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CONSOLIDATED TRANSLATION SURVEY

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CONSOLIDATED TRANSLATION SURVEY

FOR APRIL 1966

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CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary 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.

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ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AERE Harwell Library

The Librarian
AERE, Ministry of Supply
Harwell, Didcot, Birks
England

AFCRL Res Lib

Air Force Cambridge Research Laboratories
Research Library
Office of Aerospace Research
United States Air Force
Laurence G. Hanscom Field
Bedford, Massachusetts
ATTN: CRMCLR

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

Amer Math Soc

American Mathematical Society
190 Hope Street
Providence 6, Rhode Island

ANL - Argonne National Laboratory, Illinois
(see AEC)

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

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

DIA

Defense Intelligence Agency
Washington, D. C. 20301

FP

The Faraday Press, Incorporated
84 Fifth Avenue
New York, New York 10011

FTD - Foreign Technology Division (see AF)

IIB

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

IIEW - See NIII

IEEE

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

JPRS

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

NASA

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

Natl Bu Stand

National Bureau of Standards
ATTN: Dr Henry Birnbaum
Room 314, South Building
Washington, D. C.

Navy

Department of Navy
Office of Naval Intelligence
Washington 25, D. C.

NIH

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

ONI - Office of Naval Intelligence (see Navy)

ORNL - Oak Ridge National Laboratory (see AEC)

OSA

Optical Society of America, Incorporated
33 University Road
Cambridge, Massachusetts 02138

Patent Office

Department of Commerce, Patent Office
Scientific Library
14th and Constitution Avenue, NW
Washington, D. C.

Primary Sources

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11 Bleecker Street
New York, New York 10012

SLAC - Stanford Linear Accelerator Center - (see AEC)

UCRL

University of California
Lawrence Radiation Laboratory
Livermore, California
(see AEC)

USSR

Economic

Motor Transport Facilities Increase in Estonia, by I. Kangro, 5 pp.
 RUSSIAN, per, Avtomobil'nyy Transport, No 12, 1965, pp. 11-12.
 JPRS 34412

The Potential of the Chemical Industry in the Azerbaydzhan SSR, by S. B. Tatliyev, 5 pp.
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 JPRS 34567

The Potential of the Construction Industry Should Be Exploited, 6 pp.
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 JPRS 34562

The Economist in Trade by A. Abaturvov, 5 pp.
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 JPRS 34424

Survey of Present Status of Construction Industry, by G. Karavayev, 13 pp.
 RUSSIAN, np, Ekonomicheskaya Gazeta, No 1, Jan 1966, pp. 6-7.
 JPRS 34711

Price-Fixing As An Important Lever in Economic Administration, by V. Sitnin, 11 pp.
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 JPRS 34545

The Present and Future of Cooperative Trade, by A. Klimov, 11 pp.
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Improvement of Administration of Industry,
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Metallurgy, by A. Mochalov, 8 pp.
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stana, No 12, Dec 1966, pp. 31-35.
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Leningrad Shoe Association, by K. I. Volosatova,
15 pp.
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Achievements of the National Economy (VDNKh)
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of Industry in the USSR, by S. Mikhaylov and
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Feb 1966, pp. 12-19.
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13 pp.
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Problems of Planning Municipal Services,
by I. Ivanov, 6 pp.
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Subsidiary Farming, by A. Kotechenkov, 5 pp.
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the USSR, by A. Klimov, 5 pp.
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October Plant in Volgograd, by A. Karpov,
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JPRS 34524

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Proven by Experience, by A. Adeyev, et al.
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RUSSIAN, np, Pravda, 25 Feb 1966, p. 3.
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6 pp.
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pp. 3-4.
JPRS 34449

Problems of Metal Production, Return on
Assets, and Profitability in the Metallurgical
Industry, by S. Akhmatov and Zh. Tkachenko,
8 pp.
RUSSIAN, np, Pravda Ukrainy, 2 Mar 1966, p. 2.
JPRS 34811

USSR
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Application of Scientific Achievements in
Industry in Armenia, by B. Serkisov, 6 pp.
RUSSIAN, per, Promyshlennost' Armenii, No.
12, Dec 1965, pp. 3-6.
JPRS 34783

Conference of Party-Economic Aktiv of Ferrous
Metallurgy Enterprises of the Ukraine, by I.
Yevskov and N. Titarenko, 10 pp.
RUSSIAN, np, Rabochaya Gazeta, 21 Jan 1966,
pp. 1-3.
JPRS 34802

Chemical Industry of the Ukraine -- Present
Status and Prospects, by S. Kalinichev and A.
Khandros, 5 pp.
RUSSIAN, np, Rabochaya gazeta, 29 Jan 1966,
pp. 1, 3.
JPRS 34567

Transition to Direct System of Kolkhoz
Crediting, by A. Poskonov, 5 pp.
RUSSIAN, np, Sel'skaya Zhizn', 6 Jan 1966,
p. 2.
JPRS 34683

Farm Structures Assembled in a Few Hours
(An Aid to the Farm Builder), by
L. P. Ionov, V. P. Gorlyshkov, 90 pp.
RUSSIAN, bk, Sel'skiye Postroyki Sobirayemyye
za Neskol'ko Chasov (V Pomoshch' Sel'skomu
Stroitel'nyu) 2d Edition, 1964.
ACSI I-8489
ID 2218214465

The Annual Plan of Rural Construction Must
Be Successfully Completed, 6 pp.
RUSSIAN, per, Sel'skoye Stroitel'stvo, No
11, Nov 1965, pp. 1-2.
JPRS 34562

Improvements in the Economic Activity of
the Synthetic Leather and Industrial Rubber
Products Combine imeni M. I. Kalinin, by S.
Kul'chitskiy and L. Debner, 8 pp.
RUSSIAN, np, Sovetskaya Moldaviya, 5 Feb
1966, p. 2.
JPRS 34567

USSR
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Results and Prospects of Commodity Circulation Development, by V. Bulin, 8 pp.
RUSSIAN, per, Sovetskaya Potrebitel'skaya Kooperatsiya, No 1, Jan 1966, pp. 26-30.
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JPRS 34701

Wage Regulations for Trade, by Yu. Zlokazov, 7 pp.
RUSSIAN, per, Sovetskaya torgovlya, No 12, Dec 1965, pp. 38-41.
JPRS 34449

Reference Book on Fishing Gear, Nets, and Equipment, by N. N. Andreev.
RUSSIAN, bk, Spravochnik po Orudiyam Lova, Setesnastnym Materialam i Promyslovomu Snarzheniyu, Moscow, 1962, 504 pp.
*CFSTI
TT 66-51046

Recent Scientific Research in the Glass and Ceramics Industry, 5 pp.
RUSSIAN, per, Steklo i Keramika, Vol XXII, No 11, Nov 1965, pp. 1-3.
JPRS 34562

All-Union State Standard for Large-Panel Buildings Is Issued, by B. Rubanenko and D. Sergeyev, 5 pp.
RUSSIAN, np, Stroitel'naya Gazeta, 10 Dec 1965, p. 2.
JPRS 34562

Description of Single-Bucket Construction Excavators in Series Production by Construction and Highway Machine Building Plants, 14 pp.
RUSSIAN, per, Stroitel'nyye i dorozhnyye mashiny, No 1, Jan 1966, pp. 23-25.
JPRS 34685

An Urgent Need to Improve the Utilization of An Enterprise's Fixed Assets, 5 pp.
RUSSIAN, per, Stroitel'nyye Materialy, No 12, Dec 1965, pp. 1-2.
JPRS 34711

USSR
Economic (Contd)

Using Game Theory in Economics, by A. Vasil'yev and V. Petrov, 6 pp.
RUSSIAN, per, Tekhnika-Molodezhi, No 12, 1965, pp. 14-15.
JPRS 34514

Production of Agricultural Machinery at Belorussian Plants, by V. Andronov, 7 pp.
RUSSIAN, per, Tekhnika v Sel'skom Khozyaystve, No 11, Nov 1965, pp. 35-40.
JPRS 34450

Progressive Structural Shifts in the Textile Industries of Member-Countries of CEMA (Excluding Mongolia), by V. I. Naumova, 6 pp.
RUSSIAN, per, Tekstil'naya Promyshlennost', No 1, Jan 1966, pp. 6-8.
JPRS 34838

The Most Important Tasks for Tractor and Agricultural Machine Building in 1966-1970, by I. F. Sinitsyn, 8 pp.
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 1, Jan 1966, pp. 1-3.
JPRS 34686

The Problem of Finding the Main Parameters of Future Row-Crop Tractors, by A. N. Kaipov, 7 pp.
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 1, Jan 1966, pp. 17-18.
JPRS 34686

For Rapid Construction of Worker Resorts, by N. N. Romanov, 5 pp.
RUSSIAN, np, Trud, 12 Dec 1965, p. 2.
JPRS 34449

Problems of Higher Education at Moscow State University, by I. G. Petrovskiy, 5 pp.
RUSSIAN, np, Trud, 30 Jan 1966, p. 3.
JPRS 34449

Some Theoretical Questions of Optimal Planning of the National Economy, by A. I. Katsenelinboigen, Yu. V. Ovsienko and Ye. Yu. Fayorman, 11 pp.
RUSSIAN, per, Vestnik Akademii Nauk SSSR, No 12, Dec 1965, pp. 26-33.
JPRS 34736

USSR
Economic (Contd)

Problems and Developments in Machine Tool Industrial Production in 1966, by K. K. Vinogradov, 8 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, No 1, Jan 1966.
JPRS 34712

Machine-Building and Mathematics, by Prof. N. K. Kulikov, 6 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, No 1, Jan 1966, pp. 78-80.
JPRS 34681

Recording Passenger Traffic on River Transport, by A. Gurevich, 6 pp.
RUSSIAN, per, Vestnik Statistiki, No 8, Aug 1965, pp. 63-65.
JPRS 34412

The Communications Worker's Bookshelf in the New Year, 7 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

The Competition of the Communications Workers in Honor of the 23rd Party Congress Is To Be More Widespread, 6 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966,
JPRS 34768

The Economic Reform in Communications Industry, 8 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

USSR
Economic (Contd)

Equipment for the High-Frequency Switching of the Primary, Secondary and Tertiary Groups of the Multichannel Long Distance Communication Systems, 17 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

Grid Schedules for the Construction of Communication Facilities, 9 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

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RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

By Inquiring Into Economics, 9 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

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RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

The Use of Group Installations for the Organization of Telephone Service in Rural Areas, 10 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1, 1966
JPRS 34768

Test Corrector Perforated Plates Used in a Course of Construction Designs, by I. A. Yanson, 6 pp.
RUSSIAN, per, Vestnik Vyshey Shkoly, No 8, Aug 1965, pp. 18-21.
JPRS 34483

Joint Enterprises and Institutions among CEMA Countries, by G. Ruzanski, 9 pp.
RUSSIAN, per, Vneshnyaya torgovlya, No 11, Nov 1965, pp. 21-24.
JPRS 34586

USSR
Economic (Contd)

Soviet-Hungarian Economic Cooperation, by B. Sallai, 11 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 11, Nov 1965, pp. 24-28.
JPRS 34586

Past Results and Future Developments in CEMA, by N. Ptichkin, 6 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 12, Dec 1965, pp. 3-6.
JPRS 34540

Soviet Economic Assistance to Our Collaboration with Guinea, by P. Kashunin, 5 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 12, Dec 1965, pp. 42-44.
JPRS 34540

Interview with Chairman S. A. Skachkov of State Committee on Foreign Economic Relations, by S. A. Skachkov, 9 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 1, Jan 1966, pp. 3-6.
JPRS 34838

Increasing the Efficiency of the Oil-Tanker Fleet, by N. Kantemir, 5 pp.
RUSSIAN, np, Vodnyy Transport, 2 Dec 1965, p. 1.
JPRS 34412

Economic Cooperation between the Socialist Camp and Newly Independent Countries, by G. Prokhorov, 14 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1965, pp. 82-89.
JPRS 34586

On Appraising the Economic Effectiveness of the Foreign Trade of the USSR, by G. Smirnov, 17 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 12, Dec 1965, pp. 94-103.
JPRS 34838

USSR
Economic (Contd)

On the Increase of Production and the Practice of Economy, by Lu Hsin (7120 6598), 23 pp.
CHINESE, per, Ching-chi Yen-chiu, No 1, 1966, pp. 1-11.
JPRS 34569

On the Question of Certain Relationships in the Management of Industrial Enterprises, by Jen Yung-chiang (0117 3057 3068), 8 pp.
CHINESE, per, Ching-chi Yen-chiu, No 1, 1966, pp. 12-14, 53.
JPRS 34569

Advance Figures on the Fulfillment of the 1965 Economic and Cultural Plan of the MPR, 6 pp.
MONGOLIAN, np, Unen, 4 Feb 1966, pp. 1 & 4.
JPRS 34542

Labor Statistics in Industry (Book Review) by V. Chuistov and V. Varets'kyi, 7 pp.
UKRAINIAN, per, Dopovidi Akademi Nauk Ukrain'skoi RSR, No 10, Oct 1965, pp. 1396-1399.
JPRS 34845

Political

Excerpt of Stenographic Report of 24-26 March 1966 Plenum of the Central Committee of the Communist Party of the Soviet Union, 190 pp.
RUSSIAN, rpt, 1965, pp. 36-233.
JPRS 34655

Soviet Resolution of Nationalities Problem, by A. Shishkov, 7 pp.
RUSSIAN, np, Bakinakiy rabochiy, 26 Jan 1966, pp. 2-3.
JPRS 34513

Chekists on Their Work.
RUSSIAN, bk, Chekisty o Svoym Trude, 1965, pp 1-128.
*JPRS/NY-13213

USSR
Political (Contd)

An Invention Stifled by Bureaucrats, by B. Galich, 5 pp.
RUSSIAN, np, Izvestiya, 19 Dec 1965,
p. 2.
JPRS 34765

An Invention Stifled by Bureaucrats
(Continued), 5 pp.
RUSSIAN, np, Izvestiya, 3 Feb 1966, p. 5.
JPRS 34765

The Struggle against Neocolonialism Is the
Cause of All the Peoples, by G. Starushenko,
12 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
JPRS 34833

A Five-Year Plan for the Further Progress of
Soviet Society, 13 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 3-11.
JPRS 34833

Implementing the Resolutions of the March
Plenum of the Central Committee of the CPSU,
by V. Konotop, 17 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 12-23.
JPRS 34833

Man and the Universe, by Ye. Faddeyev, 14 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 42-51.
JPRS 34833

USSR
Political (Contd)

The Communist Ideal in Art, by V. Murian,
13 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 52-60.
JPRS 34833

Socialist Society and the Individual, by
M. Petrosyan, 16 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 61-71.
JPRS 34833

The Enterprise Association and the Ministry,
by G. Kulagin, 12 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 82-91.
JPRS 34833

Cooperation Is a Powerful Factor in the
Development of Socialist Countries, by Stanko
Todorov, 5 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966,
pp. 102-105.
JPRS 34833

Methodological Advice to Propagandists on
the History of the Soviet Union, by B.
Volzhskiy, 5 pp.
RUSSIAN, np, Pravda Ukrainy, 12 Mar 1966,
p. 3.
JPRS 34764

Consumer Goods Industry in Light of CC CPSU
September 1965 Plenum Decisions, by S. S.
Starostin, 7 pp.
RUSSIAN, per, Shveytnaya Promyshlennost',
No 6, Nov-Dec 1965, pp. 1-6.
JPRS 34546

USSR
Political (Contd)

Decisions of the September (1965) Plenum of the Central Committee of the CPSU and Questions on the Development of Machine Building, by P. N. Goremykin, 6 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, No 12, Dec 1965, pp. 3-6.
JPRS 34414

The High Role of Party Congresses in the Work of the CPSU, by G. I. Shitarev, 19 pp.
RUSSIAN, per, Voprosy istorii, No 2, Feb 1966, pp. 3-13.
JPRS 34422

Poisonous Ideology of the Baptists, by V. I. Golubovych, 6 pp.
UKRAINIAN, per, Nauka i Zhittya, No 1, Jan 1969, pp. 50-53.
JPRS 34775

Critique of Historical Authenticity of Some Recently Published Polish Emigre Writings, by Yevhen Vrets'on, 9 pp.
UKRAINIAN, per, Suchasnist', No 12, Dec 1965, pp. 82-89.
JPRS 34844

Pages from the History of the Communist Party of the Ukraine (IV), by Ivan Maystrenko, 13 pp.
UKRAINIAN, per, Suchasnist', No 12 (60), Dec 1965, pp. 90-99.
JPRS 34548

The Thinning Ranks of Ukrainian Nazi Collaborators, by Dmytro Tsmokalenko, 6 pp.
UKRAINIAN, per, Ukraina, No 43, Oct 1965
JPRS 34628

USSR
Military

Quality of Combat Training Classes in the Baku Pvo District, by Col Gen A. Shcheglov, 7 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 2, Jan 1966, pp. 18-23.
JPRS 34781

On Psychological Training of Submariners, by M. Ruban, 10 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 1, Jan 1966, pp. 49-54.
JPRS 34781

Soviet Destroyer Visits Ethiopia, by G. Blinov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, 26 Feb 1966, p. 4.
JPRS 34786

Instruments Patented by Nature, by M. S. Chizhov, 9 pp.
RUSSIAN, per, Morskoy Sbornik, No 2, Feb 1966, pp. 39-45.
JPRS 34781

Protection Against Weapons of Mass Contamination in the Navy, 5 pp.
RUSSIAN, per, Morskoy Sbornik, No 2, Feb 1966, pp. 46-49.
JPRS 34781

Parachute Jumping From Military Transport Aircraft, by K. A. Ovsyannikov. 163 pp.
RUSSIAN, bk, Pryzhki s Parashyutom Iz Voyenno-Transportnykh Samoletov, 1964.
Moscow, pp 3-254
ACSI I-6639
ID 2213530064-V

Soviet Armed Forces As a Deterrent, by I. Semiokhin, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, 1 Dec 1965, p. 2.
JPRS 34557

Indoctrination and Training of Draft Age Youth, by S. Shatilov, 6 pp.
RUSSIAN, np, Sovetskiy Patriot, 19 Dec 1965, p. 2.
JPRS 34557

The Military Oath and Regulations, by A. Ivanov, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, 29 Dec 1965, p. 2.
JPRS 34557

USSR
Military (Contd)

The Training and Education of Military Personnel, by Ye. Turov, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, 16 Jan 1966, p. 2.
JPRS 34557

Worthy Recruits for the Soviet Army, by A. L. Getman, 14 pp.
RUSSIAN, per, Sovetskiy Patriot, 26 Jan 1966, p. 2.
JPRS 34434

Raise the Level of Defense-Mass and Sports Work, by A. N. Skvortsov, 11 pp.
RUSSIAN, np, Sovetskiy Patriot, 26 Jan 1966, p. 3.
JPRS 34434

Fifth Plenum of the Central Committee of DOSAAF, 14 pp.
RUSSIAN, per, Sovetskiy Patriot, 30 Jan 1966, p. 1.
JPRS 34434

On Measures for Further Improving the Work of DOSAAF Organizations to Prepare Young People of Induction and Pre-Induction Age for Service in the Armed Forces of the USSR, 11 pp.
RUSSIAN, np, Sovetskiy Patriot, 30 Jan 1966, p. 1.
JPRS 34434

On Raising the Level of Defense-Mass and Sports Work in DOSAAF Organizations, 9 pp.
RUSSIAN, np, Sovetskiy Patriot, 30 Jan 1966, p. 2.
JPRS 34434

Combat Traditions of the Soviet Armed Forces, by P. Aleksandrov, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, 6 Feb 1966, pp. 2-3.
JPRS 34644

The New Methods of Signal Processing, by Lt. Col. A. I. Leonov, 10 pp.
RUSSIAN, per, Vestnik Protivovosdlishnoy Oborony, No 2, Feb 1966, pp. 59-65.
JPRS 34773

On the Peculiarities of the Initial Period of War, by V. Baskatov, 7 pp.
RUSSIAN, per, Voyenno-istoricheskiy Zhurnal, No 2, Feb 1966, pp. 29-34.
JPRS 34773

USSR
Military (Contd)

Civil Defense Training in School, by V. Kurochkin, 6 pp.
RUSSIAN, per, Voyennyye Znaniya, No 1, Jan 1966, pp. 26-27.
JPRS 34391

Improvement of Mass Defense Work and the Military-Patriotic Education of Workers, by A. Pervov, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 1, Jan 1966, pp. 30-32.
JPRS 34391

The Kiev Civil Defense Training-Methodical Center, by Lt. Col. M. Akhmatshin, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 2, 1966, pp. 18-19.
JPRS 34638

Geographic

Preface: Atlas of the Georgian SSR, 13 pp.
RUSSIAN, rpt, Predisloviye-Atlas Gruzinskoy SSR, 1964, pp 7-10.
ACSI I-8638
ID 2204057365

Scientific Research Work of the Department of Geography of the Moscow University in 1964, by B. F. Kosov, 5 pp.
RUSSIAN, per, Vestnik Moskovskogo Universiteta No 4, 1965.
ACSI I-9409 C
ID 2204016566

USSR
Sociological

Training and Distribution of Medical Personnel in the RSFSR, by I. Kh. Andreyev, 8 pp.
RUSSIAN, per, Zdravookhraneniye Rossiyskoy Federatsii, Vol 9, No 12, 1965, pp. 3-8.
JPRS 34661

Public Response to Improper Influence Issue, by I. Borisova and A. Plutnik, 5 pp.
RUSSIAN, np, Izvestiya, 7 Dec 1965, p. 3.
JPRS 34410

Institut Blocks Medal for Employee, by O. Latsis, 5 pp.
RUSSIAN, np, Izvestiya, 5 Jan 1966, p. 3.
JPRS 34765

The Responsibility and Rights of the Higher School, by Prof. Yu. Zhdanov, 5 pp.
RUSSIAN, np, Izvestiya, 8 Mar 1966, p. 5.
JPRS 34793

New Year Interviews Indicate Medical Targets for the New Five-Year Plan, 6 pp.
RUSSIAN, np, Meditsinskaya gazeta, 1 Jan 1966, p. 1.
JPRS 34721

Management of a Central Rayon Hospital in the USSR, by M. M. Chumak and Ya. Z. Itskov, 7 pp.
RUSSIAN, bk, Organizatsiya Raboty Tsentral'noy Rayonnoy Bol'nitsy: Opyt Raboty Vizh-nitskoy Bol'nitsy Chernovitskoy Oblasti, 1965, pp. 2-6 and chart between pp. 70-71.
JPRS 34824

Russian Dialectology, by R. I. Avanesov, S. V. Bromley, L. N. Bulatova, K. F. Zakharova, I. B. Kus'mina, O. N. Morokhovskaya, Ye. V. Namchenko, V. G. Orlova, and T. G. Stroganova, 331 pp.
RUSSIAN, bk, Russkaya Dialektologiya, 1965, pp. 3-305.
JPRS 34863

The Use of Folklore in the Anti-Religious Education of Russian-Language Students in Classes V - VIII, by S. U. Alekperov and D. N. Mukhov, 8 pp.
RUSSIAN, per, Russkiy yazyk v nerusskoy shkole, No 1, Jan 1966, pp. 52-60.
JPRS 34804

USSR
Sociological (Contd)

Conditions for Improving the Effectiveness of Preventing Juvenile Delinquency, by Ye. V. Boldyrev, 9 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo, No 1, Jan 1966, pp. 100-105.
JPRS 34867

The Effectiveness of Imprisonment for Rehabilitating Juvenile Criminals in the Latvian SSR, by L. A. Klyuchinskaya, 6 pp.
RUSSIAN, per, Sovetskoye gosudarstvo i pravo, No 1, Jan 1966, pp. 105-108.
JPRS 34704

Problems of Programmed Learning in Institutions of Higher Education, by N. M. Rozenberg, 10 pp.
RUSSIAN, per, Vestnik Vyshey Shkoly, No 1, Jan 1966, pp. 28-35.
JPRS 34631

Some Conditions for the Evolution of Collectivist Attitudes among Boarding School Pupils, by Ye. S. Makhlakh, 20 pp.
RUSSIAN, per, Voprosy Psikhologii, No 6, Nov/Dec 1965, pp. 65-77.
JPRS 34596

Algorithms of Action of the Human Operator in Emergency Situations, by B. M. Yankelovich, 10 pp.
RUSSIAN, per, Voprosy Psikhologii, No 6, Nov/Dec 1965, pp. 119-125.
JPRS 34596

Comparison between Old and New Nomenclature in Studying Statistical Causes of Death, by V. A. Nesterov and N. V. Khittsova, 5 pp.
RUSSIAN, per, Zdravookhraneniye Rossiyskoy Federatsii, No 1, Jan 1966, pp. 6-12.
JPRS 34852

Three Recent Orders of the Ministry of Higher and Secondary Specialized Education USSR, 8 pp.
RUSSIAN, per, Bulleten' Ministerstva Vyshego i Srednego Spetsial'nogo Obrazovaniya SSSR, No 1, Jan 1966, pp. 13-15.
JPRS 34727

EASTERN EUROPE

Economic

Albanian Party Journal Condemns "Revisionist Distortions of the Policy of Capital Investments", by Aleko Haxhi, 13 pp.

ALBANIAN, per, Rruga e Partise, No 1, Jan 1966, pp. 67-76.
JPRS 34692

Some Data on Electric Power in Bulgaria in the Fourth Five-Year Plan (1961-1965), 5 pp.

BULGARIAN, per, Elektroenergiya, No 12, Dec 1965, pp. 1-2.
JPRS 34754

Electric Power Supply To the Housing and Communal Sector in Bulgaria Up to 1980, by I. Kondev and Yu. Savenko, 13 pp.

BULGARIAN, per, Elektroenergiya, No 12, Dec 1965, pp. 3-8.
JPRS 34754

Industrial Production in Bulgaria, 38 pp.

BULGARIAN, per, Naruchnik na agitatora, No 2, Feb 1966, pp. 18-46.
JPRS 34763

Status of Agriculture in Bulgaria, 15 pp.

BULGARIAN, per, Naruchnik na agitatora, No 2, Feb 1966, pp. 48-58.
JPRS 34738

Metallurgical Problems in Bulgaria, by Georgi Pavlov, 14 pp.

BULGARIAN, per, Naruchnik na agitatora, No 3, Feb 1966, pp. 3-20.
JPRS 34754

Development of Transportation and Communications, 9 pp.

BULGARIAN, per, Naruchnik na agitatora, No 2, Feb 1966, pp. 60-66.
JPRS 34750

The Raw Materials Base in Bulgaria and Directions for Its Development, by N. Kalchev, 8 pp.

BULGARIAN, per, Partien zhivot, No 1, Jan 1966, pp. 88-91.
JPRS 34606

The National Economic Plan for the Development of Bulgaria in 1966, by Bistritsa Peneva and Georgi Todorov, 13 pp.

BULGARIAN, per, Planovo stopanstvo i statistika, No 1, Jan 1966, pp. 3-13.
JPRS 34409

Eastern Europe
Economic (Contd)

Concerning a System of Economic Indicators of the Management and Planning of the Work of Industrial Enterprises, by Georgi Krumov, 14 pp.

BULGARIAN, per, Planovo stopanstvo i statistika, No 1, Jan 1966, pp. 14-26.
JPRS 34409

Economic Accounting Under the New System of Planning and Management in the National Economy, by Stoycho Vulchanov, 11 pp.

BULGARIAN, per, Planovo stopanstvo i statistika, No 1, Jan 1966, pp. 27-36.
JPRS 34409

Profit As a Criterion for Evaluating the Work of an Industrial Enterprise, by Tsvetan Petrov, 11 pp.

BULGARIAN, per, Planovo stopanstvo i statistika, No 1, Jan 1966, pp. 37-47.
JPRS 34409

Unsolved Problems in the Cellulose and Paper Industry, by Zdravko Litovski, 6 pp.

BULGARIAN, per, Ratsionalizatsiya i standartizatsiya, No 1, Jan 1966, pp. 25-28.
JPRS 34754

Some Foreign Trade Problems under the New System of Planning and Management of the National Economy, by Ivan Golomev, 5 pp.

BULGARIAN, per, Vunshna Turgoviya, No 1, Jan 1966, pp. 6-8.
JPRS 34749

Trade and Economic Relations between Bulgaria and Finland Are Expanding, by Mincho Petkov, 5 pp.

BULGARIAN, per, Vunshna Turgoviya, No 1, Jan 1966, pp. 9-10.
JPRS 34749

Prospects for Development of Economic and Trade Relations between Bulgaria and the United Arab Republic (UAR), by Traycho Antonov, 9 pp.

BULGARIAN, per, Vunshna Turgoviya, No 1, Jan 1966, pp. 14-16.
JPRS 34749

Long-Term Trade and Payments Agreement between Bulgaria and the UAR, 11 pp.

BULGARIAN, per, Vunshna Turgoviya, No 1, Jan 1966, pp. 21-24.
JPRS 34749

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Protocol on Commodity Trade between Bulgaria and the UAR during the First Year (1966) of the Long-Term Trade and Payments Agreement, 5 pp.

BULGARIAN, per, Vunshna Turgoviya, No 1, Jan 1966, pp. 24-25.
JPRS 34749

Problems of Material Incentives in Railway Transportation under the New System of Planning and Management in the National Economy, by Ivan Trifonov, 5 pp.
BULGARIAN, per, Zhelezoputen transport, No 1, Jan 1966, pp. 12-13.
JPRS 34763

The Work of Railway Administrations under the New System of Planning and Economic Management, by Petur Krushevski, 7 pp.
BULGARIAN, per, Zhelezoputen transport, No 1, Jan 1966, pp. 16-18.
JPRS 34763

The New Narrow-Gauge 760-MM Diesel Locomotives, Series 75-00, by Dimitur Deyanov, 6 pp.
BULGARIAN, per, Zhelezoputen transport, No 1, Jan 1966, pp. 22-24.
JPRS 34750

The Oil Industry after the Economic Reform, by Zlatko Hill, 13 pp.
CROATIAN, per, Nafta, Sept 1965, No 9, pp. 269-274.
JPRS 34440

Status of Employment in Bulgaria, 13 pp.
BULGARIAN, per, Naruchnik na agitatora, No 2, Feb 1966, pp. 8-16.
JPRS 34763

The New System of Planning and Management in the National Economy, 8 pp.
BULGARIAN, per, Zhelezoputen transport, No 1, Jan 1966, pp. 1-5.
JPRS 34763

Yugoslavia As An Importer of Agricultural Food Products, by Vladimir Cvetkovic, 23 pp.
CROATIAN, per, Problemi Spoljne Trgovine i Konjunktura, No 3, May-June 1965, pp. 37-52.
JPRS 34749

Current Problems of Child Care and Rearing under the Economic Reform, by Branka Savic, 11 pp.
CROATIAN, per, Socijalna Politika, Nov-Dec 1965, No 11-12, pp. 1011-1018.
JPRS 34436

Eastern Europe
Economic (Contd)

Economic-Social Position of Improverished Blind in Serbia, by Ana Lukic, 8 pp.
CROATIAN, per, Socijalna Politika, Nov-Dec 1965, No 11-12, pp. 1080-1086.
JPRS 34436

Crop and Weather Report, 11 December 1965 -- 10 January 1966, by D. Krumbiegel, 5 pp.
GERMAN, per, Die Deutsche Landwirtschaft, No 2, Feb 1966, pp. 111-112.
JPRS 34408

Crop and Weather Report, 11 Jan - 10 Feb 1966, by D. Krumbiegel, 5 pp.
GERMAN, per, Die Deutsche Landwirtschaft, No 3, Mar 1966, pp. 159-160.
JPRS 34806

Problems of the Development of Scientific-Technical Cooperation, by Klaus Stubenrauch, 13 pp.
GERMAN, per, Einheit, 2 Feb 1966, pp. 195-204.
JPRS 34668

State Council Decree on Further Development and Simplification of State Leadership Work in the Second Stage of the New Economic System of Planning and Management, by Walter Ulbricht, and O. Gotsche, 10 pp.
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, Part I, No 5, 1 Feb 1966, pp. 53-56.
JPRS 34441

Order Concerning the Sale of Equipment Leased to LPG's, by Minister Ewald, 9 pp.
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, Part II, No 6, 22 Jan 1966, pp. 23-26.
JPRS 34404

First Implementing Regulation to the 1966 State Budget Law, 7 pp.
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, Part II, No 23, 23 Feb 1966, pp. 117-120.
JPRS 34763

Structural Change in the Dairy Industry, by H. Rischer, 9 pp.
GERMAN, per, Die Lebensmittel-Industrie, No 2, Feb 1966, pp. 61-63.
JPRS 34770

Eastern Europe
Economic (Contd)

New Strip Cold-Rolling Mill of the Wilhelm Florin Steel and Rolling Mill, Orantienburg Plant, by Kurt Fellcht, 10 pp.
GERMAN, per, Neue Huette, Vol 11, No 1, Jan 1966, pp. 38-42.
JPRS 34556

Rumania's Stagnating Crude Oil Production, 5 pp.
GERMAN, np, Neue Zuercher Zeitung, No 34, 4 Feb 1966, p. 11.
JPRS 34440

Results of the Permanent Large-Scale Inventories Carried Out in the Entire Forest Area during 1963 and 1964, by Dr. H. Grossmann, 9 pp.
GERMAN, per, Die Sozialistische Forstwirtschaft, Vol 16, No 3, Mar 1966, pp. 84-86.
JPRS 34770

U-Track Structure in Stockholm II, by Gunter Girmau.
GERMAN, per, Stuva Nachrichten, Vol 13, No 3-4, 1965.
*AEC ORNL-TR-1147
EDC Apr 11, 1966

U-Streetcar in Brussels.
GERMAN, per, Stuva Nachrichten, Vol 13, No 5-8, 1965.
*AEC ORNL-TR-1148
EDC Apr 11, 1966

Legal Position of Enterprises with State Participation, by Dr. Rudolf Streich, 6 pp.
GERMAN, per, Vertrags-system, No 1, Jan 1966, pp. 10-13.
JPRS 34763

Tasks of Water Management in 1966, by J. Rochlitzer and H. Freyer, 7 pp.
GERMAN, per, Wasservirtschaft-Wassertechnik -- WWT, Vol 16, No 1, Jan 1966, pp. 1-3.
JPRS 34612

Greater Attention to Issuing and Acquisition of Licenses in Foreign Trade, by Dr. Wilhelm Panzer, 9 pp.
GERMAN, per, Vertrags-system, No 1, Jan 1966, pp. 35-38.
JPRS 34571

Responsibility for Failure to Respect Dates of Freight Delivery in Bloc Railroad Freight Transportation, by R. I. Osinovskaya and L. S. Budkina, 5 pp.
GERMAN, per, Zeitschrift der Organisation fuer die Zusammenarbeit der Eisenbahnen--OSSHd, Vol 8, No 6 (46) Nov-Dec 1965, pp. 1-3.
JPRS 34435

Eastern Europe
Economic (Contd)

Information on OSSHd Committee Work, 21 pp.
GERMAN, per, Zeitschrift der Organisation fuer die Zusammenarbeit der Eisenbahnen -- OSSHd, Vol 8, No 6, (46), Nov-Dec 1965, pp. 19-29.
JPRS 34435

Price Measures and Trade, by Ferenc Zala, 5 pp.
HUNGARIAN, per, Figyelo, Vol 10, No 8, 23 Feb 1966, p. 2.
JPRS 34571

Procedure for Obtaining Foreign Currency and Tickets for Temporary Missions Abroad, 6 pp.
HUNGARIAN, per, Koho es Gepipari Kozlony, No 4, 22 Jan 1966, pp. 35-37.
JPRS 34561

Latest Specialization of the Manufacture of Certain Machinery Products and Certain Services (Designation No 4), 5 pp.
HUNGARIAN, per, Koho es Gepipari Kozlony, Vol 16, No 5, 31 Jan 1966, pp. 43-45.
JPRS 34543

Interview with Director of Intermetall, by Mihaly Osztatni, 7 pp.
HUNGARIAN, per, Kulkereskedelem, No 2, Feb 1966, pp. 35-37.
JPRS 34663

Investment Experience in Developing the Chemical Industry during the Second Five-Year Plan, by Gyula Szeker, Tamas Levai and Sandor Gor-Nagy, 16 pp.
HUNGARIAN, per, Magyar Kemikusok Lapja, Vol 21, No 1, Jan 1966, pp. 1-8.
JPRS 34543

Tenth Anniversary of the Borsod Chemical Combine, by Istvan Kovacs and Otto Varsanyi, 8 pp.
HUNGARIAN, per, Magyar Kemikusok Lapja, 1966, No 1, pp. 47-49.
JPRS 34675

The Amortization Fund of the Farmers' Cooperatives, by Dr. Otto Gado, 8 pp.
HUNGARIAN, per, Magyar Mezogazdasag, No 4, 26 Jan 1966, pp. 3-5.
JPRS 34445

Corporate Organs of the Hungarian Academy of Sciences after the 1965 General Assembly, 48 pp.
HUNGARIAN, per, Magyar Tudomany, No 12, 1965, pp. 3-32.
JPRS 34488

Eastern Europe
Economic (Contd)

The Danube Bend Regional Plan, by Gyorgy Gerle, 5 pp.
HUNGARIAN, rpt, Muszaki Elet, No 9, May 6, 1965, Budapest, Hungary.
DIA LN 157-66

Reform of the Economic Guidance System and Financial Management, by Matyas Timar, 10 pp.
HUNGARIAN, per, Tarsadalmi Szemle, No 3, Mar 1966, pp. 3-12.
JPRS 34763

Performance of the Railroad in 1965 and Its 1966 Tasks, 7 pp.
HUNGARIAN, per, Vasut, No 1, Jan 1966, pp. 1-4.
JPRS 34612

State Budget for 1966, by Jerzy Albrecht, 6 pp.
POLISH, per, Finanse, No 1, Jan 1966, pp. 1-13.
JPRS 34763

Changes in the Source Structure for 1966 Investment Financing, by Tadeusz Zaczek, 6 pp.
POLISH, per, Finanse, No 1, Jan 1966, pp. 22-25.
JPRS 34763

Development of Agricultural Mechanization, by Stefania Dambrowska, 6 pp.
POLISH, per, Gospodarka Planowa, Vol XXI, No 2, Feb 1966, pp. 14-20.
JPRS 34551

Tasks of the Fishing Economy in 1966, by Franciszek Golebiowski, 10 pp.
POLISH, per, Gospodarka Rybna, Vol XVIII, No 1, Jan 1966, pp. 3-5.
JPRS 34408

The Development of High-Speed Machining in Polish Engineering Industry, by Dr. Andrzej Sadowski, 9 pp.
POLISH, per, Mechanik, No 12, Dec 1965, pp. 687-639.
JPRS 34675

Quality of Agricultural Machines, 7 pp.
POLISH, per, Mechanizacja Rolnictwa, No 1, 1-15 Jan 1966, pp. 10-12, 14.
JPRS 34770

Eastern Europe
Economic (Contd)

Directive Tasks of State Machine Stations, by Stanislaw Czajkowski and Ludwik Puczek, 14 pp.
POLISH, per, Mechanizacja Rolnictwa, Vol XV, No 3, 1-15 Feb 1966, pp. 5-15.
JPRS 34770

Agricultural Circles in 1966, by Franciszek Gesing, 6 pp.
POLISH, per, Nowe Rolnictwo, No 3, 1-15 Feb 1966, pp. 4-6.
JPRS 34806

Important Tasks of the Agricultural Food Processing Industry in 1966-1970, by Stanislaw Bednarski, 7 pp.
POLISH, per, Nowe Rolnictwo, No 3, 1-15 Feb 1966, pp. 14-16.
JPRS 34806

Statistics of Polish Fisheries in the Period 1920-1960, by Stanislaw Laszczynski.
POLISH, per, Prace Morskiego Instytutu Rybackiego w Gdyni, Vol 12, (B), 1964, pp 299-334. 36p.
*CFSTI TT 66-57055

Method of Analysis of Yield of Catches of a Fishing Fleet Operating on Distant Fishing Grounds, by Jozef Orłowski. 18 p.
POLISH, per, Prace Morskiego Instytutu Rybackiego w Gdyni, Vol 12 (B), 1964, pp 367-384.
*CFSTI TT 66-57059

The Psycho-social Problems of Work in the Fisherman, by Aurelia Polanska. 25 p.
POLISH, per, Prace Morskiego Instytutu Rybackiego, Vol 13, Ser. C. 1964, pp 7-13.
*CFSTI TT 66-57060

Planned Tasks of Transport Services for 1966, by Zbigniew Wojterkowski, 15 pp.
POLISH, per, Przegląd Komunikacyjny, No 1, Jan 1966, pp. 3-9.
JPRS 34435

Main Employment Problems during the Next Five-Year Plan, by Aleksander Burski, 6 pp.
POLISH, per, Rada Narodowa, No 6, 5 Feb 1966, pp. 3-6.
JPRS 34668

Tasks of the National Bank of Poland during 1966, by Stanislaw Majewski, 10 pp.
POLISH, per, Wiadomości Narodowego Banku Polskiego, No 1, Jan 1966, pp. 1-6.
JPRS 34763

Eastern Europe
Economic (Contd)

Cooperation between the National Bank of Poland and the Investment Bank Discussed, by Bronislaw Blass, 6 pp.
POLISH, per, Wiadomosci Narodowego Banku Polskiego, No 1, Jan 1966, pp. 6-8.
JPRS 34763

Discussion of Problems Connected with Profitability in Production, by Z. Szeliga, 6 pp.
POLISH, per, Zagadnienia i Materialy, No 3, 1-15 Feb 1966, pp. 6-11.
JPRS 34668

The Introductory Analysis of Trawlers B-23 Exploitation on Fishing Grounds of Northwest Africa Shelf, by Jozef Swiniarski. 17 p.
POLISH, per, Zeszyty Naukowe Wyzszej Szkoły Rolniczej w Olsztynie, Vol 20, No 1, 1965, pp 51-67.
*CFSTI TT 66-57063

Past and Future of Electrical-Engineering Industry, by Jan Rem, 8 pp.
POLISH, per, Zycie Gospodarcze, Vol XXI, No 8, 20 Feb 1966, pp. 1, 4-5.
JPRS 34543

Problems of Animal Productivity in 1966-1970, by Mieczyslaw Rakowski, 7 pp.
POLISH, np, Zycie Gospodarcze, No 10, Mar 1966, pp. 1-2.
JPRS 34738

Fulfillment of the 1965 Plan,
RUMANIAN, rpt, 13 February 1966.
DIA 2883004066

Intensive Use of Irrigated Land, by V. Negomireanu, 7 pp.
RUMANIAN, per, Agricultura socialista, No 2, 13 Jan 1966, pp. 8-9.
JPRS 34404

Raising the Zootechnical Share of Output and Income in Agriculture, by L. Rosca, 7 pp.
RUMANIAN, per, Agricultura socialista, No 7, 17 Feb 1966, p. 7.
JPRS 34640

Eastern Europe
Economic (Contd)

Law on the Adoption of the State Budget of the Rumanian Socialist Republic for 1966, 5 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Vol 1, No 21, Part I, 25 Dec 1965, pp. 170-172.
JPRS 34441

Decree on the Organization and Operation of the Higher Agricultural Council and Regional, Raion, and City Agricultural Councils, 9 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Vol 2, No 3, Part I, 28 Jan 1966, pp. 9-14.
JPRS 34551

Efficient Exploitation of Agricultural Reserves, by Gheorghe Necula, 11 pp.
RUMANIAN, per, Lupta de clasa, Vol XLVI, No 1, Jan 1966, pp. 28-36.
JPRS 34806

Criteria of Value in Machine and Tractor Station Activities, by Radu Manescu, 8 pp.
RUMANIAN, per, Lupta de clasa, Vol XLVI, No 1, Jan 1966, pp. 37-45.
JPRS 34806

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RUMANIAN, per, Lupta de Clasa, No 2, Feb 1966, pp. 18-27.
JPRS 34606

New Perspectives in the Development of Cooperative Agriculture, by Gheorghe Moldivin and Ion Miculescu, 11 pp.
RUMANIAN, per, Lupta de Clasa, No 2, Feb 1966, pp. 28-36.
JPRS 34738

Petre Blajovici's Report to the First Conference of Construction Workers on Assigned Tasks, 13 pp.
RUMANIAN, np, Scinteia, 25 Feb 1966, p. 2.
JPRS 34750

Eastern Europe
Economic (Contd)

Calculation of Gross Production in Agricultural Production Cooperatives, by Mircea Bulgaru, 6 pp.
RUMANIAN, per, Viata Economica, No 4, 28 Jan 1966, pp. 12-13.
JPRS 34404

Deficiencies in the Fulfillment of Investment Objectives in the Chemical Industry, by Raducanu Cioroiu, 5 pp.
RUMANIAN, per, Viata Economica, No 6, 11 Feb 1966, p. 1.
JPRS 34556

Scientific Session of the Center of Economic Computation and Economic Cybernetics, 7 pp.
RUMANIAN, per, Viata economica, No 7, 18 Feb 1966, pp. 1 & 3.
JPRS 34571

Comment on the Fulfillment of the Economic Plan, 1960-1965, by Dr. Constantin Ionescu, 5 pp.
RUMANIAN, per, Viata economica, No 7, 18 Feb 1966, pp. 1 & 4.
JPRS 34571

Achievements and Perspectives in Nonmetallic Minerals Mining, by Eracle Militescu, 5 pp.
RUMANIAN, per, Viata Economica, Vol 4, No 8 (132), 25 Feb 1966, pp. 1, 4.
JPRS 34606

Integration in Yugoslav Agriculture, by Dr. Artur Starc, 13 pp.
SERBIAN, per, Ekonomika poljoprivrede, No 1, Jan 1966, pp. 3-12.
JPRS 34551

Fruit and Vegetable Consumption in the Diet of the Yugoslav Rural Population in 1963, by Milan C. Petrovic, 8 pp.
SERBIAN, per, Ekonomika Poljoprivrede, No 1, Jan 1966, pp. 50-55.
JPRS 34551

What Is Just Compensation in Expropriation? by Damjan Papic, 8 pp.
SERBIAN, per, Finansije, No 9-10, Sept-Oct 1965, pp. 511-518.
JPRS 34441

Eastern Europe
Economic (Contd)

Production and Consumption of Wheat in 1959-1965, by Dobrosav Tadic, 10 pp.
SERBIAN, per, Jugoslovenski Pregled, No 10, Oct 1965, pp. 379-382.
JPRS 34640

Production and Productivity in the Socialized Sector, by Milan Janjetovic, 14 pp.
SERBIAN, per, Socijalizam, No 12, 1965, pp. 1549-1562
JPRS 34763

Agrarian Policy and the Private Farm, by Milos Tomin, 16 pp.
SERBIAN, per, Socijalizam, No 12, 1965, pp. 1563-1579.
JPRS 34640

Internal Organization of Agricultural Cooperatives under Workers' Management, by Dr. Milos Bogdanovic, 16 pp.
SERBIAN, per, Tehnika, No 3, Mar 1966, pp. 537-543.
JPRS 34738

Observations Made by Federal Deputies on the Status of Agricultural Work after the Economic Reform, 5 pp.
SERBO-CROATIAN, per, Glasnik, No 2, Feb 1966, pp. 3-6.
JPRS 34738

The Effect of the New Economic Measures on Construction, by Josip Klepac, 5 pp.
SERBO-CROATIAN, per, Gradjevinar, No 12, Dec 1965, pp. 474-476.
JPRS 34435

Amortization and Capital Maintenance in the Economy, by Stevan Mihalovic, 17 pp.
SERBO-CROATIAN, per, Jugoslovenski pregled, No 10, Oct 1965, pp. 373-378.
JPRS 34763

Consumption of Food Products and a Break-down of the Principal Foods of the Yugoslav Population between the Years 1952 and 1964, 23 pp.
SERBO-CROATIAN, per, Jugoslavenski Pregled, No 10, Oct 1965, pp. 383-390.
JPRS 34769

Eastern Europe
Economic (Contd)

Tendencies in Procurement of Land by the Socialized Sector, by Novica Mitic, 11 pp. SERBO-CROATIAN, per, Produktivnost, No 1, Jan 1966, pp. 12-16.
JPRS 34640

The Turnover Tax, 16 pp. SERBO-CROATIAN, per, Jugoslovenski pregled, No 7-8, Jul-Aug 1965, pp. 261-265.
JPRS 34668

The Work of the Federal Economic Chamber, 14 pp. SERBO-CROATIAN, per, Jugoslovenski pregled, No 7-8, Jul-Aug 1965, pp. 266-270.
JPRS 34668

Political

Should the MTS Be Under the Jurisdiction of the Committees of the Rreth People's Councils or the Ministry of Agriculture, by Falk Labinoti, 6 pp. ALBANIAN, np, Zeri i Popullit, 6 Feb 1966, p. 2.
JPRS 34737

The People's Councils Are on the True Path, by Lyubomir Bazhdekov, 9 pp. BULGARIAN, per, Naruchnik na agitatora, No 1, Jan 1966, pp. 22-28.
JPRS 34530

Bulgarian Communist Party Organ Discusses Idea of United Front, by Stoyan Petrov, 10 pp. BULGARIAN, per, Novo vreme, No 1, Jan 1966, pp. 147-154.
JPRS 34513

German CP Organ Discusses Social Development of Leninism, by J. Fransev, 5 pp. GERMAN, np, Zeitung, 5 Mar 1966, p. 10.
JPRS 34692

Eastern Europe
Political (Contd)

Informal Cliques in an Organization of the Alliance of Communists, by Dragomir Draskovic, 10 pp. SERBO-CROATIAN, per, Gledista, No 1, Jan 1966, pp. 43-53.
JPRS 34747

Yugoslav Communists on Peaceful Coexistence, by Punisa Perovic, 10 pp. SERBO-CROATIAN, per, Socijalizam, No 12, 1965, pp. 1603-1612.
JPRS 34617

Military

Balanced Power - Modern Sea Power Represented by the Example of the US Sixth Fleet, by Gerhard Elser. GERMAN, rpt, Marine Rundschau, Jun 1965, pp 123-140. 9699691
Dept of Navy/ONI Tr No 2013

Hitler's Situation Conference of 23, 25 and 27 April 1945. GERMAN, per, Der Spiegel, No 3, 1966. *ACSI I-9735
ID 2204027466

Tactical Symbols, 10 pp. GERMAN, rpt, Taschenbuch fur Schweizerische Wehrmanner, 1965, Frauenfeld, Switzerland, pp 211-225.
DIA LN 89-66

The Combat Tank Leopard, 11 pp. GERMAN, per, Mehrtechnische Monatshefte, No 9, September 1965, pp 347-357. *ACSI I-9327
ID 2204014266

Leadership and Command in the Company, Platoon, and Squad, by Jan Krajewski, 93 pp. POLISH, per, Przeglad Wojsk Ladowych, No 1, 1965, pp 14-28.
DIA LN 295 E (1)
ID 2878019365-V

Eastern Europe
Military (Contd)

The Tactical Live Fire Exercise for the Tank Platoon, by Marian Socala, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965,
DIA LN 295 E (1)
ID 2878019365-V

Carrying Out Observation During the Attack and On the March, by Leszek Jani 'i, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965,
DIA LN 295 E (1)
ID 2878019365-V

Tying in of the Combat Formation Elements and the Direction of the Firing of an Artillery Battery Using the Data From the Zeroed-In Artillery Target, by Wiesław Szwedowski, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965, pp 84-92.
DIA LN 295 E (1)
ID 2878019365-V

The Use of the EM-61 Range Finder in Making Measurements, by Antoni Guzinski, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1 1965, pp 93-101.
DIA LN 295E(1)
ID 2878019365-V

The Monitoring of Contamination Radiation in the Training of the Contaminatin Monitoring Units, by Jozef Bazior, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965, pp 110-122.
DIA LN 295 E (1)
ID 2878019365-V

Remarks on the Organization of First Air Measures Under Winter Conditions, by Aleksander Grabarski, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965. pp 123-124.
DIA LN 295 E (1)
ID 2878019365-V

Eastern Europe
Military (Contd)

The Operation of Tank Engines in Winter, by Stefan Jaworski, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965. pp 157-165.
DIA LN 295, E (1)
ID 2878019365-V

The Star 660 660 M1 Cross-Country Vehicle, by Włodzimierz Milewski, 93 pp.
POLISH, per, Przegląd Wojsk Lądowych, No 1, 1965. pp 173-186.
DIA LN 295 E (1)
ID 2878019365-V

The Actual Problems of National Defense by Grzegorz Korczyński.
POLISH, per, Zolnierz Polski, 5 Dec 1965, pp 3-4.
DIA LN 106-66
ID 2878000166

Fire-Fighting Brigades Criticized for Negligence and Poor Organization, by Tatu Pamfil, 6 pp.
RUMANIAN, per, Paza contra incendiilor, No 1, Jan 1966,
JPRS 34801

National Defense According to the Regulations of the Constitution of Yugoslavia and the Constitutions and Statutes of Other Socio-Political Units, by Dr. Ilija F. Kostic, 31 pp.
SERBIAN, per, Arhiv za Pravne i Društvene Nauke, No 3-4, Jul-Dec 1965, pp. 231-251.
JPRS 34801

Eastern Europe
Geographic

The River Plate Countries, by Herbert Wilhelmy, Wilhelm Rohmeder, 499 pp.
GERMAN, rpt, Die La Plata-Lander, 1963, pp 18-95, 204-210, 215-216, 220-260, 264-272, 315-513.
DIA LN 287-65

Sociological

The Leadership of the Party in the Field of Literature and the Arts Must Be Improved, by Figret Shehu, 14 pp.
ALBANIAN, per, Rruga e Partise, No 1, Jan 1966, pp. 13-24.
JPRS 34737

Bureaucracy in Public Health Sector Criticized, 7 pp.
ALBANIAN, np, Zeri i Popullit, 12 Feb 1966, p. 3.
JPRS 34531

Rumanian State Council Decrees on Establishment of the State Committee for Work Safety and the State Health Inspectorate, 8 pp.
BULGARIAN, per, Buletinul oficial al Republicii Socialiste Romania, Vol I, No 24, 30 Dec 1965, pp. 200-205.
JPRS 34403

Instruction No 160, Governing the Procedure and Conditions under which Orthopedic Devices Are Issued, by Dr. Kiril Ignatov, 10 pp.
BULGARIAN, per, Durzhaven Vestnik, No 10, 4 Feb 1966, pp. 1-3.
JPRS 34403

Memorandum No IV-672 Governing the Procedure for Granting Scholarships to Full-Time Students in Higher Educational Institutions by Enterprises, Plants, Cooperative Labor Farms, State Farms, and Other Establishments, and Governing Distribution of Part of the Student Scholarships by Okruzs, 6 pp.
BULGARIAN, per, Durzhaven Vestnik, No 16, 25 Feb 1966, pp. 3-4.
JPRS 34674

Eastern Europe
Sociological (Contd)

Admission of Students in Secondary Schools for the 1966/1967 School Year, by G. Ganev, 14 pp.
BULGARIAN, per, Durzhaven vestnik, No 20, 11 Mar 1966, pp. 1-3.
JPRS 34769

Status of the Material and Cultural Prosperity of the Bulgarian People, 29 pp.
BULGARIAN, per, Naruchnik na agitatora, No 2, Feb 1966, pp. 74-96.
JPRS 34769

Rationality and Efficacy of the Primary School As a Condition for Successful Education of Pupils at the Second Level, by Mihajlo Luhas, 7 pp.
CROATIAN, per, Revija Skolstva i Prosvetna Dokumentacija, Vol II, No 3-4, 1965, pp. 183-195.
JPRS 34769

Social Insurance Bureaus, by S. Sucic, 6 pp.
CROATIAN, np, Privredni Pregled, 24 Jan 1966, p. 9.
JPRS 34436

Law on the Establishment, Organization, and Functions of the National Council for Scientific Research, 7 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Vol I, No 21, Part I, 23 Dec 1965, pp. 165-167.
JPRS 34574

Preamble and Law No 5 on Labor Safety, 8 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Vol I, No 21, Part I, 23 Dec 1965, pp. 173-176.
JPRS 34436

Eastern Europe
Sociological (Contd)

Development of a Socialist Conscience among Workers with Obsolete Attitudes, by Dr. Mihail Cernea, 14 pp.
RUMANIAN, per, Lupta de clasa, Vol XLV, No 12, Dec 1965, pp. 48-61.
JPRS 34674

Current Problems in Literary Criticism and in History, by Gh. Achitei and Gh. Stroia 13 pp.
RUMANIAN, per, Lupta de Clasa, No 2, Feb 1966, pp. 55-63.
JPRS 34747

Health Services under the Economic Reform, by S. Milosevic, 18 pp.
SERBIAN, per, Radna i Drustvena Zajednica, No 10, Oct 1966, pp. 611-625.
JPRS 34403

Secondary Schools, 15 pp.
SERBO-CROATIAN, per, Jugoslovenski Pregled, No 9, Sept 1965, pp. 323-328.
JPRS 34769

WESTERN EUROPE

Economic

Normalization of the Netherland's Inland Waterways, by J. Van der Kley, 18 pp.
DUTCH, per, de Ingenieur, No 50, 10 Dec 1965, pp 137-144.
DIA LN 148-66

The XXist International Shipping Congress, by J. Volkers, 15 pp.
DUTCH, per, De Ingenieur, No 50, 10 December 1965, pp 751-759.
DIA LN 147-66

The Role of Netherlands Industry in the Development Program for a Marine Reactor in the Netherlands, by M. Bogaardt, 7 pp.
DUTCH, per, TNO Nieuws, No 210, Aug 1963, Vol XVIII, No 8, pp 440-448.
9699699
Dept of Navy/ONI Tr No 2012-a

Western Europe
Economic (Contd)

Telex Conference Between the Scandinavian Countries and the United States in New York, by Veikko Maki-Luopa, 5 pp.
FINNISH, per, Lennattaja, No 5, 1965, pp 22-23.
DIA LN 67-66

The French Packaging Industries, by Maurice Pariat, 63 pp.
FRENCH, rpt, Notes et Etudes Documentaires, No 3196, 31 May 1965.
ACSI I-9432
ID 2204017266-V

Port of Arbatax,
ITALIAN, per, Italia Sul Mare, 9 September 1965.
DIA 5850015366

Munitions Factory, by Carlos M. Garcia, 7 pp.
SPANISH, per, Revista de las Fuerzas Armadas, March-April, 1965, pp 3-9.
DIA LN 79-66

Political

Three Articles by Kjeld Osterling on Italian CP Congress, 7 pp.
DANISH, np, Land og Folk, 18 Feb 1966, p. 7.
JPRS 34599

Ib Norlund on International Unity and Communist Responsibility, 11 pp.
DANISH, per, Tiden, Vol 26, No 8, 1965, pp. 286-294.
JPRS 34420

For a Socialist Netherlands, 24 pp.
DUTCH, rpt, Voor Een Socialistisch Nederland
JPRS 34470

Finnish CP Organ Publishes Statement by Villa Pessi at Party Congress, 12 pp.
FINNISH, np, Kansan Uutiset, 30 Jan 1966, pp. 4, 10, 11, 12.
JPRS 34444

Western Europe
Political (Contd)

Relations of Finnish Communist Party with Fraternal Communist Parties, by Inkeri Lehtinen, 5 pp.
FINNISH, np, Kansan Uutiset, 3 Feb 1966, p. 4.
JPRS 34420

Foreign Policy Statement of XIV Finnish Communist Party Congress, 6 pp.
FINNISH, np, Kansan Uutiset, 5 Feb 1966, p. 4.
JPRS 34420

Simpura Discusses Changes Resulting from XIV Finnish Communist Party Congress, by Jorma Simpura, 5 pp.
FINNISH, np, Kansan Uutiset, 6 Feb 1966, p. 4.
JPRS 34420

Finnish CP Organ Analyzes Present Situation in People's Democratic Movement, 9 pp.
FINNISH, np, Kansan Uutiset, 17 & 19 Feb 1966, p. 5 both issues.
JPRS 34599

Jokinen and Suvanto: FCP Is a Party of Free Discussion and United Action, by Urho Jokinen and Sulo Suvanto, 6 pp.
FINNISH, per, Kommunisti, No 1, 1966, pp. 33-35.
JPRS 34599

Finnish Communist Party in Need of Democratic Reform, by Vaino Palmroos, 6 pp.
FINNISH, per, Tilanne, No 6, Dec 1965, pp. 445-449.
JPRS 34851

Historical Inevitability and Freedom Discussed in Finnish Dissident Communist Journal, by Jaakko Blomberg, 7 pp.
FINNISH, per, Tilanne, No 6, Dec 1965, pp. 463-468.
JPRS 34851

Pennanen Analyzes October Manifesto of Finnish Communist Party, by Jarno Pennanen, 12 pp.
FINNISH, per, Tilanne, No 6, Dec 1965, pp. 505-523.
JPRS 34851

Western Europe
Political (Contd)

L'Humanite's Special Delegate Praises Work of Tricontinental Congress, by Yves Moreau, 6 pp.
FRENCH, per, Democratique Nouvelle, No 2, Feb 1966, pp. 67-69.
JPRS 34831

French CP Comment on the Eleventh Italian Party Congress, by Jacques Duclos, 5 pp.
FRENCH, per, France Nouvelle, No 1061, 16 Feb 1966, p. 20.
JPRS 34617

Tempest in a Teapot; a Quarrel among Revisionists, by Bernard Le Marrec, 5 pp.
FRENCH, per, L'Humanite Nouvelle, Vol 2, No 14, Feb 1966, p. 3.
JPRS 34420

Karl Marx and the End of Philosophy, by J.-J. Kirkyacharian, 15 pp.
FRENCH, per, La Nouvelle Critique, No 169, Oct 1965, pp. 58-72.
JPRS 34479

Theses on Humanism, by Jacques Godberg, 7 pp.
FRENCH, per, La Nouvelle Critique, No 170, Nov 1965, pp. 129-134.
JPRS 34479

On Humanism: Theory and Empiricism, by Jesus Ibarrola, 5 pp.
FRENCH, per, La Nouvelle Critique, No 171, Dec 1965-Jan 1966, pp. 80-85.
JPRS 34479

From the Beginnings of Man to the Problem of Humanism, by Jean Suret-Canale, 10 pp.
FRENCH, per, La Nouvelle Critique, No 172, Feb 1966, pp. 141-150.
JPRS 34479

Quatrieme Internationale: The Relative Successes and Failures of the Communist Protagonists at the Havana Conference, by Juan Santos, 6 pp.
FRENCH, per, Quatrieme Internationale, No 4, Feb 1966, pp. 1-7.
JPRS 34420

Western Europe
Political (Contd)

The Italian CP's Eleventh Party Congress As Seen by the Fourth International, by Fabio Bruno, 8 pp.
FRENCH, per, Sous le Drapeau du Socialisme, No 26, Feb 1966, pp. 26-28.
JPRS 34617

French Road to Socialism Discussed in Dissident Communist Monthly, 8 pp.
FRENCH, per, Unir pour le Socialisme, No 156, Oct 1965, pp. 8-9.
JPRS 34617

Peaceful or Violent Road, 7 pp.
FRENCH, per, Unir pour le Socialisme, No 157, Nov 1965, pp. 16-17.
JPRS 34617

Belgian CP Organ Publishes Excerpts from Document on Portuguese Class Struggle, 5 pp.
FRENCH, per, La Voix du Peuple, Vol IV, No 6, 11 Feb 1966, p. 14.
JPRS 34599

Grippa Denounces Belgian "Khrushchevist" Party, Urges Members to Join Marxist-Leninist CP, by Jacques Grippa, 12 pp.
FRENCH, per, La Voix du Peuple, No 7, 18 Feb 1966, pp. 6-7.
JPRS 34599

Italian Journal Analyzes PCI Congress, by Gianfranco Spadaccia, 5 pp.
ITALIAN, per, L'Astrolabio, Vol IV, No 6, 6 Feb 1966, pp. 4-7.
JPRS 34513

Avanti! Comments on Ideological Crisis of Italian Communism and Its Meaning for Italian and European Politics, by Giuseppe Tamburrano, 14 pp.
ITALIAN, np, Avanti!, 22 Feb 1966, p. 3; 23 Feb 1966, p. 3; 1 Mar 1966, p. 3; and 2 Mar 1966, p. 3.
JPRS 34634

Pro-Chinese Italian Communist Left Criticizes "Peaceful Coexistence" of Italian CP, 7 pp.
ITALIAN, per, Azione Comunista, Vol X, No 101, 28 Feb 1966, pp. 8-9.
JPRS 34831

Western Europe
Political (Contd)

From Open Vote to Control of Invitations, by Dante Danesi, 6 pp.
ITALIAN, per, Bandiera Rossa, Vol XVII, Nos. 1-2, Feb 1966, pp. 2-3.
JPRS 34599

Italian Trotskyite Journal Replies to Castro Attack, 9 pp.
ITALIAN, per, Bandiera Rossa, Nos. 1-2, Feb 1966, pp. 4-5.
JPRS 34599

Gerrantana: Study of Lenin and Leninism, by Valentino Gerrantana, 5 pp.
ITALIAN, per, La Citta Futura, No 15, Dec 1965, pp. 17-19.
JPRS 34692

Italian Communism Today Analyzed in Civiltà Cattolica, by Giuseppe De Rosa, 19 pp.
ITALIAN, per, La Civiltà Cattolica, Vol 117, No 2777, 5 Mar 1966, pp. 447-464.
JPRS 34831

Social Democratic Review Comments on Italian CP Congress, 8 pp.
ITALIAN, per, Corrispondenza Socialista, Vol VII, No 1, Jan 1966, pp. 2-5.
JPRS 34513

Unification of Socialist Forces Discussed by Amendola, by Giorgio Amendola, 14 pp.
ITALIAN, np, Rinascita, Vol XXIII, No 8, 19 Feb 1966, pp. 3-6.
JPRS 34479

Berlinguer Replies to Various Critical Comments on the Eleventh Congress of the Italian Communist Party, by Enrico Berlinguer, 7 pp.
ITALIAN, np, L'Unità, 15 Feb 1966, pp. 1,2.
JPRS 34479

Western Europe
Political (Contd)

Outline of Swedish Program Thesis, by O. Zennstrom, 8 pp.
SWEDISH, np, Norrskens Flamman, 28, 29 Jan 1966, p. 4.
JPRS 34599

Swedish View of Communism in Finland, by Sven Landin, 5 pp.
SWEDISH, per, Tidsignal, No 4, 26 Jan - 2 Feb 1966, pp. 10-15.
JPRS 34479

Military

Potential and Method of Employment of Armored Vehicles, by Roussel.
FRENCH, per, L'Armee, No 54, Jan 1966, pp 22-27.
*ACSI I-9331
ID 2204014666

Guerrilla Tactics Again Concrete, by Menard H. Martin, 19 pp.
FRENCH, per, Revue No 49, June-July 1965, p 16.
ACSI I-9483
ID 2204018066

Sociological

Public Health and Population, by N'Dia Koffi Blaise, 18 pp.
FRENCH, rpt, Fraternite, 19 November 1965.
DIA LN 65-66
ID 2851026565

AFRICA

Economic

Chad Said to Have Economic Potential for Overcoming Underdevelopment, by Paulin Jachim, 6 pp.
FRENCH, per, Bingo, No 158, Mar 1966, pp. 8-9, 11 and 48.
JPRS 34791

Progress in East Cameroons Agriculture, 1962-65, 5 pp.
FRENCH, per, Bulletin de l'Afrique noire, No 403, 2 Feb 1966, pp. 8153-8155.
JPRS 34457

Re-Establishment of the Domestic Market the First Step Towards Congolese Economic Independence, by Antoine Kabwasa, 9 pp.
FRENCH, per, Congo-Afrique, Vol VI, No 1, Jan 1966, pp. 13-21.
JPRS 34625

Export Sales of the French Aeronautical Industry in the Last Two Years, by H.B. 15pp.
FRENCH, rpt, Europe Outremer L'Aviation en Afrique, No 6, June 1965, pp 21-23.
DIA LN 230-65 a

Africas Airlines, 15 pp.
FRENCH, rpt, Europe Outremer L'Aviation en Afrique, No 6, June 1965, pp 24-26.
DIA LN 230-65 B

The General Budget for 1966, 9 pp.
FRENCH, np, Fraternite, Vol 7, No 359, 11 Mar 1966, pp. 9-10.
JPRS 34791

Unused Credits in 1965 Budget of Central African Republic Carried Over to 1966 Budget, 6 pp.
FRENCH, per, Journal Officiel de la Republique Centrafricaine, Vol 8, No 4, 15 Feb 1966, pp. 114-116.
JPRS 34592

Africa
Economic (Contd)

Problems Relating to Development of Effective Government Administrators in Africa, by Dr. Louis Aujoulat, 20 pp.
FRENCH, per, Le Mois en Afrique, No 2, Feb 1966, pp. 41-59.
JPRS 34642

Scientific Research within the African and Malagasy Common Organization, 6 pp.
FRENCH, per, Nations Nouvelles, No 6, Dec 1965, pp. 10-12.
JPRS 34504

Algerian Finance Minister Discusses Planning, by Kaid Ahmed, 18 pp.
FRENCH, per, Revolution africaine, No 159, 11-19 Feb 1966, pp. 4-8.
JPRS 34555

The Causes of the 19 June Coup and the Way to Struggle Against It, 10 pp.
FRENCH, per, Sous le Drapeau du Socialisme, No 26, Feb 1966, pp. 6-9.
JPRS 34703

Economic Planning in French-Speaking Black Africa, by Robert Badouin, 7 pp.
FRENCH, per, Tiers Monde, Vol 6, No 24, Oct-Dec 1965, pp. 1086-1092.
JPRS 34555

Activities of West German Firm DEMAG in Africa, 5 pp.
GERMAN, per, Afrika Heute, No 3, 1 Feb 1966, pp. 29-31.
JPRS 34760

Netherlands Aid to Africa, by Erwin A. Granzow, 11 pp.
GERMAN, per, Afrika Heute, No 3, 1 Feb 1966, pp. 31-35.
JPRS 34760

Africa
Economic (Contd)

Mali Profits from Veering between Moscow, Peiping, and the West, 5 pp.
GERMAN, per, Neue Zuercher Zeitung, 23 Feb 1966, p. 3.
JPRS 34555

Fresh Start in Ghana from Bankruptcy Nkrumah Left Behind, 5 pp.
GERMAN, per, Neue Zuercher Zeitung, 6 Mar 1966, p. 1.
JPRS 34856

Political

The Saharan Delegation vows to Free the Usurped Parts of Morocco, 5 pp.
ARABIC, per, Al-'Anba', No 666, 13-14 Feb 1966, p. 5.
JPRS 34760

Johnny Eduardo States His Views on the Angolan Problem, by Gilbert Wade, 5 pp.
FRENCH, per, L'Afrique Actuelle, No 6, Mar 1966, pp. 12-13.
JPRS 34760

Analysis of Recent Events in the Upper Volta, by Simon Kiba, 10 pp.
FRENCH, per, Afrique Nouvelle, 3-9 Feb 1966, p. 16; 10-16 Feb 1966, pp. 16, 17-23 Feb 1966, p. 16.
JPRS 34829

The Causes and Future of Political Instability in Africa, by Andre-R. Ilunga-Kabongo, 7 pp.
FRENCH, per, Congo-Afrique, Vol VI, No 1, Jan 1966, pp. 6-12.
JPRS 34625

Neocolonialism and True and False African Revolution, by Mamadou Gologu, 11 pp.
FRENCH, per, L'Essor Hebdomadaire, Vol VIII, No 342, 14 Feb 1966, pp. 4, 5, 8.
JPRS 34791

Africa
Political (Contd)

Cooperatives "One For All, All For One"
A New Judicious and Limited Start of a
Movement, 15 pp.
FRENCH, np, Fraternite, No 356, 18 Feb
1966, pp. 6-9.
JPRS 34829

The African Road to Socialism, by L. V. Thomas,
13 pp.
FRENCH, per, Les Ideologies Negro-Africaines
d'Aujourd'hui, Feb 1965, pp. 25-36.
JPRS 34458

Decree Reorganizing Secretariat of State
for Finance in East Cameroon, 13 pp.
FRENCH, per, Journal Officiel de l'Etat
Federe du Cameroun Oriental, Vol 5, No 20,
15 Oct 1965, pp. 712-716.
JPRS 34740

Leopoldville under Mobutu, by J. Privas, 8 pp.
FRENCH, per, Sous le Drapeau du Socialisme,
No 26, Feb 1966, pp. 12-14.
JPRS 34703

Speech by Chad's President Defending Member-
ship in Udeac and Warning Detractors, 7 pp.
FRENCH, np, Le Tchad en Marche, pp. 5-9.
JPRS 34703

Letter from Madagascar on Island Problems,
9 pp.
FRENCH, per, Unir pour le Socialisme, No 160,
Feb 1966, pp. 6-9.
JPRS 34625

What Will Be Africa's Future?, 5 pp.
FRENCH, np, La Verite Togolaise, 18 Jan
1966, pp. 1-2, 5.
JPRS 34625

Congo (Brazzaville) Position on OCAM,
5 pp.
FRENCH, per, La Voix de la Revolution, No
19, 19 Feb 1966, pp. 1, 2 and 6.
JPRS 34856

Africa
Political (Contd)

Boukambou Addresses Congo (Brazzaville)
Students in Cuba, 5 pp.
FRENCH, per, La Voix de la Revolution,
No 19, 19 Feb 1966, p. 4.
JPRS 34856

Nationalist China and Africa, by Franz
Ansprenger, 13 pp.
GERMAN, per, Afrika Heute, No 1-2, 15 Jan
1966, pp. 3-7.
JPRS 34740

Radio Broadcasting Situation in East Africa,
by Gerd H. Nieckau, 6 pp.
GERMAN, per, Afrika Heute, No 1-2, 15 Jan
1966, pp. 13-16.
JPRS 34740

Nhrumah's Ouster Seen Altering Balance of
Power in Africa, 7 pp.
GERMAN, per, Christ Und Welt, Vol 19, No 9,
4 Mar 1966, p. 32.
JPRS 34856

Problems of Rhodesian Freedom Movement Dis-
cussed by Nicholas Chitsiga while in Norway,
by Kjeld Osterling, 5 pp.
NORWEGIAN, np, Friheten, 17 Feb 1966, p. 4.
JPRS 34584

Military

Military Coups in Africa: Tribal Common
Denominator, by Jean Kesse, 5 pp.
FRENCH, per, France-Eurafrigue, Vol 18, No
170, Feb 1966, pp. 2-4.
JPRS 34592

Military Promotions and Demotions and Civilian
Appointments and Dismissals in the Central
African Republic, 8 pp.
FRENCH, per, Journal Officiel de la Repub-
lique Centrafricaine, Vol 8, No 4, 15 Feb 1966,
pp. 110-113.
JPRS 34592

Africa
Military (Contd)

Effects of the Military Takeover in Nigeria, 6 pp.
GERMAN, per, Neue Zuercher Zeitung, 16 Feb 1966, Section II, p. 2.
JPRS 34457

Sociological

Shanty Towns: A Modern Tragedy, by Muhammad Adib Al-Salawi, 7 pp.
ARABIC, np, Al-'Alam, 26 Jan 1966, p. 3.
JPRS 34458

Law and Order - Job Descriptions of Civil Service Personnel in the Services of Public Safety, 8 pp.
ARABIC, per, Revue de Police, Vol 5, No 4, Oct-Nov-Dec 1965, pp. 8, 9, 11.
JPRS 34458

Creation of a Consultant Committee on North African Educational Co-Operation, 5 pp.
FRENCH, np, L'Action, 9 Feb 1966, p. 6.
JPRS 34791

Mali Journalists, Women, Youth, and Other Groups Demonstrate Solidarity with N'krumah's Ghana, 5 pp.
FRENCH, per, L'Essor, 1 Mar 1966, p. 3.
JPRS 34791

The "Colonization" of Africa, by Iwiye Kale-Lobe, 5 pp.
FRENCH, per, France-Eurafrique, Vol 18, No 170, Feb 1966, pp. 5-7.
JPRS 34592

Organization, Responsibilities and Personnel of Directorate of Youth and Sports of Central African Republic, 9 pp.
FRENCH, per, Journal Officiel de la Republique Centrafricaine, Vol 8, No 2, 15 Jan 1966, pp. 44-46.
JPRS 34457

Africa
Sociological (Contd)

Mali Workers Demonstrate Solidarity with N'krumah's Ghana, 5 pp.
FRENCH, per, L'Essor, 1 Mar 1966, p. 3.
JPRS 34791

Africa on Trial, by Boubou Hama, 9 pp.
FRENCH, per, Le Niger, Vol 5, No 10, 7 Mar 1966, supplement to newspaper, without page numbers.
JPRS 34791

Africa in a Cultural Dualism, by Mao Lann, 7 pp.
FRENCH, np, L'Observaterr Africain, Vol 5, No 53-54, Jan-Feb 1966, p. 6.
JPRS 34791

Plan for Organization and Education Within the Congolese General Students' Union (UGEC Leopoldville), by Gerard Buakasa Tulu Kia Mpansu, 9 pp.
FRENCH, per, Remarques Africaines, No 254, 1 Dec 1965, pp. 18-22.
JPRS 34457

Religion in Angola, by Oscar Ribas, 25 pp.
PORTUGUESE, per, Mensario Administrativo, Vol 18, Nos. 4, 5 & 6, Apr, May & June 1964, pp. 51-67.
JPRS 34856

Angolan Ceremonious Masks and Their Uses, by Jose Redinha, 36 pp.
PORTUGUESE, per, Mensario Administrativo, Vol 18, Nos. 4, 5 & 6, Apr, May and June 1964, pp. 69-94.
JPRS 34856

Organization of Medical Services to the Rural Population in the United Arab Republic (UAR), by M. I. Chaplyuk, 5 pp.
RUSSIAN, per, Sovetskoye Zdravookhraneniye, No 12, Vol XXIV, 1965, pp. 70-73.
JPRS 34688

Trends of Public Health Development in African Countries, by T. A. Kobakhidze, 6 pp.
RUSSIAN, per, Sovetskoye Zdravookhraneniye, No 12, Vol XXIV, 1965, pp. 74-77.
JPRS 34689

MIDDLE EAST

Economic

Review of Lebanese Public Works: Port Construction, Electricity, Roads, Canals, 11 pp.
FRENCH, per, Le Commerce du Levant, 5 Mar 1966, pp. 3-5.
JPRS 34744

The State of the Lebanese Trade Union Movement, by Maurice Tawile, 11 pp.
FRENCH, per, Le Commerce du Levant, 5 Mar 1966, pp. 54-55.
JPRS 34744

A Special Issue of a Moroccan National Daily Newspaper devoted to Tunisia, by Mohamed Berrada, 14 pp.
FRENCH, per, L'Opinion, No 194, 21 Oct, 1965.
DIA LN 82-66.

Basic Problems of the Union Movement in Greece, by Basilios Nefeloudis, 19 pp.
GREEK, per, Elliniki Aristera, No 29, Dec 1965, pp. 16-27.
JPRS 34652

Political

'Ali Sabri's Recommendations, 9 pp.
ARABIC, np, Al-Ishtiraki, 22 Jan 1966, pp. 2, 3 & 15.
JPRS 34814

Allusions and Elusions, 17 pp.
ARABIC, np, Al-Ishtiraki, 22 Jan 1966, pp. 4-6.
JPRS 34814

Deviations, by Lutfi Al-Khawli, 10 pp.
ARABIC, np, Al-Tali'ah, Feb 1966, pp. 5-10.
JPRS 34814

Middle East
Political (Contd)

National Awareness: Method and Content, by Lutfi al-Khuli, 9 pp.
ARABIC, per, al-Tali'ah, Mar 1966, No 3, pp. 22-23.
JPRS 34865

The Financial and Economic Policies of the Government Attacked Violently in Constituent Assembly, 5 pp.
ARABIC, np, ar-Ra'i al-'Amm, 4 Mar 1966, pp. 1, 7.
JPRS 34744

Al Nida Communists Attack Progressive Groups, 5 pp.
ARABIC, np, Ila-al-Aman, 28 Feb 1966, pp. 1, 7.
JPRS 34796

For the Revisionist Leaders and the Repatriation of the Political Refugees, 5 pp.
GREEK, per, Anagennisi, No 15-16, Dec 1965-Jan 1966, pp. 16-18.
JPRS 34744

The Havana Tri-Continental Conference and the Soviet Positions, 13 pp.
GREEK, per, Anagennisi, No 15-16, Dec 1965-Jan 1966, pp. 35-40.
JPRS 34692

New Problems and Goals for the Professionals of the Left, 19 pp.
GREEK, per, Elliniki Aristera, No 29, Dec 1965, pp. 117-128.
JPRS 34394

M. Sneh Interviewed in Etgar, 5 pp.
HEBREW, np, Kol Haam, 14 Feb 1966, p. 2.
JPRS 34739

Reflections on the Anti-Nazi Convention in Budapest, by Dr. A. Berman, 6 pp.
HEBREW, np, Kol Haam, 28 Jan 1966, pp 3 & 6.
JPRS 34394

Book on Israel by an Austrian Communist, by Yaakov Zilber, 6 pp.
HEBREW, np, Kol Haam, 18 Feb 1966, pp. 3, 10.
JPRS 34739

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Political (Contd)

Personalities from All Circles Approve the Appearance of Kol Haam, 13 pp.
HEBREW, np, Kol Haam, 18 Feb 1966, pp. 6,7.
JPRS 34739

Israel and the Kurds' War of Independence, by Eliezer Ben-Moshe, 5 pp.
HEBREW, np, Lamerhav, 28 Jan 1966, p. 3.
JPRS 34394

Tubi on International Situation, 12 pp.
HEBREW, np, Zo Haderekh, 6 Jan 1966, pp. 2 & 7.
JPRS 34452

Communist Faction Discusses Results of Histadrut Convention, 5 pp.
HEBREW, np, Zo Haderekh, 13 Jan 1966, pp. 2,5.
JPRS 34452

Draft Resolutions of the Communist Faction in Histadrut Convention, 6 pp.
HEBREW, np, Zo Haderekh, 13 Jan 1966, pp. 7,8.
JPRS 34452

There are Chances for a Jewish-Arab Peaceful Coexistence, by Dr. Shimon Shershevski, 8 pp.
HEBREW, np, Zo Haderekh, 3 Feb 1966, pp. 2,7.
JPRS 34452

Statement of Israeli Communist Youth Alliance about the Accra Festival, 6 pp.
HEBREW, np, Zo Haderekh, 3 Feb 1966, pp. 4,7.
JPRS 34452

Three Newspapers, Three Positions, by Y. Ben-Hayon, 5 pp.
HEBREW, np, Zo Haderekh, 10 Feb 1966, pp. 5, 7.
JPRS 34739

An Open Approach, An Open Party, by Reuven Kaminer, 5 pp.
HEBREW, np, Kol Haam, 11 Feb 1966, pp. 2, 7.
JPRS 34739

On the Accra Festival, by Yair Tsaban, 13 pp.
HEBREW, np, Kol Haam, 11 Feb 1966, pp. 2, 7 and 18 Feb 1966, pp. 3, 10.
JPRS 34739

Middle East
Political (Contd)

Emil Habibi Interviewed by Etgar, 8 pp.
HEBREW, np, Zo Haderekh, 17 Feb 1966, p. 4.
JPRS 34739

Political and Sociological Changes in Turkey, by M. Gasratyan and P. Moiseyev, 84 pp.
RUSSIAN, rpt, 1963, pp. 3-94.
JPRS 34730

Sociological

The Working Class is the Center of Democratic Forces in Greece, by Stavros Caras, 6 pp.
GREEK, per, Elliniki Aristera, No 31, Feb 1966, pp. 14-19.
JPRS 34796

Departure from the Interests of the Working Community, by David Chinin, 5 pp.
HEBREW, np, Davar, 6 Jan 1966, p. 8.
JPRS 34394

Crisis in the Capitalist System, by Esther Vilenskah, 6 pp.
HEBREW, np, Davar, 9 Jan 1966, p. 11 & 12.
JPRS 34394

Address to Argaman Workers, by Ester Vilenska, 5 pp.
HEBREW, np, Kol Haam, 27 Jan 1966, p. 2.
JPRS 34394

Knesset Discusses Juvenile Delinquency, 6 pp.
HEBREW, np, Zo Haderekh, 6 Jan 1966, p. 5.
JPRS 34452

FAR EAST

Economic

The Administrative Organization and Structure of the Economy of China, Volume 1, 16 pp.
CHINESE, rpt, December 1964,
DIA LN 80-66

Discussion of the Problem of Labor Accumulation in the Collective Economy, by Yang Tien-min (2799 1131 3046), 5 pp.
CHINESE, per, Ching-chi Yen-chiu, No 1, 1966, pp. 51-53.
JPRS 34569

The Relationship between Geomorphic Conditions and Agricultural Production, by Mu Kuei-ch'un (4476 2710 2504) and Tai Hao-chih (2071 7729 0037), 7 pp.
CHINESE, per, Ti-li, No 1, 29 Jan 1963, pp. 21-23.
JPRS 34699

The Object, Task and Method of the Study of Regional Economic Geography, by Liang P'u (2733 3302), 10 pp.
CHINESE, per, Ti-li, No 1, 29 Jan 1963, pp. 28-32.
JPRS 34699

Excerpts of the Conference on How to Make Economic Evaluations on Natural Conditions, by Li Nung (0448 6593), 5 pp.
CHINESE, per, Ti-li, No 1, 29 Jan 1963, pp. 49-50.
JPRS 34699

The Support of the Labor Class for the Farm Villages and the Development of the Labor-Agriculture Alliance, by Yi Su-gu'n, 11 pp.
KOREAN, per, Kulloja, No 23, 5 Dec 1965, pp. 9-15.
JPRS 34641

Building and Balancing a Socialist Economy, by Cho'ng T'ae Sik, 13 pp.
KOREAN, per, Kulloja, No 23, 5 Dec 1965, pp. 16-26.
JPRS 34646

Far East
Economic (Contd)

The Role of Statistics in Socialist Economic Management and Operation, by Kim Ha-gwang, 13 pp.
KOREAN, per, Kulloja, No 23, 5 Dec 1965, pp. 27-34.
JPRS 34646

The Small Work Group Contract System on Cooperative Farms, 9 pp.
KOREAN, per, Kulloja, No 24, 20 Dec 1965, pp. 2-10.
JPRS 34646

Important Problems in Increasing Value of Production per Worker -- Experiences at the P'yo'ngyang Electric Factory, by P'yo'n So'ng, 8 pp.
KOREAN, per, Kulloja, No 24, 20 Dec 1965, pp. 11-18.
JPRS 34646

Let Us Improve the Level of Control and Management Commensurate to the Development of Agricultural Productivity, by O. Song-muk, 13 pp.
KOREAN, per, Kulloja, No 1, 5 Jan 1966, pp. 11-18.
JPRS 34789

Improve and Strengthen Cooperative Production, by No T'ae-sok, 5 pp.
KOREAN, per, Nodong Sinmun, 11 Feb 1965, p. 2.
JPRS 34664

Political

Study Chairman Mao's Works and Grasp the Weapon of Revolution, by Feng Hsi-ch'en (7458 3156 7775), 6 pp.
CHINESE, per, Chiang-han Hsueh-pao, No 18, 25 Dec 1965, pp. 3-7.
JPRS 34583

More Selfconsciously and Effectively Study and Apply Chairman Mao's Works, 5 pp.
CHINESE, per, Chiang-han Hsueh-pao, No 1, 10 Jan 1966, pp. 1-5.
JPRS 34583

Far East
Political (Contd)

Love Weapons, Not Make-Up, by Yang Tso-hung (2799 0155 4767), 7 pp.
CHINESE, per, Hung Ch'i, No 3, 27 Feb 1966, pp. 11-15.
JPRS 34670

Constant Revolution in Ideology and Technology, by Cheng Jui-lu (6774 3843 4389), 8 pp.
CHINESE, per, Hung Ch'i, No 3, 27 Feb 1966, pp. 15-20.
JPRS 34670

Developing the Determination To Be a Revolutionary, by Sung Wen-mei (1345 2429 5019), 8 pp.
CHINESE, per, Hung Ch'i, No 3, 27 Feb 1966, pp. 20-25.
JPRS 34670

Earnestly Implement the Party's Class Policy which Stresses Manifestation, 8 pp.
CHINESE, per, Nung-ts'un Ch'ing-nien, No 11, 10 Nov 1965, pp. 16-20.
JPRS 34583

The Struggle of the Asian, African and Latin American People's Solidarity Conference, by Chen Lo-min (7115 2867 3046), 11 pp.
CHINESE, per, Shih-chieh Chih-shih, 10 Feb 1966, pp. 15-18.
JPRS 34509

Viet Cong Tactics, 8 pp.
CHINESE, per, Shih-chieh Chih-shih, 10 Feb 1966, pp. 22-27.
JPRS 34509

Russo-Japanese Collaboration Is a Transformation of Russo-American Cooperation, by Shih Chi (0670 7162), 8 pp.
CHINESE, per, Shih-chieh Chih-shih, No 4, 25 Feb 1966, pp. 5-8.
JPRS 34726

Let Us Strengthen Thought Indoctrination Work among Our Agricultural Workers, 11 pp.
KOREAN, per, Kulloja, No 23, 5 Dec 1965, pp. 2-8.
JPRS 34641

Far East
Political (Contd)

Socialist Construction and the Nation's Housekeeping, 14 pp.
KOREAN, per, Kulloja, No 1, 5 Jan 1966, pp. 2-10.
JPRS 34785

Expanding and Strengthening Revolutionary Capacity, by Pak Han-jong, 10 pp.
KOREAN, per, Kulloja, No 1, 5 Jan 1966, pp. 19-25.
JPRS 34785

Class Indoctrination and War Literature, by Yi Sang-t'ae, 10 pp.
KOREAN, per, Kulloja, No 1, 5 Jan 1966, pp. 26-32.
JPRS 34785

Let Us Positively Support the Anti-American National Liberation Struggle of the Vietnamese People, by Kim Yong-hui, 11 pp.
KOREAN, per, Kulloja, No 1, 5 Jan 1966, pp. 33-40.
JPRS 34785

The 20th Anniversary of the Establishment of the Provisional People's Committee of North Korea, by Maeng Key-sim, 7 pp.
KOREAN, per, Minju Choson, 6 Feb 1966, p. 2.
JPRS 34785

Election Meetings, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 12, Dec 1965, pp. 3-6.
JPRS 34613

The Mongolian Revolutionary Youth League Organizations and Young Intelligentsia, by L. Gombojab, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 12, Dec 1965, pp. 7-11.
JPRS 34613

Improvements Needed in Recruitment and Composition of Party Membership, by H. Dondob, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 12, Dec 1965, pp. 12-15.
JPRS 34613

Far East
Political (Contd)

Secretary of Ulan Bator Railway Party: To Improve the Ways of Supervising Socialist Labor Movement, by B. Batsun, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 12, Dec 1965, pp. 16-19.
JPRS 34613

Assisting the Party Organizations, by O. Byambajab, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 12, Dec 1965, pp. 34-37.
JPRS 34613

Take Advantage of Local Township Party Leadership to Build Up Advanced Level II School, by Trinh Van Ngan, 9 pp.
VIETNAMESE, per, Giao Duc Cap 2, No 2, Dec 1965, pp. 3-6.
JPRS 34528

Our People Will Surely Defeat the U. S. Aggressors, 9 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 2-7.
JPRS 34581

The People of the Entire Country Are of One Mind in Stepping Up the Great Patriotic War and Are Determined to Fight and Vanquish the U. S. Aggressors, by General Vo Nguyen Giap, 25 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 11-30.
JPRS 34581

The Vietnam People's Revolutionary Party and Its Historic Mission of Liberating the South, by Hong Vu, 9 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 31-36.
JPRS 34581

Consolidate and Strengthen People's National Defense and Lead the Anti-U.S. National Salvation Cause to Complete Victory, by Maj. Gen. Hoang Van Thai, 18 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 37-49.
JPRS 34581

Far East
Political (Contd)

Publicizing and Understanding the Party's Military Policy, by Le Quang Hoa, 7 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 60-64.
JPRS 34581

A Major Factor Determining Victory in the War, by Le Phong, 7 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 65-70 and 78.
JPRS 34581

Party Central Committee Issues Directive on Hoc Tap, 5 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 71-74.
JPRS 34581

All Progressive People Support Us against the American Aggressors, by Luu Quy Ky, 7 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 83-88.
JPRS 34581

How We Organized and Led Women to Serve Combat, by Luy, 6 pp.
VIETNAMESE, np, Phu nu Viet nam, No 154, 1 Dec 1965, p. 6.
JPRS 34528

Military

Air-to-Ground Infrared Detector, 18 pp.
JAPANESE, rpt, October 1965.
DIA LN 166-66

The Big Role of Militiamen and Self-Defense Corpsmen in the War against U. S. Imperialists, by Tran Van Quang, 13 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966, pp. 50-59.
JPRS 34581

Far East
Sociological

Accentuate Politics and Struggle for Thorough Educational Revolution, 6 pp.
CHINESE, per, Chiang-hsi Chiao-yu, No 1, 15 Jan 1966, pp. 5-6 & 7.
JPRS 34583

Religion Has Always Been the Opiate of the People, by Liang Hao (2733 3185) and Yang Chen (2799 4178), 11 pp.
CHINESE, per, Hsin-chien-she, No 11/12, 20 Dec 1965, pp. 80-84.
JPRS 34726

The Victory of Mao Tse-Tung's Literary and Artistic Thinking, by Ts'ai Jo-hung (5591 5387 5725), 11 pp.
CHINESE, per, Hung Ch'i, No 3, 27 Feb 1966, pp. 26-33.
JPRS 34670

Continuously Carry Out the Teaching Reform and Further Raise the Quality of Teaching, by Hung Chou (3163 5297), 7 pp.
CHINESE, per, Shanghai Chiao-yu, No 12, 12 Dec 1965, pp. 12-14.
JPRS 34621

The Basic Way to Train Successors of Proletarian Literature, 8 pp.
CHINESE, per, Wen-i Pao, No 1, 27 Jan 1966, pp. 17-20.
JPRS 34742

Publishing Activities in Communist China, by Chukoku Kenkyujo, 11 pp.
JAPANESE, bk, Shin Chugoku Nenkan, 28 Apr 1965, pp. 342-345
JPRS 34659

Let Us Thoroughly Establish an Indoctrination Work System in Our Schools, 6 pp.
KOREAN, per, Inmin Kyoyuk, No 11, Nov 1965, pp. 2-4.
JPRS 34641

The Problem of Self-Identity in Literature and Art, by An Ham-kwang, 12 pp.
KOREAN, per, Ku'illoja, No 24, 20 Dec 1965, pp. 19-26.
JPRS 34641

Far East
Sociological (Contd)

Comment on Hanguksa - The Three Kingdoms, Centering on the Koryo' Era-, by Kim So'k-hyo'ng and Kim Se-ik, 15 pp.
KOREAN, per, Ku'illoja, No 24, 20 Dec 1965, pp. 27-37.
JPRS 34641

Conditions of the Public Health Work and Further Tasks, 13 pp.
MONGOLIAN, np, Unen, 20 Dec 1965, pp. 2-3.
JPRS 34718

Speech of Comrade B. Badarch on Public Health, 8 pp.
MONGOLIAN, np, Unen, 20 Dec 1965, pp. 3-4.
JPRS 34718

Conference on Protecting Women and Children in the North, 5 pp.
VIETNAMESE, np, Nhan dan, No 4334, 16 Feb 1966, p. 2.
JPRS 34700

Deviations in the Work Setup Have Begun to Appear, by Hoang Du, 6 pp.
VIETNAMESE, per, Thoi Su Pho Thong, Feb 1966, No 3, pp. 14-19.
JPRS 34808

History of Buddhist Struggles in Viet Nam, by Tue-Giac, 213 pp.
VIETNAMESE, bk, Viet-Nam Phat-Giao
Tranh-Dau Su, 1964, Saigon, pp 79-427.
ACSI I-7845B
ID 2204037365

LATIN AMERICA

Economic

Packaging in Cuba, 4 pp.
CZECH, per, Packaging, No 6, 1965, pp 161-164
*ACSI I-9318
ID 2204013366

Fishing and the Fish Meal Industry in Peru,
by Olivier Dollfus, 14 pp.
FRENCH, per, Les Cahiers d'Outre-Mer,
Vol 17, No 68, pp. 370-385.
JPRS 34818

Norms and Wage Scale in Agriculture, by
Juan R. Herrera and Angel Gonzalez, 13 pp.
SPANISH, np, Cuba Socialista, May 1966,
pp. 60-74.
JPRS 34803

Analysis of Manufacturing Activity in 1965,
11 pp.
SPANISH, np, Diagrama Economico, Jan-Feb
1966, pp. 7 and 14.
JPRS 34858

Trade Unionism without Marx in Chile, by Jose
Pablo Lopez, 7 pp.
SPANISH, per, Ercilla, Vol 32, No 1601, 9 Feb
1966, pp. 20-21.
JPRS 34442

Trade Agreement Between Cuba and Poland,
10 pp.
SPANISH, per, Gaceta Oficial, 23 July 1965,
pp. 311-316.
JPRS 34534

Protocol between Cuba and North Korea for
Assignment of Korean Specialists to Cuba,
11 pp.
SPANISH, np, Gaceta Oficial, 23 July 1965,
pp. 317-324.
JPRS 34632

Sugar Crop Regulations, 7 pp.
SPANISH, per, Gaceta Oficial, 26 Jan 1966,
pp. 3-6.
JPRS 34544

Latin America
Economic (Contd)

Creation of New State Enterprises in Cuba
(Resolutions 232 to 241), 11 pp.
SPANISH, per, Gazeta Oficial, 26 Jan 1966,
pp. 7-15.
JPRS 34632

Establishment of Industrial Bank in Guatemala,
5 pp.
SPANISH, np, El Imparcial, 17 Feb 1966, pp. 1 &
9.
JPRS 34570

Search for New Methods of Fishing in Cuba,
by Pedro Alberto, 5 pp.
SPANISH, np, Mar y Pesca, Dec 1965, pp. 7-12.
JPRS 34447

Progress in Fishing-Boat Building in Cuba,
by Pedro M. Escalona, 7 pp.
SPANISH, per, Mar y Pesca, Dec 1965, pp. 16-20.
JPRS 34447

Results of Semiannual Competition in Cuban
Fishing Industry, 5 pp.
SPANISH, per, Mar y Pesca, Dec 1965, pp. 26-
28.
JPRS 34447

Description of the Gulf Fishing Fleet of
Cuba, by Jesus Abascal, 7 pp.
SPANISH, np, Mar y Pesca, Jan 1966,
pp. 6-10.
JPRS 34582

Government Resolution on Tariff Rates, 8 pp.
SPANISH, np, El Mundo, Vol 64, No 21493, 2
Feb 1966, p. 5.
JPRS 34671

Report on Industrialization, 11 pp.
SPANISH, np, El Nacional, 13 Feb 1966,
p. D-6.
JPRS 34858

The National Bank of Cuba; Its Financing Sys-
tems, by Salvador Vilaseca Forme, 19 pp.
SPANISH, per, Nuestra Industria Revista
Economica, No 11, Feb 1965, pp. 3-19.
JPRS 34544

Latin America
Economic (Contd)

Aspects and Problems of Cuban Economic Development, II, by Miguel A. Figueras, 12 pp.

SPANISH, per, Nuestra Industria Revista Economica, No 11, Feb 1965, pp. 20-30.
JPRS 34544

Report of the Cuban Delegation to the 11th Convention of the Economic Commission for Latin America, by Lt. Francisco Garcia Valls, 14 pp.

SPANISH, per, Nuestra Industria Revista Economica, Vol 3, No 15, Oct 1965, pp. 3-13.
JPRS 34478

Suggestions for Better Cooperation between Domestic Economy and Foreign Trade, by Julio Gonzales Noriega and Julio Fumero Marta, 28 pp.

SPANISH, per, Nuestra Industria - Revista Economica, 1965, pp. 26-42.
JPRS 34702

Application of Linear Programming to a Problem of Perspective Planning of the Cuban Oil Industry, by Roberto Perez Amador, 7 pp.

SPANISH, per, Nuestra Industria, Revista Economica, Feb 1966, pp. 56-61.
JPRS 34544

A Uruguayan Working in Cuban Ministry Discusses Cuban Planning, by Samuel Behak, 5 pp.
SPANISH, np, El Popular, 28 Jan 1966, p. 2.
JPRS 34553

Technical Norms for the Sugar Cane Harvest, 6 pp.

SPANISH, np, Sierra Maestra, 24 Dec 1965, p. 6.
JPRS 34671

Economic Importance of Small Irrigation Projects in Cuba, by Agustin Solis, 11 pp.

SPANISH, np, Voluntad Hidraulica, Aug 1965, pp. 4-12.
JPRS 34426

Latin America
Economic (Contd)

Present and Future Role of the Cuban National Waterworks and Sewerage Commission, 5 pp.

SPANISH, np, Voluntad Hidraulica, Aug 1965, pp. 18-23.
JPRS 34489

Special Plan for Water Power Improvement in the Province of Oriente, by Arnaldo Correa, 14 pp.

SPANISH, per, Voluntad Hidraulica, Aug 1965, pp. 24-37.
JPRS 34534

The Present Irrigation Situation in Cuba, by Jorge Santamarina, 9 pp.

SPANISH, np, Voluntad Hidraulica, Aug 1965, pp. 38-42.
JPRS 34534

Water Supply for Greater Havana, by Stanimir Stanimirov, 17 pp.

SPANISH, per, Voluntad Hidraulica, Aug 1965, pp. 51-62.
JPRS 34534

Political

A Strange Evaluation of the Havana Conference, by K. Neeman, 7 pp.

HEBREW, np, Zo Haderekh, 27 Jan 1966, p. 4.
JPRS 34452

Cuba in 1966: Enthusiasm in Spite of Difficulties, by Cystein Pettersen, 8 pp.

NORWEGIAN, np, Orientering, 22 Jan 1966, pp. 6 & 7.
JPRS 34702

The Havana Conference Marked the Unification of the Anti-Imperialist Forces, by Yu.

Bochkerev, 5 pp.
RUSSIAN, per, Kommunist, No 3, Feb 1966, pp. 106-108.
JPRS 34833

Latin America
Political (Contd)

Opinions on Reorganization of Communist
Cadres, 11 pp.
SPANISH, per, Bohemia, 7 Nov 1965, pp. 56-60.
JPRS 34406

Cuba's President Asks that the Revolutionary
Spirit be Applied in Practical Work, by Pres-
ident Dorticos, 14 pp.
SPANISH, per, Bohemia, Vol 58, No 5, 4 Feb
1966, pp. 44-47.
JPRS 34426

Evaluation of National Competition in Cuba,
9 pp.
SPANISH, np, Con la Guardia en Alto, Nov 1965,
pp. 4-7.
JPRS 34447

Cuban Comments on the Twentieth General Assem-
bly of the UN, 6 pp.
SPANISH, per, Cuba Socialista, Feb 1966,
pp. 205-211.
JPRS 34406

Cuban Ministry of Foreign Trade Alleges
False Statements by Chinese Ministry of For-
eign Trade, 5 pp.
SPANISH, per, Cuba Socialista, Feb 1966,
pp. 212-215.
JPRS 34406

Repercussions of the Tricontinental Confer-
ence, 9 pp.
SPANISH, per, Cuba Socialista, Mar 1966,
pp. 115-125.
JPRS 34803

Argentine Anti-Communist Discussion of Marx-
ism and the Revolutionary War in Latin America,
by Alberto Daniel Faleroni, 29 pp.
SPANISH, per, Estudios sobre el Comunismo, No
46, Oct-Dec 1965, pp. 45-62.
JPRS 34599

The Story of "Che" Guevara, by Alberto
Arredondo, 22 pp.
SPANISH, per, Estudios sobre el Comunismo,
Oct-Dec 1965, pp. 63-75.
JPRS 34772

Latin America
Political (Contd)

Centralization of Traffic Courts, 5 pp.
SPANISH, per, Gaceta Oficial, 23 Jul 1965,
pp. 330-332.
JPRS 34553

Decrees and Announcements of the Executive
Branch of Government in Cuba, 5 pp.
SPANISH, per, Gaceta Oficial, Vol 63, No 20,
31 Dec 1965, pp. 497-499, 526.
JPRS 34534

Election of Workers and Farmers Delegates to
Local Authority, by Pedro Luis Padron, 5 pp.
SPANISH, np, Granma, 2nd Year, No 12, 13 Jan
1966, p. 8.
JPRS 34478

Impressions from a Mexican Literary Critic
Interviewed in Cuba, by Belkis Cuza Male,
6 pp.
SPANISH, np, Granma, 10 Feb 1966, Vol II,
No 40, First Edition, p. 7.
JPRS 34772

Jesus Menendez, An Exemplary Party Man in
Cuba, by Juan Marinello, 11 pp.
SPANISH, np, El Mundo, 23 Jan 1966, p. 9.
JPRS 34534

Declaration by Tri-Continental Committee
Supporting Viet Nam, 5 pp.
SPANISH, np, El Mundo, Vol 64, No 21493,
2 Feb 1966, p. 6.
JPRS 34671

A Cuban Official Sees Documentation As Having
Limitless Possibilities, by Dr. Juan Marinello,
5 pp.
SPANISH, np, El Mundo, Vol 64, No 21497,
6 Feb 1966, p. 11.
JPRS 34653

Cuba: From Popular Revolution to Personal
Dictatorship, by Segundo Casalís, 30 pp.
SPANISH, np, La Republica, 4 Feb 1966, p. 7;
5 Feb 1966, pp. 7 & 18; 7 Feb 1966, p. 7,
8 Feb 1966, pp. 7 & 18; 9 Feb 1966, p. 7,
10 Feb 1966, p. 7.
JPRS 34520

Latin America
Political (Contd)

Acosta's Report to Oriente Party Assembly,
by Armando Acosta, 20 pp.
SPANISH, np, Sierra Maestra, 21 Dec 1965,
pp. 3, 4 & 5.
JPRS 34671

Speech by Armando Hart at Oriente Party
Meeting, by Armando Hart, 14 pp.
SPANISH, np, Sierra Maestra, 23 Dec 1965,
pp. 3 & 4.
JPRS 34671

Ousted Couple Tells Story of Gideon Evan-
gelical Sect ("Batiblanco"), by Hariberto
Cardoso, 7 pp.
SPANISH, np, Sierra Maestra, 29 Dec 1965,
p. 6.
JPRS 34762

Raul Castro's Speech at Armed Forces Party
Meeting, 24 pp.
SPANISH, np, Verde Olivo, 20 Feb 1966, pp.
32-40.
JPRS 34803

Posadas Discusses Chinese Party and Govern-
ment Difficulties, by J. Posadas, 32 pp.
SPANISH, per, Voz Proletaria, 3 Feb 1966,
pp. 4-5, 7-9 and 10 Feb 1966, pp. 2-3, 9.
JPRS 34599

Discussion of Program Approved by Tenth Con-
gress of Colombian Communist Party, 19 pp.
SPANISH, per, VOZ Proletaria, No 110,
3 Feb 1966, pp. 9-12.
JPRS 34479

Tenth Congress of Colombian Communist Party
Issues Internal Organization Policy, 8 pp.
SPANISH, per, VOZ Proletaria, No 110,
3 Feb 1966, pp. 13-14.
JPRS 34479

Argentine Trotskyite Organ: Castro Aids
the Cause of the Counterrevolutionaries, by
J. Posadas, 21 pp.
SPANISH, per, Voz Proletaria, No 429,
16 Feb 1966, pp. 4-8.
JPRS 34831

Latin America
Political (Contd)

Program of the Communist Party of Colombia
Favors Democratic and Anti-Imperialist
Revolution, 18 pp.
SPANISH, np, Voz Proletaria, 24 Feb 1966,
pp. 9-12.
JPRS 34692

Great Victories of the Heroic Cuban People,
by Nguyen Thanh Ha, 6 pp.
VIETNAMESE, per, Hoc Tap, No 1, Jan 1966,
pp. 79-82.
JPRS 34581

Military

Problems of Party Function in the Revolution-
ary Armed Forces (FAR), by Raul Castro, 13 pp.
SPANISH, np, Cuba Socialista, Mar 1966,
pp. 43-59.
JPRS 34762

Military Unit Wages Fight against Bandits
in Escambray, by Norberto Fuentes, 10 pp.
SPANISH, np, Granma, 6 Feb 1966, Supplement
pp. 3-6.
JPRS 34653

Combat Readiness of Central Army Verified at
Recently Held War Games, by Luis Gomez
Wanguemert, 5 pp.
SPANISH, np, El Mundo, 14 Jan 1966, Vol 64,
No 21477, pp. 1 and 8.
JPRS 34406

Speech of Captain Juan Abrantes, 8 pp.
SPANISH, np, Verde Olivo, 30 Jan 1966,
pp. 25-29.
JPRS 34803

Latin America
Geographic

Geographic Aspects of the State of Guarico, by Marco-Aurelio Vila, 72 pp.
SPANISH, bk, Aspectos Geograficos del Estado Guarico, 1965.
JPRS 34595

Geo-Economic Notes on Barlovento, by Marco-Aurelio Vila, 16 pp.
SPANISH, per, Cuadernos de la C.V.F., No 4, Dec 1965, pp. 53-67.
JPRS 34570

Sociological

1964 Achievements of Institute for Scientific and Technical Documentation and Information and 1965 Plans, by H. Touza Pulido, 6 pp.
SPANISH, per, Boletin, Vol III, No 1, Feb 1965, pp. 5-8.
JPRS 34489

Aims and Objectives of Secondary Education in Cuba, 12 pp.
SPANISH, per, Boletin de la Universidad de Chile, June 1965, pp. 26-32.
JPRS 34426

Cultural Exchange Agreement between Cuba and East Germany, 6 pp.
SPANISH, per, Gaceta Oficial, 23 Jul 1965, pp. 325-327.
JPRS 34553

Technological Faculty Triumphs in Cuba in Spite of the United States, by Oscar F. Rego, 6 pp.
SPANISH, np, Granma, 6 Feb 1966, p. 8.
JPRS 34653

Latin America
Sociological (Contd)

Status of the Publication of Children's Books in Cuba, by Angela Soto, 6 pp.
SPANISH, np, Juventud Rebelde, 1 Feb 1966, p. 8.
JPRS 34671

Selling Price of Slide Rules Reveals Unrest among Consumers, by H. Nunez Lemus, 6 pp.
SPANISH, np, Juventud Rebelde, 10 Feb 1966, p. 2.
JPRS 34772

The Victoria de Giron Technical Naval School, by Vicente Cubillas, 5 pp.
SPANISH, per, Mar y Pesca, Feb 1966, pp. 4-10.
JPRS 34653

Close of the First Meeting on Scientific and Technical Information in Cuba, 5 pp.
SPANISH, np, El Mundo, Vol 64, No 21, 497, 6 Feb 1966, pp. 1, 10.
JPRS 34653

Fifth National Council of the National Union of Public Administration Workers: Summary of Agreements, 7 pp.
SPANISH, np, Trinchera Socialista, Dec 1965, p. 16.
JPRS 34847

SCIENTIFIC

Scientific
Aerospace (Contd)

Aerospace

Atomic Rockets and Problems in Space Conquest, by A. P. Senchenkov, RUSSIAN, bk, Atomnyye Rakety i Problemy Osvoyeniya Kosmosa, 1964, pp 1-138.
*FTD-MT-66-28

Maneuvering in Free Space, by V. Stepantsov et al. RUSSIAN, per, Aviats. i Kosmonav., Vol 47, No 7, 1965, pp 48-53.
NASA TT F-9883

Automation of Aircraft and Rocket Power Plants, by A. A. Shevyakov, 50 p. RUSSIAN, bk, Avtomatika Aviatsionnykh i Raketnykh Silovykh Ustanovok, 1965, pp 405-510.
*FTD MT-66-19

The Estimation of Ozone Concentration at the Heights of 44-102 KM During Night Launchings of Geophysical Rockets, by A. Ye Mikrov. RUSSIAN, per, Geomagnetizma i Aeronomiya, Vol 5, No 6, 1965, pp 1120-1123.
NASA TT F-10,006

Galloping of a Carriage Landing Gear During Aircraft Motion Along a Dirt Airfield, by V. S. Gozdek, RUSSIAN, per, Inzhenernyy Zhurnal, Vol V, No 4, 1965, pp 743-745.
*FTD-MT-66-223

A Red Beam in the Black Sky, by V. Chernyshev. 7 pp. RUSSIAN, per, Krasnaya Zvezda, 14 Mar 1965, p 1. 9699951
FTD-TT-65-1683

Problems in Cosmonautics; Prior to Taking Off Into Outer Space, by N. Mironova, RUSSIAN, np, Leningradskaya Pravda, 18 Aug, 1963, pp 3.
*FTD-MT-66-123

Problems of Space Biology, Vol 4. 677 pp. RUSSIAN, bk, Problemy Kosmicheskoy Biologii, Tom IV, Moscow, 1965.
NASA TT F-368 9231821-V

Peculiarities of Short-Wave Communication with Spaceships, by F. N. Berbasov, T. S. Kerblay, Ye. M. Koval'evskaya and L. N. Lyakhova, 12 pp. RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Fizike Kosmicheskogo Prostranstva, 1965, pp. 220-227.
JPRS 34723

Controlling the Thrust of Liquid-Propellant Rocket Engines, by N. Lyzwinski and S. Szczecinski, RUSSIAN, per, Technika Lotnicza, 1965, pp 42-49.
*FTD-MT-66-130

Scientific
Aerospace (Contd)

Structural Characteristics of Modern Aerial
Films and Image Sharpness of Aerial Negatives,
by V. Ya. Mikhaylov.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
Issledovatel'skogo Instituta Geodezii, Aero-
syemki i Kartigrafii "Issledovaniya po
Aerofotografii, No 149, 1964, pp 70-92.
*FTD-IT-66-214

Space Penetration and Man's Impression of
Outer Space, by A. A. Leonov and V. I.
Lebedev, 11 pp.
RUSSIAN, per, Voprosy Filosofii, No 1, 1966,
pp. 3-11.
JPRS 34615

Life in the Interplanetary Medium, by
K. E. Tsiolkovskiy.
RUSSIAN, bk, Zhizn' V Mezhzvezdnoy Srede,
Moscow, 1964, pp 1-84.
*FTD-IT-66-33

Certain Humoral Changes in Pilot Decibals
During First Flights on Jet Aircraft, by
V. Dolezal,
CZECH, per, Vojenske Zdravotnicke Listy,
Vol XXXIV, No 1, 1965, pp 8-13.
*FTD-TT-66-141

Concerning the Method of Calculating
Kp OR ap: The Planetary Aspect of these
Indices?, by P. N. Mayaud.
FRENCH, rpt, A Propos du Mode de Calcul de
Kp Ou de ap: Aspect Planetaire de ces
Indices, Note No 11, April 1965.
NASA TT F-8775

Scientific
Aerospace (Contd)

The Influence of a Constant Wind on
the Trajectory of Projectiles and
Rockets, 22 pp, by H. Molitz
FRENCH, rpt, L'influence
d'un Vent Constant sur la Trajectoire
des Projectiles et des Fuseses,
March 29, 1960,
ACSI I-9716
ID 2204027366

Present Possibilities for a Theoretical
Study of a Supersonic Ejector Nozzle,
by J. M. Hardy, J. Delery.
FRENCH, rpt, Paper Presented at the
Meeting of AGARD Specialists on
Aerodynamics of Group Propulsion,
AEDC, Tullahoma, 25-28 October 1965.
Reprint No 287.
NASA TT F-9870

Multi-Axis Satellite Trackers, by
M. Steinhach,
GERMAN, per, Feingeratetechnik, Vol
XIV, No 9, 1965, pp 397-400.
*FTD-IT-66-134

Brightness Variation of the Echo-I Satellite,
by M. V. Bratiychuk, G. V. Moskalova.
GERMAN, per, J. Chromatog, No 36, 1963,
pp 23-29.
NASA TT F-9841

The use of an Analog Computer in evaluating
Flight Data with special consideration of
the generalized harmonic analysis,
by Lothar Koch.
GERMAN, rpt, Proceedings of the International
Colloquium on the Techniques of Aeronautics,
Sept. 9-10 1963, pp 418-428.
*ABC

Scientific
Aerospace (Contd)

Why There are Still No Nuclear Powered Rockets, by A. Marks, POLISH, per, Skrzydlatą Polska, No 4, 1965, pp 9, 18.
*FTD-HT-66-131

Lunar Vehicles, by D. St. Andreescu, RUMANIAN, per, Stiinta si Tehnica, No 9, 1963, pp 30-32.
*FTD-HT-66-132

Agriculture

Investigation of Sugars in Heat Processing of Fruit Concentrates, by I. Vashatko and A. Pribela, RUSSIAN, per, Izvestiya VUZ Pishchevaya Tekhnologiya, No 6, 1965, pp 17-20.
*ACSI I-9309
ID 2204012466

Explanation of New Administrative System for Administering the Agricultural Machine Building Industry, 5 pp. RUSSIAN, per, Tekhnika v Sel'skom Khozyaystve, No 11, Nov 1965, pp. 1-4.
JPRS 34450

The Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev, by I. S. Shatilov, 8 pp. RUSSIAN, per, Vestnik sel'skokhozyaystvennoy nauki, No 11, Nov 1965, pp. 1-7.
JPRS 34421

The Presidium of the All-Union Academy of Agricultural Sciences imeni V. I. Lenin, 5 pp. RUSSIAN, per, Vestnik sel'skokhozyaystvennoy nauki, No 11, Nov 1965, pp. 146-149.
JPRS 34421

Scientific
Biological & Medical Sciences

Prospects of Development of Pharmaceuticals in the Ukraine in 1966-1970, by F. I. Spivak and L. G. Shmaruk, 6 pp. RUSSIAN, per, Apotechnoye delo, No 6, XIV, Nov/Dec 1965, pp. 7-10.
JPRS 34627

Changes in the Intestines of Monkeys Caused by Oesophagostomum Apistomum Larvae, by K. K. Zaytseva, RUSSIAN, per, Arkiv Patologii, No 1965, pp 70-78.
*FTD-HT-66-232

Defining the Concept "Disease", by I. V. Davydovskiy and V. Ye. Sil'vestrov, 9 pp. RUSSIAN, per, Arkiv Patologii, Vol 28, No 1, 1966, pp. 3-8.
JPRS 34759

Bromine in the Animal Organism and the Mechanism of its Action, by I. N. Verkhovskaya, 418 pp. RUSSIAN, bk, Brom V Zhivotnom Organizme i Mekhanizma ego Deystviya, Moscow, 1962, 9700181-V
FTD-TT-65-973

Character of Electrical Potentials of the Glossopharyngeal Nerve, by G. T. Sakhiulina. RUSSIAN, per, Byulleten' Eksperimental'noy Biologii i Meditsiny, Vol 19, 1944, pp 66-68.
*FTD-HT-66-199

Research in Cybernetics in the Ukrainian Academy of Sciences, 5 pp. UKRAINIAN, per, Dopovidi Akademiyi Nauk Ukrayins'koyi RSR, No 1, 1966, pp. 129-132.
JPRS 34367

Restoration of Contractility and Prospects for Transplantation of Human and Animal Hearts, by S. V. Andreyev. RUSSIAN, per, Eksperimental'naya Khirurgiya i Anesteziologya, Vol 9, No 4, 1964, pp 32-36. 9229863
NASA TT F-404

Scientific
Biological & Medical Sciences (Contd)

Some Problems Relating to the Mechanism of the Toxic Effect of Carbon Tetrachloride and Its Homologs, by P. G. Garkavi, 18 pp.
RUSSIAN, per, Farmakologiya i Toksikologiya, Vol XXIX, No 1, Jan/Feb 1966, pp. 118-124.
JPRS 34975

Intracranial Blood Content during Gravitational Stress in Rats Adapted to Hypoxia, by A. A. Shurubura, Z. I. Barbashova and Yu. Ye. Moskalenko, 7 pp.
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR imeni I. M. Sechenova, Vol 51, No 12, Dec 1965, pp. 1474-1477.
JPRS 34698

Active Selection by Animals and Humans of Nitrogen-Oxygen and Helium-Oxygen Mixtures, by I.S. Breslav, A. G. Zhironkin and Ye. N. Salatsinskaya, 8 pp.
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR im. I. M. Sechenova, Vol 51, No 12, Dec 1965, pp. 1501-1506.
JPRS 34698

Working Conditions and Health Status of Workers at the United Institute of Nuclear Research, by A. K. Gus'kova, A. I. Ponizovskaya, Ye. A. Denisova, V. V. Volkovitskaya, Ye. N. L'vovskaya, Ye. S. Kotova, and I. A. Gribova, 9 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 1, Jan 1966, pp. 5-11.
JPRS 34928

The Results of Dynamic Observations of the State of Hemopoiesis in Persons Subjected To the Chronic Effect of Ionizing Radiation, by V. V. Sokolov and I. A. Gribova, 7 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 1, Jan 1966, pp. 11-16.
JPRS 34928

The Value of a Bright Working Surface, by Yu. D. Khilov, 5 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 1, Jan 1966, pp. 26-29.
JPRS 34928

Scientific
Biological & Medical Sciences (Contd)

The Development and Course of Silicosis after Cessation of Contact with Dust, by V. N. Palkin, 6 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolevaniya, No 1, Jan 1966, pp. 30-34.
JPRS 34928

Concerning some Elements of Chlorella Protein Structure, by N. N. Mel'teva, 4 p.
RUSSIAN, per, Izv Vuz Pishchevaya Tekhnologiya, No 6, 1965, pp 45-48.
*ACSI I-9661
ID 22040224-66

How to Purify and to Disinfect Water with the Simplest Means, by S. P. Vekhov and N. F. Sokolova, 21 pp.
RUSSIAN, bklet, Kak Ochistit' i Obezrazazit' Vodu s Pomoshch'yu Prosteyshikh Sredstv, 1965, pp. 1-24.
JPRS 34578

Coordination of Human Voluntary Movements during Flight in Outer Space, by Levan Vladimirovich Chkhaidze, 126 pp.
RUSSIAN, bk, Koordinatsiya proizvod'nykh dvizheniy cheloveka v usloviyakh kosmicheskogo poleta, 1965, pp. 1-111.
JPRS 34654

Biological Laboratory in Orbit, by N. M. Sisakyan, V. N. Pravestskiy, and B. B. Yegorov, 10 pp.
RUSSIAN, np, Krasnaya Zvezda, 2 Mar 1966, p. 3.
JPRS 34600

Scientific
Biological & Medical Sciences (Contd)

The Mathematical Apparatus of
Biological Cybernetics, by
N. A. Bernshteyn,
RUSSIAN, bk, Matematicheskii Apparat
Biologicheskoy Kibernetiki, Moscow,
1964, pp 1-374.
*JPRS/SF-4190

Medicine Improves the State of Mind, by
I. Lapin. 7 pp.
RUSSIAN, per, Meditsinskaya Gazeta, 27 Aug
1965, p 5. 9699356
FTD-TT-65-1 38

Medicine and Technology Are Now Working
Together in One Orbit, by K. Kalmykova, 5 pp.
RUSSIAN, np, Meditsinskaya gazeta, 5 Nov 1965,
p. 2.
JPRS 34448

The Use of Phytoncids in Medical Care Dis-
cussed in Kiev, by F. Protopopov, 8 pp.
RUSSIAN, np, Meditsinskaya gazeta, 30 Nov
1965, p. 3.
JPRS 34430

Conference at Yaroslavl' Medical Institute,
by B. Danilov, 6 pp.
RUSSIAN, np, Meditsinskaya Gazeta, 11 Jan
1966, p. 3.
JPRS 34929

Elections to the Academy of Medical Sciences
USSR, 1965, 14 pp.
RUSSIAN, np, Meditsinskaya gazeta, 8 Feb 1966,
p. 4.
JPRS 34397

Effect of Prophylactic Administration of a
Mucopolysaccharide (MPS) Preparation of
Hemopoiesis and Survival of Animals Following
X-Ray Irradiation, by A. S. Shitikova, 5 pp.
RUSSIAN, per, Meditsinskaya Radiologiya, Vol
X, No 12, Dec 1965, pp. 41-45.
JPRS 34550

Scientific
Biological & Medical Sciences (Contd)

Utilization of Certain Biochemical Indices
for the Evaluation of the Effect of Ionizing
Radiation on the Organism, by T. A. Svider-
skaya, 10 pp.
RUSSIAN, per, Meditsinskaya Radiologiya, Vol
X, No 12, Dec 1965, pp. 51-57.
JPRS 34549

Certain Biochemical Indices in Innervation
Disturbances of the Motor Apparatus Caused
by Action of Ionizing Radiation, by E. N.
Sadchikova, 6 pp.
RUSSIAN, per, Meditsinskaya Radiologiya, Vol
X, No 12, Dec 1965, pp. 63-66.
JPRS 34549

Methodological Problems of Modern Medicine,
by G. I. Tsaregorodtsev, 257 pp.
RUSSIAN, bk, Metodologicheskiye Problemy
Sovremennoy Meditsiny, 1965, pp. 1-280.
JPRS 34390

Methods of Studying Industrial Dust and the
Incidence of Pneumoconioses, by A. A. Letavet
and Prof. Ye. V. Khukhrina, 108 pp.
RUSSIAN, bk, Metody Izucheniya Proizvodst-
vennoy Pyli i Zabolevayemosti Pnevmonio-
zami, 1965, pp. 1-123.
JPRS 34512

The Soviet Navy and Cybernetics, by Yu. V.
Skorokhod, 10 pp.
RUSSIAN, per, Morskoy Sbornik, No 7,
1965, pp. 62-68.
JPRS 34482

Lipid Metabolism and Atherosclerosis, by I.
Ye. Ganelina, I. N. Komarova, I. V. Krivoru-
chenko and B. M. Lipovetskiy, 10 pp.
RUSSIAN, bk, Obmen Lipidov i Ateroskleroz:
Voprosy Regulyatsii Obmena Lipidov i Patog-
ogeneza Ateroskleroza, 1965, pp. 2-7, 221-
224.
JPRS 34729

Public Health Service in Rural Regions of
the Soviet Union and Bloc Countries, by E.
R. Agayev and V. V. Pugina, 16 pp.
RUSSIAN, bk, Opyt Raboty Sel'skikh Lechebno-
profilakticheskikh Uchrezhdeniy, 1965,
pp. 3-4, 5-10, 172-181.
JPRS 34697

Scientific
Biological & Medical Sciences (Contd)

Some Results and Pressing Problems of Blood Transfusion under Ambulatory Conditions in Moscow, by D. N. Belen'kiy, 10 pp.
RUSSIAN, per, Problemy Gematologii i Perelivaniya Krovi, Vol XI, No 1, Jan 1966, pp. 3-9.
JPRS 34971

Soviet Research on Endocrine Mechanisms, by P. A. Vunder, 21 pp.
RUSSIAN, monograph, Protsessy Samoregul'yatsii v Endokrinnoy Sisteme, 1965, pp. 3-8, 153-155, 155-167.
JPRS 34758

Oligosymptomatic Infectious Lymphocytosis, by Iu. S. Klein.
RUSSIAN, per, Probl Gemat, Vol 7, No 8, 1962, pp 55-56.
HEW NIH 2-19-66

Basic Trends in the Search for Antileukemic Medicinal Preparations, by V. A. Chernov and T. S. Safonova, 17 pp.
RUSSIAN, per, Problemy gematologii i perelivaniya krovi, No 12, Vol X, Dec 1965, pp. 3-13.
JPRS 34626

Excerpts from Russian-Language Book on Rational Diet, by P. D. Leshchenko et al, 9 pp.
RUSSIAN, bk, Ratsional'noye pitaniye, 1965, pp. 3-4, 5-10, 219-220.
JPRS 34908

Autoregulation of Central Nervous System, by A. A. Krauklis.
RUSSIAN, bk, Samoregulyatsiya Vyshey Nervnoy Deyatel'nosti, 1964, pp 1-291.
*FTD-M-66-34

Work of Subject Commission under Academy of Pedagogical Sciences RSFSR in Field of Biology, by Ye. Brunovt and A. Myagkova, 10 pp.
RUSSIAN, per, Sovetskaya Pedagogika, No 9, Sept 1965, pp. 10-15.
JPRS 34929

Scientific
Biological & Medical Sciences (Contd)

Characteristics of the Methods of Utilizing the Data of Complex Medical Examinations in the Elaboration of Standards of Therapeutic and Prophylactic Service to the Population, by I. D. Bogatyrev, 8 pp.
RUSSIAN, per, Sovetskoye Zdravookhraneniye, No 12, Vol XXIV, 1965, pp. 15-20.
JPRS 34660

Forensic Psychiatry, by G. V. Morozov, 9 pp.
RUSSIAN, bk, Sudebnaya Psikhatriya, 1965, pp. 2-4, 421-423.
JPRS 34825

Brief Study in Bionics, by M. Ass, 6 pp.
RUSSIAN, per, Tekhnika-Molodezhi, No 12, 1965, pp. 22-23.
JPRS 34603

Utilization of Radiotelemetry for the Study of Gastric and Intestinal Temperature in Man, by Ye. B. Babskiy, B. Ye. Votchak, and A. S. Belousov, 6 pp.
RUSSIAN, per, Terapevticheskiy Arkhiv, Vol XXXVII, Issue 11, Nov 1965, pp. 96-100.
JPRS 34501

Excerpts from Russian-Language Book on Pharmacology and Clinical Application of Central Cholinolytics, by P. P. Denisenko, 10 pp.
RUSSIAN, bk, Tsentral'nyye Kholinolitiki - Farmakologiya i Klinicheskoye Primeneniye, 1965, pp. 3-8 and 279.
JPRS 34912

Development of Technical Cybernetics (All-Union Conference in Odessa), by M. A. Boyarchenkov, 6 pp.
RUSSIAN, per, Vestnik Akademii Nauk SSSR, No 12, 1965, pp. 98-101.
JPRS 34417

The Achievements of Veterinary Medicine in the Baltic Republics during the Twenty-Five Years of Soviet Power, 12 pp.
RUSSIAN, per, Veterinariya, No 8, Aug 1965, pp. 10-16.
JPRS 34430

Scientific
Biological & Medical Sciences (Contd)

The Principle of Equisignificance and the Probabilistic Conception of Psychic Phenomena, by A. I. Rozov and Ya. L. Kolominskiy, 14 pp.
RUSSIAN, per, Voprosy Psikhologii, No 6, Nov/Dec 1965, pp. 79-89.
JPRS 34596

Smallpox Morbidity throughout the World in 1960-1964, by I. M. Pypina and S. U. Davydov, 9 pp.
RUSSIAN, per, Voprosy Virusologii, No 6, Nov/Dec 1965, pp. 643-648.
JPRS 34572

Occupational Peculiarities of Perception of One Human Being by Another, by A. A. Bodalev, 15 pp.
RUSSIAN, bk, Vospriyatiye Cheloveka Chelovekom, 1965, pp. 106-122.
JPRS 34734

Statistical Data Characterizing the Development of Ambulatory Polyclinical Care and the Increase in Medical Personnel in the RSFSR (As of 1964), by V. N. Ivakina, 7 pp.
RUSSIAN, per, Zdravokhraneniye Rossiyskoy Federatsii, Vol 9, No 12, 1965, pp. 31-35.
JPRS 34661

Training of Physicians in Medical Higher Educational Institutions of the RSFSR, by S. Ya. Chikin and B. M. Cheknev, 5 pp.
RUSSIAN, per, Zdravookhraneniye Rossiyskoy Federatsii, No 2, Feb 1966, pp. 39-42.
JPRS 34915

Protective Properties of Antivenom Sera in Respect to Venoms of Snakes of Central Asia, by M. I. Roitman.
RUSSIAN, per, Zhurn. Mikrobiol., No 11, 1965, pp 108-111.
HEW NIH 2-8-66

Compressed Voice (Spooch), by V. Demidov.
RUSSIAN, per, Znaniye-Sila, No 11, 1963, pp 52-54.
*FTD-HT-66-202

Scientific
Biological & Medical Sciences (Contd)

Report on Prophylactic Medicine - Interviews of Leading Doctors, 8 pp.
ALBANIAN, per, Ylli, Jan 1966, pp. 11-13, 15.
JPRS 34737

Studies in the Content of the Enzyme Catalase in the Blood and Organs of Guinea Pigs, by T. Radev.
BULGARIAN, rpt, Izvest Inst Sravnitelna Patol. Domashnite Zhivotini, Bulgar. Akad Nauk, Vol VI, 1958, pp 135-143. 9232091
AEC-ANL-Tr-263

Synthesis of Crystalline Bovine Insulin from Synthetic A-Chain and Natural B-Chain, by Mao Yu, Hsu Chieh-ch'eng, 5 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 12, Dec 1965, pp 1111-1114.
JPRS 34917

Experimental Studies on Active Immunization Against Japanese B Encephalitis, by Hsu, Chao-Hsiang; Chou, Ming-Hsien.
CHINESE, per, Wei Sheng Wu Hsueh Pao, Vol 10, No 1, 1964, pp 9-16.
*FTD-HT-66-169

Studies on Infectious Ribonucleic Acid of Japanese B Encephalitis Virus, by Liu, Yuan-Yuan; Liu, Hua-Ch'en.
CHINESE, per, Wei Sheng Wu Hsueh Pao, Vol 10, No 1, 1964, pp 24-30.
*FTD-HT-66-169

Japanese B Encephalitis Vaccine Prepared from Monolayer Tissue Culture, by Wang, Yung-Chi; Chou, Ning-Chen.
CHINESE, per, Wei Sheng Wu Hsueh Pao, Vol 10, No 1, 1964, pp 31-38.
*FTD-HT-66-169

Care and Management of Dated Drugs, by Chou Han-chang (0719 5060 4545) and Hsu Jui-t'ing (6079 3843 1656), 17 pp.
CHINESE, per, Yao-hsueh T'ung-pao, No 11, Nov 1965, pp. 487-491.
JPRS 34388

Scientific
Biological & Medical Sciences (Contd)

Changes in transplanted Cells and in Cells Cultured for Some Time in vitro, by W. M. De Bruyn.
DUTCH, per, Nederl T Geneesk, Vol 107, No 56, 1963, pp 1614-1620.
HEW NIH 2-22-66

Stream and Counter-stream in the Kidneys. II. New Concepts on Renal Osmotic Regulation, by P.G.A.B. Wijdeveld.
DUTCH, per, Nederl T Geneesk, Vol 108, No 23, 1964, pp 1133-1137.
HEW NIH 2-12-66

The XXXY Syndrome, by J. J. Van Went.
DUTCH, per, Nederl T Geneesk, Vol 109, No 54, 1965, pp 1563-1569.
HEW NIH 2-20-66

Clinical Report: Two Cases of Carl Smith's Disease in Ruanda-Urundi, by H. Baudon.
FRENCH, per, Ann Soc Belg Med Trop, Vol 42, No 1, 1962, pp 133-136.
HEW NIH 2-6-66

Therapeutic Effects of Rifochromomycin (S278 RP) on Malignant Blood Diseases, by C. Jacquillat, et al.
FRENCH, per, Presse Med, Vol 73, No 35, 1965, pp 2003-2006.
HEW NIH 2-10-66

Breeding Diseases in Valuable Fur-bearing Mammals, by Richter.
GERMAN, per, Deutsche Tierarztliche Wochenschrift, No 49, Dec 1931, p 756.
*AEC
ELC 1 Jun 1966

Parasitic Breeding Diseases in Fur-bearing Mammals and Their Control, by C. Sprehn.
GERMAN, per, Deutsche Tierarztliche Wochenschrift, No 49, Dec 1931, pp 756-758.
*AEC
ELC 1 Jun 1966

Electrocardiography, by H. C. Burger.
GERMAN, rpt, De Elektrische Werking van Het Hart, Lectures, 1962-1963, 147 pp.
NASA TT F-9772

Scientific
Biological & Medical Sciences (Contd)

Hypersegmentation of Neutrophil Granulocytes as a Concomitant Symptom of Acute Infectious Lymphocytosis, by J. T. Todorow.
GERMAN, per, Folia Hematologica, Vol 77, 1960, pp 495-501.
HEW NIH 2-23-66

Modification of the Performance Ability of Infants aged 5 Months in Relation to a Period of Sleeping and Eating, by J. Koch.
GERMAN, rpt, IN Heckhausen, Heinz, ed. Bericht über den 24. Kongress der Deutschen Gesellschaft für Psychologie. Göttingen, 1965, pp 145-154.
HEW NIH 2-16-66

Some Anatomical Data of Fur-bearing Mammals, by R. Nesen.
GERMAN, per, Prager Tierärztliches, No 15, 1935, pp 211-215.
*AEC
ELC 1 Jun 1966

Clinical Pathophysiology of the Urine Concentration, by E. Buchhorn.
GERMAN, per, Schweizerische Medizinische Wochenschrift, Vol 94, No 37, 1962, pp 1273-1282.
HEW NIH 2-14-66

The Theory of Pulse Waves, by O. Frank.
GERMAN, per Z. Biol., Vol 85, 1927, pp 91-130.
*NASA TT F-10,010

Submicroscopic Studies of Normal and Degenerated Menisci, by G. Dahmen.
GERMAN, per, Z Orthop, Vol 96, No 1, 1962, pp 7-27.
HEW NIH 2-19-66

Sublight Microscopic Studies on Healthy and Degenerated Tendons, by H. J. Hohlring.
GERMAN, per, Z. Orthop, Vol 97, No 3, 1963, pp 359-353.
HEW NIH 2-9-66

Scientific
Biological & Medical Sciences (Contd)

Familial Outbreak of Acute Infectious Lymphocytosis, Problems of its Diagnosis, by E. Sanchez Villares, et al.
ITALIAN, per, Acta Pediat Esp, Vol 20, 1962, pp 26-36.
HEW NIH 2-7-66

Congenital Aplasia of the Skin (Description of a Case in an Incestuous Product), by F. Rilke, et al.
ITALIAN, per, Folia Hered Path, Vol 14, No 1, 1964, pp 35-47.
HEW NIH 2-3-66

The Humoral Picture in Eye Diseases Based on Vrtteriosclerosis, by A. Vannini.
ITALIAN, per, Rass Ital Ottal, No 7/8, 1962, pp 1-35.
HEW NIH 2-11-66

Clinical and Humoral Evaluation of the Vascular System in Persons With Simple Chronic and Irritative Glaucoma, by A. Vannini, et al.
ITALIAN, per, Rass Ital Ottal No 11/12, 1960, pp 1-40.
HEW NIH 2-5-66

Acute Infectious Lymphocytosis, by R. Pagnozzi.
ITALIAN, per, Rassegna Internazionale Clinica i Terapia, Vol 40, No 16, 1960, pp 955-961.
HEW NIH 2-4-66

The Inhibitory Effect of HeLa Cell Cultures on the Hemagglutinating Ability of the Coxsackie B₅ Virus, by S. Pauluzzi.
ITALIAN, per, Riv Ist Sieroter Ital, Vol 40, 1965, pp 73-81.
HEW NIH 2-21-66

Behavior of the Right Intraventricular Conduction in Man Under Acute Anoxic Anoxia, by E. Busnengo, G. Meineri.
ITALIAN, per, Riv Med Aeron e Sp, Vol XXVII, No 4, 1964, pp 498-504.
NASA TT F-9782

Studies of Plastics for Medical Use. 8. Plastic Blood Bags, by M. Fujii, et al.
JAPANESE, per, Eisei Shikenjo Hokoku, No 82, 1964, pp 90-92.
HEW NIH 2-2-66

Scientific
Biological & Medical Sciences (Contd)

Study of Food for use by Troops, by Ahira Hiyoshi.
JAPANESE, per, GIHO(Technical Report of TRDI), No. 138, May 1965, pp 103-110.
*ACSI
I-9668
ID 2852025965

Passive Transfer of Immunity to Tuberculosis by means of Cells From BCG Vaccinated Mice. 2. Effects of Various Treatments of Cells to be Transferred, by G. Asaba, et al.
JAPANESE, per, Kekkaku, Vol 39, 1964, pp 95-99.
HEW NIH 2-13-66

Anodyne Research. Part 2. Method of Determining Sedative Effect in Hot-water Shock, by G. Hayashi.
JAPANESE, per, Nitsiyaku Risshi, Vol 59, 1963, pp 253-263.
HEW NIH 2-1-66

Experimental Studies on the Relation Between Dental Caries and Enviroment, by Jarzab-Bastowa, G.
POLISH, per, Annales Universitatis Mariae Curie-Sklodowska Lubin-Polonia, Vol XV, No 29, 1960, pp 313-330.
*FTD-HT-66-120

Conception and Research in the Production of Drugs, by Mircea Padureleanu, 7 pp.
RUMANIAN, per, Contemporarul, 11 Feb 1966, p. 8.
JPRS 34606

Ministry of Health and Social Welfare Session on Current Tasks in the Field of Health Protection, 18 pp.
RUMANIAN, per, Muncitorul sanitar, No 4, 29 Jan 1966, pp. 2-3.
JPRS 34674

Malaria Research in Rumania, by Mihai Ciuca, 5 pp.
RUMANIAN, np, Muncitorul Sanitar, 5 Feb 1966, pp. 1, 2.
JPRS 34432

**Scientific
Biological & Medical Sciences (Contd)**

Achievements and Long-Range Measures in the Field of Animal Husbandry, by E. Balomiri, 8 pp.

RUMANIAN, per, Revista de Zootehnie si Medicina Veterinara, No 1, Jan 1966, pp. 5-10.
JPRS 34956

Recruitment and Training of Young Scientists -- Roundtable Organized by G. Cuiibus and T. Cazacu, 7 pp.

RUMANIAN, np, Scinteia, 12 Mar 1966, p. 3.
JPRS 34843

Acute Infectious Lymphocytosis, by A. L. Cohen.

SPANISH, per, Arch Argent Pediat, Vol 55, 1961, pp 269-272.
HEW NIH 2-17-66

Panorama of Cuban Academy of Sciences, by Raimundo Rodriguez, 6 pp.

SPANISH, np, Juventud Rebelde, 28 Dec 1965, pp. 8 and 9.
JPRS 34406

Oncology in Cuba, by Zoilo Marinello, 6 pp.
SPANISH, np, Revista Cubana de Cirugia, Vol IV, No 3, 30 June 1965, pp. 257-262.
JPRS 34671

Summary of Cuban Medical Research Projects, 13 pp.

SPANISH, per, Revista Cubana de Medicina, Vol 4, No 3, 30 June 1965, p. 257, 263, 265, 280, 282, 301-302, 304, 311, 313, 325, 326, 337, 345-349
JPRS 34671

Significance of Body Weight and Body Length at Birth, by J. A. Abolins.

SWEDISH, per, Svensk Lakartidn, Vol 58, 1961, pp 2096-2108.
HEW NIH 2-15-66

Development Trends of Pharmaceutical Branches, by Vu Cong Thuyet, 8 pp.

VIETNAMESE, per, Duoc hoc, No 36, Jan 1966, pp. 2-7.
JPRS 34757

**Scientific
Biological & Medical Sciences (Contd)**

The Problem of Maximal Utilization of the Mucous Membrane of the Pyriform Sinus in Extended Pharyngo-Laryngectomy, by Tran Huu Tuoc and Le Van Bich, 6 pp.

VIETNAMESE, per, Tin tuc Hoat dong Khoa hoc, 1965, pp. 10-12.
JPRS 34528

Begin the 1966 Plan with a New Atmosphere of Determination, by Nguyen Duy Cuong, 6 pp.

VIETNAMESE, per, Y-hoc Thuc hanh, Jan 1966, pp. 1-3.
JPRS 34757

Chronic Bronchitis in Vietnam, by Pham Ngoc Thach and Nguyen Din Huong, 6 pp.

VIETNAMESE, per, Y-hoc thuc hanh, Jan 1966, pp. 4-6.
JPRS 34757

Silicate Dust Infections in Vietnam, by Pham Khac Quang, Nguyen Nang Ky, Trinh Xuan Tung, Nguyen Dinh Huong, and Nguyen Dai Bang, 8 pp.

VIETNAMESE, per, Y-hoc thuc hanh, Jan 1966, pp. 6-8.
JPRS 34757

Progressive Bronchial Carcinoma, by Pham Khac Quang, Nguyen Nang Ky, and Nguyen Dai Bang, 9 pp.

VIETNAMESE, per, Y-hoc thuc hanh, Jan 1966, pp. 9-11.
JPRS 34757

Preliminary Findings on Wounds Caused by American Bombs, by Tran Van Quy, 6 pp.

VIETNAMESE, per, Y hoc thuc hanh, Jan 1966, pp. 21-23.
JPRS 34757

Mitotic Activity and DNA Synthesis in Colonies Developed from Mammalian Cells Irradiated With X-rays During Culture, by G. Marin.

LANGUAGE UNKNOWN, per, Caryologia, Vol 17, No 5, 1964, pp 481-493.
*AEC Tr 2372

Scientific
Chemistry

Synthesis of Adenylyl-(5' N)-Amino Acids (Peptides), by Means of the Carbodiimide Method, by T. S. Ryabova, et al. RUSSIAN, per, Biokhimiya, Vol XXX, No 2, 1965, pp 235-240.
NASA TT F-9791

An Application of the Method of Isotope Exchange to the Study of the Structure of Aquapoly and Heteropoly Compounds, by V. I. Spitsyn, E. A. Torchenkova. RUSSIAN, per, Dok Ak Nauk SSSR, Vol XCIV, 1954, pp 289-292. 9232302
AEC-IS-Tr-29

Effect of High Doses of Gamma Rays of Co⁶⁰ on Potato Starch, by S. E. Traubenberg, et al, 5 p.
RUSSIAN, per, Izv Vuz Pishchevaya Tekhnologiya, No 6, 1965, pp 24-28.
*ACSI I-9658
ID 22040221-66

Investigation of Ultrasonic Atomizers of Liquids and Melts, by V. P. Popov, G. K. Goncharenko, 9 pp.
RUSSIAN, per, Khimicheskaya Promyshlennost' No 6, 1964, pp 442-445. 9699353
FTD-TT-65-1445

The Influence of the Addition of Cadmium on the Speed of the Thermometrical and Radiochemical Decomposition of Silver Carbonate, by Yu. A. Zakharov. RUSSIAN, per, Kinetika i Kataliz, Vol 2, No 3, 1966, pp 2-15.
*NASA TT F-10,020

Dissolution Heat of Plutonium in Hydrochloric Acid, by V. V. Akhachinskii. RUSSIAN, rpt, O Teplote Rastvoreniya Plutoniya v Solyanoi Kislote, July 22-27, 1965.
*AEC
EDC May 1, 1966

Scientific
Chemistry (Contd)

Organotin Polymers, by M. F. Shostakovskii, S. P. Kalinina. RUSSIAN, rpt, Proceedings of the International Symposium on Macromolecular Chemistry, Sect. 1, 1960, pp 160-166.
*AEC
EDC April 19, 1966

Preface and Table of Contents of Sudebnaya Khimiya (Forensic Chemistry), by M. D. Shvaykova, 11 pp.
RUSSIAN, bk, Sudebnaya Khimiya (Khimiko-Toksikologicheskii Analiz), 1965, pp. 3-4, 287-290.
JPRS 34853

Calculation of Thermodynamic Properties of Potassium at Temperatures of up to 1300°C and Pressures of up to 25 kg/sm², by M. P. Vukalovich. RUSSIAN, per, Teplotnergetika, Vol 9, No 10, 1962, pp 65-72.
NASA TT F-9862

Evaluation of the Effectiveness of a Series of Antioxidants for Rubbers by the NMR Method, by L. P. Zalukayev. RUSSIAN, per, Vedomosti Verkhovnogo Soveta SSSR, No 8, 1965, p 87.
*FTD-HT-66-201

**Scientific
Chemistry (Contd)**

Some Fundamental Problems in Crystall
Chemistry and Their Use in Mineralogy,
by A. S. Povarennykh, 48 p.
RUSSIAN, per, Zapiski Vsesoyuznogo Min-
eralogicheskogo Obshchestva, Vol LXXXIV,
No 4, 1955, pp 470-492. 9699378/15006 #12
RSIC-507

Isotope Exchange of Oxygen in the Systems
 WO_3 -- O_2 and Na_2WO_4 -- O_2 , by V. G. Finikov.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXVIII, 1964,
pp 542-546. 9232287
AEC-IS-Tr-27

Selection of the Conditions of Chromatog-
raphic Analysis of Gas Mixtures Containing
 CO_2 , C_2H_6 , O_2 , H_2 , N_2 , CO , Cl_4 , and C_2H_6 ,
by N. S. Torocheshnikov.
RUSSIAN, per, Zh. Prikl. Khim., Vol 38,
No 9, 1965, pp 2017-2026.
NASA TT F-9875

Chemical-kinetic Basis for Differentiation
of Secondary and Priming Explosives, by
K. K. Andreyev, M. S. Plyasunov.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimi-
cheskogo Obshchestva imeni D. I. Mendeleyeva.
Vol 8, No 8, 1963, pp 586-587. 9231168
NASA TT F-418

Biochemistry of Poisons of Marine Animals,
by F. Ghiretti, 12 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimi-
cheskogo Obshchestva imeni Mendeleyeva,
Vol 10, No 6, 1965, pp. 694-699.
JPRS 34480

Catalytic System of Metals-Transition Metal
Halides for the Polymerization of α -Olefins,
by Chu Chung-huang (2612 0022 3552), 15 pp.
CHINESE, per, Hua-hsueh Tung-pao, No 11,
1965, pp. 22-27.
JPRS 34492

Chemistry of Carbodiimides, by Lu Te-chang
(7120 1779 3361), 23 pp.
CHINESE, per, Hua-hsueh Tung-pao, No 11,
1965, pp. 27-35.
JPRS 34492

**Scientific
Chemistry (Contd)**

Address Delivered at the Opening Ceremony
of the Polyvinyl Chloride Meeting of Chinese
Chemical Society and Chinese Chemical Engi-
neering Society, by Hou Te-pang (0186 1795
2831), 6 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 12,
Dec 1965, pp. 1-3.
JPRS 34696

A New Cathode Material Lanthanum Hexaboride,
by Hsu Hsiao-pai (1776 2556 4101) 19 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 12,
Dec 1966, pp. 34-39.
JPRS 34696

Progress in the Study of Photosensitive
Polymers, by Ts'ai Po-ju (5591 0590 0320),
6 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 12,
Dec 1965, pp. 40-42, 19.
JPRS 34696

Method of Microdetermination and Microanaly-
sis of Boron in a Solution or a Vegetable
Tissue by Neutron Activation and Microscopy
of Autoradiograms, by A. Garin.
FRENCH, per, Bull Microscop. Appl., Vol II,
No 8, 1958, pp 129-148. 9232089
AEC-BNL-Tr-57

Chemical Processing of Irradiated Nuclear
Fuels, "Dry" Processes, by P. Faugeras.
FRENCH, per, Energie Nucleaire, Vol VII,
No 4, 1965, pp 214-227. 9232125
AEC-ORNL-Tr-899

Scientific
Chemistry (Contd)

Effect of Solid-State Body Properties
Upon the Calculation of Doppler Coefficients,
by R. Froelich and K. Ott, 11 p.

GERMAN, rpt, Einfluss von Festkörpereigen-
schaften auf die Berechnung des Dopplerko-
effizienten, March 1965, pp 1-7.

*AEC

EDC May 1, 1966

Solvent Sensitized Radiation Chemistry
Reactions. I. Rearrangements of Conjugated,
Unsaturated Steroidal Ketones,

by J. Hoigne, K. Schaffner, et al.
GERMAN, per, Helvetica Chimica Acta, Vol
XLVIII, No 3, 1965, pp 527-538. 9232096
AEC-NP-Tr-1349

"Study of Al, Ni, and Cu Carbides,"

by E. Briner and R. Singlet.
FRENCH, per, J. Chim. Phys, No 13,
1915, pp 351-375.

*AEC ORNL-TR-1193

EDC April 30, 1966

Synthesis of Conjugated Imidazoles,

by G. Drefahl and Schmermer, W.
GERMAN, per, Journal für Praktische
Chemie, Vol XXIII, No 5-6, 1964,
pp 225-233.

*FTD-HT-66-133

Scientific
Chemistry (Contd)

Rapid Determination of Nitrogen in Steel
by the Melting Extraction Procedure in a
Carrier Gas Stream, by Helmut Lemm.

GERMAN, per, Z Analytische Chem, Vol CCIX,
No 1, 1965, pp 114-119. 9232276
AEC-IS-Tr-25

Activation-Analytical Determination of very
low Iridium Contents in Uranium Oxide,

by H. Ruf and A. von Baeckmann.
GERMAN, per, Z. Anal. Chem, Vol 215, 1966,
pp 176-181.

*AEC

EDC May 1, 1966

Rapid Extraction by a Quasi-Solid
Extraction Medium, by Richard Denig.

GERMAN, per, Z. Anal. Chem, Vol 216, No 1,
1966, pp 41-50.

*AEC ORNL-TR-1182

EDC April 4, 1966

Chemistry of Condensed Phosphates and Arse-
nates. XXXVII on Sodium Meta- and Poly-
arsenatophosphates and the Different Distri-
bution of Arsenic in the Chains in Glass and
Crystal, by Karl-Heinz Jost.

GERMAN, per, Z fuer Anorg u Allgem Chem,
Vol CCCXXV, 1963, pp 98-112. 9232289
AEC-ORNL-Tr-967

The Peptization of Solid Thorium Oxide,
by V. Kohlschutter, A. Frey.

GERMAN, per, Z für Elektrochemie, Vol XXII,
9, 10 May 1916, pp 145-161. 9232294

AEC-UCRL-Tr-1301-L

On the Radiolysis of Liquid Ammonia,

by L. Kolditz.
GERMAN, per, Z für Physikalische Chemie,
Vol CCKVIII, 1961, pp 108-140. 9232274
AEC-NP-Tr-1351

Scientific
Chemistry (Contd)

Concerning the Hydrolysis of UO_2^{+2} in Dilute Solutions, by M. Bartusek.
GERMAN, per, Z Phys Chem, Vol CCVI, 1964, pp 309-332. 9232291
AEC-ORNL-Tr-1079

Dimethylsulfoxide, an Aquo-Mimetic Solvent, by L. Marson, 36 p.
ITALIAN, per, Bolletino Chimico Farmaceutico, Vol CII, 1963, pp 109-124.
Dept of Comm
Patent Office

Liquid Sodium Technology and Problems of Fast Breeder Reactor Development, by K. Furukawa.
JAPANESE, per, Genshiryoku Kogyo, Vol 11, No 10, 1965, pp 31-37; No 11, 1965, pp 55-60; No 12, 1965, pp 55-61.
*AEC Tr 2370

Studies of the Adsorption of Iodine on Activated Carbon. II. Potentiometric Studies at Different Temperatures, by Helena Jankowska.
POLISH, per, Przemysl Chemiczny, Vol XLIV, No 5, 1965, pp 235-239. 9232205
AEC-ORNL-Tr-1018

Earth Sciences & Astronomy

Infrared Spectrophotometry of the Moon and the Galilean Satellites of Jupiter, by V. I. Moroz.
RUSSIAN, per, Astron. Zh, Vol 42, No 6, 1965, pp 1287-1295.
NASA TT F-10,025

Scientific
Earth Sciences & Astronomy (Contd)

Subsurface Drainage into the Caspian Sea and the Bottom and Shore Seepage of its Water, by Kh. K. Ulanov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol LXII, No 1, 1965, pp 166-168. 9232103
AEC-UCRL Tr 1297 (L)

The Shape and Motion of the Moon, by A. A. Yakovkin.
RUSSIAN, bk, Figura i Dvizheniye Luny, 1965, pp 5-137.
*JPRS/DC-12230

The Nature of the Novotsaritsynskaya Gravity Anomaly in the Lowlands of Crimea, According to the Data From the Seismic Tests, by V. B. Sollogubov. 133 pp.
RUSSIAN, per, Geofizicheskiye Issledovaniya Stroyeniya Zemnoy Kory, No 8(10), pp 3-12. 1964.
*ACIC TC-999-A

The Deep-seated Structure of the Earth's Crust in Crimea and in the Black Sea - Sea of Azov Basin, According to the Data of the Geophysical Explorations, by T. S. Lebedev. 133 pp.
RUSSIAN, per, Geofizicheskiye Issledovaniya Stroyeniya Zemnoy Kory, No 8(10), 1964, pp 18-26.
*ACIC TC-999-B

Some Data on Geophysical Structure of the Northwestern Part of the Black Sea, by I. A. Garkalenko. 133 pp.
RUSSIAN, per, Geofizicheskiye Issledovaniya Stroyeniya Zemnoy Kory, No 8(10), 1964, pp 44-48.
*ACIC TC-999-C

Scientific
Earth Sciences & Astronomy (Contd)

On the Organization of the Ukrainian Inter-Departmental Stratigraphic Committee, by L. Ya. Saydakova'kyy, 6 pp.
UKRAINIAN, per, Geolohichnyy Zhurnal, Vol XXV, No 5, 1965, pp. 124-126.
JPRS 34885

Unique Photo Taken of the Moon in Earthshine with the Zenith-S Camera, RUSSIAN, np, Izvestiya, 3 June, 1964, pp 4.
*FTD-HT-66-119

Isotope Equilibrium and Geological Problems, by A. P. Vinogradov, 16 pp.
RUSSIAN, per, Izvestiya AN SSSR, Seriya Geologicheskaya, No 1, Jan 1966, pp. 7-16.
JPRS 34535

Field Session of the Department of Earth Sciences Academy of Sciences USSR in the Far East, by Ya. G. Ter-Oganesov, M. A. Favor'skaya, Ye. K. Ustiyev and G. I. Reysner, 20 pp.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, No 1, Jan 1966, pp. 155-164.
JPRS 34535

The Lake Vyg Reservoir, by A. F. Smirnov, 12 p.
RUSSIAN, per, Izvestiya Gosudarstvennogo Nauchno-Issledovatel'skogo Instituta Ozernogo i Rechnogo Rybnogo Khoz'yaistva, Vol L, No 1, 1961, pp 7-18.
*CFSTI TT-66-51056

The Tsimlyansk Reservoir, by I. I. Lapitskiy, 17 p.
RUSSIAN, per, Iz Gosudarstvennogo Nauchno-Issledovatel'skogo Instituta Ozernogo i Rechnogo Rybnogo Khoz'yaistva, Vol L, No 2, 1961, pp 102-118.
*CFSTI TT 66-51056

Scientific
Earth Sciences & Astronomy (Contd)

The Dneprodzerzhinsk Reservoir, by D. B. Makeyev, 13 p.
RUSSIAN, per, Izvestiya Gosudarstvennogo Nauchno-Issledovatel'skogo Instituta Ozernogo i Rechnogo Rybnogo Khoz'yaistva, Vol L, No 3, 1961, pp 119-131.
*CFSTI TT 66-51056

The Dnepr Reservoir, by V. A. Kononov and N. S. Menyuk, et al, 15 p.
RUSSIAN, per, Izvestiya Gosudarstvennogo Nauchno-Issledovatel'skogo Instituta Ozernogo i Rechnogo Rybnogo Khoz'yaistva, Vol L, No 4, 1961, pp 132-146.
*CFSTI TT 66-51056

The Kakhovsk Reservoir, by H. E. Sal'nikov, 20 p.
RUSSIAN, per, Izvestiya Gosudarstvennogo Nauchno-Issledovatel'skogo Instituta Ozernogo i Rechnogo Rybnogo Khoz'yaistva, Vol L, No 5 1961, pp 147-166.
*CFSTI TT 66-51056

The Veselovsk Reservoir, by V. M. Kruglova and E. A. Berval'd, 16 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozernogo i Rechnogo Rybnogo Khoz, Vol L, No 6, 1961, pp 167-182.
*CFSTI TT 66-51056

The Novosibirsk Reservoir, by A. N. Petkevich, 16 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozernogo i Rechnogo Rybnogo Khoz, Vol L, No 7, 1961, pp 197-212.
*CFSTI TT 66-51056

The Kattakurgansk Reservoir, by N. A. Stepanova, 14 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozernogo i Rechnogo Rybnogo Khoz, Vol L, No 8, 1961, pp 234-247.
*CFSTI TT 66-51056

The Farkhad Reservoir, by V. E. Ozhegova and V. A. Maksunov, 13 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozernogo i Rechnogo Rybnogo Khoz, Vol L, No 9, 1961, pp 248-260.
*CFSTI TT 66-51056

**Scientific
Earth Sciences & Astronomy (Contd)**

Basic Information on USSR Reservoirs Now Existing, Being Built and Being Designed, by A. P. Antipova, 9 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozerogo i Rechnogo Rybnogo Khoz.
Vol L, No 10, 1961, pp 261-269.
*CFSTI TT 66-51056

Experience in the Biohydrochemical Classification of Reservoirs of the European Part of the USSR, by I. V. Baranov, 44 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozerogo i Rechnogo Rybnogo Khoz.
Vol L, No 11, 1961, pp 279-322.
*CFSTI TT 66-51056

Formation of Bottom Fauna in USSR Reservoirs and Experience in Their Classification, by Ts. I Ioffe, 41 p.
RUSSIAN, per, Iz Gosud Nauchno-Issled Inst Ozerogo i Rechnogo Rybnogo Khoz.
Vol L, No 12, 1961, pp 341-381.
*CFSTI TT 66-51056

Characteristics of Atmospheric Circulation in the "Prewinter" Natural Synoptic Season, by S. T. Pagava, 11 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 3-9.
JPRS 34465

Effect of Solar Activity on Temperature and Circulation Changes in the Stratosphere, by Kh. P. Pogosyan and A. A. Pavlovskaya, 12 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, Jan 1966, pp. 10-17.
JPRS 34465

Atmospheric Density Variations at Heights of 25-80 km, by V. G. Vidiyarova, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 18-23.
JPRS 34465

**Scientific
Earth Sciences & Astronomy (Contd)**

Anomalies of Heat Balance Terms of the Ocean, by M. I. Budyko, R. L. Kagan and L. A. Strokina, 7 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 24-28.
JPRS 34465

Air Currents Near the Equator and Air Exchange between Hemispheres in 1963-1964, by Yu. S. Petrovskiy, 13 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 29-35.
JPRS 34465

Interaction between the Upper and Lower Atmospheric Layers, by L. R. Rakipova, 5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 35-37.
JPRS 34465

Relationship between Outgoing Thermal Radiation and the Mean Temperature Field of the Troposphere and Lower Stratosphere, by K. Ya. Kondrat'yev, 7 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 48-51.
JPRS 34465

Review of the Book Meteorologiya i Klimatologiya dlya Geograficheskikh Fakul'tetov (Meteorology and Climatology for Geographical Faculties) by S. P. Khromov, State Publishing House for Hydrometeorological Literature, Leningrad, 1964, 5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 57-58.
JPRS 34465

Books to be Published by the State Publishing House for Hydrometeorological Literature in 1966, by A. N. Mikhaylov, 8 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 59-61.
JPRS 34465

New Soviet books on Hydrometeorology, 5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 1, 1966, pp. 62-63.
JPRS 34465

Scientific
Earth Sciences & Astronomy (Contd)

The Economic Usefulness of Forecasts,
by N. A. Bagrov, 14 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 3-12.
JPRS 34716

Low Water in 1965 on the Rivers of Central
Asia and Some Problems Involved in the Fore-
casting of the Runoff of Mountain Rivers,
by Ye. G. Popov and V. N. Parshin, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 13-18.
JPRS 34536

Computation of the Vertical Turbulent
Exchange Coefficients of Heat in Seas and
Reservoirs, by Ye. P. Anisimova and A. A.
Pivovarov, 10 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 33-38.
JPRS 34716

Operational Features of the M-47 and M-49
Meteorological Stations, by K. I. Zarubin,
5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 48-49.
JPRS 34716

Literature on Meteorology and Hydrology
for 1965, 11 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 52-55.
JPRS 34716

Conferences on Meteorology and Hydrology,
5 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya,
No 2, 1966, pp. 59-61.
JPRS 34716

Translations from the Russian Periodical
Meteorologiya i Gidrologiya, No 3,
March 1966, pp 10-17; 26-44; 49-55;
58-62; 64-68.
*JPRS/NY-13217

Scientific
Earth Sciences & Astronomy (Contd)

Numerical Methods for Solving Weat-
her-Forecasting and Climate-Theory
Problems, Part 1, by G. I. Marchuk.
RUSSIAN, per, Novosibirsk, Redakt-
sionno-Izdatel'skii Otdel Sibirskogo
Otdelenia Akademii Nauk SSSR, 1965,
101 p. 9699916-V
AFCRL T-R-520

Isotropization of Cosmic Rays,
by V. N. Tsytovich,
RUSSIAN, rpt, Ob Isotropizatsii
Kosmicheskikh Luchey, 1965.
NASA TT F-9779

Translations from the Russian Periodical
Okeanologiya, Vol VI, No 1, Jan 1966,
pp 53-61; 159-161; 172-175; 161-164.
*JPRS/DC-12229

A Study of the Main Regularities in
the Water Structure of the World
Ocean, by V. N. Stepanov.
RUSSIAN, per, Okeanologicheskiye Iss-
ledovaniya, No 13, 1965, pp 9-16.
*Dept of Navy/NOO TR-286

Spectral Method in the Investigation
of Internal Waves, by N.T. Glinskiy.
RUSSIAN, per, Okeanologicheskiye Iss-
ledovaniya, No 13, 1965, pp 24-36.
*Dept of Navy/NOO Tr-287

Basic Features of Water Structure in
the North Pacific Ocean, by M.A. Rad-
zikhovskaya.
RUSSIAN, per, Okeanologicheskiye Iss-
ledovaniya, No 13, 1965, pp 41-46.
*Dept of Navy / NOO TR-288

Characteristics of the Distribution
of Water Temperature and Salinity in
the North Pacific Ocean, by S.G. Pan-
filova.
RUSSIAN, per, Okeanologicheskiye Iss-
ledovaniya, No 13, 1965, pp 47-54.
*Dept of Navy/NOO TR-289

Scientific
Earth Sciences & Astronomy (Contd)

Areas of North Pacific Ocean with Uniform Corrections for Sound Velocity, by V.V. Aratskaya.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 55-60.
*Dept of Navy/NOO TR-290

Water Circulation in the Bering Sea, by V. S. Arsen'yev.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 61-65.
*Dept of Navy/NOO TR-291

The Extreme Winter Boundary of Ice in Far Eastern Seas, by N. P. Bulgakov.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 66-76.
*Dept of Navy/NOO TR-292

Discovery of a Deep Countercurrent at the Equator in Atlantic Ocean on Research Vessel Mikhail Lomonosov, by G. P. Ponomarenko.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 77-82.
*Dept of Navy/NOO TR-293

Calculation of Transport and Temperature Changes in the Upper Water Layer of North Atlantic Ocean, by L. A. Zhukov.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 82-89.
*Dept of Navy/NOO TR-294

Properties of Hydrological and Hydrochemical Conditions in the South Baltic During IGY, by A. Ye. Antonov and O. S. Rudneva.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 90-95.
*Dept of Navy/NOO TR-295

Investigation of Water Layer with Oxygen Minimum in the North Atlantic Ocean in the Autumn of 1959, by B. A. Skopintsev.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 108-114.
*Dept of Navy/NOO TR-296

Scientific
Earth Sciences & Astronomy (Contd)

Formation of Primary Production in Antarctic Water, by B.V. Volkovinskiy and M.V. Fedosov.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 115-122.
*Dept of Navy/NOO TR-297

Biographical Zoning of the Upper Pelagic Layers of Pacific Ocean and Its Dependence on Currents and Distribution of Water Masses, by K. V. Beklemishev.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 123-127.
*Dept of Navy/NOO TR-298

The Thickness of the Sediment Layer and the Structure of the Earth's Crust in Seas and Oceans According to the Results of Sesmo-Acoustic Investigations, by G. V. Udintsev and V. M. Neprochnov, et al.
RUSSIAN, per, Okeanologicheskkiye Issledovaniya, No 13, 1965, pp 181-188.
*Dept of Navy/NOO TR-301

Timely Problems in Astronomy, by Z. L. Ponzovskiy, 5 pp.
RUSSIAN, per, Priroda, No 12, Dec 1965, pp. 93-95.
JPRS 34678

Scientific
Earth Sciences & Astronomy (Contd)

Program of Activities Under the International Hydrological Decade in the Soviet Union
RUSSIAN, bk, Programma Rabot Po Mezhdunarodnomu Gidrologicheskomu Desyatilet'yu v Sovetskom Soyuze, 1965, pp 5-69.
*JPRS/NY-13218

Brightness Distribution in the Marginal Zone of Mars, by L. A. Bugayenko et al.
RUSSIAN, rpt, Raspredeleniye Yarkosti v Krayevoy Zone Marsa, 1964, pp 54-57.
*NASA TT F-10,018

Correlation Receiver for the Study of Cosmic Radial Radiation at = 21 cm, by N. S. Kardashev, B. M. Chikhachev. 8 pp.
RUSSIAN, per, Soobshch. Gos. Astron. In-Ta Im. P. K. Shternberga, No 126, 1963, pp 66-71, 9699355
FTD-TT-65-1386

The Structure of the Wind-Velocity and Temperature Fields in the Atmospheric Surface Boundary Layer, by A. S. Monin, 24 p.
RUSSIAN, per, Trudy, Akademii Nauk SSSR Institut Fiziki Atmosfery, No 4, 1962, pp 5-20. 9699897
AFCRL T-R-508

Investigation of Thin Samples of Mineral Rock Under Conditions of Shear Due to Torsion and Unidirectional Stress, by M.P. Volarovitch and T. Ya. Gorazdovskii, et al, 16 p.
RUSSIAN, per, Akademiia Nauk SSSR. Institut Geologicheskikh Nauk, Trudy, No 2, 1953, pp 230-236. 9699923
AFCRL G-T-R-65-9

Scientific
Earth Sciences & Astronomy (Contd)

Albedo of the Snow-Ice Cover of the Sea, by A. P. Koptev,
RUSSIAN, per, Trudy Arkticheskii i Antarkticheskii Nauchno-Issledovatel'skiy Institut, No 15, 1964, pp 25-36.
*FTD-HT-66-182

Effects of Chromatic Astronomical Refraction on the Guiding of a Long Focus Telescope, by O. A. Mel'nikov and G. G. Lengauer, et al,
RUSSIAN, per, Trudy Glavnaya Astronomicheskaya Observatoriya, Vol XXIII, No 5, 1964, pp 121-143.
*FTD-HT-66-184

Certain Possibilities of Utilizing Photoelectric and Television Methods for Combating Noise from Atmospheric Turbulence During Astronomical Observations, by N. F. Kuprevich,
RUSSIAN, per, Trudy Glavnaya Astronomicheskaya Observatoriya, Vol XXIII, No 5, 1964, pp 144-154.
*FTD-HT-66-184

Variability of the Astroclimate, by G. I. Bol'shakova and Sh. P. Darchiya,
RUSSIAN, per, Trudy Glavnaya Astronomicheskaya Observatoriya, Vol XXIII, No 5, 1964, pp 155-161.
*FTD-HT-66-184

Some Timely Problems in the Investigation of Atmospheric Diffusion, by M. Ye. Berlyand, Ye. L. Genikhovich and V. K. Kam'yanovich, 29 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 3-22.
JPRS 34719

Scientific
Earth Sciences & Astronomy (Contd)

Analysis of the Heavy-Contaminant Concentration Field from Data of Experiments on a 300-m Meteorological Tower, by N. L. Byzova and R. I. Onikul, 9 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 35-41.
JPRS 34719

Effect of Topography on the Meteorological Characteristics of the Surface Boundary Layer, by I. I. Solomatina, 15 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 58-69.
JPRS 34719

Influence of Reservoirs on Atmospheric Diffusion, by V. P. Lozhkina, 6 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 70-73.
JPRS 34719

Synoptic Conditions for the Formation of Inversions in the Lower 500-Meter Layer, by L. R. Son'kin, 10 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 79-85.
JPRS 34719

Inertial Mechanism of Settling of Large Aerosols on Vegetation on Earth, by V. F. Dunskiy, 12 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 183-191.
JPRS 34719

Settling of a Large Aerosol from the Surface Layer of the Atmosphere Onto the Underlying Surface of the Earth, by V. F. Dunskiy, I. F. Yevdokimov, V. M. Krasil'nikov, K. P. Mikulin and Z. M. Yuzhnyy, 17 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 192-204.
JPRS 34719

Interim Method for Computing the Atmospheric Scattering of Wastes (Sols and Sulfide Gases) from the Stacks of Electric Power Stations, 11 pp.
RUSSIAN, per, Trudy Glavnoy Geofizicheskoy Observatorii, No 172, 1965, pp. 205-212.
JPRS 34719

scientific
Earth Sciences & Astronomy (Contd)

Distribution of Water Content in Cu cong Modified to Produce Precipitation, by F. Ia. Voit, 12 p.
RUSSIAN, per, Trudy, Kiev. Ukrainskiy Nauchno-Issledovatel'skiy Gidrologicheskii Institut, No 47, 1965, pp 59-64.
9699919
AFCRL T-R-525

Non-Stationary Turbulent Regime in the Surface Layer of the Atmosphere, by S. S. Zilitinkevich, 18 p.
RUSSIAN, per, Trudy, Leningrad. Glavnaya Geofizicheskaya Observatoriya, No 127, 1962, pp 3-13. 9699895
AFCRL T-R-487

Special Features of the Radar Characteristics of Thunderstorm Clouds, by S. B. Gashina and E. M. Sal'man, 14 p.
RUSSIAN, per, Trudy, Leningrad. Glavnaya Geofizicheskaya Observatoriya, No 173, 1965, pp 19-25. 9699918
AFCRL T-R-535

Density Variations in the Free Atmosphere over Some Regions of the Northern Hemisphere, by L. M. Krylova and O. B. Mertsalova, 19 pp.
RUSSIAN, per, Trudy Nauchno-Issledovatel'skiy Institut Aeroklimatologii, No 30, 1965, pp. 119-132.
JPRS 34614

The Coordinate-Doppler Method of Wind Observation, by A. G. Gorelik, V. V. Kostarev, et al, 7 p.
RUSSIAN, per, Trudy, Tsentral'naya Aerologicheskaya Observatoriia, No 57, 1964, pp 19-23. 9699898
AFCRL T-R-512

Scientific
Earth Sciences & Astronomy (Contd)

Computing the Distribution of Turbulence
in Jet Streams, by T. P. Krupchatnikova and
V. P. Litovchenko, 8 pp.
RUSSIAN, per, Trudy Tsentral'noy Aerologicheskoy
Observatorii, Voprosy Dinamiki Atmosfery, No 63,
1965, pp. 31-36.
JPRS 34809

Principles of Automation of Processing of
Aircraft Meteorological Data, by N. K.
Vinnichenko, N. Z. Pinus, V. I. Chernysh
and G. N. Shur, 11 pp.
RUSSIAN, per, Trudy Tsentral'noy Aerologiche-
skoy Observatorii, Voprosy Dinamiki Atmosfery,
No 63, 1965, pp. 77-84.
JPRS 34809

Landscape and Geochemical Chart Leg-
ends, by A. V. Gedymin.
RUSSIAN, per, Vestnik Moskovskogo Uni-
versiteta, No 4, 1965, pp 88-95.
ACSI Y-9409 C
ID 2204016566

Turbulence in the Surface Layer of a
Stratified Atmosphere, by Su Tsung-
Shian, 19 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXIX, No 2, 1958, pp 73-82. 9700202
AFCRL Emm-65-41

Turbulent Diffusion From a Continuous
Point Source in the Presence of Vert-
ical Advection, by Lo Hsui-Ch'ing, 13 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXXIII, No 3, 1963, pp 375-381.
9700210
AFCRL Emm-65-17

Scientific
Earth Sciences & Astronomy (Contd)

The Effects of Thermal Stratification
on the Turbulent Exchange in a Diabatic
Surface Layer, by Su Tsung-Shian, 28 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXXIII, No 4, 1963, pp 435-448.
9700212
AFCRL Emm-65-42

A Dynamic Analysis of the Development
of Cumulonimbus Incus, by Li Shing-
Sheng and Chao Jih-Ping, et al, 17 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXXIV, No 2, 1964, pp 225-232.
9700198
AFCRL Emm-65-36

A Preliminary Study of the Formation
of Pressure Jumps by a Small Mountain
in a Two-Layer Model, by Chao Jih-Ping
and Chang Kung-Kuan, et al, 18 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXXIV, No 2, 1964, pp 233-241.
9700199
AFCRL Emm-65-37

An Analysis of the Various Factors
in Rain Formation with Respect to
Fluctuation of the Vertical Cir-
culation, by Hsu Hua-ving, 11 p.
CHINESE, per, Ch'i-Hsiang Hsueh-Pao,
Vol XXXIV, No 3, 1964, pp 378-382.
9700206
AFCRL Emm-65-26

Experiences on the Use of 500 Millibar
48-Hour Numerical Forecasting Chart At the
Meteorological Observatory of Central Metro-
logical Bureau, by Shen Ju-kuei (3088 1172
2710) and Mou Wei-feng (3664 1919 0023),
22 pp.
CHINESE, per, Ch'i Hsiang Hsueh-pao, Vol 35,
No 4, Nov 1965, pp. 383-397.
JPRS 34925

A Hot-Wire Wind Tunnel Turbulence Spectral
Analyser, by Ma Chen-hua (7456 2182 7520)
and Li Hui-yun (2621 1920 0061), 9 pp.
CHINESE, per, Ch'i-hsiang Hsueh-pao, Vol 35,
No 4, Nov 1965, pp. 434-438.
JPRS 34594

Scientific
Earth Sciences & Astronomy (Contd)

Survey of Astronomical Climate around Peking and Selection of a Site for the Peking Observatory, 14 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 12, Dec 1965, pp. 1102-1110.
JPRS 34492

Description of the Pei-Liu Group--A New Stratigraphic Unit of the Middle Devonian in Central Southern Kwangsi Province, by Wang Yu (3769 6877), Yu Chang-min (0205 2490 3046), Fang Ta-wei (2455 1129 5898), Liao Wei-hua (1675 5898 5478), Ten Chan-ch'iu (6772 0594 3808), and Chu Jui-fang (2612 3843 5364), 12 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 12, Dec 1965, pp. 1116-1120.
JPRS 34388

Influence of Solar Rotation on the Geomagnetic Field (I), by Hu Yueh-Jen, 9 p.
CHINESE, per, Ti-Ch'iu Wu-Li Hsueh-Pao, Vol VII, No 2, 1958, pp 103-107. 9700211
AFCRL Emm-65-6

Influence of Solar Rotation on the Geomagnetic Field (II), by Hu Yueh-Jen, 15 p.
CHINESE, per, Ti-Ch'iu Wu-Li Hsueh-Pao, No 2, Vol VIII, 1959, pp 123-131.
9700209
AFCRL Emm-65-7

Direct Sounding Studies of the Ionosphere, by Chou Wei, 44 p.
CHINESE, per, Ti-Ch'iu Wu-Li Hsueh-Pao, Vol XII, No 1, 1963, pp 100-117. 9700201
AFCRL Emm-65-28

Scientific
Earth Sciences & Astronomy (Contd)

The Applications of Rayleigh and Love Surface Wave Velocities to Determine the Thickness of China's Earth Crust, by Sung-Chungo-ho.
CHINESE, per, Ti ch'iu wu li hsueh pao, Vol 14, No 1, 1965, pp 33-44.
*ACIC TC-993

The Problems of Irregular Three-Dimensional Density of Surface Separations, by Hsu-yun.
CHINESE, per, Ti Ch'iu wu li hsueh pao, Vol 14, No 1, 1965, pp 55-66.
*ACIC TC-992

The Application of the Conformal Projection to the Conversion of Gravity Magnetic Field Observation Data, by Lei-Lin-yuan.
CHINESE, per, Ti ch'iu wu li hsueh pao, Vol 14, No 3, 1965, pp 67-72.
*ACIC TC-991

On Periodicities of Solar Activity, by Chen, Biao.
CHINESE, per, T'ien Wen Hsueh Pao (Acta Astronomica Sinica), Vol 13, No 1, 1965, pp 89-96.
*FTD-TT-66-115

Primary Problem Concerning the Oblateness of the Shape of the Earth, by Fang, Chun.
CHINESE, per, Ts'e liang chi ti ch'iu wu li chi k'an, No 1, 1965, pp 1-8.
*ACIC TC-996

Comparison of Longitudinal Error and Systematic Error on Hsu-Chia-Hut Observatory and the Hsi-an Basic Astronomical Point, by Han T'ien-Chi.
CHINESE, per, Ts'e liang chi ti ch'iu wu li chi k'an, No 1, 1965, pp 9-11.
*ACIC TC-995

Utilization of Photographic Observation of the Moon to Estimate and Determine Earth Surface's Absolute Coordinates and Deviation, by Chu Yu-Ch'eng.
CHINESE, per, Ts'e liang chi ti ch'iu wu li chi k'an, No 1, 1965, pp 19-34.
*ACIC TC-994

Flood on the Danube River in 1965, by Gustav Zatkalik, 22 pp.
CZECH, per, Vodni Hospodarstvi, No 12, 1965, pp 519-526.
DIA LN 159-66

Scientific
Earth Sciences & Astronomy (Contd)

Monthly Bulletin: Ionospheric Observations.
FRENCH, bk, Bulletin Mensuel: Observations
Ionospheriques, July 1965, pp 3-6.
ACIC TC-986

The Geology of Paraguay, by Hannfrit Putzer,
121 pp.
GERMAN, rpt, 1962, pp 28-150.
DIA LN 152-66

Curvature Effects in Derivations of Undulation
Directions of the Equipotential Surfaces of
the Gravity Potential, by M. Olberg.
GERMAN, per, Gerlands Beitrage Zur Geophysik,
Vol 74, 1965, pp 393-398.
ACIC TC 1002

Textbook of Geodesy, by C. F. Baeschlin.
892 pp.
GERMAN, bk, Lehrbuch der Geodasie, 1948.
*ACIC TC-997

The Scattering Spectrum of the Atmos-
phere, by K. Lenz, 11 p.
GERMAN, rpt, Optik und Spektroskopie
aller Wellenlagen, 1962, pp 623-629.
9699924
AFCL G-T-G-65-15

Design and Construction Subterranean
Space.
GERMAN, per, Stuva Nachrichten, Vol 13,
No 9, 1965.
*AEC ORNL-TR-1149
EDC April 14, 1966

Flood on the Danube River in 1965,
by Pavol Horny, 11 pp.
SLOVAK, per, Vodni Hospodarstvi, No 10,
1965, pp 427-430.
DIA LN 158-66

Scientific
Earth Sciences & Astronomy (Contd)

Complex Geophysical Investigations of the
Abyssal Structure of the Earth's Crust in
the Example of the Caspian Sea Region, by
Y. N. Godin.
SPANISH, rpt, Congresso Geologica Internat-
ional XX Session. Ciudad de Mexico, 1956,
Seccion IX, Geofisica Aplicada, Vol 2, 1958,
pp 237-248.
ACIC TC-998

National Report of Argentina to the 5th
Meeting of the International Gravimetric
Commission. 39 pp.
SPANISH, rpt, International Association of
Geodesy, Paris, Sep 13-18, 1965,
*ACIC TC-1000

Network of Observations With Gravimeter in the
Province of Avila, by Luis Lozano Calvo.
SPANISH, rpt, Red de Observaciones con Gravi-
metro en la Provincia de Avila; Instituto
Geografico y Catastral, 1950, Madrid, pp 3-21
+ 1 chart.
*ACIC TC-1006B

Network of Observations With Gravimeter in
the Province of Navarra, by Luis Lozano Calvo.
SPANISH, rpt, Red de Observaciones con Gravi-
metro en la Provincia de Navarra; Instituto
Geografico y Catastral--Seccion Ia. Servicio de
Gravimetria, 1963, text pp I-VI + tables
pp 1-16.
*ACIC TC-1006A

Contributions to Applied Geodesy, by
E. Baglietto. 51 pp.
SPANISH, rpt, Report Presented at the IX
General Assembly of the Pan-American
Institute of Geography and History and the
X Pan-American Conference on Cartography
Guatemala City, Jun 25-Jul 10, 1965.
*ACIC TC-985

Scientific
Electronics

An Investigation of Transition Effect,
by S. Mikhalyak .
RUSSIAN, rpt, Moscow, 1961. 9232370-V
AEC-ORNL-Tr-677

Measuring Technology Microminiaturization, by
A. I. Il'yenkov and M. P. Tsapenko, 17 pp.
RUSSIAN, per, Avtometriya, No 6, 1965,
pp. 5-18.
JPRS 34957

On the Possibility of Improving Measuring
Circuits by Means of Application of Thin-
Film Resistances, by A. I. Il'yenkov and
M. I. Kudryashov, 11 pp.
RUSSIAN, per, Avtometriya, No 6, 1965,
pp. 19-27.
JPRS 34957

Thin-Film Capacitors and the Possibility of
Their Use in Measuring Equipment, by E. G.
Kostsov and I. P. Mikhaylovskiy, 9 pp.
RUSSIAN, per, Avtometriya, No 6, 1965,
pp. 28-35.
JPRS 34957

Prospects for Application of Thin-Film Diodes
in Measuring Equipment, by M. G. Vinogradov,
S. I. Konyayev, E. G. Kostsov and I. P.
Mikhailovsky, 11 pp.
RUSSIAN, per, Avtometriya, No 6, 1965,
pp. 36-44.
JPRS 34957

On the Prospects of Construction of Measuring
Devices with Thin-Film Triodes, by A. I.
Il'enkov, 8 pp.
RUSSIAN, per, Avtometriya, No 6, 1965,
pp. 45-51.
JPRS 34957

Growth of Electrical Load in Agriculture,
by V. M. Tsvyakh and V. G. Babko, 10 pp.
RUSSIAN, per, Elektrichestvo, No 1,
Jan 1966, pp. 13-16.
JPRS 34913

New 60-Kilowatt Electron Beam Multi-Chamber
Furnace, by S. Schiller et al, 9 pp.
GERMAN, per, Elektris, No 2, Feb 1966,
pp. 60-63.
JPRS 34919

Scientific
Electronics (Contd)

On the Stability of Ultrashort Wave Signals
Along Medium Range Mountain Routes, by E. V.
Zubritskiy, Ye. M. Khomyak, and Ch. Ts.
Tsydygov, 11 pp.
RUSSIAN, per, Elektrosvyaz', No 12, Dec 1965,
pp. 19-26.
JPRS 34690

Analysis of the Noise-Stability of Codes
with Summation in Communications Systems
with Repetition, by M. A. Bykhovskiy, 12 pp.
RUSSIAN, per, Elektrosvyaz', No 1, Jan 1966,
pp. 60-66.
JPRS 34914

Experiment on the Use of Buffer Devices,
by O. Ambaryan, 14 pp.
RUSSIAN, per, Morskoy Flot, No 11,
Nov 1965.
DIA LN 17-66

Scientific
Electronics (Contd)

Radio Wave Propagation, by M. P. Dolukhanov,
28 pp.
RUSSIAN, monograph, Radio 70 Let, 1965,
pp. 169-189.
JPRS 34766

Redesign of the IAE Linear Electron
Accelerator, by N. N. Flerov,
V. P. Lipatov, et al.
RUSSIAN, rpt, Rekonstryktsiya Linsinogo
Uskoritelya Elektronov Instituta Atomnoi
Energii, IAE-614, Moscow, 1964, 24 pp.
*AEC

Electrical Morpheus,
RUSSIAN, per, Savremena Tehnika,
No 8, 1965, pp 294,295.
NASA TT F-9743

A method of Designing Current-Carrying
Wipers for Potentiometers used in Gyroscopic
Instruments, by V. Yu Shishmarev et al.
RUSSIAN, per, Moskovskiy Aviatsionnyy
Tekhnologicheskii Institut, Tekhnologiya I
Konstruirovaniye Giropriborov, Trudy Instituta,
No 59, 1964, pp 138-.
*ACSI
I-9666
ID 22040229-66

Equipment for Radio Printer Communications,
by V. P. Yagodin, 117 pp.
RUSSIAN, bk, Tekhnika Bukvopechatayushchey
Radiosvyazi, 1961, pp. 3-150.
JPRS 34939

The Maximum Range of Radar Detection
Of Showers, by G. B. Brylev, E.M. Sal'-
man, 9 p.
RUSSIAN, per, Trudy, Leningrad, Glavnaya
Geofizicheskaya Observatoriya, No 159.,
1964, pp 35-39. 9699893
AFRL T-R-533

Properties of the Radar Echo in
Sounding of Cu Clouds of Small
Vertical extent, by E. M. Sal'man
and G. B. Brylov, 9 p.
RUSSIAN, per, Trudy, Leningrad Glavnaya
Geofizicheskaya Observatoriya, No 159,
1964, pp 65-69. 9699917
AFRL T-R-527

Scientific
Electronics (Contd)

Synthesis of Flat-Aperture Antennas, by
Ye. G. Zelkin. 7 p.
RUSSIAN, per, Trudy Vsesoyuznyy Simpozium
Po Difraktsii Voln. III, No 3, 24-30 Sep.
1964, pp 137-141. 9699953
FTD-TT-65-1601

The Measurements and Tuning of the Amplitude-
Frequency Characteristics of the Television
Radio Stations TTR-5/2.5 KW, 11 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI, No 1,
1966
JPRS 34768

The Radiation of Multiplexed Wire-Broadcast
Networks, 9 pp.
RUSSIAN, per, Vestnik Svyazi, Vol XXVI,
No 1, 1966
JPRS 34768

On the Reliability of Low-Power Low-
Frequency Transistors Types P13 through P16,
by V. S. Khal'kov, 13 pp.
RUSSIAN, per, Vestnik vsesoyuznogo nauchno-
issledovatel'skogo instituta zheleznodorozhnogo
transporta, No 5, 1965, pp. 45-49.
JPRS 34601

The Water System of Thermal Electro
Station-Regular and Atomic, by
P. A. Akol'zin, V. V. Gerasimov.
RUSSIAN, bk, Vodnyy Rezhim Teplovykh
Elektrostantsiy, 1965, pp 385.
*Dept of Navy/ONI-Trans 2151

Problems of Space Radio Communication,
by N. T. Petrovich, Ye. F. Kamnev.
RUSSIAN, per, Voprosy Kosmicheskoy Radiosvyazi,
1965,
NASA TT F-366

Scientific
Electronics (Contd)

Method for Determining an Active Spot in a Plasmatron Channel, by A. V. Petrov and A. I. Morenov. RUSSIAN, pat, Patent No 166,578. *FTD-TT-66-87

A Random Number Transducer, by I.V. Yermenko and A. N. Sverdlik. RUSSIAN, pat, Patent No 168,545. *FTD-TT-66-90

Method of Electrical Control of the Beam of an Antenna Array, by Mamayev and Korobov, et al. RUSSIAN, pat, Patent No 171,034. *FTD-TT-66-102

Visual Observation of Infrared Laser Emission, by L. S. Vasilenko. RUSSIAN, per, Zh. Eksper. i Teor. Fiz., Vol 48, No 3, 1965, pp 777-778. NASA TT F-9888

A Television Device for the Automatic Recognition of Objects, by A. M. Khalfin. RUSSIAN, Patent Nr.: 164627 *FTD-TT-66-84

Two-mirror Antenna With Automatic Phase Error Compensation, by A. L. Ayzenberg. RUSSIAN, Patent Nr.: 170556 *FTD-TT-66-94

Turbocooler, by G. I. Voronin. RUSSIAN, Patent Nr.: 171006 *FTD-TT-66-100

Piezoelectric Accelerometer, by P. M. Alabuzhev, P. I. Ostromenskiy, et al. RUSSIAN, Patent Nr.: 171676 *FTD-TT-66-106

Scientific
Electronics (Contd)

A New Method for Measuring the Critical Characteristic Curves of Superconductors. by Pu-fun, Chen et al. CHINESE, per, Acta Physica Sinica, Vol 21, No 5, 1965, pp 889-896. NASA TT F-9880

Electrophotography and Electrostatic Printing, by Jezek and Jaromir, et al, CZECH, per, Geodeticky a Kartograficky, No 1, 1966, pp 7-13. *ACSI I-9665 ID 2204022866

A Waveguide Frequency Discriminator, by B. Novak. CZECH, per, Slaboproudy Obzor, Vol 25, No 6, 1964, pp 353-361. *FTD-TT-66-157

Frequency Detector, by L. Benes. CZECH, per, Slaboproudy Obzor, Vol 25, No 9, 1964, pp 528-533. *FTD-TT-66-156

New Method of Measuring Current Gain and Cut-Off Frequency of Transistors, by J. Hrycej, S. Vojtasek, 20 pp. CZECH, per, Slaboproudy Obzor, Vol XXVI, No 3, 1965, pp 129-138. ACSI I-8853 A ID 2204064565

Scientific
Electronics (Contd)

International Telegraph Traffic Being Automated,
by Martti Kaarento, 5 pp.
FINNISH, per, Lennattaja, No 5, 1965,
pp 39-40.
DIA LN 67-66

The Helsinki Telegraph Office,
by Niilo Vehmainen, 12 pp.
FINNISH, per, Lennattaja, No 5,
1965, pp 44-50.
DIA LN 67-66

Telecommunications Charts, 8 pp.
FRENCH, rpt, December 31, 1964.
DIA LN-100-66

Comparison of the Construction and Charac-
teristics of Metal Film and Carbon Film Re-
sistors, by K. Schar.
FRENCH, per, Bulletin de l'Association
Suisse des Electriciens, Vol LV, 1964, No 21,
pp 1059-1065. 9232212
AEC-Tr-1289-L

Contribution to the Analysis of Light
Elements Using X Fluorescence Excited
by Radio-Elements, by A. Robert.
FRENCH, rpt, Commissariat a l'Energie
Atomique, 1964, CEA-R 2539, 98p.
*NASA TT F-10,030

Verification of a Hypothesis Concerning
the Type-3 C 273 Radio Sources,
by M. Kalinkov, L. Sadowsky.
FRENCH, per, Compt Rend, Vol CCLX,
1965, pp 4917-4920.
NASA TT F-9912

The Pressure Vessel of BDF-1 Power Station
at Chinon, by P. Saget.
FRENCH, per, Construction, Vol XIX,
1964, pp 325-329.
*AEC ORNL-Tr-1202

Lateral Diffusion Electrodes, Part IV
by D. Doniat.
FRENCH, rpt, Electrodes a Diffusion
Laterale, 1965.
NASA TT F-9852

Scientific
Electronics (Contd)

The Ivory Coast, Electric Power of the
Ivory Coast Has Pursued its Activity
in 1964, 5 pp.
FRENCH, per, Industries et Travaux d'Outremer,
No 145, Dec 1965, pp 966, 968.
DIA LN 78-66

Study of Fluctuations in a 56 A.V.P. Photomul-
tiplier Tube, by G. Pfeffer.
FRENCH, per, l'Onde Electrique, Vol XLIV, 196
pp 476-478. 9232300
AEC-ORNL-Tr-1052

Multidimensional Model of Object Recognition
Process With Learning Based Upon the
Stochastic Approximation Method, by
Jan Bialasiewicz.
GERMAN, per, Archiwum Automatyki i Tele-
mechaniki, Vol 10, No 2, 1965, pp 227-237.
*FTD-TT-66-117

The Effect of Light on Plant Reproduction
by G. Klebs.
GERMAN, per, Biol Centralbl, Vol XIII,
1893, pp 641-656.
NASA TT F-9742

Scientific
Electronics (Contd)

Theoretical and Experimental Investigations
of High Deflections on Cascades in Tandem,
by Hikeo Ohashi.

GERMAN, per, Ingenieur-Archiv, Vol XXVII,
1959, pp 201-226. 0232-02
AEC-K-Tr-14

Some Remarks about Scintillation Counters
with Thin Plastic Scintillators for -Dosimetry,
by G. Nentwig.

GERMAN, per, Kernenergie, Vol VIII, No 8,
1965, pp 481-484. 9232301
AEC-ORNL-Tr-1093

Construction Guide for a Transistorized
Square-Wave Generator, by D. Borkmann, 5pp.
GERMAN, per, Radio Und Gernsehen, No 24,
1964, pp 758-760.

ACSI I-9360H
ID 2204015366

Electron-Photon Cascade Showers in Lead
Monte-Carlo Computations of Primary Electron
Energies between 100 and 1000 MeV,
by Hans-Hellmut Nagel.

GERMAN, per, Z fur Physik, Vol CLXXXVI, 1965,
pp 319-346. 9232100
AEC-SLAC-Tr-28

Electric Power Supply in Ethiopia, by
Vidkunn Iiveding, 5 pp.

NORWEGIAN, per, Elverksjefen, No 2,
Feb 1962, pp 33-35.
DIA LN 102-66

Scientific
Electronics (Contd)

Analysis of Some Problems Connected
With the Action of the MGD Direct-current
Generator, by Jerzy Milewski,

POLISH, per, Prace Instytutu Maszyn Prze-
plywowych, Polskiej Akademii Nauk, No 17,
1963, pp 109-131.

*FTD-HT-66-216

The Telephone Presented a Challenge, But
it Untangled Things, 5 pp,
PORTUGUESE, per, Visao, No 23, Dec 10, 1965,
pp 41-42.

DIA LN 138-66

Magnetic Antennas for Short Waves, by
V. Tanach, L. Stanciulea, et al.
RUMANIAN, per, Telecomunicatii, Vol VIII,
No 5, 1964, pp 222-226.

*FTD HT-66-206

National Telephone Company of Spain
Record, 6 pp.

SPANISH, rpt, 1964, pp 7-12.
DIA LN 129-66.

Alignment and Orientation Testing
Instruments, by Carl Zeiss Jena, 3 p.
SWISS, pat, Patent No 346,708.

Dept of Comm
Patent Office

On the Realization of an Amplifier
Using Negative Maser of Current Car-
riers in Semi-conductors, by E. N. Ger-
shenson, et al,
UKRANIAN, per, Ukrainskiy Fizichniy
Zhurnal, Vol IX, No 9, 1964, pp 948-955.

*ACSI I-9307
ID 2204012266

Scientific
Electronics (Contd)

Production of Accelerated Position Beams on a Linear Electron Acceleration by I. G. Arishayev.
RUSSIAN, per, Ukrayin'skyy Fizychnyy Zhurnal, Vol 10, No 3, 1965, pp 260-262.
*FTD-HT-66-175

On the Excitation of Waves in a Confined Plasma by a Modulated Current by A. M. Kondratenko.
RUSSIAN, per, Ukrayin'skyy Fizychnyy Zhurnal, Vol 10, No 3, 1965, pp 346-348.
*FTD-HT-66-175

Concerning the Mechanism of the Non-Equilibrium Effect of Depletion of Majority Carriers From Silicon, by V. Ye. Prymachenko.
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol X, No 4, 1965, pp 389-397.
*FTD-HT-66-176

Investigations of the Operation of a Q-Spoiled Ruby Laser, by Yu. V. Bayborodin, S. A. Harazha, et al.
UKRAINIAN, per, Ukrayins'kyy Fizychnyy Zhurnal, Vol X, No 4 1965, pp 455-457.
*FTD-HT-66-176

Theory of Stationary Radiation of a Homogeneous System in a Resonator With Many Nodes. II. Optimum Conditions for Laser Emission, by H. Yu. Buryakivs'kyy.
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol X, No 9, 1965, pp 991-1006.
*FTD-HT-66-180

Engineering

Some Special Features and the Maximum Capacity of Central Heating System Diphenyl Turbines, by V. C. Danilin, I. I. Zakharov.
RUSSIAN, per, Atom Energ, Vol XIX, No 3, 1965 Sep, pp 257-260. 9232298
AEC-Tr-6691

Chain Thermal Self Ignition in Systems with Energy Branches, by A. A. Borisov, G. I. Skachkov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLXIII, 1965, pp 129-132. 9232207
AEC-SC-T-66-0702

Scientific
Engineering (Contd)

Rupture Load of a Plate Weakened by a Circular Hole with Radial Cracks, by V. V. Panasyuk.
RUSSIAN, per, Dopov Ak Nauk Ukrain RSR, No 7, 1965, pp 868-872.
AEC-ORNL-Tr-1025

Structure of the Flow in Relative Motion at the Inlet of a Centrifugal Compressor Impeller, by B. L. Gumbin.
RUSSIAN, per, Energomashinostroyeniye, No 10, 1964, pp 43-44.
*FTD-HT-66-187

Application of Finite Integral Transformations to the Solution of the Nonstationary Heat Conductivity Problem of Hollow Cylinders with a Moving Internal Boundary, by G. A. Surkov.
RUSSIAN, per, Inzhen Fiz Zhur, Vol VIII, No 3, 1965, pp 375-379. 9232198
AEC-ANL-Tr-260

Engineering Psychology.
RUSSIAN, bk, Inzhenernaya Psikhologiya, 1964, pp 1-396 (c/c)
*FTD-HT-66-147

Limit Equilibrium of Non-Homogeneous Plates and Rotation Shells With Piecewise Linear Plasticity Conditions, by Yu. P. Listrova, M. A. Rudis.
RUSSIAN, per, Izv Akad Nauk SSSR, Ser Mekh, No 2, 1965, pp 88-94.
NASA TT F-9453

A Method for Fast Measurements of Thermal Conductivity and Thermal Capacity of Materials in a Broad Temperature Range, by E. S. Platonov.
RUSSIAN, per, Iz Vyssh Ucheb Zaved, Priboro, Vol IV, No 4, 1961, pp 90-97. 9232267
AEC-SCL-T-65-284

The Nature of Surface Radiation-Induced Defects in Irradiated Silica Gel I. Mechanism of Hydrogen Adsorption, by G. B. Pariyskiy, Yu. A. Mishchenko, et al.
RUSSIAN, per, Kinet i Kataliz, Vol VI, No 4, Jul, Aug 1965, pp 625-633. 9232098
AEC-ORNL-Tr-1066

Scientific
Engineering (Contd)

Course in ACFT Construction, by
M. N. Shul'zhenko.
RUSSIAN, bk, Kurs Konstruktsiy Samoletov,
2nd Rev. Ed., 1965, pp 160-563.
*FTD-NT-66-52

An Asymptote Solution to the Problem of De-
termining the Temperature of Gas Turbine
Blades, by I.S. Lyubchenko, V.A. Tupchiyev.
14 pp.
RUSSIAN, per, Moscow. Universitet. Vestnik.
Seriya I. Matematika, Mekhanika, No 1, 1965,
pp 52-60. 9699946
FTD-TT-65-1443

Instability and Related Microscopic Effects in
Toroidal Discharges, by B. B. Kadomtsev.
RUSSIAN, rpt, 1965 Culham Conference, Paper
CN-21/127, pp 1-17. 9232220
AEC-NP-Tr-1340

Interaction and Capture of Plasmoids in a
Mirror machine as a Result of Collective
Processes, by A. A. Galeev.
RUSSIAN, rpt, 1965 Culham Conference Paper
CN-21/215, Novosibirsk, pp 1-36. 9232122
AEC-NP-Tr-1339

New Type of Internal Combustion Engine, by
V. M. Kushul', 121 pp.
RUSSIAN, bk, Novyy Tip Dvigatelya Vnutrennego
Sgoraniya, pp. 3-4, 5-31, 32-79, and 164-208.
JPRS 34720

Planning and Construction of Heliports,
by L. I. Goretzkiy, A. I. Borodach.
RUSSIAN, bk, Proyektirovaniye i
Stroitel'stvo Vertoletnykh
Stantsiy, Moscow, 1964, pp 3-263.
*JPRS/DC-12288

Production of Precast Reinforced Concrete
Must be Organized More Efficiently, 7 pp.
RUSSIAN, np, Stroitel'naya Gazeta, 29 Dec 1965,
pp. 2-3.
JPRS 34924

Scientific
Engineering (Contd)

History of an Experimental Ship-Building
Basin, by I. V. Girs, 14 pp.
RUSSIAN, per, Sudostroyeniye, No 5, May
1957, pp. 20-35.
JPRS 34635

Comparative Analysis of Starting Conditions
of Steam Gas Installation with High-Pressure
VFG-120-100/540 Steam Generator, by M. I.
Korneyev and Kh. G. Demirchyan and M. Yu.
Zasenskiy, 10 pp.
RUSSIAN, per, Teploenergetika, No 1, Jan 1966,
pp. 2-5.
JPRS 34573

Efficiency of Sulfur Mazut-Fired Gas Instal-
lations, by A. I. Andryushchenko et al, 8 pp.
RUSSIAN, per, Teploenergetika, No 1, Jan 1966,
pp. 16-20.
JPRS 34573

Construction of a Deep-Water Quay Out of
Caissons 6.5 Meters in Diameter, by
I. J. Burin, 5 pp.
RUSSIAN, per, Transportnoye Stroitel'stvo,
No 12, December 1965, pp 16-18.
DIA LN 118-66

Shielding Properties of Certain Types of
Concrete, by V. N. Avayev.
RUSSIAN, per, Trudy Sovmik Statey Zashcha
Pokrytiya v Atomnoy Torni, 1965, 11 pp.
*FTD-NT-66-22

Principles of Compilation of Small-
scale Landscape Charts, by I.I. Ger-
enchuk.
RUSSIAN, per, Vestnik Moskovskogo Uni-
versiteta, No 4, 1965, pp 3-9.
ACSI T-9409 A
ID 2204016366

Millions of Operations per Second,
by N. Zubkov.
RUSSIAN, per, Voyennoye Znaniya, No 10,
1965, pp 34-35.
*FTD-NT-66-188

Device for Automatic Control of the Mag-
nitude of the Threshold Contrast, by
K. K. Polevitskiy.
RUSSIAN, pat, Patent No 160,735.
*FTD-TT-66-80

Scientific
Engineering (Contd)

Dynamometer for Measurement of Hydrodynamic Forces, by K. F. artamonov,
RUSSIAN, Patent Nr.: 165919
*FTD-TT-66-83

A Generator of Ignition Pulses, by
E. A. Silin'
RUSSIAN, Patent Nr.: 168753
*FTD-TT-66-91

Optical Resonator, by V. K. Ablekov.
RUSSIAN, pat, Patent No 176,329.
*FTD-TT-66-109

Drogue Parachute, by I. L. Kadyshev and
S. D. Khakhilev, et al,
RUSSIAN, pat, Patent No 171,275.
*FTD-TT-66-105

Coupler for Railroad Car Steam Heat
Lines, by Perez A. Lopez, 3 p.
BELGIAN, pat, Patent No 505,267.
Dept of Comm
Patent Office

On "Man-Machine" System, by TU Hsu-yen
(3205 1645 1750), 8 pp.
CHINESE, per, K'ao-hsueh T'ung-pao, No 12,
Dec 1965, pp. 1043-1049.
JPRS 34492

A Control Device for Meteor-Trail Communica-
tion System and Relaxation Analysis, by Liu
Tseng-chi (0491 1073 1015), 20 pp.
CHINESE, per, T'ien-tsu Hsueh-pao, No 2,
Dec 1963, pp. 109-119.
JPRS 34756

Design of Type 941 for Operational
Amplifier.
CHINESE, Tzu Tung Hua Hsueh Pao, Vol 3, No 3,
1965, pp 142-150.
*FTD-HT-66-198

Elastic Deformations of a Cantilever
Plate Loaded by a Concentrated
Force at a General Point, by J. Hert,
CZECHOSLOVAKIA, per, Aplikace Mate-
matiky, Vol VIII, No 6, 1963, pp
411-441.
*FTD-HT-66-135

Scientific
Engineering (Contd)

Computation of the Thickness of Steel Shield-
ing Walls Against Gamma Radiation,'
by Arnost iloenig.
CZECH, per, Inzenyrske Stavby, No 8, 1965,
pp 351-355. 9232295
AEC-ORNL-Tr-1060

Engin for the "Bumblebee", by Z. buzek.
CZECH, per, Letectvi-Kosmonautika, No 11,
1965, pp 350-352.
*FTD-HT-66-190

Pneumatic Construction in Theory and Practice,
by F. Stranecky.
CZECH, per, Pozemni Stavby, No 1, 1966
pp 26-35.
*ACSI
I-9670
ID 22040233-66

1000 Mwe Reactor Design Study of a Handling
Cell, by M. Sauvage.
FRENCH, rpt, 18 Feb 1965. 9232264
AEC-ORNL-Tr-988

Rapsodie Reactor: Preliminary Studies in
the Fabrication of Control Rod Mechanisms,
by R. Jacquelin.
FRENCH, rpt, 25 May 1965. 9232297
AEC-ORNL-Tr-987

Handling of Subassemblies and Loading of
Sleeves of the Heated Core with the Help of
an Auxiliary Gripper on the Rapsodie Engi-
neering Mock-up, by J. Bellet, P. Chouard.
FRENCH, rpt, Report on Handling Runs on the
Rapsodie Mock-up of July, October and
November 1964, No. PNR/SEPR 65.004, Cadarache,
26 Feb 1965. 9232371-V
AEC-ORNL-Tr-985

Apparatus for Degasification of a
Liquid, 4 p.
FRENCH, pat, Patent No 857,376.
Dept of Comm
Patent Office

Manufacture of Seamless Bags, by
Alexandre Detroy, 8 p.
FRENCH, pat, Patent No 346,341.
Dept of Comm
Patent Office

Scientific
Engineering (Contd)

Overshoots in Linear and Nonlinear Control System, by Henryk Gorecki.
GERMAN, per, Archiwum Automatyki i Tele-Mechaniki, Vol 10, No 2, 1965, pp 95-102.
*FTD-TT-66-117

Mechanics of Forming Optically Plane Surfaces in the Polishing Process, by W. Rupp.
GERMAN, per, Feinwerktechnik, Vol LXVII, No 8, 1963, pp 295-299.
NASA TT F-8777

Mechanics of Forming Optical Spherical Surfaces in the Polishing Process, by W. Rupp.
GERMAN, per, Feinwerktechnik, Vol LXVII, No 11, 1963, pp 438-442.
NASA TT F-8778

Novelties of the Non-Track Lifting Technique, by W. Meyercordt.
GERMAN, per, Internationales Archiv Fur Verkehrswesen, No 9, Sept 1965, pp 61-63.
*ACSI
I-9669
ID 22040232-66

Fog Properties from the Point of View of Light Engineering, by M. Wolffe.
GERMAN, per, Licht, Vol VIII, 1938, pp 105-109.
AEC-UCRL-Tr-1286(L) 9232210

Theory of Neutron Thermalization in a Cylindrically Symmetrical Two-Zone Reactor Cell, by H. Kuesters.
GERMAN, per, Nukleonik, Vol VII, No 3, 1965, pp 130-144. 9232286
AEC-ANL-Tr-267

Free-Air Anomalies and the Isostatic Anomalies, used Jointly for the Computation of the Deflections of the Vertical, by K. R. Koch.
GERMAN, per, Zeitschrift fuer Vermessungswesen, No 2, 1966, pp 43-45.
ACIC TC 1004

Examination of some Structural and Mechanical Characteristics of Extruded and Rolled Sap, by P. Gondi, D. Nobili.
ITALIAN, per, Alluminio Nuovo Metal, No 1, 1965, pp 13-17. 9232108
AEC-ORNL-Tr-976

Scientific
Engineering (Contd)

Comments on the Measurement of Gas-Dynamic Parameters by Means of the Disa 55A01 Hot - Wire Anemometer, by R. Zarzycki.
POLISH, per, Pomiary, Automatyka, Kontrola, Vol 11, No 7, 1965, pp 299-302.
NASA TT F-9837

An Infinitely Long Cantilever Plate Loaded by One Axial Force, by F. Dymek.
POLISH, per, Rozprawy Inzynierskie, Vol III, No 11, 1963, pp 411-423.
*FTD HT-66-207

The Geoid and Deflection of the Plumb Line, by I. Erokan.
TURKISH, per, Harita Dergisi (Map Digest), Chapt 1, Apr 1964, pp 5-12.
*ACIC TC-990

Fuels & Propulsion

On the Approximate Modeling of Combustion Chambers of Gas Turbines on Natural Gas, by A.A. Shatil', V.D. Nurashko. 17 pp.
RUSSIAN, per, Teplotekhnika, No 7, 1965, pp 54-58. 9699950
FTD-TT-65-1777

Paths of Deve. of Stationary Gas Turbine Units in USSR, by G. I. Shuvalov et al.
RUSSIAN, per, Teplotekhnika, No 3, 1964, pp 2-6.
*ACSI
I-9675
ID 22040238-66

Scientific
Fuels & Propulsion (Contd)

Mass Spectrometry of Gaseous Mixtures
in Mags-2 Apparatus, by Ya. A. Yuhvidin.
RUSSIAN, per, Zavodsk. Lab., Vol 23, No 1,
1957, pp 35-41.
*NASA TT F-10,005

Fuel Oil in the Blast Furnace,
by W. Singer.
DUTCH, per, Samen, Vol 34, Oct. 1965, pp 200-201.
*BISI 4792

Materials & Metallurgy

Compounds of the Rare-Earth Metals with
Aluminum and Their Crystalline Structures,
by P. I. Kripyakevich, I. I. Zalutskiy.
RUSSIAN, per, Akad Nauk SSSR, Institut
Metallurgii IM, 1964, pp 144-145.
*FTD-HT-66-186

Stand-type Production of Wall Slabs From
Porous Cinder Concrete With a Slag Cement
Base, by M. I. Diamant.
RUSSIAN, per, Beton i Zhelezo-Beton, No 2,
1965, pp 12-16.
BISI 4578

Introduction of Chromium Plated Strip In-
stead of Tinplate, by F. G. Kostenko.
RUSSIAN, per, Byulleten' Tekhniko-Econ. Inf.,
No 9, 1965, pp 49-51.
BISI 4703

Pulse Methods of Investigating the Super-
conducting Properties of Alloys, by N. Ye.
Aleksyevskiy, A. V. Dubrovin and V. S.
Yegorov, 8 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Vol 165, No 5, pp. 1059-1061.
JPRS 34842

Maximum Critical Magnetic Fields in Super-
conducting Metals, by B. G. Lazarev, Ye. Ye.
Semenenko, A. I. Sudovtsov and V. M. Kuz'-
mendo, 9 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Vol 165, No 6, 1965, pp. 1275-1277.
JPRS 34842

Scientific
Materials & Metallurgy (Contd)

On the Transformation Kinetics of the Austenite
in Cast Iron Alloyed With Chromium and Nickel,
by Yu. N. Taran, Yu. K. Bumina.
RUSSIAN, per, Dopovidi Akad Nauk UkrSR, No 10,
1965, pp 1321-1326.
HB 6799

Investigation on Elasticity and Plasticity
(Collection of Articles). 410 pp.
RUSSIAN, bk, Issledovaniya Po Uprugosti i
Plastichnosti, Sbornik 2, 1963. 9700053-V
FTD-MT-64-450

Hot Mechanical Working of VT14 Alloy Forgings,
by I. N. Kaganovich, Yu. I. Potapenko and Ye.
D. Iqumenshchev, 9 pp.
RUSSIAN, per, Isvetnyye Metally, No 10,
Oct 1965, pp. 75-79.
JPRS 34481

High Temperature Decomposition of Alnico
(Magnico) Alloys, by Ya. M. Dovgalevskiy,
E. G. Povolotskiy.
RUSSIAN, per, Izv. VUZ Chern. Met., No 11,
1961, pp 170-175.
BISI 3855

Sinter Reduction and Slag Formation in
Various Levels of Blast Furnaces, by
I. M. Galemin, et al.
RUSSIAN, per, Izv. VUZ Chern Met., No 12,
1964, pp 24-32.
*BISI 4826

How to Minimize the Amount of Skins and
Non-Metallic Inclusions in 18-9 Ti Steel
Castings, by B. B. Gulyaev, et al.
RUSSIAN, per, Izv. VUZ Chern. Met., No 2,
1965, pp 142-147.
*HB 6831

Factors Affecting the Speed at Which
Inclusions in Steel Emerge, by S. I. Popel'.
RUSSIAN, per, Izv. VUZ Chern. Met., No 4,
1965, pp 25-29.
BISI 4593

Scientific
Materials & Metallurgy (Contd)

Some Optical and Physical Characteristics of the Basic Oxygen Furnace Flame [in the Visible Part of the Emission Spectrum] and Their Use for Process Control, by B. N. Okorokov, et al.
RUSSIAN, per, Izvest. VUZ Chern. Met., No 5, May 1965, pp 21- 28.
HB 6574

Effect of Electrical Conditions in Electroslag-Refining, by Yu. M. Mironov et al.
RUSSIAN, per, Izv. Vuz. Chern. Met., May 1965, pp 51-56.
*BISI 4802

Deposition of Titanium Carbide From the Gas Phase Onto the Surface of Steel, by G. A. Semenova, A. N. Minkevich.
RUSSIAN, per, Izvest. VUZ-Chern. Met., No 8, Sep 1965, pp 168-170.
HB 6732

Analysis of the Reduction Processes in Blast Furnaces With Injection of Natural Gas, by G. I. Lizunov.
RUSSIAN, per, Izvest. VUZ Chern Met., No 9, Sep 1965, pp 34-38.
HB 6671

Development of an Algorithm for Regulating the Thermal State of a Blast Furnace, by A. D. Gotlib, et al.
RUSSIAN, per, Izv. VUZ Chern. Met., No 10, 1965, pp 22-30.
BISI 4612

Investigation of the Drying Process of Iron-Ore Pellets, by A. S. Bogma, V. M. Vityugin.
RUSSIAN, per, Izvest VUZ Chern. Met., No 12, Dec 1965, pp 36-39.
HB 6803

Concerning the Nature of Optical Absorption of Polycrystalline Films of Cadmium Sulfide, by K. V. Shalimova, T. S. Travina, et al.
21 pp.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Fizika, No 3, 1964, pp 134-143.
9699948
FTD-TT-65-1452

Scientific
Materials & Metallurgy (Contd)

Investigation of Solubilities of chromium, molybdenum and Tungsten in Aluminum by the microhardness method, by V. N. Vigdorovich, V. M. Glazov.
RUSSIAN, per, Izv Vyssh. Ucheb. Zaved. Tsvetn. Met, No 2, 1960, pp 143-146.
*AEC
EDC April 1, 1966

Influence of High-Cooling Speed on the Structure and Properties of Aluminum Compounds, by N. I. Varich, K. Ye Kolesnichenko.
RUSSIAN, per, Izvestiia Vyssh. Ucheb. Zaved. Tsvetn. Met, No 4, 1960, pp 131-136.
*AEC
EDC April 6, 1966

Calculation of Viscosity in Molten Salts (Oxides), by O. K. Sokolov.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, Vol 5, No 1, 1962, pp 89-93. 9232222
NASA TT F-416

Influence of Hydrogen on the Structure and Properties of VT15 Alloy, by B. A. Kolachev, V. A. Livanov, A. A. Bukhanova and N. Ya. Gusel'nikov, 8 pp.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, No 3, 1965, pp. 131-135.
JPRS 34481

Molten Metals as High-temperature Lubricants, by N. M. Gialko, A.I. Dintsas. 8 pp.
RUSSIAN, per, Khimiya i Tekhnologiy Topliv i Masel, No 3, 1964, pp 54-58. 9699352
FTD-TT-65-1447

Some Problems in the Use of Fused Glass for the Non-Oxidizing Heating of Steel Billets, by A. D. Akimenko, A. I. Kozlov, et al.
RUSSIAN, per, Kuznechno-ShTAMP. Proizvodstvo, No 11, 1964, pp 37-39.
HB 6662

Forming Die Inserts From Liquid Steel, by A. A. Ryzhikov, V.N. Zhuravlev, L. D. Sorokin.
RUSSIAN, per, Kuznechno-Shtampov, 1965, (10) pp 41-42.
*BISI 4791

Scientific
Materials & Metallurgy (Contd)

New Stainless Steel.
RUSSIAN, per, Mashinostroyeniye, No 2,
1965, Mar/Apr, p 63.
*FTD-HT-66-204

Metallides and Reactions among Them, by I. I.
Kornikov, 224 pp.
RUSSIAN, bk, Metallidy i Vzaimodeystviye
Mezhdru Nimi, 1964, pp. 1-181.
JPRS 34774

Application of Nitrided VT14 Alloy for Gears,
by Ye. N. Novikova, S. I. Gurevich and L. M.
Nikitina, 7 pp.
RUSSIAN, per, Metallovedeniye i termicheskaya
obrabotka metallov, No 10, Oct 1965, pp. 19-22.
JPRS 34481

Production Methods for Shaped Foamed Glass-
Slag Products From Blast Furnace Slag Melts,
by A. S. Fefer.
RUSSIAN, rpt, Metallurgicheskie Shlaki i
Primenenie Ikh v Stroitel'stve, Moscow
1962, pp 388-402.
BISI 4486

Effect of Blowing Conditions of the Life of
Basic Oxygen Furnace Linings, by A. P. Kudrina,
G. F. Gul'ev, et al.
RUSSIAN, per, Ogneupory, Vol 30, No 11, 1965,
pp 22-26.
HB 6838

Principles and Theory of Rolling, by
A. Tselikov.
RUSSIAN, bk, Osnovy Teorii Prokatki, Moscow
1965, Chap 2, Sec 10-11, pp 61-69; Chap 3,
Sec 5, pp 88-93, Chap 4, Sec 4-9, pp 126-148,
*BISI 4820

Progress in Synthesis of New Polymers, by
H. M. Koton. 39 pp.
RUSSIAN, per, Plasticheskiye Massy, No 11,
1964, pp 1-9. 9699943
FTD-TT-65-936/1+2

Study of the Deformation of Filled Fluoro-
plastic Materials, by S. N. Ganz, V. D.
Pakhomenko. 39 pp.
RUSSIAN, per, Plasticheskiye Massy, No 11,
1964, pp 37-39. 9699943
FTD-TT-65-936/1+2

Scientific
Materials & Metallurgy (Contd)

Semiconductor Polyvinyl Chloride Compositions,
by Yu. N. Van-gaut, L. A. Ol'shanskaya, et al.
39 p.
RUSSIAN, per, Plasticheskiye Massy, No 11,
1964, pp 42-45. 9699943
FTD-TT-65-936/1+2

Stresses Near an Elliptic Hole Subject
to Oscillating Pressure, by
V. D. Kubenko.
RUSSIAN, per, Prikl Mekhan,
Vol I, No 5, 1965, pp 133-137.
NASA TT F-9795

Production of Bimetals, 205 pp.
RUSSIAN, monograph, Proizvodstvo Bimetallov,
No 42, 1965, pp. 3-132.
JPRS 34815

I - Section Beams Welded from 2 Different
Steels, by V. A. Baldin.
RUSSIAN, per, Promyshlennoi Stroitelstvo,
Nov. 1964, pp 20-23.
*BISI 4800

Rhenium Alloys, by Ye. M. Savitskiy, M. A.
Tylkina, and K. B. Povarova, 215 pp.
RUSSIAN, bk, Splavy Reniya, 1965, pp. 26-31,
168-187, 188-218, 219-226, 227-235, 255-276,
277-287, 288-302, 303-318, 319-327, 328-331.
JPRS 34566

On Operation of Pumps and Blowers
at Regimes of Reduced Feed, by
V.I. Polikovskiy,
RUSSIAN, per, Teploenergetika, No 10,
1965, pp 71-74.
*FTD-HT-66-124

The use of Epoxy Shieldings for Protecting
Metal and Concrete Surfaces,
by V. B. Tikhomirov, Ye. A. Panevskina.
RUSSIAN, per, Trudy Sbornik Statey Zashch
Pokrytiya v Atomnoy Tekh, 1963, pp 144-147.
*FTD-HT-66-22

Methods of Testing Metals and Alloys for
Creep and Vibratory Creep by
L. T. Timoshuk.
RUSSIAN, per, Trudy Tsentral'nyy Nauchno-
Issledovatel'skiy Institut Chernoy Metallurgii.
No 38, 1964, pp 123-135.
*FTD-HT-66-215

Scientific
Materials & Metallurgy (Contd)

Influence of Heat Treatment and Cladding on Strength of VT14, VT15 and VT16 Ti Alloys in Two-Way Tension, by A. I. Chorev, S. G. Glazunov, T. K. Zilova, N. I. Novosil'tseva and L. V. Geras'kova, 8 pp.
RUSSIAN, per, Tsvetnyye Metally, No 9, Sept 1965, pp. 75-79.
JPRS 34481

Thermomechanical Treatment of the VT14 Alloy Forging, by I. N. Kaganovich.
RUSSIAN, per, Tsvetnyye Metally, No 10, 1965, pp 75-79.
*FTD-HT-66-213

Thermal Emission Characteristics of Transition Metals and their Compounds, by H. V. Samsonov, Yu B. Paderno.
RUSSIAN, per, Ukrayins'kyy Fizychnyy Zhurnal, Vol 10, No 6, 1965, pp 622-629.
*FTD-HT-66-178

.....Quartz, by G. A. Adadurov.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1962, pp 81-89.
*FTD-HT-66-211

Unsteady State Destruction of Glass-Like Materials in a Supersonic Gas, by B. I. Reznikov. 16 p.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 6, 1964, pp 69-76. 9699954
FTD-TT-65-1608

A Method of Making Mesh Filters From Materials And Alloys, by K. L. Chevashova.
RUSSIAN, Patent Nr. 134092, (659186/22) Class 48a, No 23, 18 March 1960, pp 1-2.
*FTD-HT-66-189

Heat-Resistant Seal Material Based on Fluorocarbon Rubber, by V. G. Fedorova.
RUSSIAN, Patent Nr.: 167926
*FTD-TT-66-88

Glass, by V. V. Vargin and T. I. Veynberg, et al.
RUSSIAN, pat, Patent No 174,777.
*FTD-TT-66-108

Scientific
Materials & Metallurgy (Contd)

Production in the Building Materials, Glass and Porcelain Industry by A. S. Beshkov, Ye. B. Valev, 9 pp.
BULGARIAN, rpt, Geografiya na Bulgariya, Vol II, Economic Geography, 1961, pp 107-113.
DIA LN 66-66

Theory of the Superconductivity of Thin Metal Films in a Strong Magnetic Field (I), by Lei Hsiao-lin, Wu Hang-Sheng.
CHINESE per, Acta Physica Sinica, Vol XX, No 10, 1964, pp 991-1002.
NASA TT F-9873

Prefaces, Table of Contents, and Introduction of Chin-shu Hsueh Yuan-li (Principles of Structural Metallurgy), by Hsu Tsu-yao (1776 4371 5069), 15 pp.
CHINESE, bk, Chin-shu Hsueh Yuan-li, Jan 1964, pp. 1, ii, 1-12, 15-18.
JPRS 34594

Mathematical Model and Computer for the Optimum Cutting of Rolled Products, by P. Caslavsky, A. Vanecek.
CZECH, per, Hutnicke Listy, No 10, 1964, pp 711-714.
*FTD-HT-66-163

Effect of Planishing on the Mechanical Properties of Deep-Drawing Sheets, by M. Endrle, L. Pokluda.
CZECH, per, Hutn. Listy, Vol 20, No 6, 1965, pp 411-418.
*BISI 4816

Vacuum Treatment of Steel Used in the Production of High-Strength Rails, by Z. Motloch, S. Morejs.
CZECH, per, Hutn. Listy, Vol 20, No 7, 1965, pp 468-473.
BISI 4610

Microscopical Evaluation of Lims in Engineering Steels, by M. Bartuska, R. Barta.
CZECH, per, Sbornik vysoke Skoly Chemicko-Technologicke v Praze, 1957, pp 49-57.
*BISI 4804

Scientific
Materials & Metallurgy (Contd)

Anisotropy of Steel Sheet, Formation of Preferred Orientations and Their Effect on Mechanical Properties, by G. Pomey. FRENCH, per, Bull. Cercle Etudes Met., Vol 9, No 11, 1965, pp 439-482. BISI 4743

Blast Furnace Refractories from 1959, by M. J. Shoendoerffer. FRENCH, per, Bull. Soc. Franc. Ceram., No 57, Oct/Dec 1962, pp 51-66. *BISI 4815

Use of 3-3' Diaminobenzidine Hydrochloride for the Colorimetric Determination of Selenium in Steel, by P. Niviere. FRENCH, per, Chimie Analytique, Vol 47, Mar 1965, pp 125-135. *BISI 4835

Rapid Analysis of Rolled Steels by Emission Spectrometry of Pressed Lathe Turnings, by N. Stoll, A. Wagner. FRENCH, per, C.N.R.M., No 5, Dec 1965, pp 73-81. BISI 4707

On the Dilatometric Behaviour of Pure Iron, by P. Lehr. FRENCH, per, Comptes Rend., Vol 242, 30 Jan 1956, pp 632-635. BISI 4748

On the Existence of a Plastic Deformation in Iron in the Course of the α - γ Transformation, by P. Lehr. FRENCH, per, Comptes Rend., Vol 242, 27 Feb 1956, pp 1172-1175. BISI 4747

Action of Segregation of Impurities on the Structure of the Oxidation Interface of a Pure Industrial Iron, by J. Maldy. FRENCH, per, Compt. Rend. Vol 261, 11 Oct. 1965, pp 2891-2894. *BISI 4828

Study of Liquid Metal Boiling Under Forced Convection, by G. Grass, H. Kottowski. FRENCH, European Joint Nuclear Research Center ISPRA, Heat Transfer Division, Oct 1965, pp 1-37. 9232285 AEC-ANL-Tr-257

Scientific
Materials & Metallurgy (Contd)

Importance of Pretreatments for the Durability of Various Rust Protective Paint Systems, by Anderson. FRENCH, per, Forche Lach, Vol 71, Jul 1965, pp 534-546. *BISI 4827

Automation of a Sinter Strand. FRENCH, rpt, Paper A-2 Presented at the International Conference on Automation in Steelmaking Amsterdam and Dusseldorf, 29-31 March & 1-3 April, 1965. BISI 4675

Numerical Solution of a Blast-Furnace Model Based on the Reaction Kinetics, by F. A. Flierman, J. M. van Langen. FRENCH, rpt, Paper B-2 Presented at the International Conference on Automation in Steelmaking Amsterdam and Dusseldorf, 29-31 March and 1-3 April, 1965. BISI 4678

Theoretical Considerations on the Automation of Blast Furnace Operation, by C. Staib. FRENCH, rpt, Paper B-4 Presented at the International Conference on Automation in Steelmaking, Amsterdam & Dusseldorf, 29-31 Mar & 1-3 Apr 1965. BISI 4680

Automatic Monitoring and Control of a Blast-Furnace by Industrial Computer, by P. Jourde, et al. FRENCH, per, Paper B-5 Presented at the International Conference on Automation in Steelmaking Amsterdam and Dusseldorf, 29-31 March & 1-3 April, 1965. BISI 4681

Automation of a Blast Furnace, by J. M. van Langel, et al. FRENCH, rpt, Paper B-6 Presented at the International Conference on Automation in Steelmaking Amsterdam and Dusseldorf, 29-31 Mar & 1-3 Apr, 1965. BISI 4682

A System for Computer Control of Blast-Furnace Operation, by A. Poos, et al. FRENCH, rpt, Paper B-7 Presented at the International Conference on Automation in Steelmaking Amsterdam and Dusseldorf, 29-31 March & 1-3 April, 1965. BISI 4683

Scientific
Materials & Metallurgy (Contd)

Comparative Study of the Various Methods of Measuring the Rolling Couple, by A. Danthine et al.
FRENCH, rpt, Paper D-2 presented at the International Conference on Automation in Steelmaking Amsterdam & Dusseldorf, 29-31 March & 1-3 April, 1965.
BISI 4692

Computer Control of a Plate Mill, by G. Daneu, L. Oliva.
FRENCH, rpt, Paper E-3 Presented at the International Conference on Automation in Steelmaking, Amsterdam & Dusseldorf, 29-31 Mar & 1-3 Apr, 1965.
BISI 4694

Control of the Oxygen Content in Steel at Different Production Stages in Low-Capacity Melting Furnaces With Basic Linings, by P. Detrez.
FRENCH, per, Rev. Met., Vol 61, Oct. 1964, pp 831-838.
BISI 4597

Gas Reduction of an Iron Oxide Specimen - II, by D. Dutilloy, et al.
FRENCH, per, Rev. Met., Vol 62, Jan 1965, pp 15-35.
BISI 4404

The Effect of the Structure of the Metal Phase Formed on the Reduction Kinetics of Wustite, by H. J. Engell.
FRENCH, per, Rev. Met. Mem. Sci., Vol 62, May 1965, pp 127-133.
BISI 4659

Observations on the Influence of Nitrogen on some Mechanical Properties of Steel, by P. Ravizza.
FRENCH, per, Rev. Met., Vol 62, Apr. 1965, pp 343-350.
*BISI 4805

General Considerations on Unformed Prepared Refractory Materials, by P. Lapoujade.
FRENCH, per, Rev. Met., Vol 62, Oct. 1965, pp 945-952.
*BISI 4796

Scientific
Materials & Metallurgy (Contd)

Users Views on Unformed Refractory Applications, by B. Leclerc.
FRENCH, per, Rev. Met., Vol 62, Oct 1965, pp 953-967.
*BISI 4797

Use of Pre-reduced Pellets in the Blast Furnace. Graphical Study, by N. Meysson.
FRENCH, per, Rev. Met., Vol 62, Dec 1965, pp 1161-1179.
*BISI 4786

Advances in the Ultrasonic Inspection of Steels at High Temperatures, by L. Beaujard.
FRENCH, per, Rev. Met., Vol 62, No 12, 1965, pp 1187-1191.
*IB 6832

Users Problems with Reheating Furnace Refractories, by M. Vallee.
FRENCH, per, Rev. Met., Vol 62, Dec. 1965, pp 1211-1218
*BISI 4798

Development of Refractories for Reheating Furnaces, by J. P. Kiehl, J. Montagnier.
FRENCH, per, Rev. Met., Vol 62 Dec. 1965, pp 1219-1223.
*BISI, 4799

Diazotype Product that is Developed by Heat, 33 p.
FRENCH, pat, Patent No 1,255,913.
Dept of Comm
Patent Office

New Diazotype Product Which Can Be Developed by Heat, 13 p.
FRENCH, pat, Patent No 1,255,950,
Dept of Comm
Patent Office

Scientific
Materials & Metallurgy (Contd)

Effect of Temperature on Mill Rolls.
(Practical and Theoretical Investigations
on Temperature Distribution, and its Effect
on a Colled Grooved Roll, by H. Kaiser.
GERMAN & FRENCH, per, Der. Kalibreur, No 3,
1965, pp 39-58.
*BISI 4773

New Ideas on Surface Tension Cohesion and
Adhesion, by E. Bock.
GERMAN, per, Adhasion, No 7-8, 1965,
pp 289-307.
BISI 4507

Solidification Equilibria in the Iron-Rich
Corner of the Quaternary System Iron-Carbon-
Manganese-Oxygen, by E. Schurmann, et al.
GERMAN, per, Arch. Eisenh., Vol 35, Aug 1964,
pp 739-747.
BISI 4416

Investigation of Transfer of Carbon From
Methane-hydrogen Mixtures to Iron, Cobalt,
and Nickel at 850-1-1050°C, by H. Schenck.
GERMAN, per, Arch. Eisenh., Vol 36, Sep 1965,
pp 683-693.
BISI 4663

Electron-microscope Observations of Magnetic
Domains in Aged Iron-nitrogen Alloys, by
W. Pitsch.
GERMAN, per, Arch. Eisenh., Vol 36, Oct 1965,
pp 737-743.
BISI 4618

Examination of Macroscopic Oxides in Killed
Steels, by J. Bruch, et al.
GERMAN, per, Arch. Eisenh., Vol 85, Nov 1965,
pp 799-807.
BISI 4635

Effect of Various Deoxidation Processes on
the Properties of Mild Plain Carbon Free-
Cutting Steels, by C. A. Muller, et al.
GERMAN, per, Arch Eisenh., Vol 37, Jan 1966,
pp 27-41.
*BISI 4777

Scientific
Materials & Metallurgy (Contd)

Direct Electrochemical Determination of the
Oxygen Content of Liquid Metals. Part 1:
Investigations on Iron, Cobalt, Nickel and
Copper Melts, by W. A. Fischer, W. Ackermann.
GERMAN, per, Archiv fur das Eisenhüttenwesen,
Vol 37, No 1, 1966, pp 43-47.
HB 6830

Development, Design and Calculation for
a Mathematical Model of a Blast Furnace,
by R. Wartmann.
GERMAN, per, Arch. Eisenh., Vol 36, Aug.
1965, pp 609-610.
BISI 4585

Processes Taking Place During the Explosive
Welding of Metals, by E. Schmidtman, et al.
GERMAN, per, Arch. Eisenh., Vol 36, Sep 1965,
pp 667-676.
BISI 4582

Spectrometric Study of Pig Irons and
Steels With Low Carbon and Manganese
Contents, by P. Dickens, et al.
GERMAN, per, Arch. Eisenh., Vol 37, No 2,
1966, pp 127-131.
*HB 6847

Abrasive Wear at High Temperatures of Fusion-
Cast and Ceramic-Bonded [Refractory] Bricks, by
H. E. Schwiete.
GERMAN, per, Berichte der Deutschen Keramischen
Gesellschaft, Vol 42, No 5, 1965, pp 222-232.
HB 6583

Continuous Measurement of Faults and Density
in Refractories Using γ -rays, by H. Dresia.
GERMAN, per, Berichte der Deutschen Keramis-
chen Gesellschaft, Sep 1965, pp 357-362.
BISI 4708

Furnace Systems for Refuse Burning, by
R. Rasch.
GERMAN, per, Brennst. Wärme-Kraft, Vol 16,
No 8, 1965, pp 376-382.
*BISI 4814

A Laboratory Instrument for the Exact
Regulation of Temperatures, by Engelhardt et al.
GERMAN, per, Chem. Ing. Tech., Vol 37, May 1965,
pp 528-531.
*BISI 4806

Scientific
Materials & Metallurgy (Contd)

Use of Flexible High-Capacity Containers as Transport & Storage Vessels, by Franz Jager, Waltershausen. GERMAN, per, Chemische Technik, No 11, 1965, pp 676-678.

*ACSI
I-9673
ID 22040236-66

A Process for the Determination of Niobium and Tantalum in Stabilized Chromium-Nickel Steels, by P. Munchow
GERMAN, per, Chemiker-Zeitung/Chemische Apparatur, Vol 88, 20 Jan 1964, pp 37-43.
BISI 4605

Chromite Inhibitor Complexes in Rust-Resisting Paint Films, by G. Meyer.
GERMAN, per, Deutsche-Farben Zeitschrift, Vol 19, No 5, 1965, pp 183-187.
BISI 4643

Forged Parts for Transmission Manufacture, by A. Klein.
GERMAN, per, D.E.W.Techn. Ber., Vol 5, Jan 1965, pp 13-20.
*BISI 4810

Effect of Tool Angle on the Life and Tool Wear of High Speed Steel Turning Tools During the Turning of Austenitic and Ferritic Steels, by O. Mulders, R. Meyer-Rhotert.
GERMAN, per, Dew Technische Berichte, April 1965, pp 125-128.
*BISI 4795

Organization of Use of Continuous Casting Machines in Conjunction With Converter and Open Hearth Steelplants, by G. Hain.
GERMAN, per, Freiberger Forschungs., Series B, No 106, 1965, pp 23-42.
*HB 6845

The Surface Roughness of Commercial Mild Steel Sheet and Strip and its Suitability for Electroplating With Zinc, by J. Elze, H. Plog.
GERMAN, per, Galvanotechnik, Vol 55, No 10, 1964, pp 612-620.
BISI 4590

Scientific
Materials & Metallurgy (Contd)

Fundamental Melting Processes in Hot Blast Cupolas, by B. S. Mil'man, N. K. Blozko.
GERMAN, per, Giesserei, Vol 11, No 8, 1965, pp 143-147.
*BISI 4774

Comparative Investigations into the Machinability of Graphite-Containing Cast Iron-Base Materials, by H. Klaus.
GERMAN, per, Giesserei, Vol 19, No 19, 1965, Sep, pp 583-593.
HB 6769

Dimensional Stability of the Cavity in a Green-Sand Mold, by H. C. Levelink, H. van den Herg.
GERMAN, per, Giesserei, Vol 52, No 3, 1965, pp 71-76.
HB 6638

Differences in Bending Fatigue Strength in Case-Hardened Specimens Caused by Stress-Relieving, by H. Brugger.
GERMAN, per, Harterei-Techn. Mitt., Vol 19, No 2, 1964, pp 100-114.
*BISI 4821

Mechanical Handling in the Tube Mill, by G. Reich.
GERMAN, per, Hebezeuge und Fordermittel, Vol 5, Apr 1965, pp 97-100.
*BISI 4778

Fuel Composition Affecting Heat Transfer and Fuel Consumption of Industrial Furnaces, by K. O. Bosse.
GERMAN, per, Internationale Zeitschrift fur Gaswarne, Vol 14, Dec. 1965, pp 427-436.
*BISI 4808

Model Study of the Vacuum Treatment of Metals, by P. Karinthy.
GERMAN, per, Le Vide (Das Vakuum), No 120, Nov Dec 1965, pp 413-426.
*HB 6833

Experience With an Electronic Tensile Testing Machine, by F. Michalski.
GERMAN, per, Materialprufung, Vol 7, Jul 1965, pp 237-242.
*BISI 4829

Scientific
Materials & Metallurgy (Contd)

Metallographic and X-ray Diffraction Studies of Hard Chromium Deposits, by H. Wiegand, H. R. Kaiser.
GERMAN, per, Metalloberflache, Vol 19, No 6, 1965, pp 161-173.
HB 6606

A New Process of Chemical Nickel Plating, by K. Lang.
GERMAN, per, Metalloberflache, Vol 19, Aug. 1965, pp B133-138.
*HB 6834

Effects of Alloying Elements on the Precipitation Behaviour of Austenitic Nickel-Chromium Steels, by G. Lennartz.
GERMAN, per, Mikrochimica Acta, No 3, 1965, pp 405-428.
BISI 4639

On the Thermal Conditions in a Continuous Casting Mold, by J. Tischendorf.
GERMAN, per, Neue Hutte, Vol 1, No 5, 1965, pp 303-307.
HB 6690

Cold Shaping of Austenitic Tube of Steel X 10CrNiTi 18.9, by W. Buch.
GERMAN, per, Neue Hutte, Vol 10, No 6, 1965, pp 338-344.
*HB 6840

Investigation of Banded Structure in Roller Bearing Steel, by H. J. Spies.
GERMAN, per, Neue Hutte, Vol 10, Oct 1965, pp 619-624.
BISI 4592

Mathematical Study of Counter-Flow Ore Reduction as a Basis for a Mathematical Model of a Blast Furnace, by L. von Bogdandy, R. Wartmann.
GERMAN, rpt, Paper B-1 Presented at the International Conference on Automation in Steelmaking, Amsterdam & Dusseldorf, 29-31 March & 1-3 Apr, 1965.
BISI 4677

Scientific
Materials & Metallurgy (Contd)

A Mathematical Model of a Blast Furnace and its Application, by H. Beer, et al.
GERMAN, rpt, Paper B-3 Presented at the International Conference on Automation in Steelmaking, Amsterdam and Dusseldorf, 29-31 Mar & 1-3 Apr, 1965.
BISI 4679

Discussion on Automation in the Blast Furnace on the Numerical Assessment of Reduction Processes, by W. Wenzel, F. R. Block.
GERMAN, rpt, Paper B-105 Presented at the International Conference on Automation in Steelmaking, Amsterdam & Dusseldorf, 29-31 Mar & 1-3 Apr, 1965.
BISI 4684

Contribution to the Study of the Automation of an LD-AC Steelworks, by F. J. Hufnagel.
GERMAN, rpt, Paper C-7 presented at the International Conference on Automation in Steelmaking Amsterdam & Dusseldorf, 29-31 March & 1-3 April, 1965.
BISI 4686

Discussion on Ideas of an LD-Steelworker on the Present State and Future Trend of the Automation of LD Steelplants, by A Wegscheider.
GERMAN, rpt, Paper C-103 presented at the International on Automation in Steelmaking Amsterdam & Dusseldorf, 29-31 March 1-3 April, 1965.
BISI 4690

The use of Hall Probes to Measure the Magnetic Flux of Mill Motors, by W. Nurnberg.
GERMAN, rpt, Paper D-1 presented at the International Conference on Automation in Steelmaking Amsterdam & Dusseldorf, 29-31 March & 1-3 April, 1965
BISI 4691

Operating Experience with a Wire Rod and Bar Mill and a Medium Section Mill, Especially with Fully Programmed Reversing Stands, by H. H. Billen, K. Eichacker.
GERMAN, rpt, Paper F-1 presented at the International Conference on Automation in Steelmaking Amsterdam & Dusseldorf, 29-31 March & 1-3 April, 1965.
BISI 4695

Scientific
Materials & Metallurgy (Contd)

Measuring Techniques in Cold Rolling Mills as a Prerequisite for Automation; I - Determination of the basic processing parameters, by A. Steidl.

GERMAN, rpt, Paper G-1 Part I presented at the International Conference on Automation in Steelmaking, Amsterdam & Dusseldorf, 29-31 March and 1-3 April, 1965.

BISI 4697

Measuring Techniques in Cold Rolling Mills as a Pre-Requisite for Automation: II - Experience in Practice and Laboratory With Various Methods of Measuring Rolling-Technological Parameters, by O. Pawelski.

GERMAN, rpt, Paper G-1, Pt 2, Presented at the International Conference on Automation in Steelmaking, Amsterdam and Dusseldorf, 29-31 Mar & 1-3 Apr 1965.

BISI 4698

The Present State of Knowledge of Roll Shape for Strip Mills, by P. Funke.

GERMAN, rpt, Paper Presented at 28th Conference of the Association of European Roll Designers, Duisburg, 25.4.64

*BISI 4830

The Effect of Additional Friction on Deformation Resistance, by J. Ludyga.

GERMAN, rpt, Paper Presented at 28th Conference of the Association of European Roll Designers, Duisburg, 25.4.64

*BISI 4831

The Design of Roll Pases for Equal and Unequal Angle Sections, by U. Suppo.

GERMAN, rpt, Paper Presented at 28th Conference of the Association of European Roll Designers, Duisburg, 25.4.64

*BISI 4832

The Detection of Grain Boundaries Damaged by Over-heating or Burning, by H. Klemm.

GERMAN, per, Praktische Metallographie, Vol 2, Apr 1965, pp 64-66.

*BISI 4833

Scientific
Materials & Metallurgy (Contd)

Quality of Austenitic Chromium-Nickel Steels Improved by Deoxidation Practice, by

A. Schoberl, W. Holzgruber, et al.
GERMAN, per, Radex Rundschau, No 6, 1965,
pp 722-732.

HB 6816

Historical Development of the Industrial Furnace and its Place in the Steel Industry, by C. God.

GERMAN, per, Radex Rund, Oct 1965, pp 672-686.

BISI 4604

Cleaning With Ultrasonics, by H. Poetschke.

GERMAN, per, Schleif-und Poliertechnik, No 1, 1965, pp 7-11.

BISI 4541

Thread Production by Chipless Cold Forming (2 parts), by E. Lickteig.

GERMAN, per, Schrauben, Muttern, Fortteile, (Suppt. to Draht-Welt), Dec 1965, pp 669-674, Jan 1966, pp 39-44.

*BISI 4790

The Welding of Thick Austenitic Steel Plate and Forgings, by S. Sadowski.

GERMAN, per, Schweissen Schneiden, Jun 1964, pp 217-228.

*BISI 4780

On the Oscillations of Steam Turbine-Rotors, by A. Stodola.

GERMAN, per, Schweiz. Bauzeitung, Vol 63, No 18/19, 1914, pp 251-255, 271-275.

*NASA TT F-10,021

Transverse Vibrations in Steam Turbine Rotor Disks, by Dr. Fr. Dubois.

GERMAN, per, Schweiz. Bauzeitung, Vol 89, No 12, 1927, pp 149-153.

*NASA TT F-10,008

Lubricants and Lubricant-carriers in the Drawing of Steel Wire. Part 2, by W. Lueg.

GERMAN, per, Stahl Eisen, Vol 76, No 17, 1956, pp 1108-1116.

*HB 6846

Scientific
Materials & Metallurgy (Contd)

A Contribution on the Mathematical Determination of the Capacity for Full Heat Treatment of Heavy Forgings, G. Bandel, H. C. Haumer.
GERMAN, per, Stahl Eisen, Vol 84, 16 Jul. 1964, pp 932-946.
BISI 3925

Sizing of Hydraulic Piping, by M. Hansen.
GERMAN, per, Stahl Eisen, Vol 85, 25 Feb. 1965, pp 183-184.
BISI 4729

Action of Hydrogen and Other Gases on Steels at Elevated Temperatures, by I. Class.
GERMAN, per, Stahl Eisen, Vol 85, 25 Feb 1965, pp 204-211.
*BISI 4834

Using Optical Means of Stress Measurement to Ensure Structural Strength: A Comparison Buttress and Solt Threads, by A. Kuske.
GERMAN, per, Stahl Eisen, Vol 85, 8 Apr 1965, pp 397-400.
BISI 4442

Determination of Reducibility of Iron Ores Using Programmed Blast Furnace Conditions, by H. Schenck, et al.
GERMAN, per, Stahl Eisen, Vol 85, 12 Aug. 1965, pp 963-970.
BISI 4671

Performance of Ingot Molds of Spheroidal Graphite Cast Iron at Steel Plants. Part 2 of 'Experience with Ingot Molds of Spheroidal-Graphite Cast Iron', by E. Spetzler, A. Vincent.
GERMAN, per, Stahl und Eisen, Vol 85, No 16, Aug 1965, pp 982-987.
HB 6659

The Testing of Big Forgings, by E. Martin.
GERMAN, per, Stahl und Eisen, Vol 85, No 19, 1965, pp 1173-1182.
HB 6582

Methods of Controlling the Nitride Content of Steel, by J. Degenkolbe.
GERMAN, per, Stahl Eisen, Vol 85, No 19, 1965, pp 1198-1199.
*BISI 4812

Scientific
Materials & Metallurgy (Contd)

Soft Carbon Steels for Sheet and Strip for Cold Forming, by D. Schauwinhold, A. Selige.
GERMAN, per, Stahl Eisen, Vol. 85, 21 October 1965, pp 1297-1307
BISI 4636

Improvement of the Mechanical Properties of Strip Continuously Galvanised After Heat Treatment, by Additional Tempering, by P. Werthebach.
GERMAN, per, Stahl Eisen, Vol 85, 21 Oct 1965. pp 1308-1311.
BISI 4613

Heat Treatment and Descaling of Wire Rod in Vacuo, by F. Bleilob, H. Jorm.
GERMAN, per, Stahl und Eisen, Vol 85, No 21, Oct 1965, pp 1311-1320.
HB 6687

Annealing Experiments on Steel Wire in Various Furnace Atmospheres, by W. Schwenzfeier, O. Pawelski.
GERMAN, per, Stahl Eisen, Vol 85, No 21, 1965, pp 1320-1327.
*HB 6839

The Maintenance Section, by H. Wiegel.
GERMAN, per, Stahl Eisen, Vol 85, Nov. 4, 1965 pp 20-23.
*BISI 4801

Planning an Iron Ore Transhipment and Pelletising Plant as a European Steelworks Community Project, by P. Puhlmann.
GERMAN, per, Stahl Eisen, Vol 85, 4 Nov 1965 pp 1361-1371.
BISI 4638

Position of Development in Programmed Hot Rolling Reversing Mill Trains, by H. Wiegmann, et al.
GERMAN, per, Stahl Eisen, Vol. 85 4 Nov. 1965, pp 1398-1403
BISI 4636

Scientific
Materials & Metallurgy (Contd)

The Use of Liquified Gas in the Iron and Steel Industry I - Conversion of an Intergrated Steelworks to the Use of Liquified Gas, by R. Nikolie.
GERMAN, per, Stahl Eisen, Vol 85, 4 Nov 1965, pp 1412-1417.
BISI 4702

Experience Gained Regarding Air Cooled Ladle Stoppers, by H. Damoiseaux, K. Monreal
GERMAN, per, Stahl Eisen, Vol 85, 4 Nov 1965, pp 1479-1481.
*BISI 4817

Slag Practice in Oxygen Top Blowing Processes for High-Phosphorus Pig Iron, by J. Schoop, K. K. Aschendorff
GERMAN, per, Stahl Eisen, Vol 85, 18 Nov 1965, pp 1517-1525.
BISI 4634

Planning and Mode of Operation of a new Universal Slabbing Mill and Wide Strip Mill, by A. Gerard et al.
GERMAN, per, Stahl Eisen, Vol. 85, 18 Nov. 1965, pp 1525-1532
BISI 4615

Recent Contributions on the Determination of Sulfur in Steel and Other Iron Alloys, by E. Schoffmann.
GERMAN, per, Stahl und Eisen, Vol 85, No 23, 1965, pp 1546-1548.
HB 6787

Study of the Production Conditions for Hot-Dip Galvanized Steel Wire With Zinc Coats as Thick and Adherent as Possible, by H. Krautmacher, P. Funke Jr.
GERMAN, per, Stahl Eisen, Vol 85, 30 Dec 1965, pp 1713-1722.
*BISI 4789

The Origin of the Basic Oxygen LD Process, by R. Durrer, H. Hellbrugge, et al.
GERMAN, per, Stahl und Eisen, Vol 85, No 26, 1965, pp 1751-1754.
HB 6796

Scientific
Materials & Metallurgy (Contd)

Economic Plant Management With the Aid of Standard Cost Accounting, by Scholler.
GERMAN, per, Stahl Eisen, Vol 86, 13 Jan 1966, pp 8-16.
*BISI 4788

Effect of the Type of Sulphide Formation on the Macinability of Free-cutting Steels, by D. Radtke, D. Schreiber.
GERMAN, per, Stahl Eisen, Vol 86, 27 Jan 1966, pp 89-99.
*BISI 4775

Control of the Flow of Materials and Optimum Allotment of Slabs by the use of an Electronic Computer System, by H. Pelzer, K. A. Ruth.
GERMAN, per, Stahl Eisen, Vol 86, 27 Jan 1966, pp 100-106.
*BISI 4776

State of Knowledge and Development Trends in the Sphere of Tool Steels, by K. Bungardt.
GERMAN, per, Stahl Eisen, Vol 86, 10 Feb 1966, pp 150-160.
*BISI 4822

Modern Electro-Mechanical Weighing in an Oxygen Steelworks, by W. Breuninger, K. Buscher.
GERMAN, per, Stahl Eisen, Vol 86, 24 Feb, 1966, pp 208-213.
*BISI 4819

The Influence of Temperature and Moisture on the Electrical Conductivity of High Insulating Dusts, by S. Masuda
GERMAN, per, Staub, Vol. 25, May 1965, pp 175-179
BISI4759

The Development of Cracks in Steel Parts, by J. Nemec.
GERMAN, per, Strojironstvi, Vol 14, No 12, 1964, pp 910-915.
*ITD-TI-65-116

Methods for Resistance Welding, by K. Havers.
GERMAN, per, Techn. Mitt, Vol 56, May 1963, pp 199-205.
*BISI 4818

Scientific
Materials & Metallurgy (Contd)

Powder-Metallurgically plated Sliding and Friction Materials, by H. Franssen.
GERMAN, per, TZ fur praktische Metallbearbeitung, July 1965, pp 454-458.
*BISI 4807

Possibilities of Vacuum-Gas Metallurgy in the Manufacture of Steel, by W. Coupette.
GERMAN, per, Vakuum-Techn., Vol 14, Sept. 1965, pp 157-163.
*BISI 4793

Dew Range Control Development and Experiences, by H. Mika, E. Sperling
GERMAN, per, VGB Mitt., Vol 95, Apr. 1965, pp 127-131.
*BISI 4809

Surface Changes in Cold Extrusion of Steel, by O. Kienzle and K. Mietzner.
GERMAN, per, Werkstattstechnik, Vol 54, 1964, pp 549-555.
BISI 4253

A Newly Developed Compound - Cast Steel for Wear Exposed Installations, by A. Harnisch, et al.
GERMAN, per, Werks. Korros., Vol 16, Mar 1965, pp 185-189.
BISI 4554

Workshop Undercoat - Delivery Coats and Conservation of Rolled Steel With Shop-Primer, by K. A. van Oesteren.
GERMAN, per, Werks. Korros., Vol 16, Jul 1965, pp 560-570.
*BISI 4813

Influence of Water Vapour and Carbon Dioxide on Oxidation of Iron and Iron-base Alloys at Elevated Temperatures, by A. Rahmel.
GERMAN, per, Werkstoffe und Korrosion, Vol 16 Oct 1965, pp 837-843.
BISI 4576

Scientific
Materials & Metallurgy (Contd)

Determination of Aluminium in the Iron and Steel Industry. The Benzoate Method Combined With Chelometric Titration, by J. Jurczyk.
GERMAN, per, Z. Anal. Chem., Vol 210, No 5, 1965, pp 324-334.
*BISI 4811

Formation of Deformation Textures in Heterogenous Alloys, by D. Merz, G. Wassermann.
GERMAN, per, Z. Metallkunde, Aug 1965, pp 516-522.
*BISI 4781

The Effect of Dispersed Boron Carbide on the Deformation Texture and Recrystallisation of Rolled Copper, by K. Gschwendtner, F. Haessner.
GERMAN, per, Z. Metallk., Vol 56, Aug 1965, pp 544-554.
BISI 4782

Investigations of Textures in Zone Purified Nickel, by K. Detert.
GERMAN, per, Z. Metallkunde, Vol 56, Sep 1965, pp 619-622.
*BISI 4783

Stress Relieving of Drawn Steels by Stretching Straightening and Annealing, by A. Peiter.
GERMAN, per, Z. Metallk., Vol 57, Jan 1966, pp 1-8.
*BISI 4836

On the Occurrence of Vapour Jets in High-Current Carbon Arcs, by R. Wienecke.
GERMAN, per, Zeitschrift fur Physik, Vol 151, No 2, 1958, pp 159-173.
BISI 4574

The Transport of Ions and Electrons in Binary Oxides and its Investigation by Means of EMF Measurements, by H. Schmalzried.
GERMAN, per, Zeitschrift fur Physikalische Chemie, Vol 38, 1963, pp 87-102.
*BISI 4784

Multilayer Tube of Synthetic Materials, 10 p.
GERMAN, pat, Patent No 1,097,220.
Dept of Comm
Patent Office

Scientific
Materials & Metallurgy (Contd)

Some Factors Influencing the Thickness of Cold Rolled Strip, by Z. Nagy.
HUNGARIAN, per, Koh. Lapok, Vol 98, No 6, 1965, pp 279-284.
*BISI 4823

Study of the Magnetic Characteristics of Bivalent Nickel Complexes of Various Symmetries, by J. Csaszar.
HUNGARIAN, per, Magyar Kemiai Folyoirat, Vol LXXI, No 3, 1965, pp 114-120.
*FTD HT-66-205

Effect of Crystal Orientation on Etching of Metal Single Crystals VI - Tin, by L. Peraldo Bicelli, et al.
ITALIAN, per, Met. Ital., Vol 56, Feb 1964, pp 54-60.
BISI 4458

Crystal Structure of Bright Tin Electro Deposit Studies on Bright Tin Plating, by D. Nohuyasu.
JAPANESE, per, Journal of the Metal Finishing Society of Japan.
*BISI 4825

Study of Bright Tin Coating Pt. 4. Corrosion Resistance of Electrodeposited Bright Tin Coatings, by N. Dohi, M. Kamon.
JAPANESE, per, J. Metal Finishing Soc. Japan, Vol 15, No 12, 1964, pp 485-492.
BISI 4537

The Maximum and Minimum Values of the Heat Transmitted From Metal to Boiling Water Under Atmospheric Pressure, by S. Nukiyama.
JAPANESE, per, Jnl. Soc. Mechanical Engineers of Japan, Vol 37, No 206, Jun 1934, pp 367-374.
*BISI 4787

On the Non-Metallic Inclusion and Austenite Grain Size of Plain Carbon Steel. (Effect of CA on Iron and Steelmaking). Part 2, by T. Ototani et al.
JAPANESE, per, Nippon Kinzoku Gakkaiishi, Vol 27 Dec. 1963, pp 622-628.
*BISI 4803

Scientific
Materials & Metallurgy (Contd)

Creep Characteristics as Related to the Heat-Treatment and Microstructures in Stainless Steel Stabilized by Titanium, by Eiji Myoshi.
JAPANESE, per, Nippon Kinzoku Gakkaiski, Vol XXVIII, 1964, pp 604-610. 9232107
AEC-ORNL-Tr-963

Some Steelmaking Applications of Investigations of Non-Metallic Inclusions, by J. Foryst.
POLISH, per, Prace, Inst. Hutn., Vol 17, No 2/4, 1965, pp 219-223.
*BISI 4824

On the Control of the Oxygen Consumption in a Basic Oxygen Ld Furnace: Part 2 of 'Study of the End Point Control in the Basic Oxygen LD Process', by S. Nakata, et al.
JAPANESE, per, Tetsu to Hagane, Vol 50, No 11, 1964, pp 1727-1730.
IB 6409

Characteristics of Inclusions in Steels Deoxidized With Silicon and Silico-Manganese; Part 3 of 'Deformation of Nonmetallic Inclusions in Steel During Rolling', by M. Sumita, I. Uchiyama.
JAPANESE, per, Tetsu to Hagane, Vol 50, No 11, 1964, pp 1870-1873.
IB 6791

Erosive Wear of Working Lining of Basic Oxygen LD Furnace, by K. Saito, et al.
JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 727-729.
IB 6742

Ways of Economizing on Refractory Brick Consumption in the Hirohata (Japan) Basic Oxygen LD Furnace, by T. Oya, et al.
JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 729-732.
IB 6743

Effect of Lance Nozzle Condition and Method of Charging Fluxes as Coolants Upon the Slag Iron Content: Part 1 of 'Study of Slag Iron Content in Low-Carbon Steelmaking by the Basic Oxygen LD Process', by T. Itaka, et al.
JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 722-725.
IB 6740

Scientific
Materials & Metallurgy (Contd)

Effect of Continuous Casting Conditions on the Quality of Pure Nickel and Products Rolled Therefrom: Part 4 of 'A Study of the Continuous Casting of Steel', by A. Suzuki, et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1901-1904.
HB 6708

Continuous Casting at a North Japan Special-Steel Plant, by Sh. Koike, T. Mikage. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1904-1906.
HB 6700

Performance of Multi-Hole Compared With Single-Hole Lance Nozzles in Basic Oxygen LD Steelmaking. Part 2 of 'Study of Lance Nozzles in Basic Oxygen LD Process', by S. Hayashi, et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1911-1914.
HB 6713

Effect of Fluxes Used as Coolants on Blowing Times and Metal Yields. Part 2, of 'Study of Iron Content of Slag in Low-Carbon Steel Made by the Basic Oxygen LD Process', by T. Itaoka, et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1920-1922.
HB 6735

Refining in Basic Oxygen LD Steelmaking, by A. Okazaki, et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1922-1925.
HB 6714

Hot Repairs to the Lining of Basic Oxygen Furnaces, by H. Nemoto, et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1935-1937.
HB 6848

Behavior of Nonmetallic Inclusions [During Rolling] of Steel Deoxidized With the Combinations Mn-Al and Si-Al: Part 5 of 'Deformation of Inclusions in Steel During Rolling', by I. Uchiyama, N. Sumita. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1959-1962.
HB 6710

Scientific
Materials & Metallurgy (Contd)

Determination of Metal Level in Mould During Continuous Casting of Steel, by Z. Cerowski et al. POLISH, per, Hutnik, Vol 32, Dec. 1965, pp 419-422.
*HB 6836

The Effect of Hot Working Conditions on the Re-crystallisation of Steels, by R. Wusatowski. POLISH, per, Prace Inst. Hutniczych, Vol 16, No 3, 1964, pp 113-125.
BISI 4600

Filtration with an Additional Filtering Layer, by Horst Buerger, Riedel. POLISH, per, Przemysl Chemiczny, Vol XLIV, No 5, 1965, pp 279-281. 9232096
AEC-ORNL-Tr-1016

Utilization of Metallurgical Slags for Production of Glass and Glass-Ceramic Materials, by B. Ziemia, E. Chlopicka. POLISH, per, Szklo i Ceramika, Vol 16, Mar 1965, pp 69-71.
BISI 4673

On the Use of Projected Networks and Moires for Plotting Contour Lines, by Nicolae Ch. Oprescu. PORTUGUESE, rpt, Tenth International Congress of Photogrammetry, Commission V, Sep 1964, pp 125-135 + 1 plate.
*ACIC TC-1003

Determination of Traces of Aluminium in Steel, by J. B. Nieves, M. H. Lancina. SPANISH, per, Inst. Hierro Acero, Vol 17, Jul-Sep 1964, pp 517-522.
BISI 4779

Determination of Diffusible Hydrogen in Metals Deposited by Electric Arc Welding. SPANISH, per, Rev. Metal. CENIM, Vol 1, No 1, 1965, pp 96-97.
BISI 4580

Scientific
Materials & Metallurgy (Contd)

Forces and Work During Hot Sawing, by
G. Wallquist.
SWEDISH, per, Jernkont. Ann., Vol 140, No 1,
1956, pp 5-23.
BISI 4353

Preparatory Considerations and Experiments on
the Automation of the Basic Oxygen LD Process,
by W. Schleicher, et al.
SWEDISH, per, Jernkontorets Annaler, Vol 149,
No 1, 1965, pp 1-11.
HB 6640

Mathematics & Data Processing

Automatic Operational Management of Processes
of Production, by A. B. Chelyustkin, 307 pp.
RUSSIAN, bk, Avtomaticheskoye Operativnoye
Upravleyiye Proizvodstvennymi Protessami,
1965, pp. 1-247.
JPRS 34972

The Problem of Optimizing the Structures of
Information Networks, by V. V. Kiryukhin,
12 pp.
RUSSIAN, per, Avtomatika i Telemekhanika, Vol
XXVI, No 12, Dec 1965, pp. 2214-2220.
JPRS 34608

Principles of Constructing a Neuron Model
Performing Elementary Mathematical Operations,
by I. A. Lyubinskiy and N. V. Pozin, 14 pp.
RUSSIAN, per, Avtomatika i Telemekhanika,
Vol XXVI, No 12, Dec 1965, pp. 2221-2229.
JPRS 34608

Evaluating the Accuracy of the Output
Signal during Modeling of Dynamic Processes
by Means of a Universal Digital Computer,
by S. Ya. Vilenkin and E. A. Trakhtengerts,
12 pp.
RUSSIAN, per, Avtomatika i Telemekhanika,
Vol XXVI, No 12, Dec 1965, pp. 2230-2238.
JPRS 34608

Scientific
Mathematics & Data Processing (Contd)

Analytical Conditions of Positiveness of
A Real Function, by M. V. Meyerov, 5 pp.
RUSSIAN, per, Doklady Akademii Nauk BSSR,
Vol 165, No 4, 1965, pp. 780-782.
JPRS 34418

Cybernetics Begins in the Shop, by
V. Shul'nan, 7 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, 10
Mar 1965, p 12. 9699955
FTD-TT-65-1681

Cybernetic Predicting Devices, by
A. G. Ivakhnenko and V. G. Lapa,
RUSSIAN, bk, Kiberneticheskiye Pred-
skazyvayushchiye Ustroystva, 1965,
pp 1-214.
*JPRS/NY-13231

Information Computer Center of a Machine
Building Plant, by V. B. Liberman, 6 pp.
RUSSIAN, per, Mashinostroitel', No 12, 1965,
pp. 30-32.
JPRS 34419

On the Representation of the Numbers
1, 2, ... N by Means of Differences,
by L. Redei and A. Renyi, 8 p.
RUSSIAN, per, Matematicheskii Sbornik,
66, Vol XXIV, 1948, pp 385-389.
9699873
AFCRL G-T-R-65-7

Scientific
Mathematics & Data Processing (Contd)

Variation Problem of Three-Dimensional Supersonic Flows, by V. M. Borisov.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 29, No 1, 1965, pp 106-113. 9699357
FTD-TT-65-1778/1+2+4

On the Construction of Two-Dimensional Equations of the Theory of Elastic Thin Plates, by A. L. Gol'denveyzer, A. V. Kolos.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 29, No 1, 1965, pp 141-155. 9699357
FTD-TT-65-1778/1+2+4

Programmed Learning; Programmed Text Books; Teaching Machines, by A. V. Prokof'yev.
RUSSIAN, bk, Programmirovannoye Obucheniye; Programmirovannyye Uchebniki; Mashiny Dlya Obucheniya, 1965, pp 1-162.
*JPRS/SF-4191

Theorems About the Behavior of the Green Function of a Finite Analog of the Strum-Liouville Boundary Problem and Their Application to the Study of Differential Equations, by A. L. Peptin.
RUSSIAN, per, Sibirskiy Matematicheskiy Zhurnal, No 5, 1964, pp 1163-1180.
*FTD-IT-66-209

Man and Automate Systems, by D. A. Oshanin,
RUSSIAN, bk, Sistema "Chelovek i Avtomat" pp 1-256, 1965.
*JPRS/NY-13240

TsUM-1 Digital Control Computer for General Commercial use, by A. S. Podakov.
RUSSIAN, bk, Trudy Soveshchaniya, Moscow, Mashinostroyeniye, Nauchno-Tekhnicheskoye Obshchestvo Priborostroitel'noy Promyshlennosti. Nauchno-Tekhnicheskoye Soveshchaniye. 3d, Moscow, 1962. Vychislitel'naya Tekhnika Dlya Avtomatizatsii Proizvodstva, 1964, pp 221-230.
*FTD-IT-66-183.

Scientific
Mathematics & Data Processing (Contd)

Chief Potentials of Programmed Learning, by V. P. Bepal'ko, 7 pp.
RUSSIAN, per, Vestnik Vysshey Shkoly, No 9, Sept 1965, pp. 46-50.
JPRS 34483

Belorussian VUZ Proposals for Programmed Learning, by Ye. B. Lozhechnikov, 5 pp.
RUSSIAN, per, Vestnik Vysshey Shkoly, No 9, Sept 1965, pp. 51-54.
JPRS 34483

Some Philosophic Questions of Statistics, by N. K. Druzhinin, 13 pp.
RUSSIAN, per, Voprosy filosofii, No 1, Jan 1966, pp. 22-31.
JPRS 34607

Analog Device, by B. V. Bolotov.
RUSSIAN, Patent Nr.: 170699
*FTD-TT-66-97

On the Machine Solutions of Ordinary Differential Equations With Boundary Conditions, by Anatol Gosiewski.
GERMAN, per, Archivum Automatyki i Telemechaniki, Vol 10, No 2, 1965, pp 239-257.
*FTD-TT-66-117

Scientific
Mathematics & Data Processing (Contd)

On the Resonance Concept in Systems
of Linear and Nonlinear Ordinary Differential
Equations, by R.I.I.A. Karim.
GERMAN, rpt, Über den Resonanzbegriff
bei Systemen Linearer und Nichtlinearer
Gewöhnlicher Differentialgleichungen,
1963.
NASA TT F-300

Old and New Ideas on Numerical Quadrature,
by E. Stiefel.
GERMAN, per, Z. Angew. Math. Mech, Vol 41,
No. 10/11, 1961, pp 408-413.
*AEC
EDC April 14, 1966

Hypergeometric Functions and Various
Related Problems, by S. Pincherle.
ITALIAN, per, Giorn Mat Battaglini
Naples, Vol XXXII, 1894, pp 209-291.
NASA TT F-9700

Nuclear Sciences & Technology

Yield and Angular Distribution of
Secondary Nucleons From Plane
Sources Under the Effect of 660-mev
Protons, by V. A. Kon'shin,
E. S. Matusevich, et al.
RUSSIAN, rpt, NP-15,385
*AEC ORNL-Tr-1191
EDC April 29, 1966

Mass-Spectrometric Detection of Reactions
between Highly Excited Hydrogen Atoms and
Ethylene Molecules, by S. E. Kupryanov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLXII,
No 4, 1965, pp 865-869. 9232216
AEC-SC-T-66-0706

On the Question of Standardizing
the Monitoring of Water
Purity in Nuclear Reactor Loop,
by B. A. Alekseev.
RUSSIAN, rpt, K Voprosy o Standartizatsii
Kontrolya nad Chistotoi Vody
v Konturakh Yadernykh Reaktorov,
IAE 789. Moscow 1964, 46 pp.
*AEC

Scientific
Nuclear Sciences & Technology (Contd)

Radiation Safety, by Yu. Grigor'yev,
Ye. Kovalev. 8 pp.
RUSSIAN, per, Meditsinskaya Gazeta, 21 Sep.
1965, p 3. 9699947
FTD-TT-65-1682

On the Fission of Nuclei Through
Quasimolecular States, by V. A. Shigin.
RUSSIAN, rpt, O Delenii Yader Cherez
Kvazimolekulyarnye Sostoyaniya, IAE-796,
Moscow 1965, 14 pp.
*AEC

Instrumentation of Certain
Experimental Channels in USSR Research
Reactors, by A. H. Demidov.
RUSSIAN, rpt, Oborudovaniye Nektorykh
Eksperimental'nykh Kanklov
Nauchno-Issledovatel'skikh
Reaktorov Sovetskogo Soyuza, IAE-725,
Moscow, 1964, 38 pp.
*AEC

Negative Ions of Atoms, by
B. M. Smirnov.
RUSSIAN, rpt, Otritsatel'nye Iony
Atomov, (Obzor), IAE-810, 93 pp.
*AEC

Scientific
Nuclear Sciences & Technology (Contd)

A Nuclear Magnetometer for Measuring Highly Non-Uniform Magnetic Fields, by D. P. Vasilevskaya, L. V. Vasil'yev, 6 pp. RUSSIAN, rpt, PTE (Instruments and Experimental Techniques), No 1, 1965, pp 174-177. 9699749 Dept of Navy/ONI Tr No 2077

Spectrum of Gamma Rays Occuring During Thermal Neutron Capture by Gold, by L. V. Groshev, A. M. Demidov, et al. RUSSIAN, rpt, Spektr Gamma-Luchei, Voznikayashchikh pri Zakhvate Teplovykh Neitronov Zolotom, IAE-772, Moscow, 1964, 10 p. *AEC

Statistical Theory of Endothermic Reactions 2. Unimolecular Reactions, by E. E. Nikitin. RUSSIAN, per, Teor i Eksperim Khim, Vol I, No 2, 1965, pp 144-150. 9232086 AEC-ORNL-Tr-942

The Role of Shielding in the Radiation Safety System, by S. M. Gorodinskiy. RUSSIAN, per, Trudy Sbornik Statey Zashch Pokrytiya v Atomnoy Tekh, 1963, pp 5-10. *FTD-MT-66-22

The use of Films with Adhesive layers for Shielding against Radioactive Contamination, by T. G. Ivanova, N. I. Gus'kova. RUSSIAN, per, Trudy Sbornik Statey Zashch Pokrytiya v Atomnoy Tekh, 1963, pp 93-97. *FTD-MT-66-22

Investigation of Lacquers for Shields against Radioactive Contamination, by S. M. Gorodinskiy, Z. Ye. Panfilova. RUSSIAN, per, Trudy Sbornik Statey Zashch Pokrytiya v Atomnoy Tekh, 1963, pp 126-136. *FTD-MT-66-22

Scientific
Nuclear Sciences & Technology (Contd)

Pulsed Magnetic Fields Apparatus, by V. K. Makar'in, V. P. Martem'nov. RUSSIAN, rpt, Ustanovka "Impul'snye Magnitnye Polya", IAE-795, Moscow 1965, 21 pp. *AEC

Water Purification and Water Preparation at Nuclear Reactors, by E. S. Chernorotov, N. V. Potekhin, et al. RUSSIAN, rpt, Vodoochistka i Vodopodgotovka na Yadernykh Reaktora'y, IAE-787, Moscow, 1964, 14 p. *AEC

Irradiation 3-Methoxy-4-Hydroxy-Almond Acids in a Pilot, by V. Dolezal, CZECH, per, Vojenske Zdravotnicke Listy, Vol XXXIV, No 4, 1965, pp 164-166. *FTD-TT-66-143

A New Criterion Regarding the Stability of Systems Containing Nuclear Reactors, by V. M. Popov. FRENCH, per, Acad. Rep. Populare Romine, Studii Cercetari Energet. Ser A, Vol XII, 1962, pp 513-531. 9232113 AEC-BNL-Tr-38

Shielding Experiments at the Reactor Station Geesthacht, Annual Report 1964, by E. Bagge, et al. GERMAN, rpt, Abschirmungsexperimente Am Forschungsreaktor Geesthacht, 1964, EUR-2494, D. *AEC ORNL-Tr-1225

Scientific
Nuclear Sciences & Technology (Contd)

Optimum Dimensioning of Dual-Purpose Plants for the Production of Desalinated Water and Electricity with the Use of Nuclear Energy, by J. Gaussens.
FRENCH, rpt, International Atomic Energy Agency, 5th Panel on the Utilization of Nuclear Energy in Water Desalination.
*AEC ORNL-TR-1173
EDC April 14, 1966

Study Group for Widespread Radioactive Fallout, Annual Report 1964, by H. Krause
GERMAN, rpt, Jahresbericht 1964, der Studiengruppe fuer Tief Lagerung Radioaktiver Abfalle, KFK-357 West Germany, May 1965,
26 p.
*AEC

Survey of Chemical Technology of the Nuclear Industry, by Leo Neumann, Vratislav Rypar.
GERMAN, bk, Prehled Chemické Technologie Jaderného Průmyslu, Zásady Vyroby Izotopových Materiálu, Chapter 3, pp 60-75, 1964.
*AEC

Theory of Multiple Scattering of Radiation in Expanding Dust Medium, Part 1, by A. Schaarschmidt.
GERMAN, per, Z. Angew. Phys, Vol 19, No 3, 1965, pp 180-187.
*AEC ORNL-TR-1152
EDC April 14, 1966

Theory of Multiple Scattering of Radiation by Expanding Dust Medium, Part 2, by A. Schaarschmidt.
GERMAN, per, Z. Angew. Phys, Vol 19, No 3, 1965, pp 187-193.
*AEC ORNL-TR-1153
EDC April 14, 1966

Scientific
Nuclear Sciences & Technology (Contd)

Method for the Investigation of Boiling by an Analysis of Fluctuations Induced in a Reactor, by I. Iftode et al, 11 p.
RUMANIAN, rpt, Ob odnom Metode Issledovaniya Kipeniya Analizom Flyuktyatsii Vyzvannykh v Reaktore, April 1963, NP-13442.
*AEC
EDC May 1, 1966

Comparative Studies on Counting Methods for the Absolute Determination of the Activity of Alpha Sources, by H. Ihle, et al.
LANGUAGE UNKNOWN, rpt, Jul 298-PC, 1965.
*AEC Tr 2371.

Physics

Viscous Hypersonic Flow with Parabolic Axially Symmetric Shock, by V. S. Nikolaev, 12 p.
RUSSIAN, per, Akademii Nauk SSSR, Izvestiya Mekhanika i Mashinostroyeniye, No 6, 1964, pp 48-52.
9699922
AFCRL G-T-R-65-10

High-Frequency Oscillations Resulting From the Interaction of an Electron Beam With Plasma, by A.K. Herezin, Ya.B. Faynberg. 21 pp.
RUSSIAN, per, Atomnaya Energiya, Vol 18, No 1, 1965, pp 5-14. 9699945
FTD-TT-65-1455

Hydromagnetic Instability of Counter-Streaming Plasmas, by A. Hruska,
RUSSIAN, per, Chekoslovatskiy Fizicheskii Zhurnal, Vol XIV, No 8, 1964,
pp 586-593,
*FTD-TT-66-139

Theory of Coagulation and Precipitation of Particles of Aerosol in Turbulent Flow of Gas. On the Coefficient of Capture of Aerosol Particles, by V. G. Levich, 9 p.
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol XCIX, 1954, pp 1041-1044.
9699925
AFCRL G-T-R-65-11

Scientific
Physics (Contd)

Rotational Relaxation of Diatomic Molecules,
by Ye. Ye. Nikitin.
RUSSIAN, per, Dokl. Akad. Nauk SSSR, Fiz.
Khim., Vol 161, No 3, 1965, pp 637-640.
NASA TT F-10,007

Mechanisms of Superconductivity, by V. Z.
Kresin, 7 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Vol 165, No 5, pp. 1059-1061.
JPRS 34842

Physics of the Atmosphere, by P. N. Tverskoi.
RUSSIAN, rpt, Fizika Atmosfery. Kurs
Meteorologii, 1962,
NASA TT F-288

The Effect of the Gas Medium and
Pressure on Body Functions III.,
by M. P Brestkin.
RUSSIAN, rpt, Funktsii Organizma v
Usloviyakh Izmenennoi gazovoi Sredy,
1964,
NASA TT F-358

A Magneto-hydrodynamic Theory -- The
Pinch Effect in the High Temperature
Dense Plasma, by V. S. Imshennik,
V. F. D'iachenko.
RUSSIAN, rpt, Gosudarstvennyi Komitet
po Ispol'zovaniyu Atomnoi Energii,
Institut Atomnoi Energii im I. V. Kurchatova,
(IAE-960), pp 10-64.
*AEC
EDC May 15, 1966

Determining the Density of a Gas Behind a
Shock Wave From Shadow Photography, by
A. N. Semenov. 18 pp.
RUSSIAN, per, Inzhenernyy Zhurnal, Vol 4,
No 4, 1964, pp 743-750. 9699952
FTD-TT-65-1385

Non-One-Dimensional Solutions of Equations
in Magneto-Gas Dynamics, by V. A. Rykov.
RUSSIAN, per Inzh. Zh., Vol 5, No 5, 1965,
pp 945-949.
*NASA TT F-10,026

Scientific
Physics (Contd)

Combustion of a Carbon Particle Moving
in a Gas Flow, by Z. S. Leont'yeva.
RUSSIAN, per, Izv Ak Nauk SSSR OTN,
No 12, 1951, pp 1801-1811.
NASA TT F-10,000

On the Theory of Infrared Light Absorption in
Crystals, by V. Kashcheyev.
RUSSIAN, per, Izvestiya Ak Nauk Lat SSR, No 11,
(196) 1963, pp 63-71.
*FTN-IT-66-210

Horizontal and Axisymmetric
Transitional Gas Dynamics at the
Anterior Border of a Streamlined Body,
by K. A. Bezhanov.
RUSSIAN, per, Izv Akad Nauk SSSR, Ser
Mekh, No 2, 1965, pp 168-170.
NASA TT F-9455

Determination of Resistance of a Flat
Plate at a Zero Attack Angle in Ultrasonic
Rarefield Gas Flow, by V. A. Sukhnev.
RUSSIAN, per, Izv Akad Nauk SSSR, Ser
Mekh, No 2, 1965, pp 171-174.
NASA TT F-9456

Oxidation of Alloys in the System Ni₃Al-
Ni₃Ni, by M. P. Arbuzov, B. G. Chuprina.
RUSSIAN, per, Iz VUZ Fizika, No 1,
1964, pp 93-98.
*FTD-IT-66-129

Temperature Dependence of Absorption
Spectra of Zinc Sulfide Polycrystalline
Films, by K. V. Shalimova, N. K. Morozova.
RUSSIAN, per, Iz VUZ Fizika, No 2,
1964, pp 104-109.
*FTD-IT-66-128

Scientific
Physics (Contd)

Laboratory and Demonstration Heavy-Particle Accelerators, by G. I. Kuz'menko.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Fizika, No 4, 1965, pp 174-175.
*FTD HT-66-191

Diffusion of a Fully Ionized Plasma Across a Magnetic Field, by V. F. Aleksin and N. A. Khizhniak, 6 p.
RUSSIAN, rpt, Konferentsiya po Fizike Plazmy i Probleme Upravlyaemykh Termoiademykh Reaktsii, Dokaldy, Kharkov, 3rd, April 1962, Kiev, Izd-vo Akad. Nauk Ukrainskoi SSR, 1963, pp 332-336.
9699899
AFCRL T-R-467

Formation of a Stream Behind a Shock-Wave Front During Outflow from a Nozzle, by A.I. Starshinov,
RUSSIAN, per, Leningrad. Universitet. Vestnik. Seriya Matematiki, Mekhaniki i Astronomii, No 3, 1965, pp 125-127.
*FTD-TT-66-136

Acceleration of a Pulsating Plasma, Slug, by P. M. Kolesnikov.
RUSSIAN, per, Magnit Gidrodinam, Vol I, 1965, pp 73-79.
NASA TT F-9452

Effect of Gas Sorption on Physical Properties of CdSe Films, by J. Viscakas and A. Medeisis.
LITHUANIAN, per, Matematika Fizika, Vol XXXIII, 1960, pp 161-169.
*ACSI I-9314
ID 2204012966

Scientific
Physics (Contd)

Theory and Practice of Ionized-Air Therapy, by L. L. Vasil'yev. 139 pp.
RUSSIAN, bk, Teoriya i Praktika Lecheniya Ionizirovannym Vozdukhom, 1951. 9700055-V
FTD-TT-65-590

Certain Properties of Calcium-Oxide Refractories, by Ye. S. Lukin, G. A. Serova. 11 p.
RUSSIAN, per, Teplofizika Vysokikh Temperatur, Vol 2, No 5, 1964, pp 736-741. 9699944
FTD-TT-65-1396

Phosphorus Containing Polyesters and Polyamides of the Aliphatic Series, by Ye. V. Kuznetsov.
RUSSIAN, per, Trudy, Geterotsepnnyye Vysokomolekulyarnyye Soyedineniya Sbornik Statey, 1963, pp 76-80.
*FTD-MT-65-446

Synthesis and Properties of a Polymer from 4.4 Vephenylvisdiazonium Tetrafluoroborate, by A. A. Berlin.
RUSSIAN, per, Trudy, Geterotsepnnyye Vysokomolekulyarnyye Soyedineniya Sbornik Statey, 1963, pp 134-138.
*FTD-MT-65-446

Study Method and Physics of Heat Exchange During Vapor Condensation, by N. V. Zozulya.
RUSSIAN, per, Tr. Inst. Teploenerg, Akad. Nauk. Ukr. SSR, No 14, 1958, pp 32-42.
NASA TT F-369

the Relation Between the Thermodynamics State of the Atmosphere and Radar Echoes From a Clear Sky, by E. M. Sal'man and G. B. Brylev, 7 p.
RUSSIAN, per, Trudy, Leningrad. Glavnaya Geofizicheskaya Observatoriya, No 159, 1964, pp 85-88, 9699895
AFCRL T-R-530

Scientific
Physics (Contd)

On the Nature of Certain Impurities in NaI-Tl Crystals Grown by Kiropulos Method, by V. N. Vyshnovs'kyi, V. V. Turkovych. RUSSIAN, per, Ukrayins'kyi Fizichnyi Zhurnal, Vol 8, No 7, 1963, pp 768-771. *FTD-HT-66-185

Characteristics of the Stimulated Raman Scattering in Benzene, by V. L. Broude, L. P. Vil'chynska. UKRAINIAN, per, Ukrayins'kyi Fiz Zhur, Vol IX, No 9, 1964, pp 1031-1032. *FTD-HT-66-174

Ferroacoustic Resonance in Magnets, by M. A. Savchenko. RUSSIAN, per, Ukrayins'kyi Fizichnyi Zhurnal, Vol 10, No 3, 1965, pp 263-274. *FTD-HT-66-217

On the Theory of Non-Localized Particles, by A. A. Vlasov. RUSSIAN, per, Zhur Eksperim i Teoret Fiz, Vol XX, 1950, pp 23-26. 9232282 AEC-LA-Tr-66-7

Superconductivity in the Ag-Ga System, by N. Ye. Alekseyevskiy, 8 pp. RUSSIAN, per, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol 49, No 1, Jul 1965, pp. 159-162. JPRS 34842

Attenuation of High-Energy μ -Mesons in Shielding Material, by B. S. Sychev, A. P. Cherevatenko, RUSSIAN, rpt, JINR-P-2354 *AEC ORNL-Tr-1192 EDC April 29, 1966

A Model of a Neuron, by N. V. Pozin. RUSSIAN, Patent Nr.: 171179 *FTD-TT-66-103

Photosensitivity of Poly(Vinyl Cinnamate) and Its Nitro-derivates, by A.P. Belyakova and Yu.S. Bokov, et al, RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya, Vol VII, No 9, 1965, pp 1637-1640. *FTD-TT-66-145

Scientific
Physics (Contd)

Investigation of a Directed Beam of High-Speed Electrons Through Mercury Vapors in a Heated-Cathode Discharge Tube, by V. Polin, S. Gvozdover. RUSSIAN, per, Zh. Eksperim. i Teor. Fiz., Vol 8, No 4, 1938, pp 436-443. NASA TT F-370

Some Observations on the Many-Body Problem in the A. A. Vlasov Arrangement, by S. V. Tyablikov. RUSSIAN, per, Zhur Eksperim i Teoret Fiz, Vol XX, 1950, pp 16-22. 9232281 AEC-LA-Tr-66-8

Theory of Nonlinear Oscillation in a Collision Plasma, by L. M. Al'tshul, V. I. Karpman. RUSSIAN, per, Zh. Eksperim. i Teor. Fiz. Vol 49, No 2(8), 1965, pp 515-528. *NASA TT F-10,015

Three-Dimensional Supersonic Equilibrium Flow of a Gas Around Bodies at the Angle of Attack, by O. N. Katskova, P. I. Chushkin. RUSSIAN, per, Zhur Vych Nat i Mat Fiz, Vol V, No 3, 1965, pp 503-518. NASA TT F-9790

A Device for Compensating the Linear Shift of an Image During Oblique Photography with a Successive-frame Aerial Camera, by A. I. Sizov. RUSSIAN, pat, Patent No 165,374. *FTD-TT-66-86

An Instrument for Measuring the Thickness of Thin Nonmagnetic and Nonmetallic Coatings on a Ferromagnetic Base, by I. V. Svistunov and N. L. Bondarenko. RUSSIAN, pat, Patent No 170,695. *FTD-TT-66-96

Scientific
Physics (Contd)

Theory of the Superconductivity of a Thin Metal Film in a Strong Magnetic Field. Critical Field of a Superconducting Film (II).
by Lei Hsiao-lin, Wu Hang-Sheng
CHINESE, per, Acta Physica Sinica, Vol XX, No 10, 1964, pp 991-1002.
NASA TT F-9873

Radiative Heat Transfer Due to the 9.6 Micron Band of Ozone, by Yin Hung (1438 1347) and Chen Ch'ang-chung (3914 7022 1813), 12 pp.
CHINESE, per, Ch'i-hsiang Hsueh-pao, Vol 35, No 4, Nov 1965, pp. 519-526.
JPRS 34854

Suppression of Side-Lobes of Linear Arrays, by L. Jen and M. Y. Loo, 14 p.
CHINESE, per, Wu-Li Hsueh-Pao, Vol XVII, No 12, 1961, pp 592-595. 9700208
AFCRL Emm-65-8

Measurement of the Lifetime of Minority Current Carriers in Ge and Si Observing the Photoconductive Decay of the Spreading Resistance Under a Point Contact, by Zhuang Wei-sha and Pan Gui-Sheng, 23 p.
CHINESE, per, Wu-Li Hsueh-Pao, Vol XIX, No 3, 1963, pp 191-201. 9700200
AFCRL Emm-65-16

Computation of the Thickness of Lead Shielding against Gamma Radiation, by Arnost Hoenig.
CZECH, per, Inzenyrske Stavby, Vol VII, 1965, pp 303-309. 9232296
AEC-ORNL-Tr-1059

Computation of the Thickness of Water Shields Against Gamma Radiation, by Arnost Hoenig.
CZECH, per, Inzenyrske Stavby, No 9, 1965, pp 399-404. 9232290
AEC-ORNL-Tr-1061

Scientific
Physics (Contd)

Thermal Evolution of the Porous Texture and Structure of Pitch Cokes, by Pierre Guiche.
FRENCH, per, Journal de Chimie Physique, Vol LXII, No 4, 1965, pp 382-390. 9232277
AEC-AERE-Tr-1039

A Physico-Chemical Model of the Cometary Nucleus, by A. H. Delsemme.
FRENCH, rpt, Vers un Modele Physico-Chimique du Noyau cometaire, 1965, 39 p.
NASA TT F-9735

Dosimetry of Individuals by the Film Blackening Method, by Martin Oberhofer.
GERMAN, per, Archiv fur Technisches Messen, Vol CCCXLII, Jul 1964, pp 149-153. 9232218
AEC-SC-T-66-0708

Studies on X-ray Emission From a Low-Pressure Pulse Discharge Without Electrodes, by C. Wahnert,
GERMAN, per, Beitrage Aus Der Plasma Physik, Vol V, No 4, 1965, pp 259-272.
*FTD-IT-66-126

Studies of Light Arcs in the Weightless State, by W. Ebert,
GERMAN, per, Beitrage Aus Der Plasma Physik, Vol V, No 5, 1965, pp 371-376
*FTD-IT-66-127

Determination of the Bremsstrahlung Spectrum at the 1.5-Mv X-Ray Tube, by R. Schneiderreit, J. Krumbiegel.
GERMAN, per, Experimentelle Technik der Physik, Vol XII, No 4, 1964, pp 247-252.
9232217
AEC-SC-T-66-0707

Scientific
Physics (Contd)

On The Temperature Rise of the
Chromosphere Through Dissipation
of Turbulent Flow of Energy,
by A. Unsold.
GERMAN, per, Zeit Astrophys, Vol LII,
No 4, 1961, pp 300-302.
NASA TT F-8780

Laminar Flow in Channels of a Variable Width,
by H. Blasius.
GERMAN, per, Zeit fur Math u. Physik, Vol 58,
1910, pp 225-233.
*AEC
EDC 1 Jun 1966

On the Nature of the Rupture Process,
by M. Polanyi,
GERMAN, per, Zeitschrift fur Physik,
Vol VII, 1921, pp 323-327.
*ACSI I-9310
ID 2204012566

Intensity and Natural Width of the
Blue Cs Doublet, I, by Wilhelm Schutz.
GERMAN, per, Zeit. Physik, Vol 64,
1930, pp 682-696.
*AEC ORNL-TR-1180
EDC Apr 28, 66

Intensity and Natural Width of Spectral
Lines, by E.F.M. van der Held.
GERMAN, per, Zeit. Physik, Vol 70, 1931,
pp 508-513.
*AEC ORNL-TR-1142
EDC April 11, 1966

Determination of the Transition Probability
2P-1S of Sodium by Absolute Intensity
Measurements of Flames,
by E.F.M. Van der Held, L. S. Ornstein.
GERMAN, per, Zeit. Physik, Vol 77,
1932, pp 459-477.
*AEC ORNL-TR-1143
EDC April 11, 1966

The Linear Zeeman Effect in Crystals,
by K. H. Hellwege.
GERMAN, per, Z fuer Physik, Vol CXXVII, 1950,
pp 513-521. 9232278
AEC-AERE-Tr-1045

Scientific
Physics (Contd)

Present Status and Prospects for Physics in
China, by Shigeru Machida, 20 pp.
JAPANESE, per, Chugoku Kenkyu Geppo, No 1,
25 Jan 1966, pp. 1-20.
JPRS 34589

On the Domains in Uniaxial Ferromagnetic
Single Crystals, by J. Klamut.
POLISH, per, Acta Physica Polonica, Vol 25,
No 5, 1964, pp 711-733.
*FTD-HT-66-150

Stimulated Raman Scattering (SRS) by
R. Nierzecki.
POLISH, per, Postepy Fizyki, Vol 16, No 4,
*FTD-HT-66-152

Application of the Laplace Transformation
and the Theory of Step Functions in the Theory
of Beams With Varying Rigidity, by
T. Iwinski.
POLISH, per, Rozprawy Inzynierskie,
Vol III, No 12, 1964, pp 429-445.
*FTD HT-66-208

Interaction of Elementary Particles
With a Gravitational Field in General
Relativity Theory and in the
Generalized Linear Theory of Gravitation
by M. P. Korkina.
UKRAINIAN, per, Ukrayins'kyi Fiz Zhur,
Vol X, No 5, 1965, pp 497-507.
*FTD-HT-66-177

Galvanomagnetic Properties of Single
Crystals of Mercury Telluride,
by L. K. Chubova, M. P. Havaleshko.
UKRAINIAN, per, Ukrayina'kyi Fizichnyi
Zhurnal, Vol 10, No 6, 1965, pp 630-635.
*FTD-HT-66-218

Growing Fibrous Mg O Crystals and their
Properties.
UKRAINIAN, per, Ukrayina'kyi Fizichnyi Zhurnal,
Vol 10, No 6, 1965, pp 676-680.
*FTD-HT-66-218.

Scientific
Physics (Contd)

The Effect of Recovery on the Recrystallization Kinetics of Deformed Metals, by L. N. Larikov, O. E. Zasychnuk, et al.
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol X, No 8, 1965, pp 899-905.
*FTD-HT-66-179

The Fluctuations and Scattering of Particles in a Turbulent Plasma, by I. O. Akhiezer,
UKRAINIAN, per, Ukrayins'kyy Fiz Zhur, Vol X, No 11, 1965, pp 1161-1167.
*FTD-HT-66-181

Miscellaneous

Nominations for Lenin Prizes in the Field of Science and Technology for 1966, 9 pp.
RUSSIAN, np, Izvestiya, 19 Feb 1966, pp. 2-3.
JPRS 34579

General Meeting of the Academy of Sciences USSR, 9 pp.
RUSSIAN, per, Priroda, No 1, 1966, pp. 2-6.
JPRS 34604

Recent Awards to Soviet Scientists, 6 pp.
RUSSIAN, per, Vestnik Akademii Nauk SSSR, No 12, 1965, pp. 127-130.
JPRS 34656

Chronicle.
RUSSIAN, per, Vestnik Moskovskogo Universiteta, No 4, 1965, pp 51-57.
ACSI I-9409 B
ID 2204016466

Problems of Interlinguistics, by V. I. Grigor'yev, 16 pp.
RUSSIAN, per, Voprosy Yazykoznaneya, No 1, Jan-Feb 1966, pp. 37-46.
JPRS 34909

Scientific
Miscellaneous (Contd)

Members of the STUVA 1965 Conference.
GERMAN, per, Stuva Nachrichten, Vol 13, No 1, 1965.
*AEC ORNL-TR-1145
EDC Apr 11, 1966

STUVA Research Activities.
GERMAN, per, Stuva Nachrichten, Vol 13, No 2, 1965.
*AEC ORNL-TR-1146
EDC Apr 11, 1966

INFORMATION RECEIVED DURING APRIL

ON COVER-TO-COVER TRANSLATIONS

Acta Mathematica Sinica, Vol XV, No 4,
1965.
Am Math Soc
Vol VII, No 2, 1965

Akusticheskii Zhurnal, Vol XI, No 4,
Oct-Dec 1965.
Am Inst Phys
Vol XI, No 4, Apr-Jun 1966

Aptechnoye Delo, Vol XV, No 2, 1966.
*JPRS/SF-4170/2

Bulleten' Eksperimental'noi Biologii i
Meditsiny, Vol LIX, No 6, 1965.
CB

Doklady Akademii Nauk SSSR, Biochemistry,
Vol CLXII-CLXIII, No 1-6, May-Aug 1965.
CB

Doklady Akademii Nauk SSSR, Biological
Sciences, Vol CLXII, No 1-6, 1965.
CB

Doklady Akademii Nauk SSSR, Earth Science
Section, Vol CLXIII, No 1-6, 1965.
Am Geol Inst

Doklady Akademii Nauk SSSR, Physics
Section, Vol CLXIV, No 4-6, Oct 1965.
Am Inst Phys
Vol X, No 10, Apr 1966

Elektrokimiya, Vol I, No 6, 1965.
CB

Elektrosvyaz, Vol XIX, No 11, 1965.
IEEE

Fizika Tverdogo Tela, Vol VII, No 10, 1965.
Am Inst Phys
Vol VII, No 10, Apr 1966

Fizika Tverdogo Tela, Vol VII, No 11, 1965.
Am Inst Phys
Vol VII, No 11, May 1966

Geliotekhnika, No 3, 1965.
JPRS 35192

Geliotekhnika, No 1, Jan/Feb 1966.
*JPRS/CSO 1880/1

Genetika, No 2, 1965.
JPRS 35022

Genetika, No 3, 1965.
JPRS 35026

Genetika, No 2, 1966.
*JPRS/SF-4174/2

Genetika, No 3, 1966.
*JPRS/SF-4174/3

Geodeziya i Aerofotografiya, No 3, 1965.
Am Geophysical Union

Geomagnetizm i Aeronomiya, Vol V, No 5,
1965.
American Geophysical Union

Gigiyena Truda i Professional'nyye
Zabolevaniya, No 1, 1966.
*JPRS/DC-12237/1

Gigiyena Truda i Professional'nyye
Zabolevaniya, No 3, 1966.
*JPRS/DC-12237/3

Izvestiya Akademii Nauk SSSR, Atmosfere i
Okeanologicheskiy, Vol I, No 9, 1965.
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Atmosfere
i Okeanologicheskiy, Vol I, No 10, 1965.
American Geophysical Union

Izvestiya Akademii Nauk SSSR, Atmosfere
i Okeanologicheskiy, Vol I, No 11, 1965.
American Geophysical Union

Izvestiya Akademii Nauk SSSR, OTN,
Tekhnicheskaya Kibernetika, No 1,
1966.
*JPRS/SF-4202/1

Izvestiya Akademii Nauk SSSR, Seriya
Fizicheskaya, No 9, 1965.
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Seriya
Fizicheskaya, No 10, 1965,
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Seriya
Fizicheskaya, No 11, 1965.
American Geophysical Union

Izvestiya Vysshikh Uchebnykh
Zavedeniy, Priborostroyeniye,
Vol IX, No 1, 1966.
*JPRS/CSO 1880

Kibernetika, Vol I, No 2, Mar/Apr 1965.
Faraday Press

Klinicheskaya Meditsina, Vol XLIV,
No 2, 1966.
*JPRS/DC-12187/2

Klinicheskaya Meditsina, Vol XLIV,
No 3, 1966.
*JPRS/DC-12187/3

Klinicheskaya Meditsina, Vol XLIV, No 4,
1966.
*JPRS/DC-12187/4

Meditsinskaya Promyshlennost' SSSR,
No 1, 1966.
*JPRS/SF-4171/1

Meditsinskaya Promyshlennost' SSSR,
No 3, 1966.
*JPRS/SF-4171/3

Nauchno-Tekhnicheskaya Informatsiya,
No 11, 1965.
JPRS 35061

Optika i Spektroskopiya, Vol XIX, No 6,
Dec 1965.
Optical Society of America

Poroshkovaya Metallurgiya, No 6 (30),
1965.
GB

Radiotekhnika, Vol XX, No 11, 1965.
IEEE

Radiotekhnika i Elektronika, Vol X, No 9,
1965,
IEEE

Radiotekhnika i Elektronika, Vol X,
No 10, 1965.
IEEE

Sovetskoye Zdravookhraneniye, Vol XXV,
No 3, 1966.
*JPRS/NY-13202/3

Sovetskoye Zdravookhraneniye, Vol XXV,
No 4, 1966.
*JPRS/DC-12287/4

Steklo i Keramika, Vol XXII, No 5-6, 1965.
CB

Tsvetnye Metally, Vol XXXVII, No 11,
1964.
Primary Sources
Vol V, No 11, 1964

Uspekhi Fizicheskikh Nauk, Vol LXXXVI,
No 3&4, Jan/Feb 1966.
Am Inst Phys
Vol VIII, No 4, Jan/Feb 1966

Vestnik Akademii Meditsinskikh Nauk
SSSR, Vol XX, No 12, 1965.
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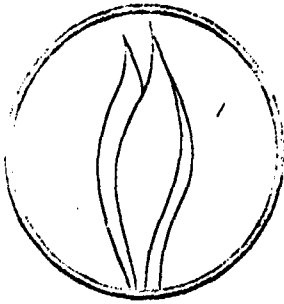
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No. 181

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RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR.....	Armenian SSR.
Arm SSR.....	Armenian SSR.
CC CPSU.....	Central Committee, Communist Party, Soviet Union.
DAN.....	Proceedings of the Academy of Sciences.
Gintsvetmet.....	State Institute of the Non-Ferrous Metals
Giprokhim.....	State Institute for the Design and Financing of Establishments in the Basic Chemical Industry.
Giprotsvetmet.....	State Institute for the Design and Planning of Non-Ferrous Metals Industry Establishments.
Giredmet.....	State Rare Metals Scientific Research Institute.
Goskhimizdat.....	State Scientific and Technical Publishing House of Chemical Literature.
Gosplan.....	State Planning Committee of the Council of Ministers, USSR.
GOST.....	All-Union Standard.
IL.....	Foreign Literature Publishing House.
Kaz SSR.....	Kazakh SSR.
L-M.....	Leningrad-Moscow.
Mashgiz.....	State Scientific and Technical Publishing House of Literature on Machinery.
Mekhanobr.....	Scientific Research Institute for the Mechanical Concentration of Minerals.
Metallurgizdat.....	State Scientific and Technical Publishing House of Literature on Ferrous and Non-Ferrous Metallurgy.
NTO.....	Scientific and Technical Society.
Oborongiz.....	State Publishing House of the Defense Industry.
ONTI.....	United Scientific and Technical Publishing Houses.
IzhKhim.....	Journal of Chemical Abstracts.
SNKh.....	Council of the National Economy.
VAMI.....	All-Union Aluminum and Magnesium Institute.

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Wolffe, M.	72		
Wu, Hang-Sheng	76,96		
Wusatowski, R.	87		



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 black ink that reads "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)

ENCLOSURE I



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
AD0482732	78-03109A	56	1	5	100	Consolidated Translation Survey For April 1966	4/1/1966	203	Approved For Release	3/25/2004
AD0485874	78-03109A	56	1	6	101	Consolidated Translation Survey For May 1966	5/1/1966	250	Approved For Release	3/25/2004
AD0486759	78-03109A	56	1	7	102	Consolidated Translation Survey For June 1966	6/1/1966	265	Approved For Release	3/25/2004
AD0488131	78-03109A	56	1	8	103	Consolidated Translation Survey For July 1966	7/1/1966	178	Approved For Release	3/25/2004
AD0800235	78-03109A	57	1	1	104	Consolidated Translation Survey For August 1966	8/1/1966	264	Approved For Release	3/25/2004
AD0801439	78-03109A	57	1	2	105	Consolidated Translation Survey For September 1966	9/1/1966	211	Approved For Release	3/25/2004
AD0803607	78-03109A	57	1	3	106	Consolidated Translation Survey For October 1966	10/1/1966	247	Approved For Release	3/25/2004
AD0804982	78-03109A	57	1	4	107	Consolidated Translation Survey For November 1966	11/1/1966	203	Approved For Release	3/25/2004
AD0805465	78-03109A	57	1	5	108	Consolidated Translation Survey For December 1966	12/1/1966	234	Approved For Release	3/25/2004
AD0808740	78-03109A	57	1	6	109	Consolidated Translation Survey For January 1967	1/1/1967	277	Approved For Release	3/25/2004
AD0811456	78-03109A	57	1	7	110	Consolidated Translation Survey For February 1967	2/1/1967	234	Approved For Release	3/25/2004
AD0813563	78-03109A	57	1	8	111	Consolidated Translation Survey For March 1967	3/1/1967	342	Approved For Release	3/25/2004
AD0814969	78-03109A	57	1	9	112	Consolidated Translation Survey For April 1967	4/1/1967	268	Approved For Release	3/25/2004
AD0816126	78-03109A	58	1	1	113	Consolidated Translation Survey Through 31 May 1967	5/31/1967	210	Approved For Release	3/25/2004
AD0818406	78-03109A	58	1	2	114	Consolidated Translation Survey Through 30 June 1967	6/30/1967	271	Approved For Release	3/25/2004
AD0834366	78-03109A	58	1	3	115	Consolidated Translation Survey Through 31 July 1967	7/31/1967	318	Approved For Release	3/25/2004
AD0820905	78-03109A	58	1	4	116	Consolidated Translation Survey Through 31 August 1967	8/31/1967	308	Approved For Release	3/25/2004
AD0822924	78-03109A	58	1	5	117	Consolidated Translation Survey Through 30 September 1967	9/30/1967	330	Approved For Release	3/25/2004
AD0824515	78-03109A	58	1	6	118	Consolidated Translation Survey Through 31 October 1967	10/31/1967	200	Approved For Release	3/25/2004
AD0824581	78-03109A	58	1	7	119	Consolidated Translation Survey Through 30 November 1967	11/30/1967	194	Approved For Release	3/25/2004
AD0832430	78-03109A	58	1	8	120	Consolidated Translation Survey Through 31 December 1967	12/31/1967	100	Approved For Release	3/25/2004
AD0828154	78-03109A	58	1	9	121	Consolidated Translation Survey Through 31 January 1968	1/31/1968	221	Approved For Release	3/25/2004
AD0829939	78-03109A	59	1	1	122	Consolidated Translation Survey Through 29 February 1968	2/29/1968	246	Approved For Release	3/25/2004

Wednesday, August 25, 2004