Physical Experiments and Industrial Tests with Help of Digital Computers, by V. M. Yegipko, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 53-61.  
F100028668-V  
FTD-MT-65-551

Certain Questions of Exploitation Reliability of Digital Calculating and Controlling Machines, by L. A. Korytnaya, 12 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 62-73.  
F100028668-V  
FTD-MT-65-551

Selection of the Type of Standards for Correlation Reading Automata, by V. K. Yeliseyev, 7 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 80-86.  
F100028668-V  
FTD-MT-65-551

Equipment of the Treatment of Optical Information Using General Purpose Computers, by V. I. Rybak, 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 87-91.  
F100028668-V  
FTD-MT-65-551

Question of Automatic Treatment of Sound Information, by V. G. Zaytsev, 11 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 92-102.  
F100028668-V  
FTD-MT-65-551

Scientific  
Electronics & Electrical Engineering (Contd)

Calculation of Photoelectric Systems with Scanning Beam, by V. K. Yeliseyev, 8 pp. RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 103-110. P100028668-V  
FTD-MT-65-551

Investigation of High Speed Optimum Operation of Systems of the Second Order (A Case of Complex Conjugate Roots of a Characteristic Equation of the Linear Part), by D. V. Karachenets, 8 pp. RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 111-119. P100028668-V  
FTD-MT-65-551

A Method of Minimizing Microprograms, by T.F. Slobodyanyuk, 11 pp. RUSSIAN, per, AN UkrSSR. Kiberneticheskaya Tekhnika, Kiev, 1965, pp. 72-80. P100008668  
FTD-HT-23-600-67

Special-Purpose Analog Computers Assembled from Standard Modules, by V. L. Ugurtsov. RUSSIAN, per, AN UsSSR. Institut Kibernetiki i Vychislitel'nykh Tsentrom. Voprosy Kibernetiki i Vychislitel'noy Matematiki, No 2, 1966, pp 27-37.  
\*FTD-HT-23-143-68

Comparing the Redundancies Used for Enhancing Reliability of Information Systems, by G. P. Beznosov. RUSSIAN, per, Avtomatich Kontrol' i Metody Elektrich Issledovaniy. Tr Konf. t. I: Teoriya Ispolit' Info Sistem, 1966, pp 77-83.  
\*FTD-HT-23-146-68

Optimal Encoding of Telemetry Signals, by V. A. Vittikh. RUSSIAN, per, Avtometriya, No 3, 1965, pp 26-33.  
\*FTD-HT-23-83-68

Adaptive Methods of Analog-to-Digital Conversion, by A. Sovin'skiy, 9 pp. RUSSIAN, per, Avtometriya, No. 4, Novosibirsk, 1967, pp. 90-97.  
JPRS 44,403

Scientific  
Electronics & Electrical Engineering (Contd)

Approximate Calculation of Acoustic Insulation of Lightweight Multilayer Structures Using the M-20 Electronic Computer, by I. V. Volkov, L. Ya. Kudisova. RUSSIAN, bk, Bozba s Shumami i Vibratsiyami, 1966, pp 256-258.  
\*FTD-HT-23-102-68

Academician Glushkov Foretells Future of Cybernetics, by V. Glushkov, 7 pp. RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 2, Moscow, Jan 68, p. 41.  
JPRS 44,415

Optimum Design of the Salient-Pole Inductor in Machines Synchronous, by A. Avetisyan. RUSSIAN, per, Elektrichestvo, No 6, 1965, pp 45-50.  
\*FTD-HT-23-142-68

Growth of a Long Spark and Lightning, by I. S. Stekol'nikov, A. V. Shkilev. RUSSIAN, per, Energeticheskii Institut. Problemy Elektro-Energetiki, 1966, pp 97-110.  
\*FTD-MT-24-46-68

The Water Conditions in Thermal Electric Stations (Conventional and Atomic), by P. Akol'zin, V. V. Gerasimov, 251 pp. RUSSIAN, bk, Energiya, 1965, Chapters VII, VIII, IX, XI, XIII, XIV and XVI.  
P500032468-V  
Dept of Navy/NIC Trans No 2151

Ejectors into Trailwater in Integral Hydroelectric Plants, by S. M. Slisskii. RUSSIAN, bk, Eshketsiya v nizhnii b'ef na sovmeshchennykh gidroelektrostantsiyakh, - Moskva, Gosudarstvennoe Energeticheskoe Izd-vo, 1953, 156 pp.  
\*CSFTI TT 68-50376

Value of Computers in the Management of Pharmacies, by I.K. Agalakova and N.A. Agalakov, 6 pp. RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 6-10.  
JPRS 44,354

Scientific  
Electronics & Electrical Engineering (Contd)

Punched Card Analysis of Ex Tempore Prescriptions Compounded at Pharmacies, by F.A. Konev and K.F. Kulesh, 7 pp.  
RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 10-13.  
JPRS 44,354

All Hospital Pharmacies Should be Operated on a Cost Accounting Basis, by M.N. Bushkova, et al, 6 pp.  
RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 15-18.  
JPRS 44,354

Development of Electrical Energy in USSR.  
RUSSIAN, per, Gosudarstvennyi Proizvodstvennyi Komitet po Energetika i Elektrifikatsii SSSR. Institut Orgenergostroi. Moskva, Izd-vo "Energiya.", 1965, 89 pp.  
\*CSFTI TT 68-50383

Limitation of Overvoltage in Tuned Electrical Transmission During Single-Phase Short-Circuit, by O. V. Ollshevskii & G. I. Samorodov, 7 pp.  
RUSSIAN, per, Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR, Seriya Tekhnicheskikh Nauk, Vol 6, No 2, 1964, pp 9-15.  
\*CSFTI TT 68-50382

Concerning Systems that Interact with a Finite Velocity of Signal Propagation, by G. I. Kostychev, 5 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 5-6.  
P100029363-V  
FTD-MT-65-72

Computing the Electron Conductivity of the Second Resonator Gap in Klystrons with Large Bunching Parameters, by G. P. Petin & A. Ya. El'Bert.  
RUSSIAN, per, Izvestiya Vysshikh Zavedeniy -- Radiotekhnika, no 3, 1966, pp 387-389.  
\*ACSI J-4348  
ID 2204005468

Electromyographic Research on Speech Sounds, by R.S. Dadshv and Ya. V. Shtil'man, 18 pp.  
RUSSIAN, bk, Kibernetika, Moscow, 1967, pp. 230-252.  
JPRS 44,331

Scientific  
Electronics & Electrical Engineering (Contd)

An Inductive Relaxation Oscillator Based on a Tunnel Diode as a Frequency Converter in an Astatic Voltage Stabilizer, by P. P. Treys.  
RUSSIAN, bk, Leningrad, Institut Elektromekhaniki. Sistyemy Upravleniya i Peredachi Informatsii v Elektroenergetike, 1966, pp 184-190.  
\*FTD-MT-24-39-68

Soviet Science Fiction Writers Comment on Future of Cybernetics, 8 pp.  
RUSSIAN, newspaper, Literaturnaya Rossiya, No. 51, Moscow, Dec 67, pp. 18-20.  
JPRS 44,192

A Memory Device Version Based on Cylindrical Magnetic Film, by Ya. A. Khetagurov.  
RUSSIAN, per, Magnitnyye Elementy Vychislitel'noy Tekhniki. Trudy Soveshchaniya, Pt 2, 1966, pp 146-152.  
\*FTD-MT-23-93-68

One Design Variant of a Magnetic Thin-Film Memory with a Planar Substrate, by Ya. A. Khetagurov.  
RUSSIAN, rpt, Magnitnyye Elementy Vychislitel'noy Tekhniki. Trudy Soveshchaniya, Pt. 2, 1966, pp 107-114.  
\*FTD-MT-23-93-68

Models of Real Media and Seismic Wave Fields.  
RUSSIAN, bk, Modeli Real'nykh Sred i Seismicheskie Volnovye Polya, 1967.  
Plenum Press

Device for Reading and Printing Alphabet Digital Information from Perforation Cards [USP-1] by Ya. P. Shturman, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskaya Informatsiya, No 1, 1965, pp 29-31. P100029568  
FTD-MT-66-582

Principles of Information Theory Illustrated, by V. Saiforov, 4 pp.  
RUSSIAN, per, Nedelya, No 46, 5-11 Nov 1967, p 10.  
JPRS 44071

Fuel Cells. Their Electrochemical Kinetics. 121 pp.  
RUSSIAN, rpt, Papers Presented at the Second Conference on Fuel Cells, Moscow, 1966.  
CONSULTANTS BUREAU

Scientific  
Electronics & Electrical Engineering (Contd)

Plasma and Electron Amplifiers and Superhigh Frequency Oscillators, by G. A. Bernashevskiy, Ye. V. Bogdanov.  
RUSSIAN, bk, Plazmennyye i Elektronnyye Usiliteli i Generatory Svch., 1965, 96 pp.  
\*FTD-MT-24-30-68

Semiconductor Compounds; Their Production and Properties. Chalcogenides of Group II, IV, and V Elements, by N. Kh. Abrikosov.  
RUSSIAN, bk, Poluprovodnikovyye Soedineniya, Ikh Polucheniya i Svoystva. Khal'kogenidy Elementov II, IV, i Grupp Periodicheskoi Sistemy, 1967, PLENUM PRESS

Transmission of Information from a Measurement-Recording Center to a Computer Through a Communication Line, by Yu. V. Gavrilov.  
RUSSIAN, per, Fribory i Tekh. Eksper., No 4, 1967, pp 92-98.  
\*Dept of Navy/APL/JHU J-1133

Miniature Semiconductor Transducer for Measuring Pressure and Temperature, by V. M. Akhutin & L. A. Osipovich.  
RUSSIAN, per, Fribory i Sistemy Upravleniya, Vol 7, 1967, pp 50-51.  
\*Dept of Navy/APL/JHU J-1124

Problems of Synthesis of Digital Automata, by V. G. Lazarev, A. D. Zakrevskiy.  
RUSSIAN, bk, Problemy Sinteza Tsifrovyykh Avtomata, 1967.  
Plenum Press

Programming, by N. A. Krinitskiy.  
RUSSIAN, bk, Programirovaniye, 2 Ed. 1966, 599 pp.  
\*FTD-HF-23-139-68C

Computer Center of Latvian State University Described, by Il'ya Lyumkis, 7 pp.  
RUSSIAN, newspaper, Sovetskaya Latvija, Riga, 12 Nov 67, p. 2.  
JPRS 44,292

Microminiature Aeronautical Digital Computers, by V. M. Dollkart, G. K. Novik.  
RUSSIAN, bk, Sovetskoye Radio, 1967, 248 pp.  
\*FTD-MT-24-27-68

Scientific  
Electronics & Electrical Engineering (Contd)

Input and Output Devices for Electronic Computers, by A.M. Bondarev, 3 pp.  
RUSSIAN, per, Standartizatsiya, No. 3, 1964, pp. 44-45. P100008268  
FTD-HT-23-842-67

Theory of Automatic Control Systems, by V. A. Besekerskiy and Ye P. Popov, 903 pp.  
RUSSIAN, bk, Teoriya Sistem Avtomaticheskogo Regulirovaniya, 1966, 992 pp.  
ACSI J-3765  
ID 2204054967

Thermal Stability of Transistors and Reliability of Radio Equipment, by Yu. A. Shifrin-Dryzhalovskiy, 228 pp.  
RUSSIAN, bk, Teplovaya Ustoychivost' Tranzistorov i Nadezhnost' Radioelektronnoy Apparatury, 1966.  
ACSI J-3509  
ID 2204048267

Correcting Arithmetic Codes in a Residual Class System, by S. B. Fayn.  
RUSSIAN, per, Trudy AN GruzSSR. Vychislitel'nyy Tsentr. Voprosy Vychislitel'noy Tekhniki, Vol 7, No 2, 1966, pp 60-91.  
\*FTD-HT-23-151-68C

Dependence of Coefficient of Friction on the Difference of Potentials of Rubbing Metals, by A. A. Dychko, 7 pp.  
RUSSIAN, per, Trudy Omskogo Instituta Inzhenerov Zheleznodorozhnogo Transporta, Vol 43, 1963, pp 117-125.  
P100014468  
FTD-MT-66-38

Transmission of Alternating Electrical Current at Distances of 1500-3000km, by V. K. Shcherbakov.  
RUSSIAN, per, Trudy Sibirskogo Nauchno-Issledovatel'skogo Instituta Energetiki, Novosibirsk, Redaktsionno-Izdatel'skii Otdel Sibirskogo Otdeleniya AN SSSR, Vol 1, No 20, 1964, 174 pp.  
\*CSFTI TT 68-50379

Transmission of Electrical Energy at Distances of 1500-3000km, by V. K. Shcherbakov.  
RUSSIAN, per, Trudy Transportno-Energeticheskogo Instituta, Novosibirsk, Izd-vo Sibirskogo Otdeleniya AN SSSR, Vol 16, 1963, 141 pp.  
\*CSFTI TT 68-50378

Scientific  
Electronics & Electrical Engineering (Contd)

Certain Electrical Properties of Thin Films of the GaTe System, by V. I. Gramatskiy and V. P. Musninskiy, 6 pp.  
RUSSIAN, per, Kishinev. Universitet. Uchenyye Zapiski, Vol 69, 1964, pp 38-40.  
P100019968  
FTD-HT-23-634-67

Radio Electronic Complexes Aboard Submarines, by V. F. Drobolenkov & V. N. Gerasimov.  
RUSSIAN, bk, Ugroza iz Glubini, 1966, pp 67-80.  
Dept of Navy NTC tr 2532

Unified Complex of Ferrite-Transistor Elements for 200 kHz Cycling Rates, by B. A. Yefimov, G. N. Chizhukhin.  
RUSSIAN, per, Vesoyuznoye Soveshchaniye po Magnitnym Elementam Avtomatiki i Vychislitel'noy Tekhniki, 10th, Kaunas, 1964. Magnitnyye Elementy Vychislitel'noy Tekhniki; Trudy Soveshchaniya, Pt 2 Moscow, Izd-vo Nauka, 1966, pp 49-56.  
\*FTD-HT-24-41-68

Foreword, by G.A. Zlobin, 5 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About the Identification of Images of Spatial Objects, by L.A. Rastrigin, 7 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

All-Union Conference on Problems Pertaining to the Use of Cybernetics in Law, 7 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Cybernetic Simulation in the Study of Handwriting, by R.M. Lantsman, 8 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Certain Questions Concerning the Theory of Identification of Objects with the Use of the Apparatus of Projective Geometry, by V. Yurans, 11 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Prospects Involved in the Utilization of Cybernetic Achievements in the Operation of Legal Establishments, by A.R. Shiyakhov, 15 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

The Utilization of Cybernetic Machines and Punchcard Computers in Concrete Sociological Study of the Causes of Crime and the Personality of the Criminal, by V.Ye. Chugunov, et al., 15 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About the Question of Formalizing a Branch of the Law, by V.M. Kogan, 17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

On the Utilization of Mathematical Methods in Expert Handwriting Analysis, by V.P. Vlasov, 17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Questions Concerning an Improvement in Criminal Record Keeping, by V.V. Pankratov, 17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Handling of Legal Evidence in the Light of Cybernetic Ideas, 18 pp., A. I. Trusov. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About the Programming of the Process Involving the Application of Legal Standards by V.N. Kudryavtsev, 20 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Certain Questions Concerning Evaluation as a Quantitative Characteristic of the Reliability of Proof, by A.A. Eysman, 20 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Cybernetics and the Resolution of Certain Legal Tasks, by A.F. Deyev, et al, 22 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Mathematical Methods of Investigation in Criminology, by Z. I. Kirsanov, 24 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Questions Pertaining to Investigative Reasoning in the Light of Information Theory, by A.R. Ratinov, 24 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About a Reference-Information Service in the Field of Law, by D.A. Karimov, 26 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Utilization of the Apparatus of Projective Geometry in the Process of the Identification of Individuals by Their Photographs, by R.E. El'bur, 27 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Cybernetics and Certain Questions Pertaining to Legal Graphology, by L.G. Edzhubov, 30 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

A Study of Law Using Methods of Mathematical Logic, by O.A. Gavrilov, 32 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Algorithm and Control System for Open-Hearth Furnaces, by M.I. Korobko and G.F. Martynyuk, 17 pp. RUSSIAN, per, Moscow. Vychislitel'nyy Dlya Avtomatizatsiya. Proizvodstva, 1964, pp. 107-117. P100008768  
FTD-HT-23-895-67

Method for Calculating Supersonic Flow Past Blunt Bodies with a Detached Shock Wave, by S. M. Gilinskiy. RUSSIAN, per, Vychislitel'nyy Metody i Programirovaniye, No 6, 1967, pp 173-205.  
\*FTD-MT-24-33-68

Growing Semiconductors From Solutions, by T. G. Petrov, E. B. Treivus, et al. RUSSIAN, bk, Vyrashchivanie Kristallov iz Rastvorov, 1967.  
PLENUM PRESS

Analog Computer for Performing Conformal Transformations, by A.N. Suprun, 3 pp. RUSSIAN, patent, Patent No. 155626 (Appl. No. 792187/26-24, August 25, 1960), 2 pp. P100006368  
FTD-HT-23-832-67

Scientific  
Electronics & Electrical Engineering (Contd)

Antenna Array, by A.F. Yakovlev, 4 pp.  
RUSSIAN, patent, Patent No. 166750 (Appl No.  
875715/26-9, Jan 13, 1964, 2 pp. P100007868  
FTD-HT-66-664

A Three-Component Piezoelectric Accelerometer, by  
V. I. Stepanov.  
RUSSIAN, Patent No 188767, Class 42.  
\*FTD-HT-23-137-68F

Dispersive Type Delay Lines as a Solution to  
Linear FM Pulse Compression, by Tuong Shih-Chia  
and Fong Ming-Yu, 16 pp.  
CHINESE, per, Acta Electronica Sinica, No 4,  
Dec 1965, pp 379-387.  
ACSI J-3806  
ID 2204056167

A New Method for Capacitance Measurement,  
by Chiu Shin Min and Wu Jen Chi, 9 pp.  
CHINESE, per, Tien Tzu Chi Shu, No 11,  
1965, pp 19-20 & 23.  
P100015068  
FTD-HT-66-635

Electrical Engineering Faculty of Czech Advanced  
School of Technology in Prague, by Josef Eichler,  
4 pp.  
CZECH, per, Ceskoslovenske Speje, Vol 12, No 6,  
Dec 67, pp 20-21.  
JPRS 44,227

Computation of Gas Turbine Cycles by Means of  
Computers, by B. Kurs.  
CZECH, per, Strojirenstvi, Vol 16, No 1, 1966,  
pp 7-8.  
\*FTD-HT-23-752-67

Reliability of Components and Systems, by F.  
Zelany.  
CZECH, per, Strojirenstvi, Vol 16, No 12, Dec  
1966, pp 883-890.  
\*ACSI J-4277  
ID 2204003268

The Measurement of Post Impact Delay and Tra-  
jectory Duration Using Electromagnetic Phenomena  
Produced by Detonations, by H. J. DeBruine.  
FRENCH/GERMAN, Commissie Proefneming - Handleiding  
Deel XA Hoofdstuk. 22-la RvF. 193/67.11, pp 61-  
109.  
\*ACSI J-4437  
ID 2204008568

Scientific  
Electronics & Electrical Engineering (Contd)

Contact-Free Distance Measurement by Means of  
a Static Test Signal, by W. T. Muller and  
F. H. Lange, 14 pp.  
GERMAN, per, Messen, Steuern, Regeln, No 12,  
1964, pp 403-407.  
P100013768  
FTD-HT-23-640-67

On the Possibilities of Coupling the ZRA 1 Digital  
Computer with Analog Systems, by P. Hufeld.  
GERMAN, per, Messen, Steuern, Regeln, No 12, 1966,  
pp 427-430.  
\*FTD-MT-23-96-68

Determination of the Dielectric Constant  
and the Loss Factor of Foam-Base  
Dielectrics, by L. Grassler, 10 pp.  
GERMAN, per, Nachrichtentechnik, No 2,  
1965, pp 71-74. P100016168  
FTD-HT-66-591

On the Direct Current and Low Frequency Behavior  
of the MOS Transistor, by R. Paul.  
GERMAN, per, Nachrichtentechnik, No 3, 1967,  
pp 87-92.  
\*FTD-HT-23-157-68

Investigation of the Firing of Spark Gaps in the  
Marx Generator Circuit, by Arnold Rodewald.  
GERMAN, rpt, Untersuchungen Uber die Zundung der  
Schaltfunkenstrecken in der Marxschen Vervielf-  
fachungsschaltung, 1966.  
\*Dept of Navy NIC

Correlation of Digital Signals With Respect to  
Switching Circuit Analysis and Synthesis, by  
J. Bankowski.  
POLISH, per, Archiwum Automatyki i Telemekhaniki,  
Vol 12, No 1, 1967, pp 61-76.  
\*FTD-HT-23-149-68C

Correction of a Contradiction Between the  
Electrodynamic Theory and the Theory of Relativity  
of Electromagnetic Masses, by Enrico Fermi.  
SPANISH, per, Nuovo Cimento, No 25, 1923, pp 159-  
170.  
Dept of Navy NIC tr 2531

Scientific  
Energy Conversion (Non-Propulsive)

New Design Standards for Power Stations and Heating Systems, 6 pp.  
RUSSIAN, journal, Energetik, No. 12, Moscow, Dec 67, pp. 34-35.  
JPRS 44,377

Leningrad Metal Plant Participates in Electrification of Soviet Union, by P.S. Chernyshev, 17 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct. 67, pp. 6-11.  
JPRS 44,265

Development of Boiler-Furnace Design at the Barnaul Boiler Plant, by V.D. Zorichev, and N.V. Popov, 10 pp.  
RUSSIAN, monthly, Leningrad, Energomashinostroyeniye, No. 10, Oct 67, pp. 11-14.  
JPRS 44,265

Gas Turbine Building at Nevskiy Machine Building Plant Imeni Lenin, by Prof. L. A. Kuznetsov, 14 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 15-19.  
JPRS 44,265

Certain Problems in Hydraulic Turbine Building, by Prof. G.S. Shchegolev, 10 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 19-21.  
JPRS 44,265

Turbine Building Development at the Turbomotorny Plant, by D.P. Buzin, 17 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 22-27.  
JPRS 44,265

First Soviet Steam-Gas Installation With Gas Discharge into Boiler, by D.V. Litvinov et al, 7 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 34-36.  
JPRS 44,265

Scientific  
Energy Conversion (Non-Propulsive) (Contd)

Investigation and Calculation of Axial-Turbine Stages, by M. Ye. Deych, B. M. Troyanovskiy, 587 pp.  
RUSSIAN, bk, Issledovaniya i Raschety Stupeny Osevykh Turbin, 1964, pp 1-627.  
P100030368-V  
FTD-MT-65-409

Strength of Turbine Disks, by V. P. Rabinovich. RUSSIAN, bk, Mashinostroyeniye, 1966, 149 pp.  
\*FTD-MT-23-78-68C

Electric Power Development in Egypt, 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 2.  
JPRS 44,183

The Electricity of the High Dam is Now a Reality, ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 3.  
JPRS 44,183

Development of Electric Power Consumption in our Country in the Past 75 Years, 7 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 4.  
JPRS 44,183

The Significance of the Success of Arab Technology in Completing the Electrical Projects of the High Dam Before Their Target Date, 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 5.  
JPRS 44,183

Medium Voltage Switching Facility Construction in Power Supply Enterprises, by Walter Dressel, Helmut Briest, 11 pp.  
GERMAN, per, Energietechnik, Vol 17, No 11, Nov 1967, pp 510-513, 515.  
JPRS 44060

Scientific  
Materials

Electron Diffraction Analysis of Clay Mineral Structures, by Boris B. Zvyagin. 364 pp.  
RUSSIAN, bk, Mar 1967  
Plenum Press

Handbook of X-Ray Structure Analysis of Polycrystalline Materials, by Lev Mirkin. 731 pp.  
RUSSIAN, bk, 1964.  
Consultants Bureau

High-Temperature Nonmetallic Thermocouples and Sheaths, by Grigoriy Valentinovich Samsonov.  
RUSSIAN, bk, Feb. 1967, 145 pp.  
Consultants Bureau

Metacolloids in Endogenic Deposits, by Lev M. Lebedev. 296 pp.  
RUSSIAN, bk, Sep 1967.  
Plenum Press

Principles of Lithogenesis. Vol 1, by N. M. Strakhov. 245 pp.  
RUSSIAN, bk.  
Consultants Bureau

Principles of Lithogenesis. Vol 2, by N. M. Strakhov. 550 pp.  
RUSSIAN, bk,  
Consultants Bureau

Principles of Lithogenesis. Vol 3, by N. M. Strakhov. 500 pp  
RUSSIAN, bk,  
Consultants Bureau

Ultraviolet Spectra of Elastomers and Rubber Chemicals, by V. S. Fikhtengol'ts, R. V. Zolotareva, et al. 170 pp.  
RUSSIAN, bk, 1966.  
Plenum Press Data Division

Science of Aviation Material, by A. E. Leykin, E. S. Porotskiy, 362 pp.  
RUSSIAN, bk, Aviatsionnoye Materialovedeniye, 1964, pp 1-459. P100035868-V  
FTD-MT-65-270

Changes in the External Shape of the Cementite and in the Mechanical Properties During Strain Ageing of Spring Steels, by N. A. Kotkis.  
RUSSIAN, per, Avtom. prom., Vol 32, June 1966, pp 39-41.  
\*BISI 6210

Hard-Alloy-Tipped, Assembled Sector Circular Saws, by V. A. Trusov & L. P. Trusova.  
RUSSIAN, per, Dereboobratyvyayushchaya Promyshlennost, Moskva, Vol 12, No 7, 1963, pp 25-26.  
\*CSFTI TT 68-50375/1

Scientific  
Materials (Contd)

On the Nature of the Deformation of Frame-Saw Blades Where They are Rolled, by V. F. Fonkin.  
RUSSIAN, per, Dereboobratyvyayushchaya Promyshlennost, Moskva, Vol 12, No 8, 1963, pp 27-28.  
\*CSFTI TT 68-50375/2

The Effect of Cold Swaging on Hardness of the Tips of Saw Teeth, by V. F. Fonkin & M. M. Balabanov.  
RUSSIAN, per, Dereboobratyvyayushchaya Promyshlennost, Moskva, Vol 13, No 9, 1964, p 13.  
\*CSFTI TT 68-50375/4

Cutting Forces on a Deep-Cutting Frame Saw, by S. M. Khasdan & V. A. Konvalov.  
RUSSIAN, per, Dereboobratyvyayushchaya Promyshlennost, Moskva, Vol 13, No 12, 1964, pp 14-15.  
\*CSFTI TT 68-50375/5

Winter-Hardiness of Juglans Regia and Other Species of Walnut, by A. M. Ozol, 4 pp.  
RUSSIAN, per, Zimostoikost' gretskogo orekha i drugikh orekhov. -- Doklady Akademii Nauk SSSR, Moskva, Vol 66, No 4, 1949, pp 725-728.  
\*CSFTI TT 68-50425

Soviet Nonferrous Metals, by P. Lomako, 9 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 2, Jan 68, pp. 5-6.  
JPRS 44,171

Physical Investigations of Reactor Shielding, by Yu. A. Kazanskiy.  
RUSSIAN, bk, Fizicheskie Issledovaniya zashchity reaktorov, Atomizdat, Moskva, 1966, 384 pp.  
\*CSFTI TT 68-50324

Effect of Magnetic Flocculation on Magnetic Separation, by L. A. Lomovtsev & L. S. Shuzol.  
RUSSIAN, per, Gorn. Zhur., Vol 143, No 8, 1967, pp 56-58.  
\*BISI 6259

Investigation of Fluxed Sinter Using a Microprobe, by Z. Nekasov.  
RUSSIAN, per, Izv AN SSSR Met., No 5, 1967, pp 125-132.  
\*BISI 6157

Scientific  
Materials (Contd)

Some Results of An Experimental Investigation of a "Dovetail" Joint, by V. B. Gorlov, 4 pp. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 120-123.  
P100029363-V  
FTD-MT-65-72

Nature of Brown Fumes Formed During the Blowing of Oxygen Through Metal, by M. F. K. Mikkau. RUSSIAN, per, Izv. VUZ Chern. Met., Vol 11, 1963, pp 37-41.  
BISI 5842

Some Basic Features of the Process of Rolling of Large Ingots, by V. P. Kotelnikov, et al. RUSSIAN, per, Izv. VUZ Chern. Met. No 4, 1967, pp 72-78.  
BISI 5777

Mechanism of Inoculation of Steel With Zirconium, by V.S. Kovalenko, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 4, 1967, pp. 93-99.  
\*HB 7334

The Influence of the Solidification Conditions on the Segregation of Sulphur in an Ingot of Steel Containing Rare Earth Elements, by E. Yu. Kolpishon. RUSSIAN, per, Izv VUZ Chern Met., No 7, 1967, pp 46-50.  
\*BISI 6164

Effect of Grain Size of Iron Ores and Concentrates on the Productivity of a Sinter Plant, by B.M. Nosovitskii. RUSSIAN, per, Izv. VUZ Chern.Met., Vol. 8, 1967, pp. 31-33.  
\*BISI 6117

Friction in the High-Speed Cold Rolling of Metals Using Various Industrial Lubricants, by D. I. Starchenko. RUSSIAN, per, Izvest. VUZ- Chern. Met., Vol 10, No 8, 1967, pp 86-91.  
HB 7272

The Use of Glass-Based Suspension Coatings for the Protection of Metals from Oxidation During Heating, by Yu. N. Grdina. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 8, 1967, pp 105-106.  
HB 7276

Scientific  
Materials (Contd)

Corrosion Resistance to Composite Coatings, by Yu. V. Grdina and A. F. Sofrosheikov. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 8, 1967, pp 113-116.  
HB 7277

Selection of the Most Representative Information Characterizing the Blast-Furnace Process, by V. Yu. Kaganov. RUSSIAN, per, Izvest VUZ Chern Met., Vol 10, No 9, 1967, pp 12-16.  
HB 7303

Increase of Wear Resistance of Rolls for Cold Rolling by Peening the Rolls, by M. Ya. Belkin. RUSSIAN, per, Izvest. VUZ Chern. Met., Vol 10, No 9, 1967, pp 120-123.  
\*BISI 6232

Influence of Nitrogen, Vanadium, and Aluminum on the Mechanical Properties of Heat Treatable Chromium Steel, by M. I. Gol'dshtein and L. M. Panfilova. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 9, 1967, pp 137-142.  
HB 7306

Aging Tendency of Steel Under Pressure while Solidifying, by V. B. Livshits and P. N. Bidulya. RUSSIAN, per, Izvest VUZ Chern Met., No 9, 1967, pp 152-154.  
HB 7305

On the Mechanism of Hardening of Fluxed Pellets - Communication I., by Yu.S.Yusfin, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 25-27.  
\*HB 7345

Some Features of the Reduction of (Iron-Ore) Pellets, by V.N. Milyutin, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 28-34.  
\*HB 7346

Mass Spectrometric Analysis of Gases Evolving During the Heating of (Ferrous) Metals in Vacuum, by V.I. Yavoiskii, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 39-45.  
\*HB 7344

**Scientific  
Materials (Contd)**

Relationships Governing the Fluctuations in Smelting Rate in Blast Furnaces of Various Volumes, by A. I. Bondarenko & M. Ya. Ostroukhov. RUSSIAN, per, Izv. VUZ Chern. Met., Vol 12, 1967, pp 19-23.  
\*HB 7384

High-Temperature Oxidation of Metal Aluminized by the Circulation (Gas) Process, by S. N. Fedoseeva. RUSSIAN, per, Izvest VUZ Cher. Met., Vol 11, No 1, 1968, pp 147-151.  
\*HB 7383

Calculating the Load-Carrying Capacity of Fluid-Film Bearings for Rolling Mills, by A. A. Korolev. RUSSIAN, per, Izv. VUZ Mashin., Vol 2, 1966, pp 133-138.  
BISI 5620

Temperature Regime of Stamping Tools in Liquid Stamping, by N.T. Deordiyev, A. F. Astashov, et al., 10 pp. RUSSIAN, per, Kuzhechno-Shtampovochnoye Proizvodstvo, No. 9, 1965, pp. 11-13.  
P100007368  
FTD-HT-67-232

On the Most Suitable Distance Between Spur Roads for Timber Extraction, by M. M. Korunov, 4 pp. RUSSIAN, per, O naivygodneishem rasstovani mezhdu lesovoznyymi usami. -- Lesnaya Promyshlennost' Vol 36, No 9, 1958, pp 12-15.  
\*CSFTI TT 68-50408

Solid Lubricants With Molybdenum Disulfide and the Reduction of Instrument Wear, by Ye.M. Oparina, L.N. Sentyurikhina, et al, 7 pp. RUSSIAN, per, Mashinostroitel'., No. 1, 1966, pp. 30-31. P100007968  
FTD-HT-23-920-67

Static and Dynamic Properties of Fiber Glass Plastics, by V. Zvornarzh and I. Tamkhina. RUSSIAN, per, Mekhanika Polimerov, No 3, 1965, pages 87-92.  
Dept of Navy NIC 2513

**Scientific  
Materials (Contd)**

Influence of Ultrasonics on the Kinetics of Transformation of Undercooled Austenite in Certain Steels, by I. Sh. Tsintsadze and F. N. Tavadze. RUSSIAN, per, Metallov Term Obr Metallov, No 7, 1967, pp 47-50.  
HB 7282

Hydrogen Brittleness of Nonferrous Metals, by B. A. Kolachev. RUSSIAN, bk, Metallurgiya, 1966, 256 pp.  
\*FTD-HT-23-95-68C

Use of Ball Bearing Steel for Cold Rolling Rolls, by V. I. Storozhev. RUSSIAN, per, Metallurg, Vol 12, No 10, 1967, pp 36.  
HB 7301

The Effect of Crystallographic Orientation on the Geometry of a Fused P-N Junction in Gallium Arsenide, by O.I.Pavlova and R.L. Petrusevich, 4 pp. RUSSIAN, per, Moscow, Gosudarstvennyy Nauchno-Issledovatel'skiy i Proyektnyy Institut Obrabotki Isvetnykh Metallov. Sbornik Nauchnykh Trudov, No. 24, 1965, pp. 54-56. P100007268  
FTD-HT-23-553-67

Investigation of the Elastic Properties of Fiberglasses by the Pulsed Ultrasonic Method, by A. I. Potapov. RUSSIAN, per, Novyye Materialy v Tekhnika i Nauke Proshloye Nastoyashcheye, 1966, pp 152-169.  
\*FTD-MT-24-47-68

New Cermet Antifriction Materials for Rubbing Parts, by I. V. Vasil'yev, 10 pp. RUSSIAN, per, Novyye Metallokeramicheskiye Antifriktsionnyye Materialy Dlya Uzlov Treniya, 1965, pp 188-194.  
P100014968  
FTD-HT-67-251

Agglomeration of Pyrite Cinder Concentrate Without Roasting, by L. Ye. Kunin. RUSSIAN, per, Obogashchenie Rud., Vol 1, 1967, pp 19-21.  
\*BISI 6246

Scientific  
Materials (Contd)

Service Performance of Controlled-Feed Inserts of Zircon and Alumina-Silicon Carbide on Continuous Steel Casting Machines, by N. M. Frolovskii.  
RUSSIAN, per, Ogneupory, Vol 32, No 12, 1967, pp 22-22.  
HB 7351

On the Compatibility of Glasses in Optic Fibers, by I. Galand & I. V. Koricheva, 7 pp.  
RUSSIAN, per, Optiko Mekhanicheskaya Promyshlennost, No 11, 1966, pp 30-34.  
ACSI J-3939  
ID 2204059567

The Use of the Photosensitive Coating Method for Studying Plastic Deformation Processes in Metals, by V. K. Vorontsov.  
RUSSIAN, bk, Polyarisatsionno-Opticheskiy Metod Issledovaniya Napryazheniy, 1966, pp 223-224.  
\*FTD-HT-23-94-68

New Metallurgical Processes Based on Advanced Technology, by Ye. Unksov, 4 pp.  
RUSSIAN, per, Pravda, 24 Nov 1967, p 2.  
JPRS 44090

Stability of Materials Subjected to High Temperatures by G. S. Pisarenko.  
RUSSIAN, bk, Prochnost' materialov pri vysokikh temperaturakh, Kiev, Izdatel'stvo "Naukova Dumka", 1966, 786 pp.  
\*CSFTI TT 68-50308

Development of a Physico-Chemical Theory of Heat Resistance Applicable to Refractory Metals and Alloys, by I. I. Kornilov.  
RUSSIAN, bk, Svoystva i Primeneniye Zharoprochnykh Splavov, 1966, pp 3-15.  
\*FTD-HT-23-110-68C

Protection of Cellulosic Materials Against Destruction by Microorganisms, by L. I. Kirikina and P. S. Simigin.  
RUSSIAN, per, Tekstilnaya Promyshlennost, No 7, 1961, pp 58-62.  
\*ACSI J-4245  
ID 2204002668

Investigation of Electrical Characteristics of Some Heat-Resistant Synthetic Films Used in Making Capacitors, by E. M. Kostenko.  
RUSSIAN, per, Trudy Leningrad. Politekhnicheskii Institut, No 276, 1967, pp 21-25.  
\*FTD-HT-23-153-68

Scientific  
Materials (Contd)

Technical Progress in Ingot Casting of Light Alloys, by V. I. Dobatkin.  
RUSSIAN, per, Tsvetnyye Metally, No 10, 1967, pp 47-51.  
\*FTD-HT-23-144-68

A Welded Steel Casting Ladle, by P. M. Kichaev.  
RUSSIAN, per, Vestnik Mashin., Vol 38, No 8, 1958, pp 56-57.  
\*BISI 6207

Classification of the Nomenclature for Ferrous Metal Rolled Stock Needs Updating, by V. Svets, 5 pp.  
RUSSIAN, per, Vestnik Statistiki, Moscow, Number 12, Dec 67, pp. 58-59.  
JPRS 44,335

On the Question of Condensation of Ferrocene With Ketones, by T. A. Sokolinskaya and T. P. Vishnyakova.  
RUSSIAN, per, Visokomolekularniye Soyedineniya, Vol A9, No 3, 1967, pages 677-683.  
Dept of Navy NIC 2505

Internal Stresses in Wood During its Drying, by B. N. Ugolev.  
RUSSIAN, bk, Vnytrennie napiyazheniya v drevesine pri ee syshko. -- Moskva, Goslesbumizdat, 1959, 116 pp.  
\*CSFTI TT 68-50365

Effect of Silicon Additions on the Corrosion Behaviour of High-Alloy Austenitic Steels in Sulfuric Acid Solutions, by L. F. Tavdse.  
RUSSIAN, per, Zashchita Metallov, Vol 3, No 5, 1967, pp 610-613.  
HB 7319

Effect of Protective Coatings on High-Alloy Cast Steel EI 572L at High Temperatures, by E. A. Antonova.  
RUSSIAN, per, Zashchita Metallov, Vol 3, No 5, 1967, pp 621-624.  
HB 7318

Residual Stresses in Cold Drawn Tube and Bar Stock Determined Mechanically as Against By X-Ray Diffraction, by F. Bollenrath.  
RUSSIAN, per, Z. Metallk., Vol 55, No 11, 1964, pp 655-659.  
\*HB 7366

Scientific  
Materials (Contd)

Oxide Coating on Wire, by A. V. Gorduchuk.  
RUSSIAN, Patent No 184098.  
\*FTD-HT-23-137-68D

Laboratory Determination of Finish Rolling and  
Coiling Conditions During the Hot-Rolling of  
Strip in Continuous Mills, by M. Endrle.  
CZECH, per, Hutn Listy, Vol 21, No 9, 1966, pp  
616-620.  
BISI 5539

Effect of Different Ratios of Longitudinal/  
Transverse Deformation on the Mechanical Properties  
of Thick Plates, by M. Endrle.  
CZECH, per, Hutn. Listy, Vol 22, Aug 1967,  
pp 546-553.  
BISI 6040

Heating Cold Ingots, by Z. Volf.  
CZECH, per, Hutnik, Vol 9, No 7, 1959, pp 234-  
238.  
\*BISI 6149

Causes of Fractures of and Damage to Smooth  
Work Rolls During Hot and Cold Rolling,  
by M. Musial.  
CZECH, per, Hutnik, Vol. 26, No. 1, 1959,  
pp. 22-30.  
\*BISI 6109

Spalling of Rolls Due to Fatigue, by S. Pytko.  
CZECH, per, Hutnik, Vol. 29, No. 5, 1962,  
pp. 180-183.  
\*BISI 6110

On the Life of Metal Moulds, by J. Kadlec.  
CZECH, per, Slevarenstvi, Vol 10, No 1, 1962,  
pp 8-11.  
BISI 5563

The Problems of Increasing the Toughness of Cast  
Tools made from 9% Tungsten High-Speed Steel,  
by O. Kastanek.  
CZECH, per, Slevarenstvi, Vol 14, No 3, 1966,  
pp 95-99.  
BISI 5645

Scientific  
Materials (Contd)

Testing of Water Proof and Water Repellent Tex-  
tiles, by J. Strecky.  
CZECH, per, Textil, No 2, 1966, pp 74-75.  
\*ACSI J-4410  
ID 2204007368

Study Concerning the Effect of Petrographic  
Composition of Bituminous Coal on its Coking  
Qualities, by V. Kudela.  
CZECH, per, Uhli, Vol 9, 1967, pp 367-370.  
\*BISI 6179

Prospect for the Use of Sodium Methyl Silanolate  
in the Manufacture of Filier Products, by  
L. Kosnac.  
CZECH, per, Zvaranie, Vol 15, Oct 1966, pp 301-  
303.  
BISI 5931

Decarburised Steel Plate, by G. de Witte.  
DUTCH, per, Constructiematerialen, Vol 1, Aug  
1967, pp 20-22.  
\*BISI 6177

Interpretation of Creep Tests on Refractory  
Products, by L. Lecrivain & R. Martin.  
FRENCH, per, Bull. Soc. Francaise Ceram., Vol 75,  
Apr-June 1967, pp 25-40.  
\*BISI 6248

Contribution to the Problem of Refractoriness  
Under Load at High Temperature and of Creep for  
Aluminosilicate Bricks, by K. Konopicky.  
FRENCH, per, Bull. Soc. Francaise Ceram., Vol 75,  
Apr-June 1967, pp 41-50.  
\*BISI 6250

A Method of Determining Rolling Power, by  
J. Desvallees.  
FRENCH, per, C.D.S. Circ., Vol 5, 1962, pp 1283-  
1291.  
BISI 5653

Evolution and New Techniques in Hot Stoves, by  
A. Soavini.  
FRENCH, per, C.D.S. Circ., Apr 1966, pp 931-955.  
BISI 5332

Deoxidation of Basic Steel By Injection of Carbon  
Powder into the Converter, by R. Remy.  
FRENCH, per, C.D.S. Circ., Vol 3, 1967, pp 691-703  
\*BISI 6216

Scientific  
Materials (Contd)

Study of the Transformation of Steels in Relation to Heat Treatment Problems, by G. Murry & A. Constant.  
FRENCH, per, C.D.S. Circ., Vol 6, 1967, pp 1561-1584.  
\*BISI 5879

The Sintering Plant at the Tarento Works (Italsider), by M. Carignani & A. Chiaverini.  
FRENCH, per, C.D.S. Circ., Vols 7-8, 1967, pp 1741-1765.  
\*BISI 6119

Elements for the Manufacture of Ultrasonic Transducers, by J. Mondot.  
FRENCH, per, C.D.S. Circ., Vols 7-8, 1967, pp 1821-1828.  
\*BISI 6254

Results of Operation of Burden Materials Preparation Plant and Sinter Plant at the Usinor Works at Dunkirk, by J. Dumaine.  
FRENCH, per, C.D.S. Circ., Vol 9, 1967, pp 1981-1997.  
\*BISI 6120

Differdange Works of the Societe Hadir: Influence of Different Parameters of Sinter Manufacture on the Operation and Results of a Blast Furnace, by E. Bintener.  
FRENCH, per, C.D.S. Circ., Vol 11, 1967, pp 2493-2501.  
\*BISI 6238

Dipole Moment of the Double Layer of Metallic Surfaces, by Roger Garron.  
FRENCH, per, Comptes Rendus, Vol 256, 1963, pp 2346-2348.  
\*NASA TT F-11,591

Girders for Crane Runways, by L. de Loringhoven.  
FRENCH, per, Construction Met., Vol 2, June 1967, pp 9-23.  
\*BISI 6194

Forces on Runway Girders. Plate Girders and Horizontal Lattice Bracing, by D. Mateesco & N. Balut.  
FRENCH, per, Construction Met., Vol 2, June 1967, pp 24-37.  
\*BISI 6202

Scientific  
Materials (Contd)

Therman Analysis of Cast Iron as a Quality Control Tool, by J. Coppolani & J. C. Margerie.  
FRENCH, per, Fonderie, Vol 243, May, 1966, pp 159-178.  
\*BISI 5673

Melting Cast Iron With Natural Gas, by G. Ulmer.  
FRENCH, per, Fonderie, July 1966, pp. 247-263.  
\*BISI 6136

Experiments on the Part Played by Rust in the Corrosion Process of Steel in Aqueous Media, by E. Herzog.  
FRENCH, per, Met.-Corros.-Ind., Vol 62, Apr 1967, pp 133-151.  
\*BISI 6195

The Effect of Various Additives on the Compatibility of Zirconium with Liquid Sodium, by L. Champeix, W. Graff, 13 pp.  
FRENCH, rpt, IX Colloque de Metallurgie, 1966, pp 63-76.  
P911016768  
AEC ANI-TR-512

Use of Pre-reduced Materials in the Blast Furnace, by J. Michard.  
FRENCH, rpt, Paper Presented at the International Congress on the use of Pre-reduced Ores, Evian, May 29-31, 1967, pp 26.  
\*BISI 5725

Definition and Manufacture of Forgings Used in Welded Constructions, by P. F. Martin & R. Bondot.  
FRENCH, rpt, Paper presented at the International Forging Conference, Sept 1967, pp 19-21.  
\*BISI 6178

Softening Points of Ores and Sinters, by A. Poos & A. Decker.  
FRENCH, per, R.U.M., Vol 15, Nov 1959, pp 773-783.  
\*BISI 6182

Effect of Ultrasonic Waves on the Chemical and Physico-Chemical Processes, by A. Le Bras.  
FRENCH, per, Rev. Chim. Minerale, Vol 4, No 1, 1967, pp 283-315.  
\*BISI 6196

Scientific  
Materials (Contd)

Electrostatic Separation in a Fluidized Bath,  
by P. Tauberon.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, No 6,  
1967, pp 442-449.  
\*BISI 6205

The Scope of the Cerchar Mill-Dryer for Processing  
Iron Ore, by J. Geoffroy & R. Marcellini.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, July 1967,  
pp 462-470.  
\*BISI 6203

Iron Ore Beneficiation by Magnetizing Reduction  
in a Fluidized Bed, by U. Colombo.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, Jul 1967,  
pp 492-500.  
\*BISI 6247

Influence of Speed of Tempering on the Structure  
of Ti-Al 6% -V4% Alloy Tempered and Dip Hardened,  
by A. Saulnier.  
FRENCH, per, Revue de Metallurgie LVI, No 3, 1959.  
\*ACSI J-4282  
ID 2204003568

Long-Time Corrosion Testing of Various Structural  
Steels in the Atmosphere, Sea and Fresh Water  
(Parts I and II), by Henri Baudot (Part I) and  
Georges Chaudron (Part II).  
FRENCH, per, Revue de Metallurgie, Vol 43, 1946,  
pages 1-67.  
\*Dept of Navy NIC

Theoretical Calculation on the Deoxidation of  
Molten Steel by Methane Bubbling, by N. Paysson  
& A. Rist.  
FRENCH, per, Rev. Mat., Vol 62, Feb 1965, pp 121-  
126.  
\*BISI 6170

Brittleness of High-Strength Steel Wire, by J.  
Backer.  
FRENCH, per, Rev. Mat., Vol 63, Jun 1966, pp 477-  
487.  
BISI 5423

Effects of Niobium and Nitrogen on the Strength of  
Ferritic-Pearlitic Steel, by J. D. Grosier.  
FRENCH, per, Rev. Mat., Vol 63, Nov 1966, pp 939-  
941.  
\*BISI 6153

Scientific  
Materials (Contd)

Some Remarks on the Hot Torsion Rupture of  
Austenitic and Ferritic Alloys, by F. E. White.  
FRENCH, per, Rev. Met., Vol 63, No 12, 1966,  
pp 991-998.  
BISI 5766

The Effect of Bright Annealing on Some Properties  
of Austenitic Stainless Steels, by P. Devore  
FRENCH, per, Rev. Met., Vol 64, No 2, 1967,  
pp 171-175.  
BISI 5730

Tube Rolling on Stretch Reducing Mills, by  
B. Fazan & P. Blain.  
FRENCH, per, Rev. Met., Vol 64, Mar 1967,  
pp 207-225.  
BISI 5702

Considerations on the Energy Balance of a Blast  
Furnace Plant, by J. Szczeniawski.  
FRENCH, per, Rev. Met., Vol 64, Apr 1967, pp 333-  
348.  
\*BISI 6258

Considerations on Automatic Control of the Thermal  
Conditions in a Blast Furnace on the Basis of  
Analysis of the Furnace Waste Gases, by C. Staib.  
FRENCH, per, Rev. Met., Vol 64, May 1967,  
pp 437-446.  
\*BISI 6221

Commercial Use of Electroslag Remelting (ESR  
Process), by L. Antoine.  
FRENCH, per, Rev. Mat., Vol 64, Jul-Aug 1967,  
pp 623-634.  
\*BISI 6244

Fatigue Tests and Measurement of Elastic Stresses  
on Steel Wires as a Critical Work-Hardening  
Domain, by N. Theolier.  
FRENCH, per, Rev. Mat., Vol 64, Jul-Aug 1967,  
pp 649-652.  
\*BISI 6261

Analysis of Blast Furnace Gases by Solid-Gas  
Chromatography, by G. Jecko & B. Reynaud.  
FRENCH, per, Rev. Mat., Vol 64, Jul-Aug 1967,  
pp 681-686.  
\*BISI 6180

Study of Roll Torque in the Shaping Passes,  
by C. Lachenait and J.C. Albert.  
FRENCH, per, Rev. Mat., Vol. 64, Oct 1967,  
pp. 833-886.  
\*BISI 6133

Scientific  
Materials (Contd)

Some Observations on the Carbides in High-Speed Steels, by L. Colombier.  
FRENCH, per, Rev. Met., Vol 64, Nov 1967, pp 987-994.  
\*BISI 6187

A New Method for Extrapolating the Fracture Time of an Industrial Alloy, by S. Zimering.  
FRENCH, per, Rev. Met. Mem. Sci., Vol 62, Dec 1965, pp 939-950.  
BISI 5665

Use of Phase Diagrams of Binary Systems for the Calculation of the Heat of Fusion of the Solvent, by A. Ferrier.  
FRENCH, per, Rev. Met. Mem. Sci., Vol 63, Jul-Aug 1966, pp 597-612.  
BISI 5683

Heat Treatment of Heavy Forgings Modern Viewpoints and Future Outlook, by G. Papuli.  
FRENCH, per, Techn. Mod., Vol 59, Mar 1967, pp 105-107.  
BISI 5984

Experimental Study Using a Model for Simulating the Vacuum Treatment of Metals, by P. Karinthi.  
FRENCH, per, Le Vide (Paris), No 120, Nov/Dec 1965, pp 413-425.  
HB 6833

Procedure for Rendering Metals Especially Iron and Steel Rust Resistant, and Materials used for this Purpose, by William H. Cole, 7 pp.  
FRENCH, Patent No 647,314, 5 pp.  
ACSI J-4324  
ID 2204004968

Procedure for Protecting Metals, Particularly Iron and Steel, Against Rust, and for Derusting Iron and Steel Objects, by William H. Cole, 3 pp.  
FRENCH, Patent No 648,106, 2 pp.  
ACSI J-4325  
ID 2204005068

Pass Reduction Computer for Roll Screwdown as an Example of a Special Purpose Digital Computer, by H. M. Heinen, A. Krock.  
GERMAN, per, VEG Mitt., Vol 54, No 11/12, 1964, pp 684-689.  
BISI 5251

Scientific  
Materials (Contd)

Application of Chemical Kinetics to Iron-making Processes, by L. von Bogdandy.  
GERMAN, per, Allg. Prakt. Chem., Vol 18, No. 3, 1967, pp. 58-63.  
\*BISI 6116

Development of Internal Stresses in Deformed Steels - Part II, by K. Kolb and E. Macherau.  
GERMAN, per, Arch Eisenh., Vol 36, Jan 1965, pp 18-27.  
BISI 5405 Pt. II

New Investigations of Methods of Preparing Metal Specimens for Optical Emission Spectrum Analysis, by P. Holler.  
GERMAN, per, Arch Eisenh., Vol 37, Jun 1966, pp 483-489.  
BISI 5365

Investigation of the Transformation Behaviour of Iron-Manganese Alloys by Damping Measurements in the Region of 1 Cycle/Sec, by E. Schmidtman.  
GERMAN, per, Arch Eisenh., Vol 37, Jul 1966, pp 561-567.  
BISI 5535

Investigations on Reduced Layers of Iron Oxide by Means of the Surface Diffraction of Electrons and of the Optical Microscope, by J. Baurmann.  
GERMAN, per, Arch Eisenh., Vol 37, Sep 1966, pp 691-695.  
BISI 5448

Structural Changes and their Importance for Creep-Rupture Strength: Example of a Cr-Mo Steel, by A. Krisch & F. K. Naumann.  
GERMAN, per, Arch. Eisenh., Vol 37, Sept 1966, pp 749-757.  
\*BISI 6214

Structural Changes Occurring in Steels Having High Strength at Elevated Temperatures, by K. Relander & T. Geiger.  
GERMAN, per, Arch. Eisenh., Vol 37, Nov 1966, pp 897-906.  
\*BISI 6227

Testing the Mechanical Properties of Hardened Steels in Static Bending Tests, by E. Ruckerl.  
GERMAN, per, Arch. Eisenh., Vol 38, Jan 1967, pp 41-47.  
BISI 5565

Scientific  
Materials (Contd)

Study on Nitriding Pure Iron, by K. Bohnenkamp.  
GERMAN, per, Arch Eisen, Vol 38, Mar 1967, pp 229-232.  
\*BISI 6155

Isolation of Carbides by Dissolving Steel in Nitric Acid, by H. Keller & K. H. Sauer.  
GERMAN, per, Arch. Eisenh., Vol 38, June 1967, pp 429-433.  
\*BISI 6197

Kinetics of Reactions of Ferrous, Nickel and Cobalt Oxides with Graphite, by H. K. Kohl & B. Marincek.  
GERMAN, per, Arch. Eisenh., Vol 38, July 1967, pp 493-500.  
\*BISI 6223

Decarburisation Rate and Decarburisation During the manufacture of Steel by Oxygen Top Blowing, by K. Borowski.  
GERMAN, per, Arch. Eisenh., Vol 38, Jul 1967, pp 501-507.  
BISI 5878

Contribution to the Knowledge of the Phenomena Occurring during Reduction of Pure Iron Oxides I. - Investigations on the Kinetics of Reduction of Iron Oxides Considering Particularly the Porosity as well as the Absolute and Partial Pressure of the Component of the Gas Phase, by H. Schenck.  
GERMAN, per, Arch. Eisen, Vol 38, Aug 1967, pp 577-584.  
\*BISI 6165

Reactions Occurring During the Formation of Primary Decaridation Products in Steel, by H. Straube, G. Kuhnelt.  
GERMAN, per, Archiv Eisenhüttenwesen, Vol 38, No 8, 1967, pp 607-615.  
HB 7259-I

Isothermal Martensite Formation in Fe-Mn-C Alloys, by E. Schmidtman.  
GERMAN, per, Arch. Eisenh., Vol 38, Aug 1967, pp 639-645.  
\*BISI 6222

Martensitic Transformations in Low-Carbon Manganese Steels, by H. Schumann.  
GERMAN, per, Arch. Eisenh., Vol 38, Aug 1967, pp 647-656.  
\*BISI 6229

Scientific  
Materials (Contd)

Comprehensive Representation of the Reduction Kinetic of Dense Ores, by R. Jeschar.  
GERMAN, per, Arch. Eisenh., Vol 38, No 9, 1967, pp 663-665.  
\*BISI 6237

Contribution to the Knowledge of the Phenomena Occurring During the Reduction of Pure Iron Oxides. II - Change of Properties of Iron Oxides With Increasing Reduction Degree, by H. Schenck.  
GERMAN, per, Arch. Eisenh., Vol 38, No 9, 1967, p 669.  
\*BISI 6236

Formation of Etch Pits on Decorated Dislocations in Iron-Silicon Alloys, by W. Schaarwachter.  
GERMAN, per, Arch. Eisenh., Vol 38, Oct 1967, pp 805-808.  
\*BISI 6175

Contribution to the Crystallographic Analysis of Phase Transformations in Metals, by W. Pitsch.  
GERMAN, per, Arch Eisen, Vol 38, Nov 1967, pp 853-864.  
\*BISI 6160

Simultaneous Rapid Determination of Oxygen and Nitrogen in Steel by the Helium Carrier Method, by W. Koch & H. Lamm.  
GERMAN, per, Arch. Eisen, Vol 38, No 12, 1967, pp 881-885.  
\*HB 7364

Problem of Sensitivity to Red Shortness of Low Carbon Rimmed Steels, by W. Scholz & H. Dautzenberg.  
GERMAN, per, Arch. Eisen., Vol 38, No 12, 1967, pp 915-920.  
\*HB 7365

Possibilities of Influencing Palletising Pan Operation and their Effects on the Properties of the Palletised Material, by W. Pitsch.  
GERMAN, per, Aufbereitungs-Technik, Apr 1966, pp 177-191.  
BISI 5140

Bin Discharging Devices, by W. Hoormann.  
GERMAN, per, Aufbereitungs-Technik, No 10, 1967, pp 21-33.  
\*BISI 6151

Scientific  
Materials (Contd)

Manufacture of Spirally Welded Tubes, by W. Wennemann.  
GERMAN, per, Bander Bleche, No 6, 1963, pp 278-281.  
BISI 5552

Spirally Welded Tubes - Properties and Certain Possibilities of Application, by W. Schmidt and F. O. Koch.  
GERMAN, per, Bander Bleche, No 6, 1963, pp 298-304.  
BISI 5554

The Latest Gauge Control Units for Cold-Rolling Mills, by O. Steinbrecher.  
GERMAN, per, Bander Bleche, Vol 4, 1966, pp 225-234.  
\*BISI 6219

The Mechanical Properties of Cemented Tungsten Carbide-Cobalt Alloys in Relation to the Structure, by H. Fischmeister, H. E. Exner.  
GERMAN, per, Bander Bleche, Vol 8, No 3, 1967, pp 143-149.  
BISI 5699

Fully Automatic Hot Finishing on a Continuous Tube Mill, by D. Grube.  
GERMAN, per, Bander Bleche, Vol 8, June 1967, pp 368-371.  
\*BISI 6203

Cooling of Ferritic Tubes in Still Air as a Function of Tube Size, and Their Mechanical Properties, by H. Muhs.  
GERMAN, per, Bander Bleche, Vol 8, Oct 1967, pp 667-671.  
BISI 6047

Review of Cross-Roll Cold-Straighteners for Steel Tubes, by J. Vogt.  
GERMAN, per, Bander Bleche, Vol 8, Oct 1967, pp 681-683.  
\*BISI 6213

Non-Destructive Testing of Quality Tubes in Production, by K. Fink.  
GERMAN, per, Bander Bleche, Vol 8, No 11, 1967, pp 729-735.  
\*BISI 6176

Scientific  
Materials (Contd)

Glass-Fiber Reinforced Plastics for Supporting Constructions, by G. Hintersdorf.  
GERMAN, per, Bauplanung Bautechnik, No 11, 1967, pp 538-543.  
\*ACSI J-4319  
ID 2204004468

Relationship Between Properties and Service Life of Tar-Dolomite Bricks in Oxygen Converters, by P. Hammerschmid.  
GERMAN, per, Ber. DKG, Vol 44, No 7, 1967, pp 343-344.  
\*BISI 6198

Mineralogical Investigations on the Wear of Tar-Dolomite and Tar-Magnesite Bricks in Oxygen Converters, by R. Euler.  
GERMAN, per, Ber. Dtsch. Keram. Ges., Vol 44, No 7, 1967, pp 345-347.  
\*BISI 6256.

Change in Basic Bricks in Oxygen Converters, by W. S. Treffner & K. Wohlleben.  
GERMAN, per, Ber. DKG, Vol 44, No 7, 1967, pp 350-354.  
\*BISI 6193

The Formation of Different Phases in a Molten-Cast Magnesia-Chrome Brick (Corhart 104) in Relation to the Temperature, by J. Recasens, 12 pp.  
GERMAN, per, Ber. Deut. Keram. Ges., No 44, 1967, pp 366-369.  
F911013868  
AEC NP-TR-1587

Investigations on the Bonding of Refractories with a Solution of Monaluminium Phosphate, by E. Kupzog.  
GERMAN, per, Ber. Dtsch. Keram. Ges., Vol 44, No 9, 1967, pp 445-452.  
\*BISI 6257

The Action of Furnace Atmospheres, and the Use of Protective Atmospheres, in Hot and Cold Deformation of Steel, by W. Wirth.  
GERMAN, per, Berg-Hutten. Monatsh., No 110, Jul 1965, pp 222-231.  
BISI 5791

Determination of Residual Austenite by Means of Differential Thermal Analysis (DTA), by J. J. Dicht.  
GERMAN, per, Berg-Hutten. Monatsh., Vol 111, Sept 1966, pp 430-437.  
\*BISI 6181

Scientific  
Materials (Contd)

The Continuous Casting of Roller and Ball Bearing Steel, by W. Poppmeier and B. Tarmann. GERMAN, per, Berg- und Hutten Monatshefte, Vol 112, No 9, 1967, pp 249-255. HB 7329

Precision Forged Turbine Blades, Manufacture, Properties and Materials, by H. Tarmann. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 351-361. \*BISI 6240

Improvement of Steel Quality By Tap Degassing, by R. Plessing. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 361-371. \*BISI 6226

Hydromechanical Descaling in Rolling Mills Using an Operating Pressure of Up to 200 Ats Gauge, by H. Hojas & R. Rheindt. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 372-379. \*BISI 6241

Power Problems in Austrian Steelworks, Particularly as Regards Natural Gas Within a Framework of a Greater Power Economy, by K. Rieder and H. Tichy. GERMAN, per, Berg-Hutten Monatsh., Vol 112, No 11, 1967, pp 394-402. \*BISI 6162

Scientific Work in the Chemical Fiber Industry, 7 pp. GERMAN, per, Berliner Zeitung, No 350, 20 Dec 1967, p 3. JPRS 44069

Corrosion Protection in Reinforced and Pre-Stained Concrete, by S. Soretz. GERMAN, per, Betonsteintz., Vol 33, No. 2, 1967, pp. 52-63. \*BISI 6138

A New Cross Dividing Plant for Mannesmann A.G. at the Huckingen Steelworks. Part III, by W. Unger. GERMAN, per, Blech., No. 3, 1967, pp. 106-109. \*BISI 6107

The Elasticity of Tinplate and its Importance for the Use of Thinner Sheet Metal Types, by H. Wyss. GERMAN, per, Blech, Vol 14, No 5, 1967, pp 252-253. \*BISI 6235

Scientific  
Materials (Contd)

The Effect of Inert Materials on the Coking Behaviour of a Coking Coal and on the Quality of the Coke Produced from Mixtures, by R. Agricola. GERMAN, per, Brennstoff-Chemie, Vol 43, No 8, 1967, pp 240-252. \*BISI 6252

The Results of Electrochemical Investigations of Stress Corrosion Cracking and Their Practical Application, by H. Grafen. GERMAN, per, Corros. Sci., Vol 7, Apr 1967, pp 177-195. \*BISI 6192

Investigations of Thin Oxide Layers, Pt. I - Oxidation of Pure Iron at Temperatures Around 200°C, by R. Grauer & W. Feitknecht. GERMAN, per, Corros. Sci., Vol 6, Jul 1966, pp 301-311. BISI 5410

Tool Steels in the Plastic Forming of Screws, Bolts and Nuts, by W. Haufe. GERMAN, per, Draht, Vol 18, Aug 1967, pp 624-635. \*BISI 6154

The Use of Protective and Reaction Gases in the Heat Treatment of Cold-Formed Bright Steel, by W. Wirth. GERMAN, per, Draht-Welt, Vol 53, Jul 1967, pp 467-472. \*BISI 6156

Investigations to Reduce Network Disturbances Caused by Electric Arc Furnaces, by K. Kegel. GERMAN, per, Electrowarme, Vol 6, June 1967, pp 205-208. \*BISI 6172

The Significance of the Preliminary Treatment for the Durability of Various Rust-Resistant Coating Systems, by B. Andersson and G. Ekwall. GERMAN, per, Farbe u Lack, Vol 71, Jul 1965, pp 534-546. BISI 4827

Advances in the Technology of Tinplate, by W. E. Hoare. GERMAN, per, Forschungsges. Blechverarb. Mitt., Vols 4/5, 1966, pp 54-60. BISI 5971

Scientific  
Materials (Contd)

Design and Construction of a Pilot Plant for Electroslag Melting, by W. Richling.  
GERMAN, per, Freiberger Forschungsh., Vol. B122, 1966, pp. 143-154.  
\*BISI 6103

Practical Experience from the Experimental Operation of a 1 Ton Electroslag Remelting Plant, by G. Holfert, et al.  
GERMAN, per, Freiberger Forschungsh., Vol. B122, 1966, pp. 155-168.  
\*BISI 6104

Conversion of a Steelworks Gas Supply from Blast Furnace and Coke-Oven Gas to Natural Gas, by G. Fechner.  
GERMAN, per, Gaswarme, Vol 15, Jul 1966, pp 224-233.  
BISI 5362

Simple Apparatur for Accelerating Metallurgical Reactions, by J. E. Ostberg.  
GERMAN, per, Giesserei, Vol 53, no 24, 1966, pp 316-318.  
BISI 5850

Compression Characteristics of Moulding Sands, by W. Siefert.  
GERMAN, per, Giesserei, Vol 54, 13 Apr 1967, pp 197-207.  
\*BISI 6163

The Development of Cast Iron with Particular Characteristics, by H. Mayer.  
GERMAN, per, Giesserei, Vol 54, 28 Sep 1967, pp 522-526.  
\*BISI 6142

Methods for Inoculation of Liquid Cast Irons, by K. Reifferscheid.  
GERMAN, per, Giesserei, Vol 54, No 23, 1967, pp 621-624.  
HB 7352

Desulphurization of Cast Iron by Treating it with Calcium Carbide, by D. Gleisberg.  
GERMAN, per, Giesserei, Vol 55, No 1, 1968, pp 1-7.  
\*HB 7380

Scientific  
Materials (Contd)

Desulphurization of Cast Iron with Calcium Carbide in a Basic-Lined 3-Ton Shaking Ladle, by D. Schurmann & W. Bohner.  
GERMAN, per, Giesserei, Vol 55, No 1, 1968, pp 7-14.  
\*HB 7381

Eutectic Solidification of Iron-Carbon Alloys, by F. Honke.  
GERMAN, per, Giesserei-Praxis, Vol 21, Nov 1967, pp 391-407.  
\*BISI 6182

Metallurgy and Melting Technique of a Water-Cooled Hot-Blast Cupola, Part I, by D. Logothetis.  
GERMAN, per, Giesserei Techn -Wiss Beihefte, Vol 17, No 1, 1965, pp 29-37.  
HB 6639-I

The Mechanism of Hot-Tearing, Particularly of Steel Castings, by W. Patterson et al.  
GERMAN, per, Giessereiforschung, Vol 19, No. 3, 1967, pp. 151-160.  
\*BISI 6129

Studies on Hot-Tearing in Steel Castings, by W. Patterson.  
GERMAN, per, Giessereiforschung, Vol 19, No 4, 1967, pp 161-174.  
\*BISI 6168

Experiences in Determining Fatigue Strength of Thin-Sectioned, Case-Hardened Specimens of High Strength, by R. Chatterjee-Fischer & O. Schaber.  
GERMAN, per, Hart.-Techn. Mitt., Vol 6, Jan 1, 1960.  
BISI 5912

Fatigue Tests on Steel Specimens Coated With a Sprayed Metal Deposit, by H.D. Steffens and H. Bastert.  
GERMAN, per, Hart.-Techn. Mitt., Vol. 22, 1967, No. 3, pp. 221-232.  
\*BISI 6106

The Development of Deep-Drawing Qualities for Sheet at Hoesch A. G., by H. Hoff.  
GERMAN, per, Hoesch Ber., Vol 1, 1966, pp 7-15.  
\*BISI 6215

Scientific  
Materials (Contd)

New Methods for Securely Clamping Hard Metals in the Workshop, by E. Kirchner, Chr. Lewicki.  
GERMAN, per, Industrie-Anzeiger, Vol 3, 10 Mar 1959, pp 285-290.  
BISI 5357

Lacquer Hardening by Electron Radiation, by I. Kuhn.  
GERMAN, per, Industrie-Lackier-Betrieb, Vol 35, No 6, 1967, pp 233-237.  
BISI 5841

Adhesive Bonding Forces in Glass-Fiber Reinforced Plastics, by G. Ehrenstein, 21 pp.  
GERMAN, per, Institut A für Werkstoffkunde der Technischen Hochschule, Hannover, P500025168  
Dept of Navy/NIC Tr No 2516

The Technical Rolling Aspects of a Continuous Semi-Finished Products Mill with a Wide Programme and High Output, by H. Muckli.  
GERMAN, per, Der Kalibreur, Mar 1967, pp 59-76.  
BISI 5770

Continuous Rolling of Continuous Cast Bars and Slabs, by A. Jakomaski.  
GERMAN/FRENCH, per, Kalibreur, Aug 1967, pp 49-60.  
\*BISI 6174

Continuous Casting of Quality Steels on a Bow-Type Machine, by B. Tarmann and W. Poppmeier.  
GERMAN, per, Kleppzig Fachber., E 219, Oct. 1967, pp. 628-632.  
\*HB 7343

Further Development of Atmospheric Corrosion-Resistant Steels, by K. Daevs.  
GERMAN, per, Kohle- und Eisenforschung G.m.b.H. Mitt., Feb 1935.  
\*BISI 6242

The Testing and Behavior of Metallic Materials against the Striking of Drops and Cavitation, by M. Vater, 31 pp.  
GERMAN, per, Korrosion und Metallschutz, Vol 20, No 6, Jun 1944, pp 171-179. P500025368  
Dept of Navy/NIC Tr No 2506

Scientific  
Materials (Contd)

External Coating of Pipes with PVC by Turbulence Sintering, by E. Gemmer.  
GERMAN, per, Kunststoffe, Vol 57, No 1, 1967, pp 21-24.  
\*BISI 6159

Ternary Phase  $Fe_{23}C_3B_3$  in the Ternary System, Iron, Carbon, Boron, by H. H. Stadelmaier and R. A. Gregg.  
GERMAN, per, Metall, Vol 17, May 1963, pp 412-414.  
\*BISI 6166

Determining Cutting Edge Temperatures During the Cutting Operation, by H. G. Wiebach.  
GERMAN, per, Metall, Vol 21, No 6, 1967, pp 612-615.  
BISI 6056

The Electrodeposition of Iron-Chromium-Nickel Alloys from Sulphate Triethanolamine Solutions, by M. Sarojamma and T. L. Rama Char.  
GERMAN, per, Metalloberfläche, Vol 21, No 11, 1967, pp 334-335.  
\*BISI 6167

The Present State of Progress in Direct-On One-Coat Enamelling, by A. Dietzel.  
GERMAN, per, Metalloberfläche, Vol 21, Dec 1967, pp 372-373.  
\*BISI 6230

Direct-On Enamelling, by H. Hoffmann.  
GERMAN, per, Metalloberfläche, Vol 21, Dec 1967, pp 374-375.  
\*BISI 6186

Flow Resistance in Blast Furnace Burden Materials, by K. Scheidig and G. Gruson.  
GERMAN, per, Neue Hütte, Vol 11, Jul 1966, pp 385-390.  
BISI 5585

Automation and Process Control of Blast Furnaces and Oxygen Converters, by P. Cesselin.  
GERMAN, per, Neue Hütte, Vol 11, Oct 1966, pp 583-591.  
\*BISI 6233

Tendencies in the Development of High-Strength Weldable Structural Steel: Alloying with Nb, V, Ti, Zr, etc., by F. Stadler.  
GERMAN, per, Neue Hütte, Vol 11, Oct 1966, pp 606-608.  
\*BISI 6231

Scientific  
Materials (Contd)

Production and Properties of St45/60 Steel, by  
H. Loscher.  
GERMAN, per, Neue Hutte, Vol 12, Aug 1967,  
pp 475-481.  
\*BISI 6234

Determination of Molybdenum in Special Materials,  
by I. Sajo.  
GERMAN, per, Neue Hutte, Vol 12, No 8, 1967,  
pp 500-502.  
\*BISI 6251

Development of the Plasma Melting Process, by  
F. Ebeling.  
GERMAN, per, Neue Hutte, Vol 12, No 9, 1967,  
pp 546-550.  
HB 7291-II

Continuous Casting of Steel in Poland, by  
B. Paczula.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 655-658.  
\*HB 7371

Results Obtained in the Manufacture and Use of  
Nodular-Iron Steel Mill Ingot Moulds, by  
K. Schneider.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 656-661.  
\*HB 7378

Production, Properties, and Applications of  
Whiskers, by E. Norgentha.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 681-685.  
\*HB 7376

Improved Pouring of Steel by Use of Synthetic  
Exothermic Slag, by L. Rietz.  
GERMAN, per, Neue Hutte, Vol 12, No 12, 1967,  
pp 714-718.  
\*HB 7377

The Opening Up of New Areas of Use for Zinc  
Coated Strip and Sheet by the Development of  
Continuous Wide Strip Galvanising Lines, by  
R. Haarmann.  
GERMAN, per, Oberflächentechnik Jahrbuch, Vol 22,  
1966, pp 158-165.  
\*BISI 6218

Scientific  
Materials (Contd)

Metallographical Problems with the Hot Working  
of Steels, by W. Dahl.  
GERMAN, rpt, Paper from the Symposium on Metal-  
lurgical Problems in Hot Working, 1966, 15 pp.  
BISI 5583

On the Influence of Oxide Impurities in Ferro-  
Chromium on the Degree of Purity of Chromium  
Steels, by A. Schoberl.  
GERMAN, per, Radex Rund., Feb 1966, pp 34-50.  
\*BISI 6217

On the Formation of Comets in Polishing  
Sheets of Corrosion-Resistant Austenitic  
Steel, by F. Bauer and J. Riedl.  
GERMAN, per, Radex Rund., Aug 1967, pp.  
635-640.  
\*BISI 6121

High-Temperature Properties of Plastic Lubricants,  
by E. F. Vamos.  
GERMAN, per, Schmieretechnik, Vol 14, No 6, 1967,  
pp 299-303.  
\*HB 7379

Fundamentals of Magnetic Pulse Welding, by F.  
Erdmann-Jesnitzer and E. Feustel.  
GERMAN, per, Schweissen and Schneiden, Vol 19,  
No 1, 1967, pp 2-9.  
HB 7216

Concerning the Corrosion Characteristics of  
Ferrous and Non-Ferrous Metals in the Presence  
of Cement and Mortar, by A. Bukowiecki.  
GERMAN, per, Schweis Arch Wiss Techn, Vol 31,  
No 9, 1965, pp 273-293.  
BISI 5453

Filler Surface Preparation for Improvement  
of the Moisture Stability of Epoxy and Poly-  
ester Casting Resins, by S. Kopniczky and  
K. Kelemen, 16 pp.  
GERMAN, rpt, Second International Symposium  
on Glass Fiber Reinforced Plastics,  
Mar 13-17, 1967, pp D10/1-D10/8.  
P500019468  
Dept of Navy/NIC Trans No 2503

Scientific  
Materials (Contd)

The Deformation Strength of Steel C 45 Against Hot Pressing at Medium Deformation Rates, by W. Lueg & U. Krause.  
GERMAN, per, Stahl Eisen, Vol 80, Aug 4, 1960, pp 1061-1067.  
BISI 5706

Shearing Force Measurements on a Mechanically Working 2000-Ton Ingot-Slab Shear, by M. Vater.  
GERMAN, per, Stahl Eisen, Vol 87, 9 Mar 1967, pp 255-263.  
\*BISI 6148

Temperature Distribution in the Hearth of a Blast Furnace with an Air-Cooled Hearth Bottom, by R. Wartmann, H. Mertes.  
GERMAN, per, Stahl und Eisen, Vol 87, No 7, 1967, pp 337-363.  
HB 7252

I - Effect of Increased Coil Weights on the Properties of Wire Rod and On Its Preparation for Drawing, by H. J. Bockenhoff.  
GERMAN, per, Stahl Eisen, Vol 87, July 13, 1967, pp 834-854.  
\*BISI 6225

Reducing the Susceptibility of Nickel-Chromium Heat Treatable Steel to Hair-Line Cracking, by A. Wittmoser & N. Noerenberg.  
GERMAN, per, Stahl Eisen, Vol 87, Jul 27, 1967, pp 904-911.  
BISI 5933

Pelletizing Iron Ores with the Use of Pre-Roasted Material, by W. Wenzel and H. W. Gudensau.  
GERMAN, per, Stahl und Eisen, Vol 87, No 16, 1967, pp 933-938.  
HB 7233

Flow Tests with Models in the Development of Suction Offtakes for Converter Waste Gases, by H. Boenecke & M. Hansen.  
GERMAN, per, Stahl Eisen, Vol 87, Aug 10, 1967, pp 951-958.  
BISI 5913

Contribution to the Analysis of Water in Lime, by W. Thomich, H. Taxhet.  
GERMAN, per, Stahl Eisen, Vol 87, Sept 21, 1967, pp 1140-1143.  
\*BISI 6135

Scientific  
Materials (Contd)

Formation of Oxide Layers on Cemented Carbide Machine Tools During the Machining of Steel, by A. Wicher and R. Pape.  
GERMAN, per, Stahl Eisen, Vol 87, 5 Oct 1967, pp 1169-1178.  
\*BISI 6161

Change in the Material Caused by Annealing Open Coiled, Cold Rolled Wide Strip, by P. Werthebach.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1233-1241.  
\*BISI 6140

Present State of the Efficiency of Open Coil Annealing, by J. Wesseling.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1242-1248.  
\*BISI 6141

Calculations Concerning High Speed Cooling in Bell and Pot Annealing Furnaces, by G. Woalk.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1249-1255.  
\*BISI 6139

Protective Atmospheres for Bright Annealing of Austenitic Chromium-Nickel Steels, by F. Kohlmeyer and H.-J. Pohle.  
GERMAN, per, Stahl Eisen, Vol. 87, Oct. 19, 1967, pp. 1256-1261.  
\*BISI 6128

Investigations on the Loading of the Main Drive of a Blooming Slabbing Mill with the Aid of a Multiple Channel Analyser, by M. Proske.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1315-1321.  
BISI 6124

Process of Constant Heat Exchange at High Temperatures, by H. Sonnenschein.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1348-1355.  
BISI 6125

The Effect of Boron on the Properties of Structural and Tool Steels, by H. Treppschuh.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1355-1368.  
BISI 6058

Scientific  
Materials (Contd)

Continuous Casting of Wide Slabs, by H. Schrewe.  
GERMAN, per, Stahl Eisen, Vol 87, No. 22,  
1967, pp. 1372-1375.  
\*HB 7339

Determination of Acid-Soluble Boron in Case-  
Hardening Steels, by A. Stettner.  
GERMAN, per, Stahl und Eisen, Vol 87, No 22, 1967,  
pp 1386-1388.  
HB 7341

Method of Cooling Used for a Blast Furnace with  
a Hearth Diameter of 9 M, by G. Schnegelsberg  
& K. P. Roeder.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 16, 1967,  
pp 1422-1428.  
BISI 6127

Production of Semi-Killed Steel in the Basic  
Converter, by G. Bauer.  
GERMAN, per, Stahl Eisen, Vol 87, No 23, 16 Nov  
1967, pp 1435-1443.  
\*BISI 6152

Investigations on Hot Blast Slide Valves, by  
W. Altpeter & G. Schnegelsberg.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1478-1482.  
\*BISI 6183

Analogue Computer Calculations of Rolling Moment,  
by J. Heidepriem & F. Thielecke.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1482-1488.  
\*BISI 6184

Time Studies on Roughing Mills Using Manual  
and Programmed Control, by S. Fegerl.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1488-1494.  
\*BISI 6173

The Iron and Steel Industry of Japan, by J. Bruns.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1510-1514.  
\*BISI 6185

Improved Pouring Bay Efficiency at a Bof Plant  
by Shorter Pouring Times, by R. Hammer.  
GERMAN, per, Stahl Eisen, Vol 87, No 25, 1967,  
pp 1539-1543.  
\*HB 7340

Scientific  
Materials (Contd)

Significance of Quality of Lime in Steelmaking,  
by K. H. Obst and J. Stradtman.  
GERMAN, per, Stahl Eisen, Vol 87, No 25, 1967,  
pp 1543-1546.  
\*HB 7348

Comparison of Cut Wire with Steel Shot Elasting  
Media, by M. Vater and A. Schuetza.  
GERMAN, per, Stahl Eisen, Vol 87, No 26, 1967,  
pp 1586-1589.  
\*HB 7354

Tinning of Steel, by J. Siewert.  
GERMAN, per, Stahl Eisen, Vol 87, Dec 28, 1967,  
pp 1594-1599.  
\*BISI 6200

Operating Practice with Equipment for Automatic  
Control of 170-m Ton Basic Oxygen Furnaces, by  
F. J. Hufnagel.  
GERMAN, per, Stahl Eisen, Vol 88, No 1, 1968,  
pp 1-5.  
\*HB 7362

Continuous Sulphur Removal of b from Basic Iron  
in a Teapot Ladle Outside the Blast Furnace,  
by S. Henkel.  
GERMAN, per, Stahl Eisen, Vol 88, No 1, 1968,  
pp 10-14.  
\*HB 7363

Approximate Assessment of Machinability of Mild  
Free-Cutting Steels, by A. Hauttmann.  
GERMAN, per, Stahl Eisen, Vol 88, Jan 25, 1968,  
pp 62-67.  
\*BISI 6212

Slide-Rule Nomogram for Rapid Conversion of  
Numerical and Gravimetric Concentrations of  
Industrial Dusts, by H. Seidel.  
GERMAN, per, Staub-Reinhalt Luft, Vol 26, Aug  
1966, pp 329-332.  
BISI 5369

The Use of Aluminium, Titanium, Zirconium and  
Nitrogen Additions in the Production of High  
Speed Steels, by G. Richau.  
GERMAN, per, Die Technik, Vol 18, Jul 1963, pp  
473-475.  
BISI 5311

**Scientific  
Materials (Contd)**

Studies About Suitable Spray Nozzles for the Secondary Cooling Side of a Continuous Casting Machine, by H. Graichen.  
GERMAN, per, Technik, Vol 22, No 8, 1967, pp 500-503.  
\*HB 7357

Design and Supplication of a Two-Dimensional Hydraulic Analogy Model for Continuous Casting Problems, by H. Stecher.  
GERMAN, per, Technik, Vol 22, No 8, 1967, pp 503-507.  
\*HB 7358

Welded Steel Pipes Subjected to High Stresses, by W. Schmidt.  
GERMAN, per, Techn Mitt, Vol 57, Nov 1964, pp 534-541.  
BISI 5551

Report on the Machineability of High Temperature Resistant Materials, by H. Mitze.  
GERMAN, paper, Thesis for Academical Degree of Dr. Ing. approved by the Faculty of Mechanical Engng. of the Rheinisch-Westf. Techn. Hochschule, Aachen.  
\*BISI 6132

Rapid Control Testing of Foundry Ancillary Products, by C. Pelhan and B. Dobovisek.  
GERMAN, per, 34th International Foundry Congress, Paper No. 13, Oct 1967.  
\*BISI 6134

Damage in the Fatigue Testing of High Strength Steel, by K. Wellinger & H. Gassmann.  
GERMAN, per, V.D.I. Z., Vol 108, 1966, pp 1535-1542.  
\*HB 7372

Precise Calculation of Optimum Diameter Ratios of Externally Heated Tubes with Internal Pressure, by E. Ulrich.  
GERMAN, per, V.G.B. Mitt., Vol 56, Oct 1958, pp 354-357.  
\*BISI 6243

The Welding of Spheroidal Graphite Cast Iron, by W. Hummitsch and G. Juretsko.  
GERMAN, per, Werkstatt und Betrieb, Vol 100, No 6, 1967, pp 437-442.  
HB 7285

**Scientific  
Materials (Contd)**

Sampling of Pig and Cast Iron for Spectrometric Analysis of Emissions, by G. Staats.  
GERMAN, per, Z. anal. Chemie, Special Print, Vol 230, No 3, 1967, pp 184-188.  
\*BISI 6245

Directional Ordering and its Effect Upon the Magnetic Properties of Solid Solutions of Metals, by G. Rassmann.  
GERMAN, per, Z. Angew. Phys., Vol 21, No 4, 1966, pp 323-330.  
BISI 5606

Order/Disorder and Infrared Absorption. IV. Absorption of Some Metal Oxides with Spinel Structure, by Stefan Hafner.  
GERMAN, per, Zeitschrift fur Kristallographie, Vol 115, 1961, pp 331-358.  
\*NASA TT F-11,587

Residual Stresses in Cold Drawn Tube and Bar Stock Determined Mechanically as Against by X-Ray Diffraction, by F. Bollenrath.  
GERMAN, per, Z. Metallk., Vol 55, No 11, 1964, pp 655-659.  
\*HB 7366

The Deformability of Technical Materials at High Strain Rates, by K. Matthes.  
GERMAN, per, Z Metallk., No 57, Jan 1966, pp 8-11.  
BISI 5434

Absolute X-Ray Fluorescence Analysis, by H. Ebel.  
GERMAN, per, Z. Metallk., Vol 57, June 1966, pp 454-457.  
BISI 5670

Hexagonal Crystalline Structure of Fe Alloys With Transition Metals, by H. Schumann.  
GERMAN, per, Z. Metallk., Vol 58, No 3, 1967, pp 207-210.  
\*BISI 6206

1. Considerations on Design and Accuracy to Size of Extrusion Dies, by B. Heinen.  
2. Maintenance of the Extrusion Dies Under Service Conditions, by F. Kleinow.  
GERMAN, per, Zeit Metallk., Vol 58, 1967, No 4, pp 215-220.  
BISI 5731

Scientific  
Materials (Contd)

The Structure and Mechanical Properties of a Nickel-Iron-Base Alloy Containing Aluminium and Titanium After Undergoing Different Thermal and Thermomechanical Treatments, by E. Hornbogen and W.A. Meyer. GERMAN, per, Z. Metallk., Vol. 58, No. 7, 1967, pp. 445-449.  
\*BISI 6130

Potentialities and Limits of Salt-Bath Nitriding of Constructional Steels, by C. Razim. GERMAN, per, Z. Wirtschaftliche Fertigung, Vol. 62, Sep 1967, pp 439-447.  
\*BISI 6143

The Influence of Inclusions on Steel Sheet of Type St 52-3, by K. Mrosko. GERMAN, per, ZIS, Halle Mitteilungen, Vol 7, Nov 1966, pp 1563-1569.  
\*BISI 6158

Plasticity Theory in Strip Extruding, by Osmo Piispanen, 4 pp. GERMAN, bk, Zur Plastizitätstheorie des Strangpressens von Bandern, 1967.  
ACSI J-3487  
ID 2204045467

National Materials Handling Conference. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 1-2.  
ACSI J-3897  
ID 2204058267

Situation and Development of Materials Handling in Hungary. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 2-9.  
ACSI J-3897  
ID 2204058267

Activity of the Hungarian-Bulgarian Company. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 9-18.  
ACSI J-3897  
ID 2204058267

Development of the Manufacture of Materials Handling Machinery in Hungary. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 19-21.  
ACSI J-3897  
ID 2204058267

Scientific  
Materials (Contd)

Education of Materials Handling Engineers at the Budapest Technical University. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 22-27.  
ACSI J-3897  
ID 2204058267

The Role and Utilization of Technical Information in Metallurgy, by G. Ivan. HUNGARIAN, per, Koh. Lapok, Vol 99, No 6, 1966, pp 261-266.  
BISI 5819

Example of Quantitative Analyses with the Use of the Electron Probe Microanalyzer, by O. Caloni and A. Ferrari. ITALIAN, per, La Metallurgia Italiana, Vol 58, No 8, 1966, pp 330-334.  
HB 6992

Hot Rolling of Wide Sheet. Aspects Related to the Quality of the Finished Product, by E. Gabbini, et al. Italian, per, Met. Ital., Vol. 58, June 1967, pp. 437-444.  
\*BISI 6122

Contribution to the Development of New High-Strength Structural Steels with Good Toughness Properties, by P. Brozzo & V. Berruti. ITALIAN, per, Met. Ital., Vol 59, No 4, 1967, pp 247-255.  
\*BISI 6189

The Effect of Nitrogen and Aluminium on the Ductility and the Drawability of High Carbon Steel for Large Diameter Wire Drawing, by M. Mazzanti & R. Passeri. ITALIAN, per, Met. Ital., Vol 59, No 6, 1967, pp 445-452.  
\*BISI 6199

Effect of Bonding Agents Upon the Properties of Tar-Bonded Refractories, by G. Aliprandi. ITALIAN, per, Met. Ital., Vol 59, No 9, 1967, pp 693-698.  
\*HB 7386

Effect of Lime Quality and Hot Metal Composition in Bop Viewed from the Qualitative and Economic Standpoint, by P. Meschi & C. Sabato Ceraldi. ITALIAN, per, Met. Ital., Vol 59, No 9, 1967, pp 748-752.  
\*HB 7385

Scientific  
Materials (Contd)

Outline of IHI Blast Furnace Cooling System.  
JAPANESE, per, Ishikawajima-Harima Eng. Rev.,  
Vol 35, May 1967, pp 291-298.  
\*BISI 6239

Research on Trace Elements in Iron and Steel  
(Report No 3) Concerning Titanium and Zirconium  
Nitrides in Iron and Steel, by K. Narita.  
JAPANESE, per, J. Chem. J. of Japan, Vol 70,  
1956, pp 1536-1539.  
\*BISI 6260

Research on Trace Elements in Iron and Steel  
(Report No. 7 [17]), by K. Narita.  
JAPANESE, per, J. Chem. for Japan, Vol 80, 1959,  
pp 266-269.  
\*BISI 6253

Electrodeposition of Aluminium Powder, by K.  
Inoue.  
JAPANESE, per, J Met Fin Soc Japan, Vol 17, No 3,  
1966, pp 81-85.  
\*BISI 6144

Low-Temperature Brittle Fracture of Hot-Dipped  
Zinc Coatings, by H. Okuda and T. Okuda.  
JAPANESE, per, Kagaku to Kogyo, Vol 39, No 8,  
1965, pp 502-505.  
BISI 5375

Study of Electrophoretic Aluminium Coatings on  
Steel Plate, III. - Mechanism of Electrophoretic  
Deposition of Aluminium Powder, by T. Yamada.  
JAPANESE, per, Keikinzoku, Vol 15, May 1965,  
pp 55-59.  
\*BISI 6145

Studies on Martensite Transformation in  
Iron Nickel Alloys Report No. 3. Coexisting  
Ranges for Schiebung and Umklapp Transformation,  
by T. Honma.  
JAPANESE, per, Nippon Kinzoku, Vol. 21,  
1957, pp. 126-128.  
\*BISI 6096

Studies on Martensite Transformation in Iron-  
Nickel Alloys. Report No. 4. Propagation  
Process in Umklapp Transformation, by T. Honma.  
JAPANESE, per, Nippon Kinzoku, Vol. 21, 1957,  
pp. 263-267.  
\*BISI 6097

Scientific  
Materials (Contd)

Quantitative Spectrographic Determination of  
Traces of Boron in Plain-Carbon and Low-Alloy  
Steels, by T. Kawaguchi.  
JAPANESE, per, Nippon Kinzoku, Vol 28, No 11,  
1964, pp 759-763.  
BISI 5548

The Effect of Alloying elements on the Corrosion-  
Resistance of 20Cr-11Ni Type Heat-Resisting Steels  
Against Molten Lead Oxide, by K. Kusaka &  
K. Ikashima.  
JAPANESE, per, Nippon Kinzoku, Vol 30, No 3,  
1966, pp 226-230.  
\*BISI 6169

Strengthening of Steel by Hot Working, by  
I. Gokyu & K. Hashimoto.  
JAPANESE, per, Nippon Kinzoku, Vol 31, Apr 1967,  
pp 352-356.  
\*BISI 6211

The Origin of Ridging in 17% Stainless  
Steel Hot Strips, by N. Ohoshi.  
JAPANESE, per, Nippon Kinzoku, Vol 31,  
April 1967, pp. 519-525.  
\*BISI 6111

Grain Growth of Rimmed Mill Steel Sheet,  
Relationship Between the Distribution of  
Tiny Inclusions in Rimmed Mild Steel Sheet  
and the Recrystallized Grain Size, by  
H. Kubotera, et al.  
JAPANESE, per, Nippon Kinzoku, Vol. 31,  
April 1967, pp. 527-534.  
\*BISI 6112

On the Mechanism of Ridging Phenomenon in  
17% Chromium Stainless Steel, by H. Takechi,  
et al.  
JAPANESE, per, Nippon Kinzoku, Vol. 31,  
No. 6, 1967, pp. 717-723.  
\*BISI 6113

Study of Boron Impregnation of Steel Surfaces  
by  $B_2C-NaOCN$ , by A. Kura.  
JAPANESE, per, Nippon Kinzoku Gakkaishi, Vol 31,  
No 3, 1967, pp 296-300.  
HB 7347

Changes in Texture of Hot Rolled Strip of Low  
Carbon Steel, by H. Kubotera.  
JAPANESE, per, Nippon Kogan Techn. Rep., Vol 38,  
1966, pp 333-340.  
\*BISI 6190

Scientific  
Materials (Contd)

Proof Stress of H.T. Steel Members, by T. Kato, et al.  
JAPANESE, rpt, Proceedings of 12th Symposium on High Strength Steel and Its Function, 1965, Nov. 26, pp. 15-24.  
\*BISI 6114

Application and Use of a Neutron Moisture Gauge for Moisture Analysis of Blast Furnace Coke, by E. Egami.  
JAPANESE, per, Sumi Mat., Vol 19, Jan 1967, pp 23-27.  
BISI 5615

The Application of a Large Rimming Steel Ingot to the Production of Cold Rolled Deep Drawing Steel Sheet, by K. Sugazawa.  
JAPANESE, per, Sumitomo Mat., Vol 19, Apr 1967, pp 142-155.  
\*BISI 6220

Liquid Metal Flow in Ingot Mould During Solidification of Killed Steel, by H. Mori.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 3, 1966, pp 221-225.  
\*HB 7359

Effect of Pulsating Blast on the Reduction of Iron Ores, by Y. Yamada and T. Tsuda.  
JAPANESE, per, Tetsu to Hagane, Vol 52, No 9, 1966, pp 1370-1372.  
HB 7311

Trial Manufacture of Doubly Oriented Fe-Al-Si System, by O. Madono.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 10, 1966, pp 1633-1635.  
\*BISI 6146

Study of Directional Silicon Steel Sheet, II. - Electron-Microscopic Observation of Impurities which Influence Secondary Recrystallization of Silicon Steel Sheet, by T. Matsuoka.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 19, 1966, pp 1638-1640.  
\*BISI 6147

The Mechanism of Formation of Macroscopic Inclusions Produced by Air-Oxidation of Molten Steels, by K. Senda.  
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No. 1, 1967, pp. 11-27.  
\*BISI 6137

Scientific  
Materials (Contd)

Relationship Between Reducing Conditions and Physical Properties of Pre-Reduced Iron Ore Pellets, Part I of Basic Study of Pre-Reduced Iron-Ore Pellets, by K. Kunii.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 3, 1967, pp 199-202.  
HB 7322

Experiments on the Solidification of Killed Steels, by H. Iijima & K. Inamoto.  
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No 3, 1967, pp 227-230.  
\*HB 7360

Measurement of Tensile Properties of Steel with a High-Speed Impact Tension Testing Machine, by S. Sakui.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 4, 1966, pp 739-741.  
BISI 5130

Blowholes in Aluminum-Silicon Killed, Nitrogen-Alloyed Steel Ingots and Welding-up of Blowholes During Hot Rolling, by T. Saito.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 812-814.  
HB 7287

Wire Drawing Characteristics Under Critical Pressure, Part II of Drawing of Carbon Steel Wire with Forged Lubrication at Extreme Pressure, by T. Tsujimura.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 843-846.  
HB 7355

Photometric Determination of Zirconium in Stainless Steel with Arsenazo III, by O. Kamori.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 857-859.  
HB 7335

The Growth of Inclusions During Decoxidation [of Steels] with Calcium Silicide, Part II of Investigation into the Behavior of Complex Decoxidants, by Y. Watanabe and T. Kusakawa.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1191-1193.  
HB 7369

Scientific  
Materials (Contd)

Elimination of Carbon from Liquid Metal by Means of Carbon Dioxide + Argon Gas Mixtures, by K. Sano.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1193-1195.  
HB 7370

Nonmetallic Inclusions in 20-Ton Steel Ingots Made in the Basic Electric Arc and Acid Open-Hearth Furnaces, Also in a 20-Ton Vacuum Cast Ingot. Part III of Study of Specifications of Heavy Forgings Made in Basic Arc and Acid Open-Hearth Furnaces, and an Investigation into Vacuum Casting, by K. Narita.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1199-1202.  
HB 7325

Room-Temperature Properties of Chromium Bearing Steels as Affected by Additions of Columbium and Molybdenum, by J. Muraki.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1273-1275.  
HB 7338

High-Temperature Properties of Chromium Bearing Steels as Affected by Additions of Columbium and Molybdenum, Part II of Effect of Columbium and Molybdenum Additions to Chromium-Type Bearing Steels, by J. Muraki.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1276-1278.  
HB 7342

Effect of Titanium, Copper and Tungsten Additions on the Properties of 10% Ni, 5% Mo, 9% Co Maraging Steel, by K. Kusaka.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1288-1291.  
HB 7323

Effect of Ausforming on Carbide Precipitation in Iron-Molybdenum-Carbon Alloys, by S. Watanabe.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1294-1296.  
HB 7324

The Nitrided Case of Rapid Nitrating Steel, by K. Kusaka.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1302-1305.  
HB 7258

Scientific  
Materials (Contd)

Rolling Fatigue Characteristics of Carburized or Carbonitrided 1% Cr Steel at Elevated Temperatures, by H. Kurabe and T. Araki.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1305-1308.  
HB 7367

Spectrographic Solution for the Determination of Acid-Soluble Aluminum in Steels, by S. Ogawa.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1359-1361.  
HB 7337

Equipment for Sampling and Analyzing Metallurgical Furnace Atmospheres, by M. Hayer, M. Mandl.  
POLISH, per, Hutnicke Listy, Vol 21, No 8, 1966, pp 532-538.  
HB 7000

An Investigation of the Kinetics of Sedimentary Deoxidation of Steel, by K. Mamro & J. Taborski.  
POLISH, per, Hutnik, Vol 34, Nos 7-8, 1967, pp 302-307.  
\*BISI 6255

Critical Consideration of Quantitative Micro-Methods for Determining Cleanliness of Steel, by J. Rys.  
POLISH, per, Hutnik, Vol 34, No 9, 1967, pp 391-395.  
\*HB 7373

The Effect of Angle Parameters During Rolling of Metal Powders on the Density of Strip, by W. Missol.  
POLISH, per, Prace Inst. Hutniczych, Vol 19, No 1, 1967, pp 57-59.  
BISI 5787

Trial Runs in a Pilot Basic Oxygen Furnace (at a Steelworks in Poland), Part I, by J. Grayb, L. Kurdzial.  
POLISH, per, Prace Rady Naukowo-Technicznej Huty im Lenina, No 14, 1964, pp 111-129.  
HB 6677

Polish-Soviet Cooperation in Metallurgy, by Juliusz Rybarski, Jerzy Stepian, 14 pp.  
POLISH, per, Problemy Projektowe Hutnictwa i Przemyslu Maszynowego, Vol 15, No 10, Oct 1967, pp 289-295.  
JPRS 44069

Scientific  
Materials (Contd)

The Effect of Sand Grain Size of the Casting Properties of Synthetic Sand Mixes, by J. Szozeniawski.  
POLISH, per, Prz. Odlew., Vol 17, June 1967, pp 177-183.  
\*BISI 6249

Segregation of Elements in a Killed Steel Ingot, by W. Hansel & L. Osika.  
POLISH, per, Z.N.A.G.H. Met. Odlewn., Vol 67, No 9, 1963, pp 37-56.  
\*BISI 6228

Operation of Electric Reduction Furnaces, by Max Fernandes Alvim Machado.  
PORTUGUESE, per, Bol Assoc Brasil Metals, Vol 20, No 84, Sep 1964, pp 451-467.  
\*BISI 6150

Continuous Casting of Steels for Tinplate, by C.H. M. Braga.  
PORTUGUESE, per, Met ABM (Sao Paulo), Vol 22, Oct 1966, pp 779-783.  
BISI 5426

Classification of Some Brazilian Iron Ores by the Reduction Test, by C. D. Brosch & H. P. Rizzo.  
PORTUGUESE, per, Met. ABM, Vol 23, Sept 1967, pp 687-692.  
\*BISI 6201

Pelletization of Manganese Ore, by C. D. Brosch.  
PORTUGUESE, per, Met. ABM, Vol 23, Sept 1967, pp 695-697.  
\*BISI 6204

Reduction of Iron Ores in Shaft Furnaces by Regenerated Circulating Gas, by I. Tripsa & O. Hatarascu.  
RUMANIAN, per, Metalurgia, Vol 19, No 3, 1967, pp 130-134.  
\*HB 7353

Increased Production of High-Grade Steels, by Dragomir Moisin, 5 pp.  
RUMANIAN, per, Munca, Bucharest, 24 Dec 67, pp. 1,3.  
JPRS 44,244

Scientific  
Materials (Contd)

Investigations Into the Modification of Pig Iron by Treatment with Methane, by L. Sofroni, E. Nicoloiu.  
RUMANIAN, per, Rev. Roumaine Sci. Techn., Vol 9, No 2, 1964, pp 233-244.  
\*BISI 6171

Steelmaking in the Electric Furnace with Total Substitution of the Scrap by Krupp-Renn Modules, by G. Coll Gomex-Trevijano.  
SPANISH, per, Inst. Hierro Acero, Vol 16, Jul-Sept 1963, pp 276-283.  
BISI 5630

The Packing Material Research and Testing Laboratory, 9 pp.  
SWEDISH, per, Emballageprovninglaboratoriet (Kort Presentation av Organization och Verksamhet), No 2, 1964.  
ACSI J-4121  
ID 2204000868

Scab Preventing Liquids for Application to the Surface of Green Sand Moulds, by R. Sillen.  
SWEDISH, per, Gjuteriet, Vol 57, June 1967, pp 81-83.  
\*BISI 6209

Direct Reduction of Iron Ore by the Stora Kopparbergs Method, by A. Josefsson.  
SWEDISH, per, Jernkon Ann., Vol 148, No 3, 1964, pp 128-139.  
BISI 5353

The Influence of Different Factors on the Coefficient of Heat Transfer in Steel Heating Furnaces, by G. Wallquist.  
SWEDISH, per, Jernkon, Ann., Vol 149, No 5, 1965, pp 221-256.  
\*BISI 6224

Changes in Steels for Reactor Pressure Vessel After Neutron Irradiation, by H. P. Myers.  
SWEDISH, per, Jernkon, Ann., Vol 151, No 3, 1967, pp 197-215.  
\*BISI 6191

KAM 40, KAM 60 and KAM 90. (Reinforcing Steels.), by H. Granholm.  
SWEDISH, per, Trans Chalmers Univ of Technology, 1959, pp 2-39.  
BISI 5066

Scientific  
Mathematical Sciences

Studies in Mathematical Geology, by  
Andrew B. Vistelius. 294 pp.  
RUSSIAN, bk, Sept 1967.  
Consultants Bureau

Collected Works of Academician A. M. Lyapunov,  
Volume I, by A. M. Lyapunov, 451 pp.  
RUSSIAN, bk, Academician A. M. Lyapunov, Sobraniye  
Sochineniy. (I), Vol 1, 1956, pp 1-447.  
FI00035368-V  
FTD-MT-64-209

Instruments for Determining Correlation  
Functions, by K. V. Tomingas & M.S. Alabyan,  
8 pp.  
RUSSIAN, per, AN SSSR. Institut Avtomatiki i  
Telemekhaniki. Tekhnicheskaya Kibernetika,  
1965, pp 56-60.  
FI00017868  
FTD-HT-66-598

A Minimal Circuit Made up of Closed Contacts for  
a Boolean Function of n Arguments, by R. Ye.  
Krichevskiy.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Institut Matematiki. Diskretnyy Analiz, No 5,  
1965, pp 89-92.  
\*FTD-HT-23-136-68

Minsk-222 Universal Computer System, by E. V.  
Yevreinov, G. P. Lopato.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Institut Matematiki. Vychislitel'nyye Sistemy, No 23,  
1966, pp 13-20.  
\*FTD-HT-23-169-68

On Question of Realization of Variational  
Methods in AVM (Analog Computers), As Applied  
to Solution of Integral Equations, by A. F.  
Verlan', 6 pp.  
RUSSIAN, per, AN UKRSSR. Institut  
Kibernetiki. Kibernetika i Vychislitel'naya  
Tekhnika, 1964, pp 3-7.  
FI00028668-V  
FTD-MT-65-551

Elements of Applied Mathematics, by Ya. B.  
Zel'dovich, A. D. Myshkis.  
RUSSIAN, bk, Elementy Prikladnoi Matematiki,  
Second edition, revised and enlarged, 1967.  
PLENUM PRESS

Scientific  
Mathematical Sciences (Contd)

On One Representation of the Probability Integral  
in Terms of an Elementary Function, by  
A. N. Reznikov.  
RUSSIAN, per, Inzh.-Fiz. Zh., Vol 13, No 3,  
1967, pp 379-381.  
Dept of Navy/APL/JHU T-2101

Computers with Core-Diode Elements, by  
Yu. A. Makhmudov, 11 pp.  
RUSSIAN, per, AN AZERBSSR. Izvestiya.  
Seriya Fiziko-Tekhnicheskikh i Matematiches-  
kikh Nauk, No 6, 1964, pp 27-35.  
FI00015468  
FTD-HT-67-48

Numerical Solution of a System of Two-Dimensional  
Unsteady Navier-Stokes Equations for a Compress-  
ible Gas in a Closed Region, by V. I. Polezhayev.  
RUSSIAN, per, AN SSSR. Izvestiya. Mekhanika Zhid-  
kosti i Gaza, No 2, 1967, pp 103-111.  
\*FTD-HT-23-104-68

Numerical Calculation of a Supersonic Flow Past  
Ducted Bodies at Angle of Attack, by O. N. Katskova  
& P. I. Chushkin.  
RUSSIAN, per, AN SSSR. Izv., Mekh. Zhid. i Gaza,  
No 3, 1967, pp 124-130.  
\*Dept of Navy/APL/JHU J-1117

A Method for System Reliability Analysis,  
by B. P. Zelentsov, 7 pp.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Izvestiya. Seriya Tekhnicheskikh Nauk, No 2,  
1965, pp 44-48.  
FI00014168  
FTD-HT-23-501-67

Principles of Construction of Flat Outlines,  
by I. I. Kotov, 6 pp.  
RUSSIAN, per, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 95-98.  
FI00029368-V  
FTD-MT-65-72

Determination of the Distribution Parameters  
of Linear Dimensions When Treating a Batch of  
Components, by A. S. Shevelev, 8 pp.  
RUSSIAN, per, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 99-106.  
FI00029868-V  
FTD-MT-65-72

Scientific  
Mathematical Sciences (Contd)

Resolvent of a Self-Adjoint Expansion of an Elliptic Operator, by V. N. Pivnenko. RUSSIAN, per, VUZ, Izv., Mat., No 9, 1967, pp 69-74.  
\*Dept of Navy/APL/JHU J-1123

Theory of Representation of Symmetric and Isometric Operators in Hilbert Spaces, by V. I. Polyakov. RUSSIAN, per, VUZ, Izv., Mat., No 9, 1967, pp 86-92.  
\*Dept of Navy/APL/JHU J-1124

Approximate Determination of the Eigenvalues of Certain Operators Which are Meromorphically Dependent on a Parameter, by L. M. Belyakov. RUSSIAN, per, VUZ, Izv., Mat., No 11, 1967, pp 7-10.  
\*Dept of Navy/APL/JHU J-1139

Cybernetics in the Navy, by A. L. Lifshits, 225 pp. RUSSIAN, bk, Kibernetika v Voenno-Morskoy Flote, 1964, pp 1-258.  
P100029068-V  
FTD-MT-65-80

Statistical Probability Modelling of Random Processes, by A. S. Zhernenko. RUSSIAN, per, Morskoy Sbornik, No 11, 1965, pp 32-37.  
\*FTD-MT-23-101-68

Certain Questions of Asymptotic Solution of One Operator Differential Equation, by I. I. Kovtun, 8 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 33-39.  
P100028968-V  
FTD-MT-64-322

Sufficient Conditions of Convergence of Method of Yu. D. Sokolov during Approximate Solution of Nonlinear Integral Equations of Type of Hammerstein, by N. S. Kurpel', 8 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 47-53.  
P100028968-V  
FTD-MT-64-322

Scientific  
Mathematical Sciences (Contd)

On the Cauchy Problem for Equations of Higher Order with Multiple Characteristics, by I. F. Kushnirchuk, 6 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 54-59.  
P100028968-V  
FTD-MT-64-322

On Random Processes in Simple Linear Delay Systems, by M. N. Maydanyuk, V. P. Rubanik, 5 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 60-63.  
P100028968-V  
FTD-MT-64-322

On Adherence of Solutions of a Linear Uniform Second Order Delay Differential Equation, by S. B. Norkin, 11 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 82-89.  
P100028968-V  
FTD-MT-64-322

Substantiation of Principle of Averaging for Differential Equations with Discontinuous Right Side, by A. M. Samoilenko, 8 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 90-95.  
P100028968-V  
FTD-MT-64-322

Asymptotic Behavior of Negative Part of Spectrum of One-Dimensional Differential Operators, by B. Ya. Skachek, 18 pp. RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 96-109.  
P100028968-V  
FTD-MT-64-322

Scientific  
Mathematical Sciences (Contd)

On the Solution of a Type of Nonlinear Differential Equation, by E. F. Fayzibayev, 3 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 126-128.  
P100028968-V  
FTD-MT-64-322

On the Existence and Properties of Integral Manifold for System of Nonlinear Delay Differential Equations with Variable Coefficient, by V. I. Podchuk, 14 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 129-140.  
P100028968-V  
FTD-MT-64-322

On Nonlinear Oscillations of a Plate, by I. F. Shulezhko, 15 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 141-154.  
P100028968-V  
FTD-MT-64-322

On Two Representations of the Equations of the Theory of Shells, by V. Z. Vlasov.  
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 11, No 5, 1947, pp 521-526.  
\*FTD-MT-23-100-68

Remarks on Using Approximation Methods of Solving Differential Equations, by E. G. Kronberg.  
RUSSIAN, per, Sb Vopr Dinamiki i Prochnosti, Vol 12, 1966, pp 28-38.  
\*FTD-MT-23-138-68

On Type of Integral Equations in Banach Spaces, by V. M. Misaev.  
RUSSIAN, per, Sibirsk. Mat. Zh., Vol 8, No 3, 1967, pp 621-628.  
\*Dept of Navy/APL/JHU J-1116

One-Sided Estimations of Solution of Non-Linear Differential Equations in Banach Spaces, by R. M. Sultanov.  
RUSSIAN, per, Sibirskii Mat. Zh., Vol 8, No 4, 1967, pp 859-864.  
\*Dept of Navy/APL/JHU J-1121

Scientific  
Mathematical Sciences (Contd)

On the Completeness of a System of Functions in HP, by B. M. Bichkov & V. M. Grober.  
RUSSIAN, per, Sibirskii Mat. Zh., Vol 8, No 4, 1967, pp 942-946.  
\*Dept of Navy/APL/JHU J-1122

The Summation of Orthogonal Series by Linear Methods, by A. V. Efimov.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 2, 1967, pp 119-121.  
Dept of Navy/APL/JHU T-2103

Quasilinear Equations in Linear Topological Spaces, by V. I. Averbukh.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 3, 1967, pp 233-234.  
Dept of Navy/APL/JHU T-2107

Infinite-Dimensional Elliptic Operators and Related Parabolic Equations, by Yu. L. Daletskiy.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 4, 1967, pp 3-54.  
\*Dept of Navy/APL/JHU J-1126

About Possible Extension of the Idea of Solution for Linear and Quasi-Linear Elliptic Equations of the Second Order, by O. A. Ladyzhenskaya, N. N. Ural'tseva, 19 pp.  
RUSSIAN, per, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 10-25.  
P100028868-V  
FTD-MT-64-145

Generators in Ergodic Theory, by V. A. Rokhlin, 8 pp.  
RUSSIAN, per, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 26-32.  
P100028868-V  
FTD-MT-64-145

Stability of Solution of Minkowski Problem, by Yu. A. Volkov, 13 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 33-43.  
P100028868-V  
FTD-MT-64-145

Scientific  
Mathematical Sciences (Contd)

About Representation of a Function of Two Variables by the Difference of Convex Functions, by V. A. Zalgaller, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 44-45.  
P100028868-V  
FTD-MT-64-145

The Question about Stability of Solutions of Equations of the Elliptic Type, by Ye. P. Sen'kin, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 46-47.  
P100028868-V  
FTD-MT-64-145

On the Existence of Closed Convex Polyhedrons with Given Curvatures of Vertices in n-Dimensional Euclidean and Lobachevskian Spaces, by A. A. Zil'berberg, 7 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 48-52.  
P100028868-V  
FTD-MT-64-145

About Determination of a Surface by Supporting Function, by Yu. G. Dutkevich, 8 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 53-58.  
P100028868-V  
FTD-MT-64-145

On Double Sums, Connected with the Zeros of the Dirichlet L-Series, by A. I. Vinogradov, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 59-63.  
P100028868-V  
FTD-MT-64-145

About the Maximum Principle for One Class of Operators in Banach Space, by V. G. Maz'ya, 7 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 64-69.  
P100028868-V  
FTD-MT-64-145

Scientific  
Mathematical Sciences (Contd)

Formulas of Summation, by V. V. Pototskiy, 10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 70-78.  
P100028868-V  
FTD-MT-64-145

Necessary and Sufficient Criterion of Compactness of Insertion, by A. G. Ramm, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 150-151.  
P100028868-V  
FTD-MT-64-145

Higher Mathematics for Beginners and its Application to Physics, by Ya. B. Zel'dovich.  
RUSSIAN, bk, Vyshshaya Matematika dlya Nachinayushchiky i ee Prilozheniya i Fizike, Third ed. enlarged, 1965.  
PLENUM PRESS

Method of Adding Binary Numbers, by R. B. Mnatsakanov, G. G. Ladariya, 5 pp.  
RUSSIAN, Patent No 176724 (Appl No 880153/26-24, Feb 6, 1964)  
P100013368  
FTD-HT-23-709-67

Methods of Finding Pulse Compression Signals of Noncyclic Binary Codes, by Liu Ch'en-hua, 16 pp.  
CHINESE, per, Chung-kuo K'o-hsueh Chi-shu Ta-hsueh Hsueh-pao, Vol 1, No 1, Feb 1965, pp 123-133.  
JPRS 44088

On a Very General Integral Equation of Gravimetry, by J. J. Levallois.  
FRENCH, rpt, Bulletin Geodesique. New Series No 50, 1958, pp 36-49.  
\*AGIC TC-1390

Communication on the Curvature of the Vertical, by F. Kobold, E. Hmsiker.  
FRENCH, rpt, Bulletin Geodesique. New Series No 65, 1962, pp 265-267.  
\*AGIC TC-1388

Synthesis of the Analytical Results on Optimal Transfers Between Keplerian Orbits, by Christian Marchal.  
FRENCH, rpt, ONERA T.P. 515, 1967, 35 pp.  
\*NASA TT F-11,590

Scientific  
Mathematical Sciences (Contd)

Linear Solutions of Molodensky's Problem, by H. Moritz.  
GERMAN, rpt, Report to the IAG Conference "The Normal Spheroid and the Figure of the Earth", March 1967, 50 pp.  
ACIC TC-1298

Practical Computing Formulas for Three-Dimensional Geodesy, by R. A. Hirvonen.  
GERMAN, per, Zeitschrift für Vermessungswesen, Vol 89, No 5, May 1964, pp 145-151.  
\*ACIC TC-1387

Redundant Representations and the Arithmetic Operation Speed of Digital Computers, by J. Bankowski, 22 pp.  
POLISH, per, Archiwum Automatyki i Telemechaniki, Vol 10, No 3, 1965, pp 375-390.  
P100015968  
FTD-HT-67-35

The Selection of a Corrective Element in Multidimensional Linear Systems, by Z. Podgoda, 15 pp.  
POLISH, per, Dobor Elementu Korckcyjnego w Liniowych Ukludach Wielowymiarowych, Vol 10, No 3, 1965, pp 341-352.  
P100015968  
FTD-HT-67-35

Resolution of a Great System of Standard Equations through the Application of Ideas of Francis Francovich and Prof. Bolts, by Esteban Horvat.  
SPANISH, per, Instituto Panamericano de Geografia e Historia, Publ No 135, 1954.  
\*ACSI J-4376  
ID 2204006768

Mechanical, Industrial, Civil & Marine  
Engineering

Electromagnetic Depth Sounding, by L. L. Vanyan 312 pp.  
RUSSIAN, bk, Aug 1967  
Consultants Bureau

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

The Monofrequency Method in the Dynamic Analysis of Structures, by Yu. A. Mitropol'skiy, B. I. Moseykov. 102 pp.  
RUSSIAN, bk, Sep 1967.  
Consultants Bureau

Analytical Mechanics, Stability of Motion, Celestial Ballistics. Proceedings of the Second All-Union Conference on Theoretical and Applied Mechanics.  
RUSSIAN, bk, Analiticheskaya mekhanika, ustoychivost'dvizheniya, nebesnaya ballistika. Trudy II Vsesoyuznyi s'yezd' po teoreticheskoy i prikladnoy mekhanike, Moscow, Izdatel'stvo "Nauka", 1965, 211 pp.  
\*CSFTI TT 68-50305

On the Equations for the Errors of an Inertial Navigational System Which Determines the Arbitrary Curvilinear Coordination of a Moving Object; from Automation Express, by V. D. Andreyev.  
RUSSIAN, per, AN SSSR. Izvestiya Mekhanika, No 4, 1965, pp 108-116.  
\*FTD-HT-23-98-68

Machine for Rolling Circular Saws, by Yu. M. Stakhiev.  
RUSSIAN, per, Dereboobrabatyvayushchaya Promyshlennost, Moskva, Vol 14, No 2, 1965, p 28.  
\*CSFTI TT 68-50375/7

Central Asia-Central Russia Transcontinental Gas Pipeline, by K.K. Smirnov, 5 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost', Moscow, No. 11, 1967, pp. 5-6.  
JPRS 44,412

Moscow Order of Lenin Gas Pipeline Administration, by A. B. Sedykh, 6 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost', Moscow, No. 11, 1967, pp. 7-9.  
JPRS 44,412

Kiev Gas Pipeline Administration, by V.S. Chernovol, 5 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost', Moscow, No. 11, 1967, pp. 10-11.  
JPRS 44,412

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Bukhara-Urals Natural Gas Pipeline Administration, by V.S. Zotov, 7 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 12-14.  
JPRS 44,412

Minsk Natural Gas Pipeline Administration, by  
G.M. Dzagnidze and A.V. Zheleznyakov, 6 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 15-17.  
JPRS 44,412

Leningrad Natural Gas Pipeline Administration,  
by S.F. Barmin, and I.M. Zhigalova, 7 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 17-20.  
JPRS 44,412

Power and Irrigation Construction in the  
Balkhashiliyskiy Basin in Kazakhstan, by  
B. Amosov and R. Sedykh, 6 pp.  
RUSSIAN, newspaper, Kazakhstanskaya Pravda,  
Alma-Ata, 20 Jan 68, pp. 2-3.  
JPRS 44,374

Large Depressions in Slanted Rotation Shells with  
a Zero Bend Rigidity and Affected by Steady Inside  
Pressure, by A. V. Sachenkov.  
RUSSIAN, per, Kazan. Universitet. Issledovaniya  
po Teorii Plastin i Obolochek, No 2, 1964, pp 71-  
78.  
\*FTD-HT-23001-68

Survey of Design Specifications of Missile Ships,  
by N. I. Belavin, 6 pp.  
RUSSIAN, bk, Korabli-Raketonosty, 1967, pp 2, 3-4,  
269, 270, 271-272.  
JPRS 44083

Construction of Auto Plant in Tol'yatti,  
by Val. Rushkis, 6 pp.  
RUSSIAN, weekly, Literaturnaya Gazeta,  
No. 52, Moscow, 27 Dec 67, p. 11.  
JPRS 44,264

Theoretical Analysis of the Process of Readjust-  
ment of the Operating Regimes of Stages in a  
Multistage Axial Compressor, by V. A. Stefanovskiy.  
RUSSIAN, bk, Lopatochnyye Mashini i Struynyye  
Apparaty, 1967, pp 147-170.  
\*NASA TT F-11,584

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Effect of Water Flow Rate on Cavitation  
Erosion, by S. P. Kozyrev, 9 pp.  
RUSSIAN, per, Mashinovedeniye, No 1, 1966,  
pp 91-95.  
P100015768  
FTD-HT-23-581-67

Mechanics of Low-Thrust Spaceflight, by  
G. L. Grodzovski.  
RUSSIAN, bk, Mekhanika kosmicheskogo poleta s  
maloy tyagoy. Moscow, Izdatel'stvo "Nauka",  
1966, 67 $\frac{3}{2}$  pp.  
\*CSFTI TT 68-50301

Automation of Construction Operations, by V. A.  
Ogiyevich, A. M. Ginzburg, 5 pp.  
RUSSIAN, per, Mekhanizatsiya Stroitel'stva, No  
12, Dec 1967, pp 2-4.  
JPRS 44077

Mean and Extreme Pressure Values, by O. B.  
Mertsalova, M. V. Sokolova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut  
Aeroklimatologii, Trudy No 24, 1963, pp 54-58.  
\*FTD-MT-24-45-68

Computers and Calculation of Constructions,  
by A. V. Gemmerling, 12 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal,  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooruzheniy"  
No 3, 1963, pp 1-4.  
P100015668  
FTD-MT-66-24

Stereophotogrammetric Method of Measurement  
of Deformations of Three-Dimensional  
Structures, by P. I. Polyakov, M. Z.  
Taranovskaya, 10 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal,  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooruzh-  
eniy", No 3, 1963, pp 7-11.  
P100015668  
FTD-MT-66-24

Calculation of Rods from Plastics on Buck-  
ling, by V. P. Kotsegubov, 9 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal,  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooru-  
zheniy", No 3, 1963, pp 15-19.  
P100015668  
FTD-MT-66-24

Pulsed Light Source with Radiation Similar to that of a Complete Black Body at a Temperature of about 40000 K, by N. N. Ogurtsova, I. V. Podmoshenskiy.  
RUSSIAN, per, Optiko-Mekhanicheskaya Promyshlennost', No 1, 1960, pp 1-5.  
\*FTD-MT-24-40-68

Strength Calculation of Machine Parts; a Manual for Machine Designers, by I. A. Birger.  
RUSSIAN, bk, Raschet na Prochnost' Detaley Mashin; Spravochnoye Posobiye, 2d Ed., Rev and Enl., Mashinostroyeniye, 1966, 616 pp.  
\*FTD-HT-23-80-68C

Scattering, Reaction and Decay in Nonrelativistic Quantum Mechanics, by A. I. Baz'.

RUSSIAN, bk, Rasseyaniye reaktsii i raspady v nerelativistskoi kvantovoi mekhanike, Moscow, Izdatel'stvo "Nauka", 1966, 337 pp.  
\*CSFTI TT 68-50309

Conference on the Machine and Tractor Pool Held in Krasnodar, 18 pp.  
RUSSIAN, per, Sel'skiy Mekhanizator, No. 12, Moscow, Dec 67, pp. 6-9.  
JPRS 44,338

Improvements to be Made in Rural Construction, by V. Gushchin, 8 pp.  
RUSSIAN, journal, Sel'skoye Stroitel'stvo, Moscow, No. 12, Dec 67, pp. 1-2.  
JPRS 44,216

The Establishment and Development of Construction, Road, and Communal Machine-Building in the USSR, 13 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 1-8.  
JPRS 44081

Stages in the Development of Single-Bucket Excavators, by A. I. Astakhov, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 14-17.  
JPRS 44081

Development of Production of Multibucket Excavators, by Z. Ye. Garbusov, V. P. Uspenskiy, 6 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 18-20.  
JPRS 44081

Construction Cranes in the USSR, by A. A. Vaynson, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 21-23.  
JPRS 44081

Self-Propelled Boom Cranes in the USSR, by S. M. Borisov, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 24-26.  
JPRS 44081

Road Machine Building in the 50 Years of Soviet Power, by A. A. Vasil'yev, 8 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 26-32.  
JPRS 44081

Development of Power Tools and Machines for Finishing Operations in Construction, by V. A. Yeletskiy, 10 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 32-37.  
JPRS 44081

Ways of Improving the Cavitation Characteristics of Marine Condensate Pumps, by N.S. Yalovoy, 11 pp.  
RUSSIAN, per, Sudostroyeniye, No. 7, July 67, Moscow, pp. 30-34.  
JPRS 44,367

Merchant and Fishing Shipbuilding in Jubilee Year, by Ye.G.Frid and M.N. Belyayev, 10 pp.  
RUSSIAN, per, Sudostroyeniye, Leningrad, No. 11, 1967, pp. 13-17.  
JPRS 44,199

An Automatic Transverse Stabilization System for the Scientific-Research Ship  Akademik Kurchatov, by E. A. Yanohevskiy, V. A. Kaverin, 8 pp.  
RUSSIAN, per, Sudostroyeniye, No 9, Sep 1967, pp 31-34.  
JPRS 44079

The Use of Color Screen for Quantitative Investigations of Schlieren by the Tepler Optical Method, by M. B. Apashev and V. B. Mikhaylenko.  
RUSSIAN, bk, Theory, Construction, Design and Testing of Internal Combustion Engines, Issue VI, Proceedings of the Engine Institute of the Academy of Sciences of the USSR, Academy of Sciences Publishing House, Moscow, 1962.  
Dept of Navy NIC 2514

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

New Standard Designs for Large-Capacity Water-Purification Plants, by V.I. Filippov, 10 pp.  
RUSSIAN, per, Vodosnabzheniye i Sanitarnaya Tekhnika, No. 5, Moscow, 1964.  
JPRS 44,309

The Action of Wind Waves on Petroleum Industry Hydraulic Engineering Installations of Continuous Design, by A. Ibragimov, 165 pp.  
RUSSIAN, bk, Vozdeystviye vetrovykh voyn na neftepromyslovyye gidrososruzheniya skvoznoy konstruktsii, 1966. P500026468-V  
Dept of Navy/NIC Trans No 2489

The Development of Antifriction Bearing Designs, by P. N. Sidorov.  
RUSSIAN, per, Vsesoyuznyy Nauchno-Issledovatel'skiy i Konstruktorско-Tekhnologicheskiy Institut Podshipnikovoy Promyshlennosti. Trudy, Issue 3(35), 1963, pp 31-39.  
\*FTD-HT-23-97-68

Planning Solutions for Apartment Houses Made of Room-Blocks, by D. Meyerson, and M. Ioffe, 10 pp.  
RUSSIAN, journal, Zhilishchnoye Stroitel'stvo, Moscow, No. 12, 1967, pp. 6-9.  
JPRS 44,263

Dynamics of Rotors on Gas Bearings, by A. Tondl.  
CZECH, per, Strojirenstvi, Vol 16, No 7, 1966, pp 486-490.  
\*FTD-HT-23-62-68

Railroad Designer, by Rudolf Hudec, Petr Hodan.  
CZECH, per, Zeleznicar, 29 Apr 1967, pp 2-3.  
DIA LN 276-68

Straightening of Rails in a Modern Installation at the Micheville Plant of Sidelor, by H. Charbonnier.  
FRENCH, per, CDS Circ., No. 9, 1967, pp. 2055-2062.  
\*BISI 6123

Construction of the New Dam at Kossou, 7 pp.  
FRENCH, newspaper, Fraternite, Abidjan, Vol 10, No. 456, 19 Jan 68, pp. 5,6,8.  
JPRS 44,382

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Geometry and Kinematics of the Roll Gap in Straightening of Round Bars by a Two-Roll Straightening Machine, by O. Pawelski and R. Fangmeier.  
GERMAN, per, Arch. Eisenh., Vol. 38, Sept 1967, pp. 711-723.  
\*BISI 6118

Some New Accelerator Problems, II, by Chr. Keck.  
GERMAN, per, Kernenergie, Vol 9, No 7, 1966, pp 217-224.  
\*FTD-HT-23-162-68

Optimum Plant Size in the Steel Industry, by K.W. Putsch and H. Timmke.  
GERMAN, per, Kleppzig Fachber., Vol. 75, April, 1967, pp. 729-732.  
\*BISI 6108

The Full-Track Assembly (Development and Status).  
GERMAN, per, Soldat Und Technik, Vol 10, No 8, 1967, pp 421-427.  
ACSI J-3800  
ID 2204055967

The Full-Track Assembly (Independent Suspension).  
GERMAN, per, Soldat Und Technik, Vol 10, No 9, 1967, pp 468-474.  
ACSI J-3800  
ID 2204055967

Operational Experience With Oxygen Steelworks Fume Arrestment Equipment, by G. Mainshausen.  
GERMAN, per, Stahl Eisen, Vol. 87, 1967, pp. 1304-1309.  
\*BISI 6105

Control of Sinter Mix Humidity Using a Neutron Surface Probe, by M. Erpelding, et al.  
GERMAN, per, Stahl Eisen, Vol. 87, Nov. 16, 1967, pp. 1417-1422.  
\*BISI 6126

Atomic Ships, by M. Otto, 5 pp.  
GERMAN, per, Volksarmee, No. 20, 1966, p. 8.  
P100009168  
FTD-HT-23-779-67

Non-linear Bending Theory of Sandwich Sheets, Part II, by V. Dundrova.  
HUNGARIAN, per, Acta Technica Academiae Scientiarum Hungaricae, Vol 55, No 1-2, 1966.  
\*ACSI J-4411  
ID 2204007468

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Non-Linear Bending Theory of Sandwich Sheets,  
Part III, by V. Dundrova.  
HUNGARIAN, per, Acta Technica Academiae Scienti-  
arum Hungaricae, Vol 57, No 1-2, 1967, pp 19-32.  
\*ACSI J-4412  
ID 2204007568

A Setting System With an On-Line Computer  
For a Tube Manufacturing Plant Employing  
Pilger Rolling Mills and Reducing and  
Stretching Mill, by R. Raimondi, et al.  
ITALIAN, per, Boll. Tech. Finisider,  
Dec 65, pp. 909-917.  
\*BISI 6131

Diesel - Hydraulic Fork Lift Trucks. 40 pp.  
ITALIAN, rpt, Diesel - Hydraulic Fork Lift Trucks.  
ACSI J-3745  
ID 2850028167

Progress in the Ship Painting Field.  
POLISH, per, Budowictwo Okretowe, No 11, 1965.  
\*Dept of Navy NIC

Use of Construction Elements Discussed, 11 pp.  
POLISH, per, Fundamenty, No 47, 19 Nov 1967,  
pp 6,7, 11.  
JPRS 44092

Modernization of State Steam Locomotives, by  
Jozef Fijalkowski, 10 pp.  
POLISH, per, Przeglad Kolejowy Mechaniczny,  
No. 11, Warsaw, Nov 67, pp. 317-321.  
JPRS 44,232

Some Scientific Research Problems in the Machine-  
Building Industry (A Discussion-Type Article),  
by S. Lewandowski, 7 pp.  
POLISH, per, Przeglad Mechaniczny, No 3, pp 66-  
69.  
ACSI J-3549  
ID 2204049367

Mobile House Trailer Camp for Army Engineer  
Units, by Dragutin Milunovic, 12 pp.  
SERBO-CROATIAN, per, Vojnotehnicki Glasnik,  
No. 12, Belgrade, Dec 67, pp. 1009-1014.  
JPRS 44,275

Trends in the Development of the Blast Furnace  
Process, by S. Ekatorp.  
SWEDISH, per, Jarkon. Ann., Vol. 47, No. 9,  
1963, pp. 757-843.  
\*BISI 6115

Scientific  
Methods & Equipment

Terminology of Aerial Photography,  
by A. M. Terpigorev.  
RUSSIAN, per, Committee on Technical Terminology,  
No 29, Academy of Sciences of the USSR, Publishing  
House of the Academy of Sciences of the USSR.  
Dept of Navy NIC 2512

An Effective Method of Increasing the Durability  
of Wood-Cutting Saws, by L. F. Melekhin.  
RUSSIAN, per, Dereboobratyvyvushchaya  
Promyshlennost, Moskva, Vol 12, No 12, 1963,  
pp 5-8.  
\*CSFTI TT 68-50375/3

The Planer Saw Designed by A. P. Den'kac, by  
Yu. M. Stakhiev & Yu. P. Varlamov.  
RUSSIAN, per, Dereboobratyvyvushchaya  
Promyshlennost, Moskva, Vol 13, No 12, 1964,  
pp 28-29.  
\*CSFTI TT 68-50375/6

Bandsaw Strength Under the Influence of Feed  
Forces, by A. E. Feoktistov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 3, No 3, 1960, pp 95-106.  
\*CSFTI TT 68-50397/3

A Test Rig for Investigating the Process of  
Frame-Sawing, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 6, No 3, 1963, pp 107-113.  
\*CSFTI TT 68-50397/12

The Wear of Swage-Set and Spring-Set Teeth of  
Frame Saws, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 4, No 5, 1961, pp 113-116.  
\*CSFTI TT 68-50397/7

Profiling Saw Teeth for Cross-Cutting, by  
V. I. Mikulinski.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 3, No 4, 1960, pp 116-119.  
\*CSFTI TT 68-50397/5

Measuring Stresses in the Blade of a Bandsaw  
by Wire Strain-Gauges, by I. I. Trubnikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 6, No 3, 1963, pp 119-121.  
\*CSFTI TT 68-50397/13

Scientific  
Methods & Equipment (Contd)

Deformations and Stresses Arising in an Idling Bandsaw, by E. D. Dobrynin.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 5, No 5, 1962, pp 123-127.  
\*CSFTI TT 68-50397/8

The Roller-Tensioning of Frame Saws, by Yu. I. Yurev.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 2, No 4, 1959, pp 136-143.  
\*CSFTI TT 68-50397/2

Physico - Chemical and Histological Characteristics of Meat Frozen by an Accelerated Method, by S. Il'chenko, 6 pp.  
RUSSIAN, per, Mysnaya Industriya, No 7, 1967, pp 27-30.  
ACSI J-3718  
ID 2204052967

Methods for Computing a Tentative Standard Atmosphere, by Z. I. Gavrilova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii. Trudy, No 24, 1963, pp 7-17.  
\*FTD-HT-23-99-68

An Investigation of Stresses in the Key End of a Compressor Blade, by V. B. Gorlov.  
RUSSIAN, rpt, Polyarizatsionno-Opticheskiy Metod Issledovaniya Napryazheniy, 1966, pp 330-334.  
\*FTD-HT-23-152-68

Pyrometer for Measuring Temperatures Below 800°, by A. V. Kogan, M. L. Bantsur.  
RUSSIAN, per, Poroshkovaya Metallurgiya Akad Nauk Ukr SSR, Vol 6, No 7, 1966, pp 102-106.  
\*FTD-HT-23-113-68

The Use of Aerosols to Control Forest Pests, by I. V. Tropin.  
RUSSIAN, bk, Primenenie aerorozlei olva bor'by s vreditelyami lesa, -- Moskva, Goslesbumizdat, 1962, 86 pp.  
\*CSFTI TT 68-50364

Points in the Kinetics of Color Development, by V. I. Usenskiy, N. I. Rodionova.  
RUSSIAN, per, Zhurnal Nauchoy i Prikladnoy Fotografii i Kinematografii, Vol 6, No 2, Mar-Apr 1961, pp 125-129.  
\*ACSI J-4356  
ID 2204005868

Scientific  
Methods & Equipment (Contd)

A method for Measuring Deformations, by I. S. Sheynin.  
RUSSIAN, Patent No 195689, Class 42.  
\*FTD-HT-23-137-68G

A Device for the Automatic Calculation of Correlation Functions of Acoustic Signals, by D. Berthier, 15 pp.  
FRENCH, per, L'Onde Electrique, 46, No 475, 1966, pp 1067-1073. P200369867  
RSIC-690

Physics of an Aerial Photograph in Correct and Faulty Colors, by F. L. Corten.  
GERMAN, per, Bildmessung und Luftbildwesen, Vol 34, 1 Dec 1966, pp 191-198.  
\*ACSI J-4359  
ID 2204006168

Current State of Development of Soft and Semi-Hard Packings, by R. Heiss & K. Becker.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 65.  
\*ACSI J-4326  
ID 2834022567

Missile Technology

Electronics in Military Science, by J. Jecmen, 344 pp.  
CZECH, bk, Elektronika ve Vojenstvi, 1964, pp 1-298. P100035568-V  
FTD-HT-66-477

The Way I See Missile Systems, by C. Drosynakis.  
GREEK, 1967.  
\*ACSI J-4362  
ID 1837008867

Warheads of Surface-to-Air Guided Missiles, by S. Roglic, 31 pp.  
SERBO-CROATIAN, per, Vazduhoplovni Glasnik, No. 2, 1966, pp. 131-149. P100006868  
FTD-HT-67-462

Damping in Inertial Navigational Systems, by O. P. Boychuk.  
RUSSIAN, per, AN UkrRSR. Dopovidi, Seriya A. Fligko-Tekhnichni ta Matematichni Nauky, No 3, 1967, pp 250-254.  
\*FTD-HT-23-167-68.

Electroautomation of Ship and Aircraft Radar Stations, by V. M. Artamonov, 473 pp.  
RUSSIAN, bk, Elektroavtomatika Sudovykh i Samoletnykh Radiolokatsionnykh Stantsiy, 1962, pp 1-363.  
P100029268-V  
FTD-MT-64-352

Resolution of High-Directional Antennas with Strong Fluctuation of Field Distribution, by Yu. A. Kravtsov.  
RUSSIAN, per, VUZ, Izv., Radiofiz., Vol 10, No 8, 1967, pp 1131-1140.  
\*Dept of Navy/APL/JHU J-1130

Results of Computations of Radiowave Refraction in a Horizontally-Inhomogeneous Troposphere and Ionosphere, by A. N. Kazantsev.  
RUSSIAN, per, Kosmicheskie Issledovaniya, Vol 5, No 5, 1967, pp 766-771.  
Dept of Navy/APL/JHU T-2095

Principles of the Theory of Automated Air Navigation, by N. G. Rachkovskiy.  
RUSSIAN, bk, Osnovy Teorii Avtomatizirovannogo Samoletovozhdeniya, 1966, 126 pp.  
\*FTD-MT-24-51-68

Complex Signals and the Principle of Ambiguity in Radar, by D. Ye. Vakman.  
RUSSIAN, bk, Slozhnyye Signaly i Printsip Neopredelnosti v Radiolokatsii, 1965, 303 pp.  
\*FTD-MT-24-55-68

Leading Television Center of the USSR, by I.I. Govallo and Yu. B. Gruzdev, 26 pp.  
RUSSIAN, journal, Tekhnika Kino i Televideniya, No. 12, Moscow, Dec 67, pp. 3-14.  
JPRS 44,191

Transport and Communications in the USSR, by R. I. Kushkina, 303 pp.  
RUSSIAN, bk, Transport i Svyaz' SSSR, Statisticheskiy Sbornik, Moscow, "Statistika" Publishing House, 1967, pp. 1-332.  
JPRS 44,308

Design of Inertial Guidance Systems, by N. Ya. Vovchenko, 13 pp.  
RUSSIAN, per, Aviatsionnyy Institut, Trudy, Moscow, No. 161, 1965, pp. 76-85. P100009068  
FTD-HT-23-573-67

Electrocommunication and Radio During Half a Century.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 14-45.  
JPRS 44475

We Are Developing Skilled Communications Specialists, by V. N. Lebedev.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 60-64.  
JPRS 44475

Device for Synchronizing Binary Communications, by V. V. Makhonin.  
RUSSIAN, Patent No 197273, Class 42.  
\*FTD-HT-23-137-68B

RVG 960 Microwave Radio Relay System, by G. Findeisen, 10 pp.  
GERMAN, journal, Der Fernmelde-Praktiker, Vol 7, No. 12, East Berlin, Dec. 67, pp. 273-275.  
JPRS 44,236

On the Applications of Infrared Imagery for Geothermal Investigations, by Hirokazu Hase, Kyuya Matsuno, 14 pp.  
JAPANESE, per, Chinetsu, No 11, Jun 1967.  
ACSI J-3631  
ID 2204052067

Ambiguity Characteristics of a Pulse-Code Radar, by Toshifusa Sakakoto.  
JAPANESE, per, Sogoshikenjo nenpo, Vol 22, No 1, 1963, pp 37-48.  
Dept of Navy/APL/JHU T-2049

Description of New Carrier Telephone Equipment, by Jerzy Gadwed, 10 pp.  
POLISH, per, Przeglad Kolejowy Elektrotechniczny, Vol XIV, No. 11, Warsaw, Nov 67, pp. 330-333.  
JPRS 44,236

Scientific  
Navigation, Communications, Detection &  
Countermeasures (Contd)

Electronic Digital Computers in Telecommunications, by Jerzy Wyrzykowski, 13 pp.  
POLISH, per, Przegląd Komunikacyjny,  
Warsaw, No. 11, Nov 67, pp. 415-419.  
JPRS 44,363

Exhibit of Magnetic Defectoscopes.  
CROATIAN, per, Strojarska Vyroba, Vol 15, No  
10, 1967, pp 750-752.  
\*ACSI J-4247  
ID 2204002768

Nuclear Science & Technology

Heat Transfer Systems of Nuclear Reactors, by  
A. G. Samoilov.  
RUSSIAN, bk, Dispersionnye teplovydelyayushchie  
elementy yadernykh reaktorov, Moskva, 1965,  
340½ pp.  
\*CSFTI TT 68-50327

Dynamic Decompensation of the Space Charge of  
Ion Beams during Electromagnetic Separation  
of Isotopes, by B. Ye. Gavrilov, A. V. Zharinov,  
13 pp.  
RUSSIAN, per, Moscow. Institut Atomnoy Energii  
Doklady, No 592, 1964, pp 3-20.  
P100013568  
FTD-MT-66-148

The Use of Atomic Energy in Water Transportation,  
by V. V. Lakhainin & Yu. V. Zakharov.  
RUSSIAN, bk, Ispol'zovaniye atomnoy energii na  
vodnom transporte, 1965.  
Dept of Navy NIC tr 2527

Application of Electron Microscopy to the Study  
of Radiation Defects in Alkali Halide Crystals,  
by Yu. Ekmans.  
RUSSIAN, per, Investiya. AN IatSSR, No 4, 1965,  
pp 55-61.  
\*FTD-HT-23-147-68

Processing and Disposal of Radioactive Wastes  
from Laboratories, by E. Ya. Spitsyn.  
RUSSIAN, bk, Pererabotka i zakhroneniye  
radioaktivnykh otkhodov laboratorii, Moskva,  
1965, 130 pp.  
\*CSFTI TT 68-50326

Scientific  
Nuclear Science & Technology (Contd)

Radiation and Polymers, by I. M. Barkalov, 8 pp.  
RUSSIAN, per, Priroda, No 2, 1965, pp 13-17.  
ACSI J-3966  
ID 2204060267

3 4  
The Use of D(d,n)He AND T(d,n)He Nuclear  
Reactions to Calibrate Fast-Neutron Radio-  
meters, by R.D. Vasil'yev, G.A. Dorofeyev,  
et al., 6 pp.  
RUSSIAN, journal, Soyuznyy Nauchno-Issledovatel'-  
skiy Institut Priborostroyeniya. Doklady,  
No. 3, 1966, pp. 22-25. P100007568  
FTD-HT-23-816-67

Trends in the Development of Radiation Chemistry,  
by I. V. Vereshchinskiy, P. I. Dolin, 4 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, No 1,  
1961, pp 116-119.  
ACSI J-3969  
ID 2204060567

Radiation Effects on Polymers, by Marcel Van  
de Voorde, 15 pp.  
FRENCH, per, Industries Atomiques, No 3/4, 1967,  
pp 61-70.  
P911040568  
AEC-TR-6920

Isotope Practice  
GERMAN, per, Akademie-Verlag-GMBH, Vol 1, No 3, 1965.  
Dept of Navy NIC 2501

A Simple Method for the Determination of  
the Distribution of Thermal Neutron Flows,  
by S. Deme and I. Feher, 8 pp.  
GERMAN, per, Kernenergie, Vol 9, No 2,  
1966, pp 54-57. P100016468  
FTD-HT-23-703-67

Fast Fuel Element Testing Reactor (P.E.C.),  
Preliminary Design Study, Section I, by P.  
Aiello, 71 pp.  
ITALIAN, rpt, Comitato Nazionale per l'Energie  
Nucleare C.N.E.N.-EURATOM Association for Fast  
Reactors, 31 July 1966.  
P911013768  
AEC ORNL-TR-1786

China's Second Atomic Test Site.  
JAPANESE, per, Koko Joho Shiryo, No 103, 1966,  
pp 36-39.  
\*ACSI J-4389  
ID 2204003768

Scientific  
Physics

Atlas of Electron Spin Resonance Spectra:  
Theoretically Calculated Multicomponent Sym-  
metrical Spectra, by Ya. S. Lebedev,  
N. N. Tikhomirova, et al. 229 pp.  
RUSSIAN, bk. Volume 1, 1963.  
Plenum Press

Atlas of Electron Spin Resonance Spectra:  
Theoretically Calculated Multicomponent Sym-  
metrical Spectra, by Ya. S. Lebedev,  
N. N. Tikhomirova, et al. 195 pp.  
RUSSIAN, bk, Volume 2, 1964.  
Plenum Press

Chemical Bonds in Semiconductors and Solids.  
294 pp.  
RUSSIAN, rpt. Apr 1967.  
Consultants Bureau

Handbook of the Physicochemical Properties of  
the Elements. 910 pp.  
RUSSIAN, bk, Oct 1967.  
Plenum Press Data Division

Molecular Flow in Vessels, by Yu. N. Lyubotov.  
164 pp.  
RUSSIAN, bk, Mar 1967.  
Consultants Bureau

Nuclear Magnetic Resonance in a Flowing Liquid,  
by A. I. Zhernovoi. 166 pp.  
RUSSIAN, bk, 1965.  
Plenum Press

Quantum Field Theory and Hydrodynamics. 271 pp.  
RUSSIAN, rpt, Apr 1967.  
CONSULTANTS BUREAU

Effect of Simultaneous Vibrational and Dissociating  
Relaxation on Supersonic Flow Past Blunt Bodies,  
by S. B. Koleshko, Yu. P. Lam'kin.  
RUSSIAN, bk, Aerofizicheskiye Issledovaniya  
Sverkhzvukovykh Techeniy, 1967, pp 142-163.  
\*FTD-HT-23-109-68C

Heat Exchange During Condensation of Potassium  
and Sodium Vapor, by V. I. Subbotin, M. N.  
Ivanovskiy.  
RUSSIAN, per. AN BSSR, Institut Teploi Massobmena.  
Obshchiye Voprosy Teplo- i Massobmena, 1966,  
pp 247-255.  
\*FTD-MT-24-54-68

Acceleration of Particles with Interaction  
Between High Frequency Fields and a Plasma, by I.  
S. Danilkon, N. D. Rayzer.  
RUSSIAN, per. AN SSSR, Fizicheskiy Institut.  
Trudy, Fizika Plasmy, Vol 32, 1966, pp 165-172.  
\*FTD-MT-24-52-68

Scientific  
Physics (Contd)

Effects of Variable Heat Capacity of a Gas in  
Supersonic Flow Past Blunt Bodies, by Yu. P.  
Lam'kin, T. Ya. Timofeyeva.  
RUSSIAN, bk, AN SSSR, Fiziko-Tekhnicheskiy In-  
stitut. Aerofizicheskiye Issledovaniya Sverkh-  
zvukovykh Techeniy, 1967, pp 128-142.  
\*FTD-MT-24-49-68

Method of Asymptotic Integration of Laminar Boun-  
dary Equations, by B. I. Reznikov.  
RUSSIAN, per, AN SSSR, Fiziko-tekhnicheskiy  
Institut. Aerofizicheskiye Issledovaniya Sverkh-  
zvukovykh Tekheniy, 1967, pp 284-300.  
\*FTD-MT-24-34-68

The Growing of Single Crystals of Calcite  
Under Hydrothermal Conditions, by  
N.Yu. Ikornikova, et al., 5 pp.  
RUSSIAN, per, AN SSSR, Institut Kristallografii.  
Rost Kristallov, No. 4, 1964, pp. 92-94.  
P100008168  
FTD-HT-23-563-67

X-Ray Effects in Alkali Halide Crystals After  
Irradiation by Protons, by S. T. Konobeyevskiy,  
F. P. Butra.  
RUSSIAN, per, AN SSSR, Otdeleniye Fiziko-  
Matematicheskikh Nauk, 1962, pp 251-256.  
\*FTD-MT-24-28-68

Self-Oscillating Systems, by K. F. Teodorchik,  
195 pp.  
RUSSIAN, bk, Avtokolebatel'nyye Sistemy, 1952,  
271 pp.  
ACSI J-3539  
ID 2204049167

On the Effect of Archimedean Forces on the Structure  
of the Temperature Field in a Turbulent Flow, by  
A. M. Obukhov.  
RUSSIAN, per, AN SSSR, Doklady, Vol 125, No 6,  
1959, pp 1246-1248.  
Dept of Navy/APL/JHU T-2109

A Generalization of the Law of Thermal Conductivity,  
by B. M. Berkovskii.  
RUSSIAN, per, AN BSSR, Doklady, Vol 11, No 9,  
1967, pp 793-794.  
Dept of Navy/APL/JHU T-2106

Dosimetry of Ionizing Radiations, by V. I.  
Ivanov, 252 pp.  
RUSSIAN, bk, Dozimetriya Ioniziruyushchikh  
Izlucheniy, 1964, pp 1-263.  
P100028768-V  
FTD-MT-65-160

Scientific  
Physics (Contd)

Elementary Plasma Physics, by  
L. A. Artsimovich, 151 pp.  
RUSSIAN, bk, Elementarnaya Fizika Plazmy,  
1963, pp 1-192.  
P100029168-V  
FTD-MT-65-443

Detonation Attenuation in Liquid Explosive Mix-  
tures of Tetranitromethane and Ethyl Iodide,  
by V. S. Solov'yev.  
RUSSIAN, per, Fizika Goreniya i Vzryva, No 3,  
1966, pp 31-35.  
\*FTD-HT-23-141-65

Theory of the Thermal Explosion of Self-Accelerating  
Reactions, by V. V. Barzykin.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, No 4,  
1966, pp 18-23.  
Dept of Navy/APL/JHU T-2083

Combustion of a Polydisperse Spray of Liquid  
Fuel, by R. S. Tyul'panov & O. P. Sobolev.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, Vol 3,  
No 1, 1967, pp 94-97.  
\*Dept of Navy/APL/JHU J-1138

Ionization of Media and Plasma Generation by  
Laser Emission, by G. A. Askarian, M. S. Rabinov-  
vich.  
RUSSIAN, per, Fizika Plazmy, Vol 32, 1966, pp 89-  
96.  
\*FTD-MT-24-42-68

Investigation of the Doppler Effect in  $238\text{U}$  in  
a Shield Made of Uranium Oxide of the Reactor  
BR-1, by L. P. Abagyan, V. I. Golubev.  
RUSSIAN, rpt, International Atomic Energy Agency.  
Paper SM-101/63. Symposium on the Physics and  
Safety Problems of Fast Reactors, 11 pp.  
P911045368  
AEC ANL-TR-540

Experimental Investigation of the Heat Conducti-  
vity Coefficient of an Argon Plasma, by E. I.  
Asimovskiy, A. V. Kirillin.  
RUSSIAN, rpt, International Symposium on Pro-  
perties and Applications of Low-Temperature  
Plasma, Moskva, USSR, 15-17 Jul 1965, 1965,  
pp 248-257.  
\*FTD-MT-24-58-68.

Scientific  
Physics (Contd)

Turbulent Boundary Layer of a Free Jet of Com-  
pressible Gas in Accompanying Counterflows, by  
M. P. Teterin.  
RUSSIAN, per, Inzhenernyy Zhurnal, Vol 4, No 2,  
1964, pp 330-336.  
\*FTD-MT-24-35-68

Transport Processes When Injecting a Fuel-  
Oxidizer Mixture Into a Reacting Boundary  
Layer, by A.L. Mosse and G.T. Sergeyev, 12 pp.  
RUSSIAN, journal, Inzhenerno-Fizicheskiy  
Zhurnal, Vol 10, No. 3, 1966, pp. 311-317.  
P100007668  
FTD-HT-23-790-67

Combustion of a Liquid-Fuel Droplet in a Sound  
Field, by V. E. Nakoriakov.  
RUSSIAN, per, Inzhenero-Fizicheskiy Zhurnal, Vol  
12, May 1967, pp 650-656.  
\*FTD-MT-24-26-68

Experience Gained in the Operation of the  
VVR-M Reactor, by V.M. Pasechnik, et al,  
23 pp.  
RUSSIAN, bk, Isucheniye i Uluchsheniye  
Eksploatatsionnykh Vozmozhnostey i Opyt  
Eksploatatsii Reaktora VVR-M Instituta  
Fiziki AN UkSSR, Kiev, 1963, pp. 1-18.  
JPRS 44,332

Criterial Equations of Nonsteady Heat and  
Mass Transfer in Moist Materials, by  
Yu. Mikhaylov, 5 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya, Energetika.  
No. 10, 1962, pp. 87-89. P100008068  
FTD-HT-67-475

Heat Transfer in a Transverse Homogeneous  
Magnetic Field, by Yu. A. Mikhaylov and  
R. Ya. Ozols, 10 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya  
Seriya Fizicheskikh i Tekhnicheskikh Nauk,  
No 2, 1963, pp 19-26.  
P100017568  
FTD-HT-67-476

Scientific  
Physics (Contd)

Motion Near a Phase Boundary in the Presence of An Electromagnetic Field, by U. I. Ivanov and Yu. A. Mikhaylov, 17 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya. Seriya Fizicheskikh i Tekhnicheskikh Nauk, No 1, 1966, pp 3-15.  
P100017768  
FTD-HT-67-478

Flow Around a Flat Blunt Plate under a Small Angle of Attack with a Hypersonic Gas Stream, by V. I. Kholyavko, 8 pp.  
RUSSIAN, per, AN SSSR. Izvestiya. Mekhanika i Mashinostroyeniye, No 2, 1964, pp 19-23.  
P100016568  
FTD-HT-66-606

The Effect of Radiation on Flow in the Region of the Stagnation Point, by V. K. Vertushkin & V. N. Zhigulev.  
RUSSIAN, per, AN SSSR, Izv., Mekh. Zhidkosti i Gaza, No 2, 1967, pp 30-32.  
Dept of Navy/APL/JHU T-2099

Plotting the Flow Pattern of a Fluid Flowing Past a Solid Body Surrounded by an Air Space, by M. V. Tret'yakov.  
RUSSIAN, per, AN SSSR, Izv., Mekh. Zhidkosti i Gaza, No 2, 1967, pp 67-71.  
Dept of Navy/APL/JHU T-2110

Supersonic Three Dimensional Flow Around a Triangular Wing with Blunted Edges.  
RUSSIAN, per, Izvestiya. AN SSSR. Mekhanika Zhidkosti i Gaza, Jul/Aug 1967, pp 159-163.  
\*FTD-HT-23-150-68

Numerical Investigation of a Three Dimensional Boundary Layer in a Compressible Gas.  
RUSSIAN, per, Izvestiya. AN SSSR. Mekhanika Zhidkosti i Gaza, Jul/Aug 1967, pp 171-177.  
\*FTD-HT-23-150-68

Certain Characteristics of Radiative Centers in Synthetic Germanium-Doped Quartz, by Sh. Vakhidov, G. Ikramov, 4 pp.  
RUSSIAN, per, AN UZSSR. Izvestiya. Seriya Fiziko-Matematicheskikh Nauk, No 4, 1966, pp 50-52.  
P100013868  
FTD-HT-67-426

Scientific  
Physics (Contd)

The Effect of Radiation on the Contract Melting of Crystals, by I. G. Berzina, P. A. Savintsev.  
RUSSIAN, per, Izv. Tomskogo Politekhn In-ta, No 122, 1962, pp 33-38.  
\*FTD-HT-23-111-68

Toward the Determination of Linearized Perturbation Flows in the Hypersonic Flow over Conical Bodies without Axial Symmetry, by A. M. Mkhitaryan, M. P. Ovsyannikov, 9 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 7-14.  
P100029868-V  
FTD-MT-65-72

On the Theory of Sandwich Type Shells, by B. G. Gazizov, 13 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 24-34.  
P100029868-V  
FTD-MT-65-72

Investigation of the Stability of the Shell of An Air Cooled Sleeve Type Bypass Blade, by A. G. Zenukov, 12 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 35-45.  
P100029868-V  
FTD-MT-65-72

On the Question of Increasing the Vibration Stability of Structural Members, by P. S. Skachkov, 9 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 46-53.  
P100029868-V  
FTD-MT-65-72

Investigation of the Influence of the Vibrations of a Body on the Coefficient of Heat Transfer under Conditions of Free Convection, by L. I. Kudryashev, Yu. A. Tkachev, 10 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 54-62.  
P100029868-V  
FTD-MT-65-72

Scientific  
Physics (Contd)

Towards the Determination of the Velocity of Sound in Hydraulic Lines of Complex Cross Section, by V. F. Prisyakov, 9 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 63-70.  
P100029868-V  
FTD-MT-65-72

Turbulent Mixing of Fluid Flows in a Limited Space with Peculiarities in the Feed of One of the Flows, by A. P. Pudoveyev, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 71-77.  
P100029868-V  
FTD-MT-65-72

Temperature State of a Porous Plate with Volume Heat Release for Effusional Cooling, by V. K. Shchukin, A. F. Koval'nogov, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 87-94.  
P100029868-V  
FTD-MT-65-72

On the Pressure Coefficient at Hypersonic Velocities, by S. V. Fal'kovich, N. G. Bol'man, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 111-114.  
P100029868-V  
FTD-MT-65-72

Investigation of Vibrations of Cantilevered Triangular and Trapezoidal Plates by the Ritz Method, by G. A. Marchenko, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 115-119.  
P100029868-V  
FTD-MT-65-72

Experimental Investigations of a Fuel Evaporator, by I. N. Dyatlov, 7 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 124-131  
P100029868-V  
FTD-MT-65-72

Scientific  
Physics (Contd)

Nonstationary Temperature Field in Sandwich Plates, by M. A. Il'gamov, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 132-138.  
P100029868-V  
FTD-MT-65-72

The Influence of An Attached Volume on the Speed of Rotation of a Stall Zone, by N. I. Sapozhnikov, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 139-143.  
P100029368-V  
FTD-MT-65-72

On the Question of Determining the Components of Contact Thermal Resistance, by P. Ye. Khizhnyak, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 144-148.  
P100029368-V  
FTD-MT-65-72

Influence of the Magnitude of Bolt Tightening on the Strength of Bolt Joints, by A. I. Yarkovets, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 149-155.  
P100029868-V  
FTD-MT-65-72

Experimental Investigation of the Influence of Thermodynamic Properties of Liquid on Cavitation Phenomena, by N. S. Yerшов, B. I. Borovskiy, 11 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 2, 1966, pp 130-136.  
P100014768  
FTD-MT-67-40

Flow Field Between a Shock Wave and the Lateral Surface of a Blunt Cone Moving at a High Supersonic Speed, by E. R. Abramovskii.  
RUSSIAN, per, VUZ, Izv., Aviatsionnaya Tekhnika, No 1, 1967, pp 135-142.  
Dept of Navy/APL/JHU T-2098

Scientific  
Physics (Contd)

The Effect of Initial Turbulence on the Efficiency of Diffuser Flows, by V.K. Migay, 5 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy Energetika, No. 2, pp. 116-119.  
P10008868  
FTD-HT-23-536-67

Dependence of the Results of Probe Measurements of the Conductivity of Semiconductor Samples on Their Thickness, by A. I. Emel'yanov.  
RUSSIAN, per, VUZ, Izv. Fiz., No 5, 1967, pp 114-116.  
Dept of Navy/APL/JHU T-2105

On the Nature of High-Voltage Photo-emf in Thin Semiconductor Layers, by N. F. Kovtonyuk & V. F. Fedenin.  
RUSSIAN, per, VUZ, Izv., Fiz., No 6, 1967, pp 40-43.  
\*Dept of Navy/APL/JHU J-1114

Experimental Investigation of Gas Laser Emission Absorption in Air on the 3.39 and 3.51- $\mu$  Wavelengths, by V. A. Antipov.  
RUSSIAN, per, VUZ, Izv., Fiz., No 7, 1967, pp 142-144.  
\*Dept of Navy/APL/JHU J-1128

The Frenkel Effect in Semiconductor Diodes, by V. I. Gamba.  
RUSSIAN, per, VUZ, Izv., Fiz., Vol 9, 1967, pp 92-95.  
\*Dept of Navy/APL/JHU J-1120

Convective Heat Transfer in Two-Phase Flows, by V. M. Borishanskii & I. I. Paleev.  
RUSSIAN, bk, Konvektivnaya teploperedacha v dvukhfaznom i odnofaznom potokakh, Moskva-Leningrad, 1964, 447 $\frac{1}{2}$  pp.  
\*CSFTI TT 68-50328

Traveling-Wave Tube, by M. B. Tseytlin, 228 pp.  
RUSSIAN, bk, Lampa S Begushchey Volnoy, 1964, pp 1-311.  
P100029368-V  
FTD-MT-65-453

Scientific  
Physics (Contd)

Method of Moments in the Problem of Hypersonic Rarefied Gas Flow Past Bodies, by Yu. Shlazha, 18 pp.  
RUSSIAN, per, Leningrad. Universitet. Vestnik, Seriya Matematiki, Mekhaniki i Astronomii, No. 3, 1966, pp. 101-112.  
P100006168  
FTD-HT-23-923-67

Metallography, Physical Chemistry, and Physics of Superconductors, by E. M. Savitskiy, V. V. Baron.  
RUSSIAN, bk, Metallovedenie, Fiziko-Khimiya i Metallofizika Sverkhprovodnikov, 1967.  
Plenum Press

Toward Calculation of Beams on Elastic Supports, by P. P. Suvorovskiy, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal. Akademii Stroitel'stva i Arkhitektury SSSR. "Stroitel'naya Mekhanika i Raschet Sooruzheniy", No 3, 1963, pp 12-15.  
P100015668  
FTD-MT-66-24

Concerning the Question of Solution of Two-Dimensional Problem of Theory of Elasticity by Analogy Method with Bending of Plate, by G. A. Geniyev, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal. Akademii Stroitel'stva i Arkhitektury SSSR. "Stroitel'naya Mekhanika i Raschet Sooruzheniy", No 3, 1963, pp 5-7.  
P100015668  
FTD-MT-66-24

The Stressed State of a Viscoelastic Non-uniformly Heated Cylinder With a Starshaped Cavity, by V.G. Savchenko, 12 pp.  
RUSSIAN, per, Nauchnoye Soveshchaniya po Teplovyu Napryazheniyam v Elementakh Konstruktsiy, 6 d, Kiev, 1966, pp. 137-146.  
P100006268  
FTD-HT-23-591-67

Fiber Optics in the USSR, by Dr. V.B. Veynberg, 8 pp.  
RUSSIAN, per, Optiko-Mekhanicheskaya Promyshlennost', No. 11, 1967, pp. 48-51.  
JPRS 44,272

Scientific  
Physics (Contd)

Application of Method of Small Parameter to Analysis of Hypersonic Flow of Gas around Flat Bodies, by A. M. Antonov, A. G. Stetsenko, 10 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 3-10.  
P100028968-V  
FTD-MT-64-322

Influence of Hysteresis Motor on Stability of Motion of Gyroscope in Cardan Joint Suspension, by R. M. Borodina, 9 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 11-18.  
P100028968-V  
FTD-MT-64-322

On Numerical Solution of Three-Dimensional Boundary Value Problems of Theory of Potential by Method of Sum Representations, by V. P. Gatun, 10 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 19-26.  
P100028968-V  
FTD-MT-64-322

Concerning the Question of Stability of Motion in One Case of the Three Bodies, by M. M. Zatenyakin, 7 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 27-32.  
P100028968-V  
FTD-MT-64-322

On the Influence of Random Forces on Nonlinear Oscillatory Systems, by V. G. Kolomyets, 8 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 40-46.  
P100028968-V  
FTD-MT-64-322

Random Shocks in Linear Dynamic Systems, by V. D. Mil'man, A. D. Myshkis, 21 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 64-81.  
P100028968-V  
FTD-MT-64-322

Scientific  
Physics (Contd)

Appearance of Theory of Potential of Double Layer and Its First Applications to Solution of Certain Boundary Value Problems, by V. S. Sologub, 14 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 110-125.  
P100028968-V  
FTD-MT-64-322

Carrying Ability of a Hollow Spherical Shell, Strengthened along the Contour, by O. N. Shablyi, 7 pp.  
RUSSIAN, per, Prikladnaya Mekhanika, Vol 1, No 11, 1965, pp 7-11. P100029468  
FTD-MT-66-584

Plasma Jet Interactions, by V. T. Tolok. RUSSIAN, per, Problemy Termoyadernykh Issledovaniy. Novoye V Zhisad, Nauke, Tekhnike, Seriya IX: Fizika, Matematika, Astronomiya, No 21, 1965, pp 18-25.  
\*FTD-MT-24-48-68

Self-Turning Circuit for the Reception of Binary Signals under Conditions of Noise with Unknown Statistical Characteristics, by A. N. Klimov, G. N. Potapov.  
RUSSIAN, bk, Samoobuchay Ushchiyevaya Avtomaticheskoye Sistemy, 1966, pp 402-407.  
\*FTD-MT-23-112-68

Theory of Linear Accelerators, by A. D. Vlasov. RUSSIAN, bk, Teoriya lineinykh uskoritelei, Atomizdat, Moskva, 1965, 304 pp.  
\*CSFTI TT 68-50322

Theory of Nuclear Magnetic Resonance, by L. V. Aleksandrov, 184 pp.  
RUSSIAN, bk, Teoriya Yadernogo Magnitnogo Rezonansa, 1964, pp 1-208.  
P100029768-V  
FTD-MT-65-429

Effect on the Lubricating Property of a Surface on the Transfer Process in Systems Consisting of a Drop-Form Liquid and a Solid, by B. M. Smol'skiy and I. T. El'perin, 10 pp.  
RUSSIAN, per, Teplota i Massoobmen Tezhe Okruzhayushchey Gazovoy Sredoy, Nauka i Tekhnika, 1965, pp 130-137.  
P100016868  
FTD-MT-66-595

Scientific  
Physics (Contd)

Edge Effects in Linear Induction Pumps,  
by L. Ya. Ulmanis, 15 pp.  
RUSSIAN, per, AN LATSSR. Institut Fiziki.  
Trudy, No 8, 1956, pp 81-94.  
P100014868  
FTD-HT-67-469

The Ionization Processes Associated with Metallic  
Additives in Flame Gases, by A. N. Hayhurst, T.  
M. Sugden.  
RUSSIAN, rpt, Trudy. Mezhdunarodnyi Simpozium po  
Svoystvam i Primeneniyu Niskotemperaturnoy Plazmy.  
1967, pp 63-76; 75-77.  
\*FTD-MT-24-58-68

Dependence of the Coefficient of Friction  
and Wear on Stresses in Surface Layer of  
Rubbing Bodies, by A. A. Dychko, 12 pp.  
RUSSIAN, per, Trudy Omskogo Instituta  
Inzhenerov Zheleznodorozhnogo Transporta,  
Vol 43, 1963, pp 197-210.  
P100014468  
FTD-MT-66-38

Physical Bases of the Nature of Friction,  
Wear and Gripping of Metals at Low Temper-  
atures, by A. A. Dychko, 14 pp.  
RUSSIAN, per, Trudy Omskogo Instituta  
Inzhenerov Zheleznodorozhnogo Transporta,  
Vol 43, 1963, pp 221-235.  
P100014468  
FTD-MT-66-38

Twelfth International Conference on High Energy  
Physics, Dubna, August 5-15, 1964.  
RUSSIAN, per, XII Mezhdunarodnaya Konferentsiya  
po fizike vysokikh energii Dubna, 5-15 Avgusta.  
1964, Vols I and II, 1966, 987 pp.  
\*CSFTI TT 68-50325/1-2

On the Thermal Effect Produced with a Ruby Laser  
Beam Interacts with a "Transparent" Crystal, by  
V. M. Vatal'ov.  
RUSSIAN, per, Ukrains'kyi Fizichnyi Zhurnal, Vol  
12, No 7, 1967, pp 1200-1202.  
\*FTD-HT-23-65-68

The Theory of Mobility, Hall Effect and Magneto-  
resistance in Semiconductors with Non-Uniform  
Concentration of Charged Ions, by Yu. V. Koryushin.  
RUSSIAN, per, Ukr. Fiz. Zh., Vol 12, No 8, 1967,  
pp 1327-1330.  
\*Dept of Navy/APL/JHU J-1115

Scientific  
Physics (Contd)

Equations of State of Solids at High Pressures  
and Temperatures, by V. N. Zharkov,  
V. A. Kalinin.  
RUSSIAN, bk, Uravneniya Sostoyaniya Tverdykh  
Tel pri Vysokikh Davleniyakh i Temperaturakh,  
1968  
Plenum Press

Problems of Quantum Radiophysics and Propagations  
of Radio Waves, by O. A. Krokhin, 2 pp.  
RUSSIAN, per, AN SSSR. Vestnik, No 6, 1965, pp  
101-102. P100029968  
FTD-HT-66-576

Aleksandr Danilovich Aleksandrov (On His  
Fiftieth Birthday), by S. V. Vallander,  
G. I. Petrashen', 4 pp.  
RUSSIAN, per, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki  
i Astronomii, No 1, 1963, pp 7-9.  
P100028868-V  
FTD-MT-64-145

Propagation of Elastic-Plastic Load Wave in  
a Rod of Finite Length, by A. I. Buravtsev,  
10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta, Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 79-85.  
P100028868-V  
FTD-MT-64-145

Small Parameter Method for Hypersonic Ideal  
Gas Flow around Pointed Bodies, by G. Baush,  
5 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 86-89.  
P100028868-V  
FTD-MT-64-145

Plane Motion of Vessel with the Wind, by  
A. P. Vorob'yev, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 90-95.  
P100028868-V  
FTD-MT-64-145

Scientific  
Physics (Contd)

On Certain Peculiarities of Gas Motion at Hypersonic Speeds, by A. A. Grib, G. Baush, 11 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 95-105.  
P100028868-V  
FTD-MT-64-145

About Selection of Optimum Parameters of Vibrator of Loop Oscillograph, by A. Yu. L'vovich, V. S. Sabaneyev, 10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 106-114.  
P100028868-V  
FTD-MT-64-145

Virtual Masses of An Elliptic Cylinder during Motion in Liquid, Limited by a Flat Wall or a Free Surface, by V. A. Sabaneyev, 11 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 115-123.  
P100028868-V  
FTD-MT-64-145

Oscillations of An Asymmetric Body on Elastic Stretching, by S. A. Zegzhda, 5 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 145-148.  
P100028868-V  
FTD-MT-64-145

On Possibility of Numerical Solution of Laminar Boundary Layer Problem on Semi-Infinite Body with Suction in Dissociating Gas, by L. A. Kulonen, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 148-150.  
P100028868-V  
FTD-MT-64-145

Impact of a Supersonic Jet on a Surface, by A. Ya. Sagonyan 9 pp.  
RUSSIAN, per, Vestnik Universitet. Seriya I. Matematika. Mekhanika, No. 6, 1966, Moscow, pp: 98-103, P100006768  
FTD-HT-23-924-67

Scientific  
Physics (Contd)

Measurement of Magnetic Field Induction Components in the Gap of An Induction Pump, by L. Ya. Ulmanis, 7 pp.  
RUSSIAN, per, Voprosy Magnitnoy Gidrodinamiki, 1963, pp 153-159.  
P100018268  
FTD-HT-67-473

Application of the Theory of Heredity to the Problem of the Recalculation of Data Pertaining to the Relaxation of Creep Stresses, by A. A. Chizhik, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

An Approximate Solution of the Indentation of Sloping Cones into Rigid Plastic Medium, by V. V. Varnello, 7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Calculation of a Point Explosion in Various Gases, by N. S. Mel'nikova, T. M. Salamakhin, 13 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Concerning the Attenuation of Finite-Amplitude Longitudinal Plasma Oscillations, by V. I. Karpman, 11 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964,  
P100326767  
FTD-HT-66-261

Concerning the Initial Stage of an Electrical Discharge in Water, by A. I. Ioffe, K. A. Naugol'nykh, 12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Concerning the Magnetohydrodynamic Theory of the Stability of an Inhomogeneous Ionized Gas in a Magnetic Field, by A. M. Fridman, 10 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Scientific  
Physics (Contd)

Concerning the Mechanism of the Amplification of Acoustic Vibrations by the Combustion Surface of Solid Fuel, by G. K. Karakozov, G. V. Rossikhin, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Concerning Perturbations of the Equilibrium of the Conducting Fluid In a Spherical Cavity in a Magnetic Field, by Yu. K. Bratukhin, S. I. Shliomis, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Concerning Some Estimates for the Specific Surface of Cracks Formed in the Case of Dynamic Action upon a Solid, by G. I. Barenblatt, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Concerning the Stabilization of Detonation Waves by Means of Poorly Streamlined Bodies, by M. P. Samozvantsev, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Creep at Variable Temperature under Conditions of a Complex Stressed State, by V. S. Namestnikov, 5 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Determination of the Joule Dissipation in a Channel with Dielectric Walls and One Nonconductive Partition when a Conductive Medium in an Inhomogeneous Magnetic Field Flows Along the Channel, by A. B. Vatazhin, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Scientific  
Physics (Contd)

The Detonation of Condensed Explosives at Low Charge Densities, by L. N. Stesik, N. S. Shvedova, 7 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Detonation in a Gas Heated by a Shock Wave, by R. I. Soloukhin, 18 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Effect of Relaxation on the Decay of an Arbitrary Discontinuity, by V. N. Arkhipov, 12 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

The Effect of the Size of the Heating Surface Upon the Critical Heat Flow in the Case of Boiling in a Large Volume of Liquid, by G. I. Bobrovich, I. I. Gogonin, 5 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Experimental Investigation of Friction and Heat Transfer during Gas Flow in a Tube, by N. M. Belyanin, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

Gas-Dynamic Analysis of the Nonsteady-State Propagation of Flame, by A. S. Pleshakov, 7 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

The Integral Characteristics of a Magneto-hydrodynamic Generator with Two Parts of Finite-Length Electrodes, by Ye. K. Kholobchevnikova, 15 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

FI00326767  
FTD-HT-66-261

The Interaction of Shock Waves in an Ideally Conductive Gas with Weak Magnetic Fields, by V. I. Korobeynikov, 5 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Investigation of Normal Reflection of Shock Waves in a Shock Tube, by S. G. Zaytsev, Ye. V. Lazareva, 16 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Measuring the Turbulent Velocity of Flame Propagation by the Inverse-Cone Method, by I. L. Kuznetsov, M. D. Malanov, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Nonlinear Interaction of a Spherical Shock Wave, Originating As A Result of the Explosion of a Shaped Charge with the Free Surface of the Water, by B. I. Zaslavskiy, 14 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Postcritical Deformations and the Stability of a Sloping Spherical Segment, by L. I. Shkutin, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Propagation of a Shock Wave in a Nonhomogeneous Atmosphere in the Direction of Diminishing Density, by Yu. P. Rayzer, 14 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Reflection of Plane Elastic Waves from an Arbitrary Inhomogeneous Layer in the Case of Normal Incidence, by E. V. Nikol'skiy, 10 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Rotational Relaxation of Diatomic Molecules in a Light Inert Gas, by M. N. Safaryan, Ye. V. Stupochenko, 12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Some Questions Regarding the Theory of the Electrode Layer of a Change in Potential, by G. A. Lyubimov, 15 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Steady-State Flow of an Anisotropically Conductive Liquid between Parallel Porous Walls, by I. P. Semenova, 9 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Theory of the Tixotropy of Viscoelastic Media with a Continuous Distribution of the Relaxation Time, by A. I. Leonov, 22 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Torsional Loss of Stability in the Case of Plastic Deformations, by V. D. Klyushinikov, 7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

A Two-Dimensional Periodic Contact. Contact Resistance with Account Taken of Secondary Flows in the General Case, by A. L. Stasenko, 12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Scientific  
Physics (Contd)

Viscoplastic Flow in Noncircular Cylinders in the Presence of a Pressure Gradient, by G. I. Bykovtsev and A. D. Chernyshev, 7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Approximate Equation of State of Solids, by V. P. Koryavov, 5 pp.  
RUSSIAN, per, Zh Prikl Mekh Tech Fiz, No 5, 1964, pp 123-126.  
P911016668  
AEC ANL-TR-536

Theory of the Motion of a Vortex Ring Subjected to Gravity Force. Ascent of Atomic Cloud, by A. T. Onufriyev.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 2, 1967, pp 3-61.  
\*FTD-MT-24-53-68

Breakdown of Transparent Polymers by Powerful Light Pulses at Various Temperatures, by N. N. Vsevolodov, N. F. Novikov.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 2, 1967, pp 86-89.  
\*FTD-MT-24-53-68

Gradient Method of Solving One Class of Optimal Control Problems, by O. V. Vasil'yev.  
RUSSIAN, per, Zhurnal Vychislitel'noy Matematiki i Matematicheskoy Fiziki, Vol 7, No 1, 1967, pp 52-61.  
\*FTD-HT-23-158-68

Mirror-Lens Objective, by V.F. Babintsev and L.G. Kochetova, 4 pp.  
RUSSIAN, patent, Patent No. 162682 (Appl. No. 840779/26-10, June 8, 1963), 2 pp.  
P100007768  
FTD-HT-66-663

An Extremely Sensitive Flow Regulator, by A. S. Brushteyn.  
RUSSIAN, Patent No 182991, Class 47.  
\*FTD-HT-23-137-68C

The Possibility of Gas Thermal Conductivity Measurement in a Shock Tube, by V. Kaonicek, 15 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 139-148. P100006568  
FTD-HT-66-680

Scientific  
Physics (Contd)

The Supersonic Wind Tunnel of the Institute for Thermomechanics, for Basic Research on Two-Dimensional Cascades, by J. Kveton, 19 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 167-179. P100006568  
FTD-HT-66-680

Heat Exchange Between a Dissociated Gas Stream and a Wall, by L. Krejci, 12 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 191-198. P100006568  
FTD-HT-66-680

Hydrophotographic Investigation of the Diffusion of Water through Liquid Hydrocarbons, by Joesph Sivadjian, 5 pp.  
FRENCH, per, Bulletin de la Societe Chimique de France, No. 6, 1967, pp 1918-1919.  
Dept of Navy NSRDC No. 338

A Numerical Method for Analyzing Gamma Spectra, by J. P. Flandre.  
FRENCH, per, International Journal of Applied Radiation and Isotopes, Vol 18, 1967, pp 337-343.  
Dept of Navy NIC tr 2523

Physico-Chemical Calculations in Science and Industry, by H. Fromherz. 355 pp.  
GERMAN, bk, 1964 second edition.  
Plenum Press

Continuous Spectrum of the 1-ATM Argon Arc in the Spectral Range from 2700 to 500 Angstrom Units, by H. Guendel, W. Neumann.  
GERMAN, per, Beitraege aus der Plasmaphysik, Vol 7, No 3, 1967, pp 221-231.  
\*FTD-HT-23-165-68

UNILAC, a Linear Accelerator for Atomic Ions of Any Mass, by UNILAC Team, 9 pp.  
GERMAN, rpt, Institut für Angewandte Physik, Universität Heidelberg. UNILAC-Gruppe, 30 Dec 1966, 26 pp.  
P911014868  
AEC ANL-TR-533

Research Report of the Unilac Team for 1964-1966, 46 pp.  
GERMAN, rpt, Institut für Angewandte Physik, Universität Heidelberg. UNILAC-Team. UNILAC No 3-67, 1967, 84 pp.  
P911040768  
AEC ANL-TR-535

Scientific  
Physics (Contd)

Stressing and Deformation (GFK)-Laminated Structural Elements. Part I. Fundamentals of Stress and Deformation Analysis, by Alfred Puck. GERMAN, per, Kunststoffe, Vol 57, No 4, 1967, pp 284-293.  
Dept of Navy NIC tr 2524

Optimization of the Giessen Ion Thruster, by J. Freisinger and H. Lob, 18 pp. GERMAN, per, Raumfahrtforschung, Vol 10, No 4, 1966, pp 174-179.  
P911017568  
AEC NP-TR-1599

Thrust-Deduction Investigations on Bodies with Blunt Ends, by H. Amtsberg & W. Arlt. GERMAN, per, Schuff und Hafen, Vol 17, No 10, 1965, pp 786-790.  
Dept of Navy NIC tr 2519

Hit Region Theory and Linear Energy Transfer (LET) I. Survival Rate without Influence of Time Factor, by K. Gunther, H. Rossbach, 11 pp. GERMAN, per, Studia Biophysica, Vol 1, 1966, pp 25-36.  
P911039868  
AEC NP-TR-1561

Simplified and Expanded Theory of Barrier Layer Rectifiers, by W. Schottky, 66 pp. GERMAN, bk, Vereinfachte und Erweiterte Theorie der Randschichtgleichrichter, pp 539-493.  
ACSI J-3562  
ID 2204050167

The Influence of Various Charge Carrier Densities on the Optical Dispersion and Absorption of Stannous Telluride, by H. Koehler. GERMAN, per, Zeitschrift fuer angewandte Physik, Vol 23, No 4, 1967, pp 270-276.  
Dept of Navy NIC tr 2526

Acceleration of Inhomogeneous Plasmas by Laser Light, by H. Hora, D. Pfirsch, 9 pp. GERMAN, per, Zeitschrift fur Naturforschung, Vol 22A, No 2, 1967, pp 278-280.  
P911042568  
AEC NP-TR-1605

The Plasma Jet as a New Light Source and Emission Spectral Analysis Using a Plasma Torch, by Hidehiro Goto, Iruo Atsuya, 22 pp. JAPANESE, per, Ryusaki Kagaku, Vol 16, 1967, pp 735-747.  
P911044868  
AEC ORNL-TN-1826

Scientific  
Physics (Contd)

Exact Title Unknown - Pertains to Quaternisation of Pyridine. JAPANESE, per, Kogyo Kagaku Zasshi, Vol 68, No 3 1965, pp 504-506.  
\*ACSI J-4281  
ID 2204003468

The Measurement of Spectra and Correlation Functions of Transient Random Signals, by H. R. Loos. POLISH, per, IMEKO-IV, Warszawa, No 3-8-VII-1967, 25 pp.  
\*FTD-BT-23-168-68

Propulsion & Fuels

Fast Boiling Reactors with Fuel in the Form of a Molten Salt, by Mechislav Taube, 7 pp. RUSSIAN, per, Atomaya Energiya, Vol 22, Issue No 1, Jan 1967, pp 10-13. P500025668  
Dept of Navy/NIC Tr No 2361

Ignition Lags of Hydrocarbon Fuels at High Temperature, by V. M. Zimont & Yu. L. Trushin. RUSSIAN, per, Fiz. Goreniya i Vzryva, Vol 3, No 1, 1967, pp 86-93.  
\*Dept of Navy/APL/JHU J-1137

Domestic Gas Pipeline Transport Developments, by Yu. I. Bokserman, 7 pp. RUSSIAN, per, Gazovaya Promyshlennost', No 10, 1967, pp 9-13.  
JPRS 44079

Study of the Initial Section of Turbulent Jets of Various Gases in a Wake Flow of Air, by G. N. Abramovich. RUSSIAN, per, AN SSSR, Izv., Mekh, Zhidkosti i Gaza, No 6, 1966, pp 166-172.  
Dept of Navy/APL/JHU T-2097

Analysis of the Work of a Turbojet Engine with Thrust Reversal by the Method of Small Deviations, by A. S. Tikhonov, 10 pp. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, 1965, No 1, pp 78-86.  
P100029868-V  
FTD-MT-65-72

Scientific  
Propulsion & Fuels (Contd)

Residual Oils of Higher Viscosity, by P. A. Zelotarev, 5 pp.  
RUSSIAN, per, Neftepererabotka i Neftekhimiya,  
No 5, 1965, pp 3-6. P100029668  
FTD-HT-66-578

Turbulent Nonisothermal Jets of a Compressible  
Gas of Variable Composition, by A. S. Ginevskii.  
RUSSIAN, per, Promyshlennaya Aerodinamika, No 27,  
1966, pp 31-54.  
Dept of Navy/APL/JHU TG 230-T538

Antisurge Regulator, by A.I. Pryadilov, 3 pp.  
RUSSIAN, patent, Patent No. 178012 (Appl.  
No. 770869/25-8, March 19, 1962), 2 pp.  
P100007468  
FTD-HT-23-954-67

Acceptance Tests for Stopper Heads and Nozzles,  
by M. Moray.  
FRENCH, per, C.D.S Circ., No. 4, 1967,  
pp. 1011-1030.  
\*BISI 6099

The Douroux Rotary Engine, by E. M. Douroux.  
FRENCH, Patent No. 1,251,954.  
USAFSTC P200031468  
FSTC-HT-23-4-68

Electromagnetic Generation of Plane Pressure  
Pulses in Fluids, by W. Eisenmenger.  
GERMAN, per, Acustica, Vol 1, 1962, pp 185-202.  
NSTIC Trans No 1680 P944024668

Conversion of the Frankfurt/Oder Oil Cracking  
Facility to Liquid Gas Use, by Bodo Wolf and  
Heins Martin, 11 pp.  
GERMAN, per, Energiotechnik, Vol 17, No 11, Nov  
1967, pp 481-484.  
JPRS 44060

Examination of Inter-element Effects as  
Function of Sparking-Off Time, by G. Herberg,  
et al.  
GERMAN, per, Spectrochimica Acta., Vol. 23B,  
1967, Sept., pp. 101-116.  
\*BISI 6102

Pulsejet, Jet and Rocket Engines, by Stanislaw  
Wojcicki, 33 pp.  
POLISH, bk, Ministerstwa Obrony Narodowej, 1962,  
pp 1-299. P100039468-V  
FTD-TT-64-991

Scientific  
Space Technology

General Perturbations of the Elements of  
Artificial Lunar Satellites, by V. A. Brumberg,  
37 pp.  
RUSSIAN, per, Bulleten' Instituta Teoretiche-  
skoy Astronomii, Vol VIII, No 10 (103), 1962,  
pp 705-732. P500018968  
Dept of Navy/NIC Trans No 2492

Three-Dimensional Lunar Trajectories, by  
V. A. Yegorov.  
RUSSIAN, bk, Prostranstvennaya zadacha  
dostizheniya lunny, Moscow, Izdatel'stvo "Nauka",  
1965, 222½ pp.  
\*CSFTI TT 68-50306

Handbook on Cosmonautics.  
RUSSIAN, bk, Spravochnik po kosmonavtike, Moscow,  
Voennoye Izdatel'stvo Ministerstva Oborony SSSR,  
1966, 329 pp.  
\*CSFTI TT 68-50304

The ABC of Outer-Space Piloting, by I.  
Merkulov, 10 pp.  
RUSSIAN, per, Tekhnika - Molodezhi, No 1,  
1966, pp 20-23. P100020668  
FTD-HT-23-891-67

Scientific Session on Astronautics Held in  
Budapest, by Andras Szentesi, 7 pp.  
HUNGARIAN, per, Geodesia es Kartografia, Vol 19,  
No 6, 1967, pp 461-464.  
JPRS 44103

Miscellaneous

Adaptation to Extreme Effects in Experimental  
Environments, by P. K. Isakov.  
RUSSIAN.  
\*ACSI J-4288  
ID 2204003668

Collected Works of Academician A. M.  
Lyapunov, Vol II, by A. M. Lyapunov, 463 pp.  
RUSSIAN, bk, Akademik A. M. Lyapunov,  
Sobraniye Sochineniy (II), 1956, pp 1-473.  
P100030268-V  
FTD-MT-64-209

Scientific  
Miscellaneous (Contd)

Azerbaydahan Academy of Sciences Elects New Members, by R.G. Ismaylov, 6 pp.  
RUSSIAN, newspaper, Bakinskiy Rabochiy, Baku, 29 Dec 67, p. 3.  
JFRS 44,193

State Standard for Articles from Black Powder. 5 pp.  
RUSSIAN, per, Izdeliya Pressovanyye Iz Dymnogo Ruzheynogo Porokha Gost 6760-58, Jan 1959.  
ACSI J-4067  
ID 1771093267

Scientific Achievements of State Prize Winners Prof. Tat'yana Vinogradova and Prof. Arseniy Rusakov, by V. Petrova, 3 pp.  
RUSSIAN, newspaper, Meditinskaya Gazeta, Moscow, 1 Jan 68, p. 3.  
JFRS 44,224

Fawn, by B. Savitskii.  
RUSSIAN, per, Fyzhik. -- Okhotnichi Prostory, Vol 15, 1960, pp 210-212.  
\*CSFTI TT 68-50392

The "Inprodmas-67" Exhibition.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 90.  
\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

The Crisis of Scientific Research, by 'Abbas Mabruk, 14 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 10 and 11 Jan 68.  
JFRS 44,329

Untying the Prague Knot.  
CZECH, per, Zelexnicar, 29 Apr 1967, pp 2-3.  
DIA LN276-68

Information Bulletin, No 15, June 1964, 57 pp.  
FRENCH, rpt.  
P500025968-V  
Dept of Navy/NIC Trans 2507

Information Bulletin, No 17, June 1965, 98 pp.  
FRENCH, rpt.  
P500026168-V  
Dept of Navy/NIC Trans No 2508

Scientific  
Miscellaneous

Information Bulletin No 20, December 1966, 32 pp.  
FRENCH, rpt.  
P500026368-V  
Dept of Navy/NIC Trans No 2509

The Redoutable, 12 pp.  
FRENCH, per, 1967. P500024768  
Dept of Navy/NIC Tr No 2491

The Plain of Reeds, by Victor Delahaye, 248 pp.  
FRENCH, bk, La Plaine des Joncs (Indochine Francaise) et sa Mise en Valeur, 1928.  
\*ACSI J-4236  
ID 2294002468

List of Contracts for Planned Projects.  
FRENCH, per, Le Progres Scientifique, No 109, June 1967, pp 54-60, 69-70.  
\*ACSI J-4307  
ID 2832022167

News Reports, 2 pp.  
ITALIAN, 9 Sep 1967.  
ACSI J-4120  
ID 2204000968

Speech by Vice Prime Minister at the Building Materials Conference, by Eugeniusz Szyr, 6 pp.  
POLISH, monthly, Cement-Wapno-Gips, No. 9-10, Warsaw, Sept-Oct 67, pp. 262-264.  
JFRS 44,285

General Report of the Minister of Building and Building Materials, by Marian Olewinski, 14 pp.  
POLISH, monthly publ., Cement-Wapno-Gips, Nos 9-10, Warsaw, Sept-Oct, 67, pp. 264-269.  
JFRS 44,285

Multilateral Cooperation in Global Geophysical Research, by Witold Krzeminski, 5 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 70-72.  
JFRS 44061

Work of the Fan Qualification Committee, by Anastasja Strus, 6 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 103-106.  
JFRS 44061

Scientific  
Miscellaneous (Contd)

Plan Activities from 1 April 1967 to 30 June  
1967, 68 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 107-  
145.  
JPRS 44061

Polish Patents - Calendar Year 1968.  
POLISH Patents, 1968.  
\*CSFTI TT 68-50012

Meeting of the "Rudjer Boskovic" Astronomical  
Society, by Nenad Jankovic, 3 pp.  
SERBO-CROATIAN, journal, Visiona, No. 2,  
Belgrade, 1967, pp. 40-41.  
JPRS 44,181

Goals of Academy of Science Outlined, by  
Antonio Nunez Jimenez, 11 pp.  
SPANISH, newspaper, Granma, Havana, 2 Jan 68,  
p. 2.  
JPRS 44,306

Information Manual, of Various Articles by A.  
Berrondo, Andres I. Flores, 71 pp.  
SPANISH, per, Manual de Informaciones, Vol 6,  
No 3/4, 1964, pp 2-15; 36-60; 62-90; 92-112; 114-  
119.  
ACSI I-6925  
ID 2804000765

Speech at the International Congress of Bottling,  
SPANISH, per, IDE (Informacion de Envase)  
Embalaje y Artes Graficas Aplicadas, No 101, Jan  
1968, pp 20-21.  
\*ACSI J-4407  
ID 2204007068

Educational Travel, 7 pp.  
SWEDISH, per, Svensk Intendentur Tidskrift, No  
9, 1967, pp 267-273.  
ACSI J-3941  
ID 2204059967

Warmest Congratulations to Venus IV the Brill-  
iant Result of Soviet Science and Technology,  
by Ta Quang Buu, 10 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 81-88.  
JPRS 44,391

Annotated Bibliography of Foreign Literature,  
LANGUAGE UNKNOWN, bk, Survey No 4, 1967, 360 pp.  
\*CSFTI TT 68-50451

INFORMATION RECEIVED THROUGH

ON COVER-TO-COVER TRANSLATIONS

- Acta Medica Jugoslavica, Vol 20, No 3, 1966.  
CFSTI TT 66-59007-3
- Arhiv za Poljoprivredne Nauke, Vol 20,  
No 68, 1967.  
CFSTI TT 67-58019-1
- Arhiv za Poljoprivredne Nauke, Vol 20,  
No 69, 1967.  
CFSTI TT 67-58019-2
- Arhiv za Poljoprivredne Nauke, Vol 21, 1968.  
\*CFSTI TT 68-50057
- Bilten Instituta za Nuklearne Nauke Boris  
Kidric, Vol 19, 1968,  
\*CFSTI TT 68-50055  
\*AEC-tr-6884
- Biokhimiya, Vol 32, No. 2, Part 1, March-April 1967.  
CB
- Biokhimiya, Vol 32, No 2, Part 2, Mar-Apr 1967.  
CB
- Biokhimiya, Vol 32, No 3, Part 1, May-Jun 1967.  
CB
- Byulleten Izobret, October 1967, Section I-Chemical.  
Derwent Publications LTD
- Byulleten Izobret, October 1967, Section II-  
Electrical.  
Derwent Publications LTD
- Casopis Ornitoloski Zavod, Vol 19, 1965.  
\*CFSTI TT 68-50064
- Doklady Akademii Nauk SSSR, Vol 175, No 1-6,  
Jul-Aug 1967.  
CB
- Doklady AN SSSR, Vol 175, No 4-6, Aug 1967.  
Am Inst Phys  
Vol 12, No 8, Feb 1968
- Doklady Ak Nauk SSSR, Vol 176, No 1-3, Sept 1967.  
Am Inst Phys  
Vol 12, No 9, March 1968
- Elektrokhimiya, Vol 3, No. 8, Aug 1967.  
CB
- Elektrosvyaz, Vol 21, No 9, 1967.  
IEEE
- Fizika Tverdogo Tela, Vol 9, No 8, Aug 1968.  
Am Inst Phys  
Vol 9, No 8, Feb 1968
- Fizika Tverdogo Tela, Vol 9, No 9, 1967.  
Am Inst Phys  
Vol 9, No 9, March 1968
- Fiziologiya Rastenii, Vol 14, No. 5, Sept-Oct 1967.  
CB
- Geodeziya i Kartografiya, No 3, 1967.  
Am Geophysical Union
- Geokhimiya, Vol 3, No. 6, 1966.  
American Geological Institute
- Geologiya Nefti i Gaza, Vol 7, No 4, 1963.  
Petroleum Geology
- Gigiena i Sanitariya, Vol 30, No 10-12, Oct-Dec  
1965.  
CFSTI TT 66-51033-4
- Glasnik Hemijskog Društva - Beograd, Vol 31,  
No 3, 1966.  
CFSTI TT 66-59000-3
- Glasnik Hemijskog Društva - Beograd, Vol 33,  
1968.  
\*CFSTI TT 68-50056

Izvestiya AN SSSR, Atmosfery i Kosmologicheskaya,  
Vol 3, No 7, 1967.  
Am Geophysical Union

Polski Przegląd Radiologii i Medycyny Nuklearnej,  
Vol 31, No 3, 1967.  
CFSTI TT 67-56003-3

Izvestiya Akademii Nauk SSSR, Fizika Zemli,  
No 6, 1967.  
Am Geophysical Union

Problemy Peredachi Informatsiy, Vol 3, No 4,  
1967.  
JPRS 44644

Izvestiya Akademii Nauk SSSR, Ser Fiz, Vol 31, No. 3,  
March 1967.  
Columbia Technical Translations

Radiobiologiya, Vol 6, No 6, 1966.  
AEC-tr-6775  
P911064568-V

Izvestiya VUZ Radiotekhnika, Vol 9, No 2, Mar-Apr  
1966.  
Faraday Press

Radiotekhnika, Vol 22, No 9, 1967.  
IEEE

Izvestiya VUZ Radiotekhnika, Vol 9, No 3,  
May-Jun 1966.  
Faraday Press

Radiotekhnika i Elektronika, No 8, 1967.  
IEEE

Kosmicheskaya Biologiya i Meditsina, Vol 1,  
No 5, 1967.  
JPRS 44299

Radiotekhnika i Elektronika, No 9, 1967.  
IEEE

Kristallografiya, Vol 12, No 4, Jul-Aug 1967.  
Am Inst Phys  
Vol 12, No 4, Jan-Feb 1968

Rudarsko-Metalurski Zbornik, 1968.  
\*CFSTI TT 68-50059

Lijecnicki Vjesnik, Vol 89, No 2, 1967.  
CFSTI TT 67-58020-2

Saopstenja Institut za Vodoprivredu Jaroslav  
Cerni, Vol 15, 1968.  
\*CFSTI TT 68-50060

Lijecnicki Vjesnik, Vol 89, No 3, 1967.  
CFSTI TT 67-58020-3

Saopstenja, Vol XIV, No 40, 1967.  
CFSTI TT 67-58016-1

Lijecnicki Vjesnik, Vol 89, No 4, 1967.  
CFSTI TT 67-58020-4

Savremena Poljoprivreda, Vol 14, No 7-8, 1966.  
CFSTI TT 67-58007/7-8

Lijecnicki Vjesnik, Vol 89, No 5, 1967.  
CFSTI TT 67-58020-5

Savremena Poljoprivreda, Vol 14, No 9, 1966.  
CFSTI TT 67-58007-9

Lijecnicki Vjesnik, Vol 89, No 6, 1967.  
CFSTI TT 67-58020-6

Savremena Poljoprivreda, Vol 14, No 10, 1966.  
CFSTI TT 67-58007-10

Nukleonika, Vol 11, No 11-12, 1966.  
AEC-tr-6657, 6658

Savremena Poljoprivreda, Vol 15, No 1, 1967.  
CFSTI TT 67-58014-1

Nukleonika, Vol 13, 1968.  
\*CFSTI TT 68-50011  
\*AEC-tr-6931

Savremena Poljoprivreda, Vol 15, No 2, 1967.  
CFSTI TT 67-58014-2

Polski Przegląd Radiologii i Medycyny Nuklearnej,  
Vol 31, No 1, 1967.  
CFSTI TT 67-56003-1

Savremena Poljoprivreda, Vol 16, 1968.  
\*CFSTI TT 68-50058

- Tekhnika i Yuzrazheniye, No 10, 1967.  
ACSI J-3837
- Tsvetnye Metally, Vol 39, No 8, Sept 1966.  
Primary Sources  
Vol 7, No 9, 1966
- Tyl i Snabzheniye, No 11, 1967,  
ACSI J-3978
- Tyl i Snabzheniye, No 12, 1967.  
ACSI J-4132
- Tyl i Snabzheniye, No 1, 1968.  
\*ACSI J-4396
- Ukrainskiy Fizicheskiy Zhurnal, Vol 12, No 1,  
Jan 1967.  
Israel Program for Scientific Translations
- Uspelkhi Fizicheskikh Nauk, Vol 92, Nos. 1 and 2,  
Nov-Dec 1967.  
American Institute of Physics  
Vol 10, No. 3, Nov-Dec 1967
- Vesnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja, Geologija, No 25, 1968.  
\*CFSTI TT 68-50061
- Vesnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja. Serija B. Inzenjerska Geologija i  
Hidrogeologija, No 8, 1968.  
\*CFSTI TT 68-50062
- Vesnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja. Serija C. Primenjena Geofizika, No 9,  
1968.  
\*CFSTI TT 68-50063
- Vestnik Akademii Nauk SSSR, Vol 37, No 11, 1967.  
JPRS 44643
- Vestnik Protivovozdushnoy Oborony, No 9, 1967,  
ACSI J-3547
- Vestnik Protivovozdushnoy Oborony, No 1, 1968.  
\*ACSI J-4394
- Voyenno Meditsinskiy Zhurnal, No 9, 1967.  
ACSI J-3648
- Voyenno Meditsinskiy Zhurnal, No 10, 1967.  
ACSI J-4119
- Voyenno Meditsinskiy Zhurnal, No 11, 1967.  
\*ACSI J-4395
- Voyenny Vestnik, No 9, 1967.  
ACSI J-3534
- Voyenny Vestnik, No 10, 1967.  
ACSI J-3836
- Voyenny Vestnik, No 11, 1967.  
ACSI J-4015
- Yadernaya Fizika, Vol 5, No. 6, Dec 1967.  
American Institute of Physics  
Vol 5, No. 6, June 1967
- Zhurnal Eksperimental'noi i Teoreticheskoi  
Fiziki, Vol 53, No 1, July 1967.  
Am Inst Phys  
Vol 26, No 1, 1968
- Zhurnal Tekhnicheskoy Fiziki, Vol 37, No 9, 1967.  
Am Inst Phys  
Vol 12, No 9, March 1968
- Zhurnal Prikladnoy Khimii, Vol 40, No. 5, May 1967.  
CB

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**EDITOR'S NOTE**

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arotg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

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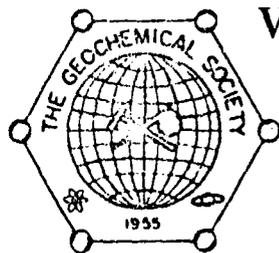
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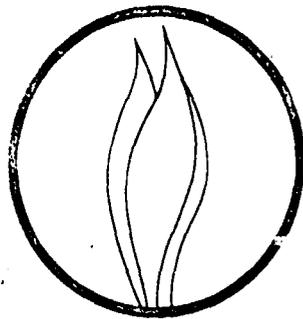
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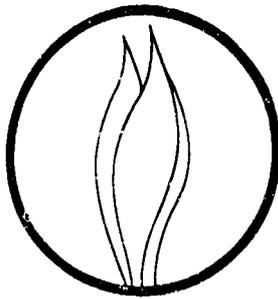
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With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

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A  
G  
R  
G

Soviet Usage	American equivalent
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

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arctg	tan <sup>-1</sup> (arc tan)
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cosec	csc
ctg	cot(ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

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RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR.....	Academy of Sciences, USSR.
CC CPSU.....	Central Committee, Communist Party, Soviet Union.
Gintsvetmet.....	State Institute of Non-Ferrous Metals.
Giprotsvetmet.....	State Institute for the Design and Planning of Non-Ferrous Metals Industry Establishments.
Giredmet.....	State Rare Metals Scientific Research Institute.
Gosplan.....	State Planning Committee of the Council of Ministers of the USSR.
GOST.....	All-Union Standard.
Mekhanobr.....	Scientific Research Institute for Mechanical Concentration of Minerals.
TsIIN TsM.....	Central Institute for Information on Non-Ferrous Metals.
UAZ.....	Ural Aluminum Plant.
UKSTsK.....	Ust'-Kamenogorsk Lead-Zinc Combine.
VAMI.....	All-Union Aluminum and Magnesium Industry.
VNIITsvetmet.....	All-Union Scientific Research Institute of Non-Ferrous Metallurgy.

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VESTNIK OF THE USSR ACADEMY OF MEDICAL SCIENCES

No 11, November 1967

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Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen  
Deputy Director for Operations  
Defense Technical Information Center  
7725 John J. Kingman Road  
Suite 0944  
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar  
Chief, CIA Declassification Center,  
Declassification Review and Referral  
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)



## Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0831939	78-03109A	59	1	2	123	Consolidated Translation Survey Through 31 March 1968	3/31/1968	252	Approved For Release	3/25/2004
AD0833917	78-03109A	59	1	3	124	Consolidated Translation Survey Through 30 April 1968	4/30/1968	223	Approved For Release	3/25/2004
AD0835906	78-03109A	59	1	4	125	Consolidated Translation Survey Through 31 May 1968	5/31/1968	267	Approved For Release	3/25/2004
AD0838252	78-03109A	59	1	5	126	Consolidated Translation Survey Through 30 June 1968	6/30/1968	341	Approved For Release	3/25/2004
AD0839299	78-03109A	59	1	6	127	Consolidated Translation Survey Through 31 July 1968	7/31/1968	354	Approved For Release	3/25/2004
AD0841414	78-03109A	59	1	7	128	Consolidated Translation Survey Through 31 August 1968	8/31/1968	255	Approved For Release	3/25/2004
AD0844244	78-03109A	59	1	8	129	Consolidated Translation Survey Through 30 September 1968	9/30/1968	259	Approved For Release	3/25/2004
AD0845247	78-03109A	60	1	1	130	Consolidated Translation Survey Through 31 October 1968	10/31/1968	252	Approved For Release	3/25/2004
AD0847806	78-03109A	60	1	2	131	Consolidated Translation Survey Through 30 November 1968	11/30/1968	284	Approved For Release	3/25/2004
AD0848152	78-03109A	60	1	3	132	Consolidated Translation Survey Through 31 December 1968	12/31/1968	176	Approved For Release	3/25/2004
AD0848841	78-03109A	60	1	4	133	Consolidated Translation Survey Through 31 January 1969	1/31/1969	188	Approved For Release	3/25/2004
AD0850186	78-03109A	60	1	5	134	Consolidated Translation Survey Through 28 February 1969	2/28/1969	167	Approved For Release	3/25/2004
AD0851748	78-03109A	60	1	6	135	Consolidated Translation Survey Through 31 March 1969	3/1/1969	232	Approved For Release	4/5/2004
AD0853348	78-03109A	60	1	7	136	Consolidated Translation Survey Through 30 April 1969	4/30/1969	262	Approved For Release	3/25/2004
AD0856606	78-03109A	60	1	8	137	Consolidated Translation Survey Through 31 May 1969	5/31/1969	306	Approved For Release	3/25/2004
AD0857706	78-03109A	63	1	1	138	Consolidated Translation Survey Through 30 June 1969	8/22/1969	413	Approved For Release	3/25/2004
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AD0860022	78-03109A	63	1	3	140	Consolidated Translation Survey Through 31 August 1969	10/3/1969	315	Approved For Release	3/25/2004
AD0860905	78-03109A	63	1	4	141	Consolidated Translation Survey Through 30 September 1969	9/30/1969	285	Approved For Release	3/25/2004
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