SOV/147-[illegible]

AUTHORS: Ostoslavskiy, I.V. [illegible] Grumondz, T.A.

TITLE: On the Relation Between the Creation of the Lift of [illegible] and the Characteristic Flow in the Boundary Layer [illegible] mezhdu vozniknoveniyem pod"yemnoy sily kryla [illegible] techeniya v pogranichnom sloye)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, [illegible] Aviatsionnaya Tekhnika, 1958, Nr 1, [illegible] (USSR)

ABSTRACT: This paper contains results of investigations [illegible] the authors at the Moscow Aviation Institute and gives an explanation of the formation of the vortex system of a wing corresponding to steady motion. Experimental results are produced in support. The wing (which is unswept) is large enough for it to be assumed that the incompressible air flow is two-dimensional. Laminar flow in the boundary layer is also assumed. By using different colours on the upper and lower surfaces of the wing, it was observed that the vortices [illegible] on the upper surface became principally the trailing vortex and those on the lower surface principally the starting vortex. As a result of an unstable velocity profile near the leading edge, flow in that region [illegible] it is quasi-steady elsewhere. Near the trailing edge vortices arise periodically and move towards the trailing edge.

Card1/2

SOV/147-[illegible]

On the Relation [illegible] Characteristic [illegible]

[illegible] different velocities [illegible] ing. Steady motion in [illegible] definite time after motion [illegible] change in the incidence [illegible] motion flow breakaway may be delayed. [illegible] and 6 references, of which are Soviet, [illegible] Russian and 1 English.

ASSOCIATION: Kafedra aeromekhaniki [illegible] institut (Chair of Aircraft Aerodynamics, [illegible] Aviation Institute)

SUBMITTED: November 5, 1957

Card 2/2 [illegible]

PHASE I BOOK EXPLOITATION SOV/4013
SOV/11-M-118

Ostoslavskiy, I.V., and T.A. Grumondz

O svyazi mezhdu pod"yemnoy siloy kryla i kharakterom techeniya v pogranichnom sloye (Connection Between the Lifting Force of a Wing and the Nature of Flow in the Boundary Layer) Moscow, Oborongiz, 1959. 51 p. (Series: Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze. Trudy, vyp. 118) 1,100 copies printed.

Sponsoring Agency: RSFSR. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya.

Ed.: I.L. Yanovskiy, Engineer; Ed. of Publishing House: A.A. Khrustaleva; Tech. Ed.: V.P. Rozhin; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for scientific workers and instructors at technical schools of higher learning.

COVERAGE: The book covers investigations of unsteady motion in the boundary layer

Card 1/3

at the initial moment after the beginning of circulation. It includes some phenomena of the formation of the lifting force . Results of experiments confirming theoretical considerations are given. These experiments were made with noncompressible fluids, but they may be extended to cover compressible conditions. The authors thank Engineer N.V. Korolev, Engineer A.Ya. Vasil'yev, Engineer B.I. Mindrov, and Docent A.S. Povitskiy. There are 6 references: 5 Soviet and 1 English.

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Appendixes:

AVAILABLE: Library of Congress

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7-29-60

PHASE I BOOK EXPLOITATION SOV/5130

Ostoslavskiy, Ivan Vasil'yevich, and Irina Viktorovna Strazheva

O formirovanii kontura upravleniya samoletom (Forming Aircraft Control Outline) Moscow, Oborongiz, 1960. 97 p. Errata slip inserted. 3,150 copies printed. (Series: Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze. Trudy, vyp. 124)

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR and Moskovskiy ordena Lenina Aviatsionnyy institut imeni Sergo Ordzhonikidze.

Ed.: I. L. Ivanovskiy, Engineer; Ed. of Publishing House: M. S. Anikina; Tech. Ed.: V. P. Rozhin; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: The book is intended for aircraft industry personnel. It may also be used by instructors and students in technical schools of higher education.

Card 1/4

Forming Aircraft Control Outline SOV/5130

COVERAGE: The book describes the general case of longitudinal and lateral maneuverability of modern aircraft, equipped with automatic devices. Air compressibility is taken into account. The problem is treated linearly, with the help of simple methods of the theory of aircraft regulation. Approximate graphic and analytical methods for determining the center of gravity and the transmission ratios of the automatic systems are determined. A method of improving the maneuverability characteristics and the controllability of aircraft at high altitude through the use of automatic stabilizers is discussed. The authors thank A. M. Letov and N. A. Kheyfets, Doctors of Technical Sciences, and I. L. Goloborod'ko and A. Ya. Vasil'yev, Engineers. There are 4 references, all Soviet.

TABLE OF CONTENTS:

AM4022014 BOOK EXPLOITATION S/

Ostoslavskiy, Ivan Vasil'yevich; Strazheva, Irina Viktorovna

Flight dynamics; trajectories of flying apparatuses (Dinamika poleta; trayektorii letatel'nykh apparatov) Moscow, Oborongiz, 1963. 430 p. illus., biblio. Errata slip inserted. 10,000 copies printed. (Textbook for aviation vuzes and departments) Publishing house editor: M. F. Bogomolova; Technical editor: V. I. Oreshkina; Reviewers: Professor Kurshev, N. V., Professor Tkachenko, Ya. Ye.; Editor: Docent Kotlyar, Ia. M.; Chief editor: Engineer Krasil'nikov, S. D.

TOPIC TAGS: Flight dynamics, flight trajectory, airplane, guided missile, ballistic rocket, rocket plane, equation of motion, problem of Mayer, time standard atmosphere, dynamic ceiling, maneuvering, flight range, effective radius

PURPOSE AND COVERAGE: This book is a textbook for students at aviation vuzes and conforms to programs in flight dynamics. It can be used also by engineers concerned with the design of flying apparatuses. In this book, methods of computing the flight trajectories of different flying apparatuses - airplanes, guided missiles, ballistic rockets, and rocket planes - are described. Methods of optimizing flight trajectories based on the application of variational calculus are

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analyzed. Brief information is presented concerning the application of mathematic apparatus to problems of flight dynamics. Problems of the maneuverability and stability of flying apparatuses are to be analyzed in the second book on this general subject. The authors thank Professors Ya. Ye. Tkachenko and N. V. Kurshev and Docent Ya. M. Kotlyar.

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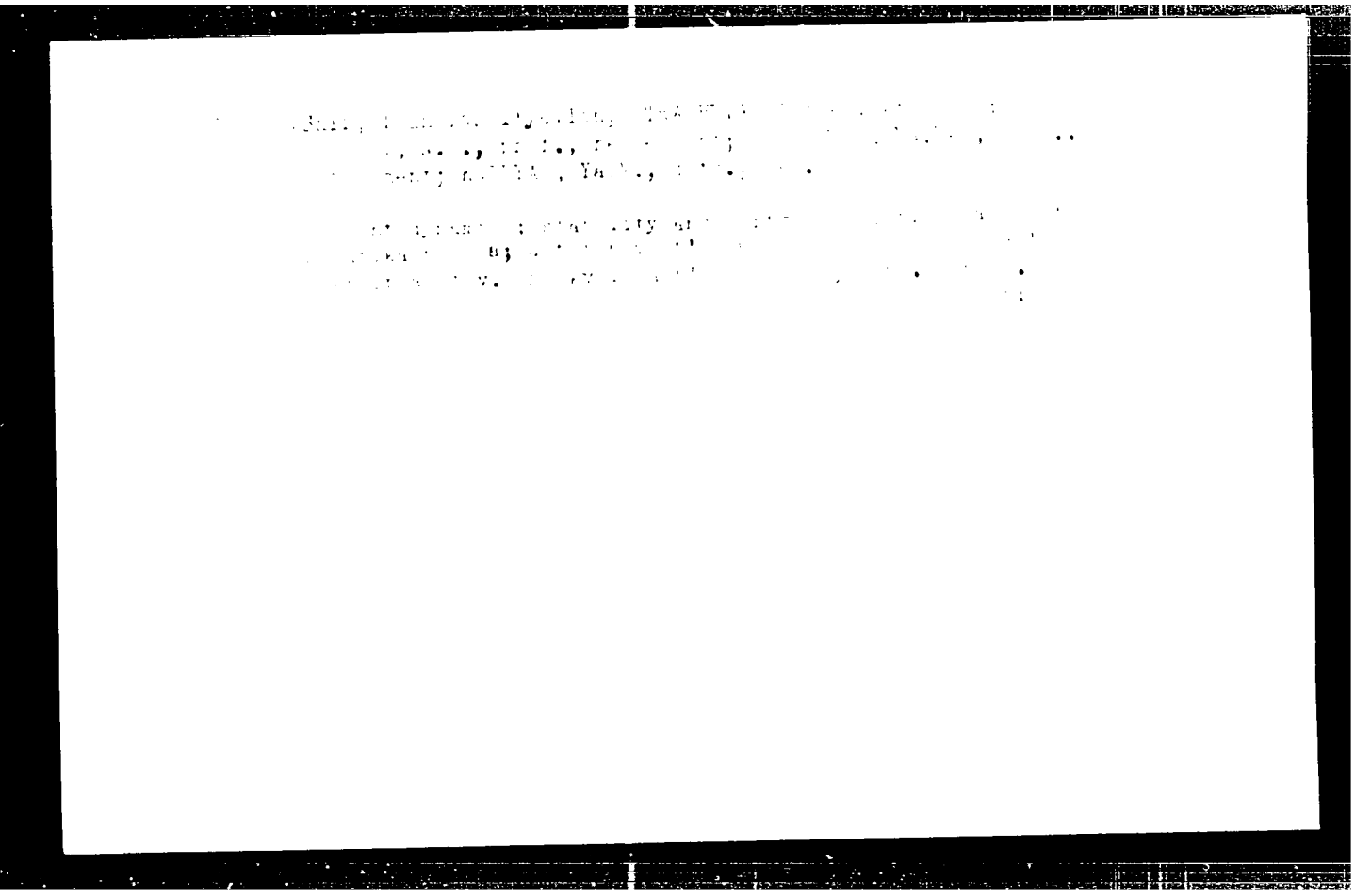
Appendix. The time standard atmosphere (VSA-60) - - 422
Literature - - 426

SUB CODE: AI, AP SUBMITTED: 10Aug63 NR REF SOV: 35

OTHER: 8 DATE ACQ: 5Mar64

Card 7/7



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

L 16894-66 EWT(d)/FSS-2/EEC(k)-2 GS/BC

ACC NR: AT6003578 SOURCE CODE: UR/0000/65/000/000/0302/0307

AUTHOR: Ostoslavskiy, I. V. (Professor, Doctor of technical sciences) 38 B+1

ORG: None

TITLE: On the expediency of stabilizing the pitch angle when flying in a turbulent atmosphere

SOURCE: Issledovaniya po dinamike poleta (Research on flight dynamics), no. 1. Moscow, Izd-vo Mashinostroyeniye, 1965, 302-307

TOPIC TAGS: aerodynamic pitch, aircraft autopilot, motion stability, aerodynamic stability, atmospheric turbulence

9,44

ABSTRACT: The article deals with the role of the autopilot channel which stabilizes the pitch angle during flight in a turbulent atmosphere. Horizontal flight is assumed to be the programmed flight mode. The following simplifying assumptions are postulated in the solution of the problem: 1) the flight speed of the aircraft is considerably less than the first cosmic speed, and the effect of the Earth's curvature on the aircraft flight characteristics are disregarded; 2) the diurnal rotation of the Earth is not taken into account; 3) changes in density, temperature, and pressure of the environmental air in the process of turbulent

Card 1/2 UDC 629.19.04.005

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ACC NR: AT6003578

motion are disregarded; 4) the aerodynamic forces acting on the aircraft are determined in accordance with the steady-state hypothesis (except for the downwash at the tail); 5) the angle-of-attack is small so that the propulsive force component normal to the flight trajectory is disregarded; 6) the effect of elevator deviation on the lift of the aircraft is disregarded; 7) the autopliot is ideal; 8) the problem is solved in a linear formulation. It is shown that, provided it is possible to ensure satisfactory transient process quality and other indices of controllability and maneuverability without pitch angle stabilization, the use of such stabilization to improve flight conditions in turbulence is not advisable. Orig. art. has: 3 figures and 12 formulas.

SUB CODE: 01 /SUBM DATE: 02Aug65

Card 2/2

L 16895-66 EWT(d)/FSS-2/EWT(1)/EWP(m)/EEC(k)-2/EWA(d) GS/GW/BC

ACC NR: AT6003579 SOURCE CODE: UR/0000/65/000/000/0308/0337

AUTHOR: Ostoslavskiy, I. V. (Professor, Doctor of technical sciences); Strazheva, I. V.

ORG: None

TITLE: The design of an on-board stabilization system for a pilotless flying craft

SOURCE: Issledovaniya po dinamike poleta (Research on flight & dynamics), no. 1. Moscow, Izd-vo Mashinostroyeniye, 1965, 308-337

TOPIC TAGS: aircraft automatic pilot, stabilizer, motion stability, aerodynamic stability

ABSTRACT: The authors consider the purposes, requirements, design, and configuration of an on-board stabilization feedback system for a pilotless flying craft. The transmission function for such a system is derived and analyzed. Primary attention is given to the formation of an on-board stabilization system which will provide satisfactory transmission of control signals over the entire range of required frequencies with a transient process of satisfactory quality, regardless of the problem of a reduction of the harmful effect of interference. The craft is considered a second-order element (oscillatory or aperiodic), so that if the real automatic pilot is replaced by an ideal device, the amplitude-frequency

Card 1/2 UDC 629.19.04.005

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ACC NR: AT6003579

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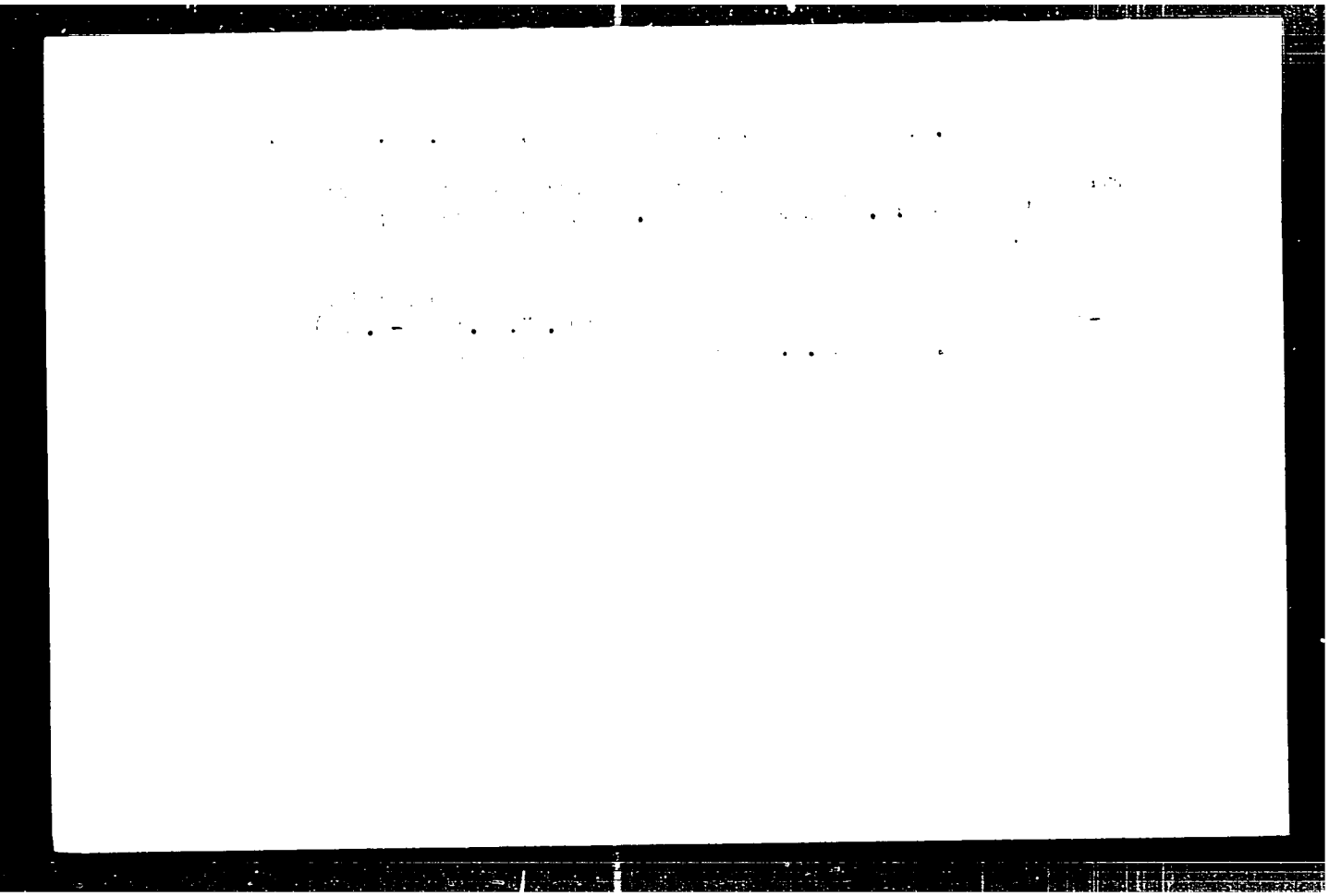
characteristics of the on-board stabilization system will be of a quite definite form. If the maximum control frequency is small then the required eigenfrequency of the craft (an aircraft, for example) with the autopilot will also be small, and the problem can be solved without the introduction of any correcting elements. Basic expressions and transmission functions for a case of longitudinal motion by the craft are derived, together with similar equations for lateral or translational motion. On the basis of the mathematical model, the authors describe an on-board stabilization system for a pilotless flying craft, assuming an ideal device in place of the autopilot, and the effect of rudder movement on the generation of aerodynamic forces acting on the vehicle is disregarded. The paper concludes with an estimation of the errors due to the substitution of the ideal autopilot for the real. Orig. art has: 7 figures and 136 formulas.

SUB CODE: 01 / SUBM DATE: 02Aug65 / ORIG REF: 005

Card 2/2SM



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

YUGOSLAVIA

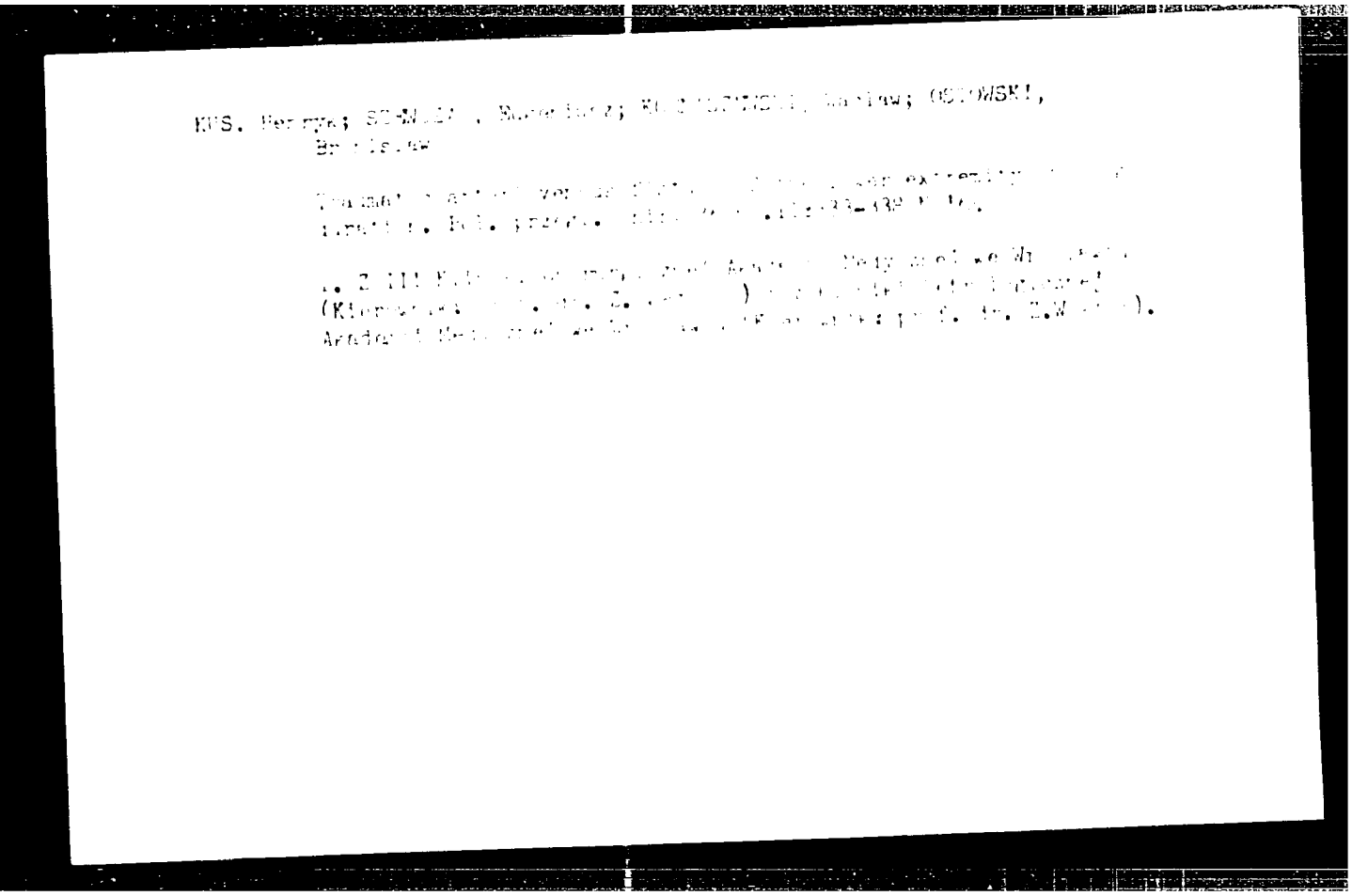
BENCIC, Dr Z., and OSTOVIC, Dr Z., of the A. Stamper Public Health School (Skola Narodnog Zdravlja "A. Stampar" in Zagreb and the Public Health Station (Dom Narodnog Zdravlja) in Daruvar.

"Infectious Hepatitis in the Area of Koncanica."

Belgrade, Narodno Zdravlje, Vol 19, No 7-8, 1963, pp 246-248.

Abstract: [Authors' Serbocroatian summary modified] The epidemic of infectious hepatitis in the vicinity of the Bosnian village of Koncanica lasted more than a year and a half. The authors tried to determine whether the early hospitalization of sufferers might prevent the further spread of the disease, but the isolation of patients did not check the epidemic. The length of the epidemic was probably due to the types of settlements (one village along both sides of a road, another huddled in the midst of a woods, another on neighboring hills, all with a single common elementary school) and hygienic conditions (poorly protected wells, no sewage disposal system), but early hospitalization may have played a part. Two tables, one graph, four Yugoslav references.

1/1



OSTRADOVEC, J.

Parinaud's oculo-glandular syndrome. Cesk. opht. 10 no.6:381-387 Dec 54.

1. Z II. ocni kliniky Karlovy university v Praze - prednosta prof. Dr. Jaromir Kurz
(NERVES, OCULOMOTOR, paralysis
Parinaud's synd.)

ANDREYEV, A., gvardii mayor; OSTROVSKIY, V., gvardii kapitan

Muscles of steel. Voen.vest. 43 no.11:36-38 N '63.(MIRA 16:12)

OSTRASZ, L., inz.

Support for the national economy in the Wroclaw Voivodeship. Przegl techn 84 no.16:5 21 Ap '63.

1. Przewodniczacy Oddzialu Stowarzyszenia Elektrykow Polskich, Wroclaw.

OSTRAUSKIENE, S.

Care for rheumatic children. Sveik. Apsaug. 3, no. 4, 1961.

1. Kauno Valst. medicinos instituto vaiku ligu katedra.

DANYS,J., med.m. dr.; SKUCAITE,O., [illegible]; DALIENE, St.; OSTRAUSKIENE, S.; DRAUGELIENE, D.; MILASIUSKIENE, M.; LUKOSEVICIUTE,A.; KATILIENE, G.; KABASINSKIENE, J.

The perspectives in further rheumatism control. Sveik. apsaug. 8 no.12:3.-35 D '63.

1. Kauno Valst. medicinos institutas. (rektorius - prof. Z.Januskevicius) ir Respublikine Kauno klinikine ligonine (vyr.gyd. - doc. P.Jasinskas).

*

OSTRAYA, Yu.

Incubator for tomatoes. IUn.tekh. 7 no.5:60 My '63. (MIRA 16:6)
(Growth promoting substances) (Tomatoes) (Ethylene)

BELISSKAYA, Ye.A.; OSTRAYA, S.S.

Blackheads and pimples in infants. Vest. derm. i ven. 33 no.2: 82-83 Mr-Ap '59. (MIRA 12:7)

1. Iz Kozhno-venerologicheskogo dispansera Moskvy.
(SKIN--DISEASES)

KRACMER, M.; OSTRCIL, F.

Pertrochanteric fractures (incidence and results of conservative treatment). Rozhl. chir. 42 no.7:480-483 Jl '63.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. dr. Vl. Novak, DrSc.
(FEMORAL NECK FRACTURES)
(FRACTURE FIXATION)
(AGED)

MASTNY, V.; OSTRCIL, F.

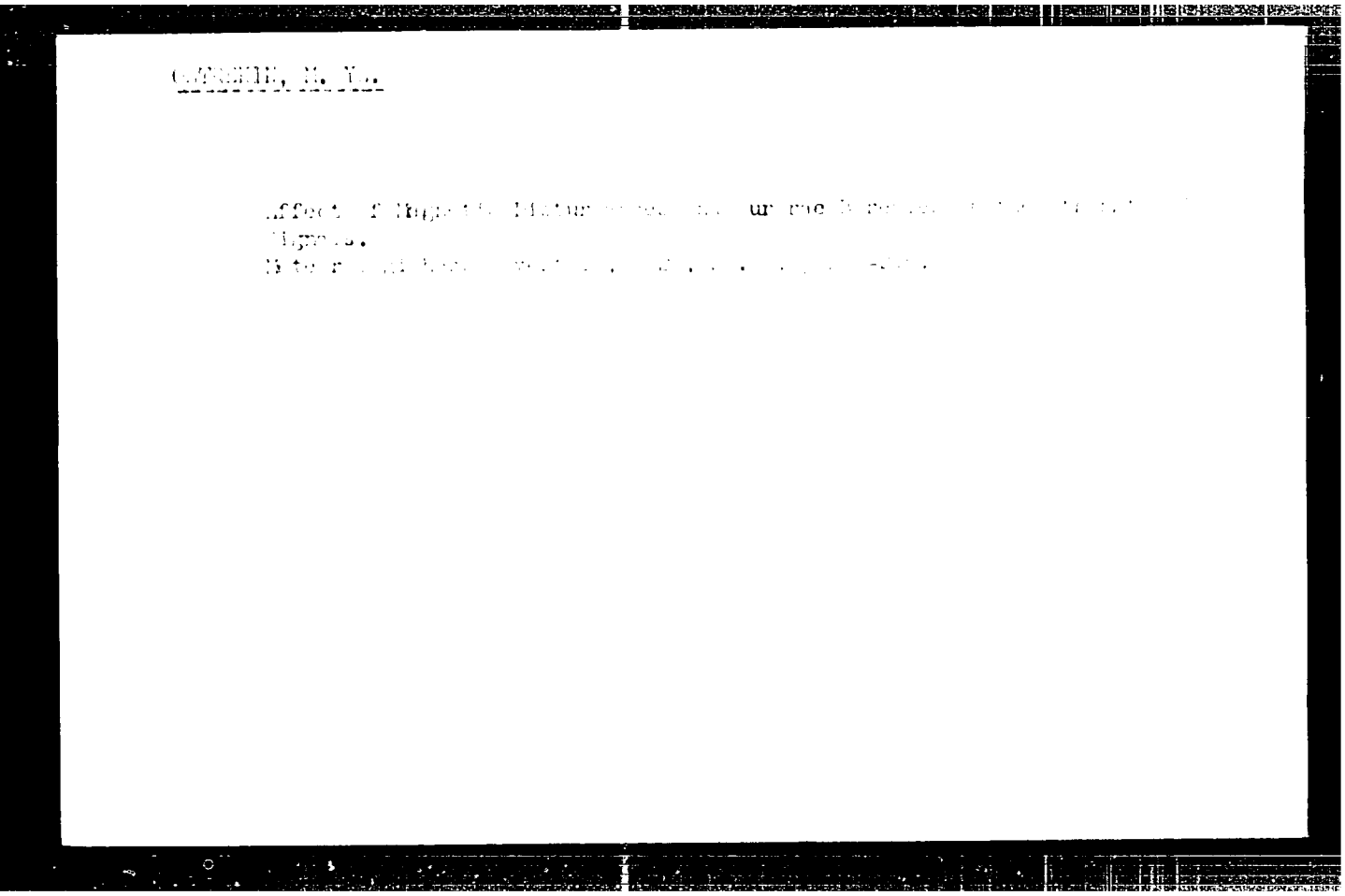
Restoration of joint mobility after injury. Rozhl. chir. 42 no.7:454-458 Jl '63.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. dr. Vl. Novak, DrSc.
(FRACTURES) (JOINTS) (REHABILITATION)
(DISABILITY EVALUATION)

STRNISKA, J., [illegible]

Functional results after intra-articular fractures. Rozhl. chir. 43 no.11:771-776 N '64.

1. Vyzkumny ustav traumatologicky v Brne, (reditel prof. dr. F. Novak, DrSc.).



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

OSTREKIN, M. E.

AMS/AIB

11 29

551.501.9 551.510.535(98)(47)

Ostrekin, M. E. Novye magnitnye i ionosfernye stantsii v Sovetskoi Arktike. [New magnetic and ionosphere observation stations in the Soviet Arctic.] *Problemy Arktiki* No. 2: 120-121, 1944. DGS. Description of observation stations in Tiksi Bay which started their work in 1944. *Subject Headings:* 1. Ionospheric stations. 2. Soviet Arctic.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

OSTROKIN, M. Yc.

"Problems and Prospects [illegible] Geomagnetic and Ionospheric Research [illegible] the Soviet Arctic". Problemy Arktiki, Vol, 1966, (37-71).

OSTREKIN, M.Ye.

USSR/Geography - Arctic explorations

Card 1/1 : Pub. 86 - 1/38

Authors : Ostrekin, M.Ye.

Title : Most recent researches in the Central Arctics

Periodical : Priroda 43/12, 3-12, Dec 1954

Abstract : A historical account is given of explorations in the Arctic regions, culminating in the opening-up of shipping passages. The methods of exploration are explained. These methods enabled the scientists to set up stations and collect data on the earth's magnetism, air temperatures, direction and speed of ice movement, and the depth of the ocean. The last mentioned data being incorporated into maps as shown. Maps; illustrations.

Institution : .....

Submitted : .....

Translation DSIS-T-172-R, 22 Sep 55

OSTREKIN, M.Ye., geroy Sovetskogo Soyuza.

Magnetic anomaly in the central Arctic. Priroda 45 no.7:127-128 Jl '56.
(Arctic regions--Magnetism, Terrestrial) (MIRA 9:9)

84589

S/169/60/000/009/007/00
A005/A001

3,9100

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 9, p. 204, # 11649.

AUTHOR: Ostrekin, M.Ye.

TITLE: Some Preliminary Conclusions on the Geographic Distribution of Daily Magnetic Disturbances in the South Pole Region According to the Observation Results Obtained in 1958

PERIODICAL: Inform. byul. Sov. antarkt. ekspeditsii, 1959, No. 6, pp. 32-34

TEXT: The geographic distribution of magnetic disturbances is analyzed on the basis of the data from the antarctic stations. The investigations showed a well expressed diurnal course of the magnetic activity at these stations. The distribution of the instants of maximum magnetic disturbance gives rise the assumption that the helix scheme obtained from the data for the arctic region remains, obviously, valid in principle also for the South Pole region. It is assumed that a secondary zone of enhanced recurrence and intensity of the polar lights exists in both the circumpolar Antarctic and the Arctic regions

Kh.D Kanonidi

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

OSTREKIN, M.Ye., kand.geograf.nauk

Scientific results of the Fourth Continental Expedition. Inform. biul. Sov. antark. eksp. no.21:5-7 '60. (MIRA 13:10)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
(Antarctic regions—Russian exploration)

OSTRĒKIN, M.Ye., kand.geograf.nauk

Sixth Antarctic Expedition. Inform. biul. Sob. antark. ekep. no.25: 8-10 '61. (MIRA 14:5)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
(Antarctic regions—Russian exploration)

LEBEDEV, Vladimir L'vovich, kand. geogr. nauk; OSTREKIN, Mikhail Yemel'yanovich, kand. geogr. nauk, red.; TOLSTIKOV, Yevgeniy Ivanovich, kand. geogr. nauk, red.; KAPLINSKAYA, L.G., red.; KOTLYAKOVA, O.I., tekhn. red.

[Transactions of the Soviet Antarctic Expedition]Trudy Sovetskoy antarkticheskoy ekspeditsii]Leningrad, Izd-vo "Morskoi transport." Vol.16.[Third continental expedition, 1957-1959; general description and scientific results]Tret'ia kontinental'naia ekspeditsiia, 1957-1959 gg; obshchee opisanie i nauchnye rezul'taty. Pod red. M.E.Ostrekina i E.I.Tolstikova. 1962. 327 p. (MIRA 15:9)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955-. 2. Nachal'nik Tret'yey kontinental'noy ekspeditsii, 1955- (for Tolstikov).
(Antarctic regions--Geophysical research)

L 08035-67 EWT(1) GW
ACC NR: AT7001680

SOURCE CODE: UR/3174/65/000/055/0005/0011

AUTHOR: Ostrekin, M. Ye. (Head of the 10th seasonal Antarctic expedition) 16

ORG: Arctic and Antarctic Scientific Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut) 15

TITLE: Results of the work of the tenth seasonal Antarctic expedition

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955-. Informatsionnyy byulleten', no. 55, 1965, 5-11

TOPIC TAGS: antarctic climate, sea ice, oceanography

ABSTRACT: The objectives and results of the Tenth Soviet Antarctic Expedition are given. All the basic objectives for the January-March (1965) season were met: 1) Seventy-six oceanographic stations were occupied between Mirnyy and Novolazarevskaya along profiles which previously had never been studied, or only very little. 2) Detailed observations of ice and icebergs were made with photorecording of the radar screen. 3) Precise recording of the shore was accomplished along about 500 miles of poorly investigated coast between Mirnyy and Novolazarevskaya. 4) Depth soundings were made for a distance of about 7,000 miles between Mirnyy and Novolazarevskaya with quite frequent tie-in with astronomical determinations. 5) Six oceanographic stations were occupied in the zone of the Antarctic convergence. 6) Two scientific treks were made for a distance up to 100 km from Mirnyy for geodetic determinations and determination of thickness of the ice cover by the electromagnetic method.

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L 08085-67

ACC NR: AT7001630

7) German specialists determined precise gravity values at Mirnyy and Molodezhnaya and reduced them to the reference point at Potsdam. 8) The attached American biologist collected mosses and lichens at Mirnyy, Molodezhnaya and Novolazarevskaya. 9) Vostok was fully supplied by air. 10) A round-trip flight with Japanese scientists was made from Siowa and back. 11) Personnel at all stations were replaced and all stations were supplied; the "Ob'" brought 3,700 tons of cargo and the "Estoniya" about 200 tons. In addition, much construction work was done at Molodezhnaya and much repair work at Mirnyy. A special gravimetric observatory was built for German scientists at Molodezhnaya. Continuous shipboard meteorological observations were made. Ice and weather conditions were good during the field season. Orig. art. has: 1 figure. [JPRS: 37,397]

SUB CODE: 04, 08 / SUBM DATE: 03Jul65

Card 2/2

OSTREKIN, M.Ye.

Fishing in Antarctica. Inform. biul. Sov. antark. eksp. no.39: 44-45 '63. (MIRA 16:6)

(Antarctic regions—Fishing)

OSTRENIN, M.Ie.

"Marked" iceberg. Inform. biul. Sov. antark. ekap. no.38:47-49 '63. (MIRA 16:7)
(Lazarev Station region, Antarctica--Icebergs)

KHALIFA-ZADE, Ch.M.; O[illegible]SKIY, M.R.

Thermoanalytic determination of the content of siderite (magnesium siderite) in ferruginous carbonates. Izv.AN Azerb.SSR. Ser.geol.-geog.nauk no.2:63-67 '64.

(MIRA 18:11)

ANDREYEV, G.Ya., kand.tekhn.nauk; DAVIDENKO, N.P., inzh.; MALITSKIY, I.F., inzh.; OSTRENKO, B.S., inzh.; SHAT'KO, I.I., inzh.

Using induction heating in setting and dismantling wheel pairs. Mashinostroenie no.6:67-71 N-D '62. (MIRA 16:2)

1. Khar'kovskiy gornyy institut.
(Induction heating) (Car wheels)

AVDONIN, A.K., inzh.; OSTRENKO, V.S., inzh.

Device for registering the ampere-second characteristics of semiconductor rectifiers and protectors. Elektrotekhnika 36 no.7:44-46 Jl '65.
(MIRA 18:7)

OSTRENKO, V.Ya., kand. tekh. nauk; [illegible], kand. ekon. nauk; [illegible], inzh.

Theoretical and experimental determination of the force necessary for mandrel drawing in a pilgrim mill. Proizv. trub no.10:7-14 '63. (MIRA 17:10)

OSTRENKO, V.Ya.; FOMICHEV, I.A., redaktor.

[Skilled worker in the drill and casing pipe section; textbook for practical and technical courses and schools for skilled workers] Master otdela buril'nykh i obsadnykh trub; uchebnik dlia proizvodstvenno-tekhn.kursov i shkol masterov. Khar'kov, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 179 p. (MLRA 7:3)
(Petroleum--Well boring) (Boring machinery)

OSTRENKO, V. Ya.

V. Ya. Ostrenko, Brigadir buril'nogo otdela [Drilling section brigade leader], [illegible]-rizdat, 8 sheets

Describes the modern methods [illegible] ends of drill pipes, the design and work principle of [illegible] presses, and the calibration of the [illegible] setting tool. [illegible] main rules for the process of [illegible] setting, [illegible] presents elementary calculations for calibration [illegible] tool (matrixes, [illegible] setting rings.)

The book is intended for brigade leaders and [illegible] engineering courses and [illegible] foreman schools.

SO: [illegible], 12 Nov 19[illegible]

ACCESSION NR: AR4014146 S/0137/63/000/012/D035/D035

SOURCE: RZh. Metallurgiya, Abs. 12D214

AUTHOR: Ostrenko, V. Ya.; Dferov, V. M.; Geyko, I. K.; Pechennikova, I. S.; Lagutina, R. V.; Kirvalidze, N. S.

TITLE: Hot rolling of pipes from EP30, EP39, and EI993 steels

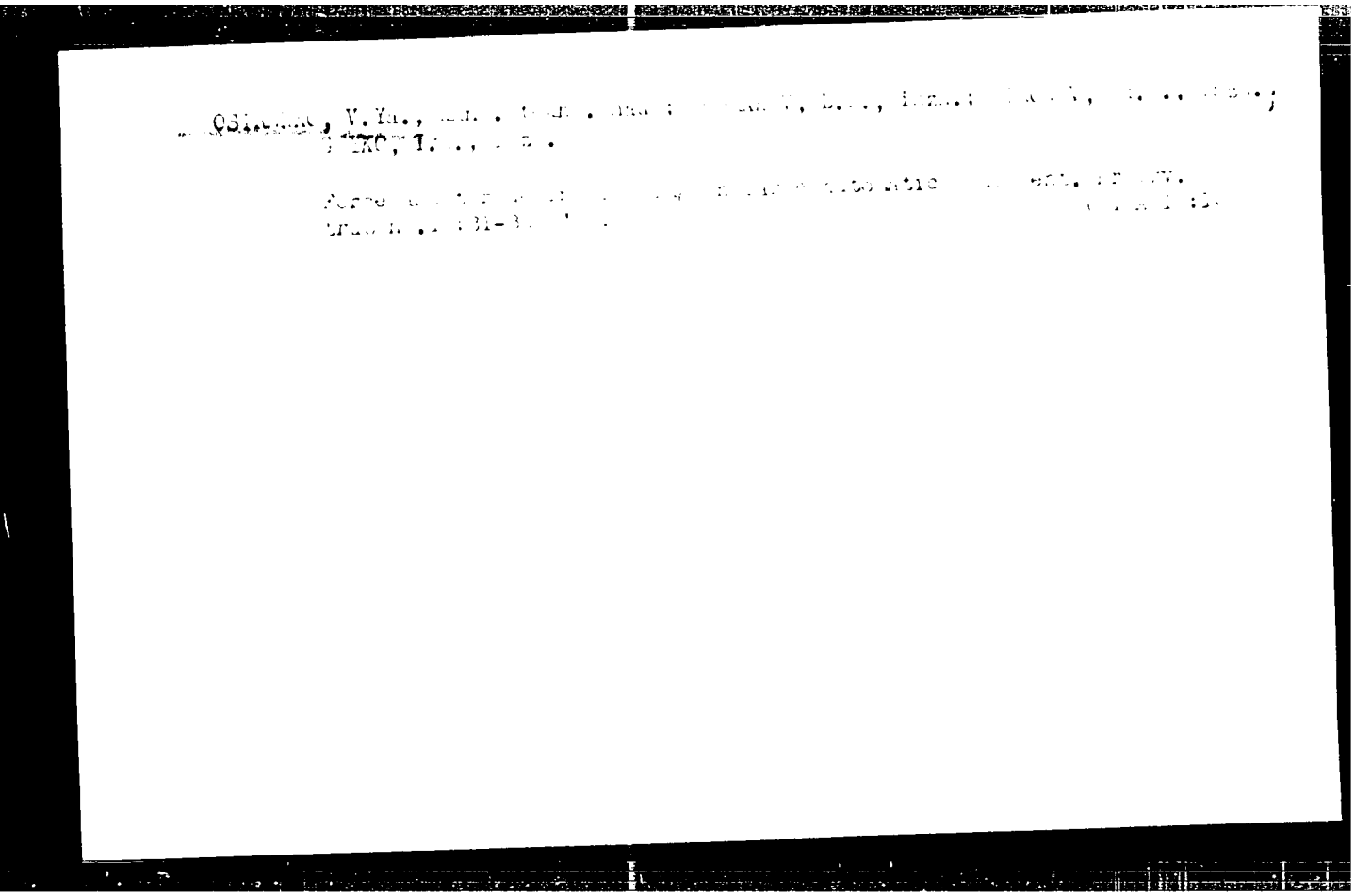
CITED SOURCE: Sb. Proiz-vo trub. M., Metallurgizdat, vy*p. 9, 1963, 5-12

TOPIC TAGS: Steel pipe hot rolling, pipe steel composition, steel pipe rolling

TRANSLATION: Chemical compositions of the indicated steels to be used in production and the mechanical properties of the tube blanks are given. The mechanical properties of these steels are examined in detail. The mechanical properties of the pipes obtained are indicated, and recommendations designed to improve the quality of the pipes are given for the procedure of their hot rolling.

DATE ACQ: 09Jan64 SUB CODE: ML ENCL: 00

Card 1/1



ACCESSION NR: AT4007048 S/2598/63/000/010/0254/0261

AUTHOR: Ostrenko, V. Ya.; Bogoyavlenskaya, N. V.; Bobrikov, L. D.; Akimova, Ye. P.; Usov, V. K.; Okhramovich, L. N.; Il'vovskaya, L. A.

TITLE: Development of a production process for AT-3 titanium alloy tubes

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963. Issledovaniya titanovy*kh splavov, 254-261

TOPIC TAGS: titanium alloy, AT-3 titanium alloy, AT-3 alloy tube, tube rolling, hot rolling, cold rolling, AT-3 titanium alloy property, titanium aluminum chromium alloy, iron containing alloy, silicon containing alloy, boron containing alloy

ABSTRACT: The effect of thermal treatment on the mechanical properties of AT-3 alloy and parameters affecting the cold and hot rolling of tubes of this alloy were investigated in the laboratories of the Ukrainskiy nauchno-issledovatel'skiy trubny*y institut (Ukrainian Scientific-Research Institute for Tubes) and the Nikopol'skiy yuzhnotrubny*y zavod (Southern Tube Plant, Nikopol). At temperatures of 800-900C the mechanical properties and hardness of AT-3 were markedly altered by hardening in water but essentially unchanged by cooling in air or in a kiln. This effect is explained by the fixation of the intermediate $\alpha + \beta$ structure during hardening in water. These alloys demonstrated high ductility in a wide range

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ACCESSION NR: AT4007048

of rolling temperatures (1975-1125C). A maximum deformation of 55% can be attained by cold rolling of such tubes, while hot rolling of these tubes proceeds normally. The problems involved are sticking of the metal to the rolling device and the formation of a gas-saturated film on the hot rolled tube. These problems have been solved by additional mechanical treatment, such as etching, coating with an oxide film, and lubrication with a mixture of castor oil and talc. Some of these recommended procedures are discussed. Orig. art. has: 6 figures and 3 tables.

ASSOCIATION: Institut metallurgii AN SSSR (Metallurgical Institute, AN SSSR)

SUBMITTED: 00	DATE ACQ: 27Dec63	ENCL: 00
SUB CODE: MA, ML	NO REF SOV: 000	OTHER: 000

Card 2/2

ACCESSION NR: AT4007059 S/2598/63/000/010/0357/0361

AUTHOR: Ostrenko, V. Ya.; Akimova, Ye. P.; Il'vovskaya, L. A.

TITLE: Investigation of AT-4 titanium alloy suitability as tube material

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963. Issledovaniya titanovy*kh splavov, 357-361

TOPIC TAGS: titanium alloy, AT-4 titanium alloy, AT-4 alloy tube, AT-4 alloy hot ductility, titanium alloy tube, tube rolling

ABSTRACT: The six-component titanium-base alloy AT-4, developed previously for sheet-rolling and forging, has been investigated for suitability for seamless tube manufacture by hot rolling. The chemical composition of AT-4 is 3.5-5.0% Al, 0.4-0.9% Cr, 0.25-0.60% Fe, 0.25=0.60% Si, 0.01% B, and the rest titanium. Basically, aluminum is an alpha stabilizer; and chromium, iron, and silicon are beta stabilizers. At room temperature the alloy consists mainly of alpha-solid solution and a small amount of beta phase. According to a practice adopted for testing of materials for tube manufacture, the alloy AT-4 has been tested in hot twisting and piercing. Phase transformation and response to heat treatment have also been studied. It has been found that the number of twist turns-to-failure increased sharply from 9 to 28 with an increase in temperature from

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ACCESSION NR: AT4007059

900 to 1000C; the number of turns increased further up to 1100C, and decreased beyond that point. From twisting tests it has been concluded that plasticity of AT-4 is slightly lower than that of pure titanium, but higher than that of carbon steel. Further, hot rolling of AT-4 alloy seamless tubes is possible in a temperature interval from 1000 to 1200C. In piercing tests, conclusions on plasticity have been made from the surface appearance of test barrels and from loads transmitted to the press. It is concluded that piercing can be normally performed at 1050-1200C; at lower temperatures defects develop in the barrels; at higher temperatures clamping conditions of barrels get worse. Titanium barrels were of higher quality than similarly produced carbon steel barrels. It has been established that AT-4 responds to heat treatment. Orig. art. has: 6 figures.

ASSOCIATION: Institut Metallurgii AN SSSR (Metallurgical Institute AN SSSR)

SUBMITTED: 00	DATE ACQ: 27Dec63	ENCL: 00
SUB CODE: MM	NO REF SOV: 000	OTHER: 000

Cord 2/2

ACCESSION NR: AR4041538 S/0137/64/000/004/D041/D042

SOURCE: Ref. zh. Metallurgiya, Abs. 4D248

AUTHOR: Ostrenko, V. Ya.; Yuferov, V. M.; Geyko, I. K.

TITLE: Mastering production of pipes from steel 12Kh6S2M

CITED SOURCE: Sb. Proiz-vo trub. Vy*p. 11. M., Metallurgizdat, 1963, 7-9

TOPIC TAGS: pipe, pipe production, rolling, heat treatment/12Kh6S2M steel

TRANSLATION: In the development of production technology of pipes from steel 12Kh6S2M there was investigated metal of pipe billets of composition (%): C, 0.12; Si, 1.53; Cr, 5.12; Mn, 0.38; Mo, 0.70; Nb, 0.25; Ni, 0.25; S, 0.014; P, 0.015. Billets had diameter 85 millimeters and length 900-1000 millimeters. Experiments for piercing were conducted on the laboratory piercing mill of the Ukrainian Scientific Research Institute of Pipes. Rolls of the mill had in pressing a diameter of 140 millimeters and angle of entrance and output cones of 3°30'. There were rolled test pieces of diameter 35 millimeters and length 90

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ACCESSION NR: AR4041538

millimeters. For comparison there were pierced also test pieces of Steel 10. During rolling they measured the load on the motor of the piercing mill and pressure of metal on the roller; temperature of heating was determined by a control piece with a thermocouple. During pressing in the 16% press, a cavity was uncovered at all rolling temperatures; with increase of temperature dimensions of the cavity decreased, which corresponded to results of twisting tests. During pressing of 10%, openings of the cavity were not observed. Proceeding from given data, the temperature of piercing was selected within 1220-1250°. Rolling of pipes was produced on automatic installation 140 with a roller-type piercing mill. Before piercing, billets were heated in a Hoffmann kiln for 50-60 minutes. During piercing, adjustment of the piercing mill was the following: diameter of rollers 738 millimeters distance between rollers in narrowing: 76 millimeters, between straightedges: 83 millimeters; diameter of mandrel: 68 millimeters; advancement of blade of mandrel beyond narrowing: 37 millimeters; diameter of housing: 93 millimeters; thickness of wall of housing: 11 millimeters; pressing before blade of mandrel: 5.3%, calibration of rollers symmetric with angle of conicity: 3°30'. Load on mill motor 850-950 kilowatt. On automatic mill, housings were rolled in gauge of 88 millimeters applying mandrels 70 millimeters in diameter. During the first pass and 72 millimeter during the second pass. On the rolling mill pipes were rolled up to a diameter of 96 millimeters, after which they were

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ACCESSION NR: AR4041538

calibrated to finished dimension 89 x 8 millimeters and subjected to straightening. Investigation of branch connections cut from finished hot-rolled pipes showed that their metal had a martensite structure and was characterized by the following properties: σ_b , 143 kg/cm^2; σ_s , 123.5 kg/cm^2; δ , 6.5%, a_k , 9.3 kg/cm^2; and hardness 302H_B. Intermediate heat treatments of pipes in the process of cold rolling consisted in annealing at a temperature of 760-780° which ensured removal of work hardening, preservation in the metal of the structure of granular perlite and restoration of mechanical properties. On the basis of conducted investigations there was developed the technology of production and prepared an experimental lot of boiler tubes of brand 12Kh6S2M steel.

SUB CODE: IE, MM ENCL: 00

Card 3/3

NECHIPORENKO, A.I.; OSTRENKO, V.Ya.

Ways of automating pipe mills. Mat. i gornorud. prom. no. [illegible]
40-41 Mr-Ap '64. (MIRA 17:[illegible])

ACCESSION NR: AP4019481 S/0133/64/000/003/0258/0263

AUTHOR: Ostrenko, V. Ya.; Yuferov, V. M.; Geyko, I. K.; Ty*r, V. P.; Oslon, N. A.; Chererinskaya, R. I.; Vil'yams, O. S.; Lagutina, R. V.

TITLE: Manufacture of tubes from new ferritic martensitic heat resistant steels

SOURCE: Stal', no. 3, 1964, 258-263

TOPIC TAGS: heat resistant steel, steel tube, ferritic martensitic steel, tube rolling

ABSTRACT: The authors report on techniques developed in recent years by the Ukrainskiy n.-i. trubny*y institut (Ukrainian Tube Research Institute) in cooperation with tube factories in Pervoural'sk and Nikopol for hot rolling and heat treating of tubes made from 9 new types of steel, all of which contain 10—14% Cr and additions of V, Mo, Nb, and W. The AC temperature was in the range of 810—830C; ferrite grain growth was noted above 1100C; piercing temperatures varied from 1090 to 1200C. Ductility at high temperatures was found to depend on the content of free ferrite, and piercing of tube billets presented no

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ACCESSION NR: AP4019481

difficulties at a content of 50%. At 15—20% ferrite hot tears, cracks, and laps were formed. Annealing of hot-rolled and reduced tubes at 770—780C imparts a structure of granular pearlite and the mechanical properties needed for further cold reduction. Metal consumption for almost all steels, including machining, proved no higher than those for similar pipes of stainless steels in current production practice. "Engineers N. S. Kirvalidze, R. A. Prudkova, N. N. Pil'nikova, L. S. Rakhnovetskiy, I. S. Pechennikova, and others took part in the work." Orig. art. has: 8 figures and 2 tables.

ASSOCIATION: Ukrainskiy n.-i. trubny*y institut (Ukrainian Tube Research Institute); Pervoural'skiy novotrubny*y zavod (Pervoural'sk New Tube Plant); Nikopol'skiy yuzhnotrubny*y zavod (Nikopol' Southern Tube Plant)

SUBMITTED: 00 ATD PRESS: 3045 ENCL: 00

SUB CODE: MM,IE NO REF SOV: 010 OTHER: 000

Card 2/2

L 9874-66 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(z)/EWP(b)/EWP(l)
ACC NR: AT5022779 EWA(c) JD/HW SOURCE CODE: UR/3164/64/000/014/0005/0010

AUTHOR: Ostrenko, V. Ya. (Candidate of technical sciences); Yermolov, I. V. (Engr.)

ORG: VNKITP

TITLE: Causes of formation of scales on the outer surface of stainless steel hot-rolled pipes

SOURCE: Dnepropetrovsk. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskiy institut trubnoy promyshlennosti. Proizvodstvo trub, no. 14, 1964. Sbornik statey po teorii i praktike trubnogo proizvodstva (Collection of articles on the theory and practice of pipe production), 5-10

TOPIC TAGS: pipe, stainless steel, hot rolling, corrosion

ABSTRACT: Difficulties which developed on a 350 pipe rolling mill producing stainless pipes having a diameter up to 325 mm are described. The inner surface of these pipes met the necessary technical requirements, but the outer surface had

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ACC NR: AT5022779

serious defects in the form of scales, made up of thin, 0.5 to 1 mm films. They could be removed only by mechanical processing on special machines and by changing the size of the outer-wall diameter. In order to establish the cause of scale formation under industrial conditions, an experimental investigation of the influence of basic technological factors on the quality of pipes was carried out. The investigation consisted of increasing the content of harmful admixtures - arsenic, lead, tin and copper; increasing the content in the metal of free and combined oxygen, hydrogen, and nitrogen; and increasing the content of sulfur in the fuel used in the continuous furnaces for preheating ingots. The temperature schedule of furnaces, the cooling of working rollers of broaching machines, and the wear of rolling tools were also investigated. The analyses of three leading types of steel were made and no trace of arsenic, lead, or tin were found. The copper content was about 0.2% within the limit of requirements and did not influence the formation of scales. The presence of gases (oxygen, hydrogen, nitrogen) in steel sharply decreased the plasticity of the metal and caused destruction in the outer layers during the process of deformation. It was characteristic for the pipes with scales on the outer surfaces to have an increased oxygen content when compared with the initial ingots. Hydrogen and nitrogen were within the limits of

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ACC NR: AT5022779

technical requirements. The furnaces operating on natural gas fuel with no sulfite admixture thus had no influence on the scale formation. The furnaces were fired previously with fuel oil. When gas was substituted for oil the furnaces were not reconditioned for the use of gas and the temperature schedule deteriorated. The metal remained for long periods in high-temperature zones with a considerable excess of air, which caused overheating and burning of the outer surface and the scaling of pipes. The cooling of bronching-machine rollers with cold water did not seem to influence the formation of scales nor did the wear of rolling tools. The following measures were recommended: Decrease the total time of preheating the ingots to 10 - 12 min per cm of the ingot diameter. Decrease the temperatures in the first zone to 1000 C, in the second zone to 1180-1190 C; in the third zone to 1190-1200 C. Decrease the temperature of the ingot center when preheating. Explore the possibilities of conducting the preheating process in a neutral or lightly oxidizing atmosphere. Orig. art. has: 3 figures.

SUB CODE: 11 / 13 SUBM DATE: none/ NR REF SOV: 002/ OTHER: 000

OC

Card 3/3

OSTRETSOVA, I.B. (Leningrad); SYTINSKIY, I.A. (Leningrad)

Decarboxylase of glutamic acid. Ukr. biokhim. zhur. 34 no.3:456-474 '62. (MIRA 18:5)

ACCESSION NR: AT3013136 S/3018/63/000/000/0163/0173

AUTHOR: Sytinskiy, I. A.; Avenirova, Ye. L.; Dement'yeva, S. P.; Ostretsova, I. B.; Priyatkina, T. N.

TITLE: Gamma aminobutyric acid in animal brains during radical acceleration and narcotic sleep

SOURCE: Trot'ya Vsesoyuznaya konferentsiya po biokhimii nervnoy sistemy. Sbornik dokladov. Yerevan, 1963, 163-173

TOPIC TAGS: gamma aminobutyric acid level, aminobutyric acid, glutamic acid decarboxylase activity, radial acceleration, cortex inhibition, amytal sodium, chromatography, electrophoresis, electroencephalogram, central nervous system, beta oxidation

ABSTRACT: In the first of two series of experiments the level of gamma aminobutyric acid and the activity of its enzyme, glutamic acid decarboxylase, were determined in rats in relation to functional activity of the central nervous system under conditions of strain. In the second series they were determined in relation to the functional state of the cortex inhibited by amytal sodium. For the first series animals were subjected to radial acceleration of 23, 33,

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ACCESSION NR: AT3013136

and over 39 g on a centrifuge and then frozen in liquid oxygen. After the brains were removed, they were divided into large hemispheres and cerebellum for extract preparation by Robert's method. Amino acids were separated by chromatography and electrophoresis. Glutamic acid decarboxylase activity in the large hemispheres was measured by Barburg's manometric method. For the second series animals were injected subcutaneously with amytal sodium to induce narcotic sleep and then were frozen in liquid oxygen. Electroencephalograms were made before and after injections. Findings show that gamma aminobutyric acid and its enzyme take part in the resistance processes of the organism under heavy strain. Increase in gamma aminobutyric acid level with radial acceleration of 33 g appears to be a protective reaction which contributes to inhibition of the central nervous system. In animals with induced inhibition of the cerebral cortex, gamma aminobutyric acid level is reduced when brain biopotentials are sharply depressed. To compensate for this reduction, beta oxidation of the gamma aminobutyric acid takes place and beta-oxygamma-aminobutyric acid forms. This is reduced when the animal awakens. Orig. art. has: 3 figures, 3 tables.

ACCESSION NR: AT3013136

ASSOCIATION: Laboratoriya khimii belka fiziologicheskogo instituta im. A. A. Ukhtomskogo Leningradskogo universiteta (Protein Chemistry Laboratory of the Physiological Institute, Leningrad University)

SUBMITTED: 00 DATE ACQ: 28Oct63 ENCL: 00

SUB CODE: AM NO REF SOV: 012 OTHER: 029

Card 3/3

OSTRETSOVA, I.B.; SYTINSKIY, I.A.

Study of the glutamic decarboxylase activity in the brain of rats following the introduction of strychnine and isonicotinic acid hydrazide. Ukr. biokhim. zhur. 36 no. 4:593-597 '64. (MIRA 18:12)

1. Laboratoriya khimii belka Leningradskogo gosudarstvennogo universiteta. Submitted August 25, 1963.

L 17331-63 BDS/EEC-2/EED-2/EEO-2 AFFTC/ASD/ESD-3/APGC Pm-4

ACCESSION NR: AP3004894 S/0120/63/000/004/0083/0085 67 67

AUTHOR: Borisov, V. A.; Ostreyko, G. N.; Panasyuk, V. S.; Yudin, L. I.

TITLE: High-power pulsed modulators for high-frequency amplifiers and oscillators without long-line shapers

SOURCE: Pribory*i tekhnika eksperimenta, no. 4, 1963, 83-85

TOPIC TAGS: modulator, pulsed modulator, h-f amplifier, h-f oscillator, pulse shaper, long transmission line

ABSTRACT: Two types of pulsed modulators intended for h-f equipment in the supply channel of particle accelerators are described. The modulators do not contain pulse-shaping long lines and, hence, appear to eliminate many drawbacks associated with such lines. Instead, a partial discharge of a capacitor is used. Switching is performed by thyratrons. One circuit is designed for a power amplifier 1 Mw with a pulse duration of 200 microsec and a repetition rate of 5 cps;

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ACCESSION NR: AP3004894 2

another circuit, 2 Mw, 200 microsec, and 10 cps. "The authors are thankful to V. M. Petrov, who made a number of valuable suggestions for improving both modulator circuits, and also to I. A. Samokhin for his part in calculating and aligning the second circuit." Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 01Sep62 DATE ACQ: 28Aug63 ENCL: 00

SUB CODE: NS NO REF SOV: 000 OTHER: 000

Card 2/2

(5)

L 05642-67 EWT(m) IJP( )

ACC NR: AP6021620 (N) SOURCE CODE: UR/0089/66/020/003/0206/0210

AUTHOR: Budker, G. I.; Kiselev, A. V.; Kon'kov, N. G.; Naumov, A. A.; Nifontov, V. I.; Ostreyko, G. N.; Panasyuk, V. S.; Petrov, V. V.; Yudin, L. I.; Yasnov, G. I. 21

ORG: none

TITLE: Starting of the B-3M synchrotron, used as an injector for a positron-electron storage ring

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 206-210

TOPIC TAGS: synchrotron, ~~particle~~ linear accelerator, storage ring, cyclotron magnet/ VEPP-2 storage ring, B-3M synchrotron, ILU linear accelerator

ABSTRACT: The article describes an adjustment of a synchrotron with external single-turn injector and single-turn emission of electrons and with a specially constructed electromagnet. This pulsed synchrotron is designed to serve as an injector for the VEPP-2 storage ring for colliding positron and electron beams, designed and described by one of the authors (G. I. Budker, et al., in Trudy Mezhdunarodnoy konferentsii po uskoritelyam, Dubna, 1963 [Transactions of International Conference on Accelerators, Dubna, 1963], Atomizdat, 1964, p. 1065, and elsewhere). The article describes the synchrotron itself (Fig. 1), the magnet, two variants of capture into synchronism, and various test procedures. The injector for the B-3M synchrotron was an ILU pulsed linear accelerator. The injected electrons had energy 1 - 1.5 Mev (pulse duration ~7 nsec) and were accelerated to 50 Mev. The B-3M synchrotron makes it possible to

UDC: 621.384.612.12

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L 05642-67

ACC NR: AP6021620

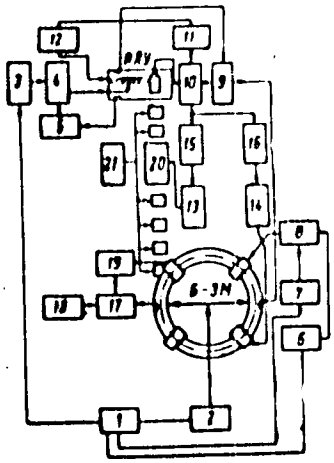

Fig. 1. Block diagram of the apparatus of the B-3M synchrotron. 1 - Starting-pulse block, 2 - electromagnet excitation, 3 - hf generator modulator, 4 - injector hf generator, 5 - phase shifter, 6,7 - modulators, 8 - amplifier, 9 - computer, 10 - phase fixing block, 11 - delay line, 12 - electron gun pulse generator, 13 - electron shutter pulse generator, 14 - inflector pulse generator, 15,16 - delay line, 17 - voltage comparison, 18 - reference voltage, 19 - deflector pulse generator, 20 - electronic shutter, 21 - channel electron supply block.

operate the VEPP-2 storage ring at energies 100 - 130 Mev and an electron current ~100 mA, at an approximate repetition frequency 1 cps. The IIU injector was recently replaced by one with higher injection energy (2.5 - 3 Mev) and longer injection pulse (15 nsec). This increased the number of electrons in the storage ring by approximately a factor of 10. Orig. art. has: 10 figures.

SUB CODE: 20/ SUBM DATE: 22Nov65/ ORIG REF: 006

Card 2/2

ACC NR: AP7001936 SOURCE CODE: UR/0120/66/000/006/0039/0040

AUTHOR: Grits, Yu. A.; Panasyuk, V. S.; Ostreyko, G. N.; Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR, Novosibirsk (Institut yadernoy fiziki, SO AN SSSR)

TITLE: High-frequency power stage excitation circuit for feeding cyclic and linear accelerator resonators

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 39-40

TOPIC TAGS: cyclic accelerator, linear accelerator, particle accelerator component

ABSTRACT:
In high-power common-grid pulse amplifiers for cyclic or linear accelerators, low efficiency and pulse distortion result from a mismatch between the driver and the power tubes where the second harmonic is undesirable An excitation circuit is presented in which the fundamental and the second harmonics follow different paths at the power tube cathode input circuit. The interstage circuit between the driver and the power tube consists of a tuned split LC circuit (tuned to the fundamental frequency), two parallel cable sections assuring a high travelling wave ratio for the fundamental and a high impedance for the second harmonic (cable length is such that it acts as a quarter-wave cable for the second harmonic). The second harmonic is further trapped by LC circuits between

Card 1/2 UDC: 621.3.084.872:621.384.61;621.384.62

ACC NR: AP7001936

the power tube cathode and ground. The described circuit was tested using a GK-5A power tube operating at 6.3 Mc in pulsed mode. The output pulse had a power of 3 Mw. Its duration and repetition frequency were 1 msec and 12 cps, respectively. It is claimed that the efficiency of this circuit is 60% greater than that of the simple common grid circuit. Orig. art. has: 4 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 02Dec65/ ORIG REF: 002/ ATD PRESS: 5111

Card 2/2

ACC NR: AP6031250 SOURCE CODE: UR/0057/66/036/009/1523/1535

AUTHOR: Bukar,G.I.; Medvedev,P.I.; Mostovoy,Yu.A.; Nezhevenko,O.A.; Nelidov,A.B.; Ostreyko,G.N.; Panasyuk,V.S.; Samoylov,I.M.

ORG: none

TITLE: The IEAN iron-free single turn synchrotron

SOURCE: Zhurnal tekhnicheskoy fiziki, v.36, no. 9, 1966, 1523-1535

TOPIC TAGS: electron accelerator, synchrotron

ABSTRACT: This paper is concerned with the type IEAN iron-free single turn accelerator, put at the IYaF CO AN SSSR for injection of up to 180 MeV electrons into a storage ring. A general description of the machine has been given by [illegible] Aleksandrov and 22 other authors (Transactions of the International Conference on Accelerators, Dubna, 1963, p.1065, Atomizdat, M., 1964). In the present paper certain features of the accelerator are described in somewhat more detail, including the magnet, the magnet power supply, and the injector, and the adjustment of the machine is discussed. The magnet winding consists of two concentric duralumin rings [illegible] the beam circulates. The outer ring is capable of withstanding a magnetic [illegible] 50 atm, and the geometry is such that the inner ring is in equilibrium [illegible] netic forces, being subjected only to a hydrostatic pressure. The magnet is powered by a 0.045 F capacitor bank charged to 10 kV. The maximum magnet current is about

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[illegible] corresponding to an electron energy of 180 KeV. There are two auxiliary [illegible] which are discharged at selected phases of the cycle to control [illegible] of the magnetic field. Injection of 600 kV electrons is accomplished [illegible] revolution of the captured electrons. The discharge of the auxiliary [illegible] connector banks is so timed that the field is approximately constant during [illegible] tion. The rf accelerating voltage is frequency modulated from 105.5 to 110 Mc [illegible] is applied to the beam with the aid of a single resonator with a Q of 200. [illegible] difficulties were encountered in the adjustment of the machine, but none [illegible] were overcome. It was possible to inject about 1.2 A of 600 kV electrons into the magnetically constant field, and to accelerate some 20 % of the injected electrons. The observed beam current was found to be limited by longitudinal space charge effects (and not the beam effect), rather than by transverse space charge effects. It is hoped that higher currents might be achieved with a strong focusing iron-free cyclotron. The authors thank A.A.Naumov for his interest and discussion, A.I. [illegible] for organizing the fabrication of the main parts of the accelerator, and [illegible], A.A.Lyashin, and P.G.Kharchenkov for participating in the development of certain parts of the accelerator. Orig. art. has: 3 formulas and 6 figures.

SUB CODE: 20/ SUBM DATE: 27Sep65/ ORIG REF: 000/ OTH REF: 001

Card 2/2 [illegible]

ACC NR: AT7004005 SOURCE CODE: UR/0000/66/000/000/0287/0290

AUTHOR: Grits, Yu. A., Ostreyko, G. N., Panasyuk, V. S., Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR (Institut yadernoy fiziki SO AN SSSR), Physico-Technical Institute, GKAE SSSR (Fiziko-tekhnicheskiy institut GKAE SSSR)

TITLE: High-frequency pulse generator with 8-Mw pulses intended for a high-power electron accelerator

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam, 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators), trudy konferentsii. Moscow, Atomizdat, 1966, 287-290

TOPIC TAGS: pulse generator, electron accelerator

ABSTRACT: A linear accelerator with a 40-amp, 1.3-Mev, ±0.5%-spread, 7-nsec pulse was developed and built in the Physico-Technical Institute, GKAE SSSR. It was put into operation in the Institute of Nuclear Physics, SO AN SSSR, and has been used there for a single-circle injection into an electron synchrotron.

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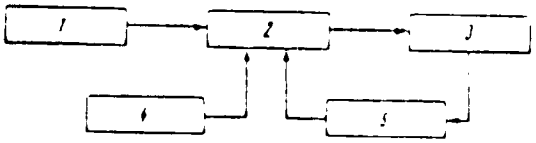
ACC NR: AT7004005



Hf energy stored in a 0.4-Mc resonator is used for particle acceleration. Modulator 1 (see figure) supplies voltage pulses to two-stage generator 2 anodes; feedback is effected via high-Q load 3, adjustable coaxial line 5 is employed for selecting the feedback phase. A low-power oscillator 4 is intended for overcoming the resonator multipactor. A power of 8 Mw was obtained from the generator, with 25-kv anode pulses, during tests. However, in the above high-Q-load-excitation scheme, the generator develops 3.6 Mv at 16 kv. "The authors wish to thank A. A. Naumov for organizing this project, and V. I. Vishnevskiy, N. P. Rubinshteyn, and Ye. P. Mel'nikov for their participation in the alignment of the equipment." Orig. art. has: 2 figures.

SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 003

Card 2/2

SAVIC, Isidor, prof.dr. (Beograd, Risanska 10a); OSTRIC-MATIJASEVIC, Biserka, dr inz., strucni saradnik; MAKSIMOVIC, Bogdan, dr. naucni saradnik

Lyophilization of meat. Tehnika Jug 18 no.7:Supplement: Prehran ind 17 no.7:1340-1344 Jl'63

1. Rukovodilac naucne i strucne problematike Instituta za tehnologiju mesa SFRJ, Beograd (for Savic). 2. Institut za tehnologiju mesa SFRJ, Beograd (for Ostric-Matijasevic, Maksimovic.

OSTRIHANSKY, Lubor; PANENKA, Jaroslav

Effect of nuclear fallout on the radiometric field measurement in prospecting for radioactive raw materials. Jaderna energie 10 no. 2:35-39 F '64.

1. Katedra uzite geofyziky prirodovedecke fakulty, Karlova universita (for Ostrihansky).
2. Geologicky pruzkum, Jachymovske doly, Spisska Nova Ves.

OSTRIKOV, M.S.; VITKEVICH, N.D.; SVIRSKAYA, O.D.

Kinetics of the increase of shrinkage stresses in systems undergoing drying. Koll. zhur. 23 no.1:122-124 Ja-F '61. (MIRA 17:2)

1. Rostovskiy gosudarstvennyy universitet.

SVIRSKAYA, O.D.; OSTRIKOV, M.S.

Shrinkage stresses in s[illegible] bers. Koll.zhur. 26 no.1:95-99 Ja-F '[illegible]. (MIRA 17:4)

1. Rostovskiy universit[illegible], [illegible]tet.

DIBROV, G.D.; OSTRIKOV, M.S.; PETRENKO, T.P.

Contraction (setting) of cement stone. Dokl.AN SSSR 149 no.3: 648-651 Mr '63. (MIRA 16:4)

1. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut i Rostovskiy-na-Donu gosudarstvennyy universitet. Predstavleno akademikom P.A.Rebinderom.

(Cement)

PALKIN, A.P.; OSTRIKOVA, N.V.; VIGUTOVA, T.N.

Interaction in the system $InCl_3$ - In . Zhur. neorg. khim. 8 no.11:2566-2568 N '63. (MIRA 17:1)

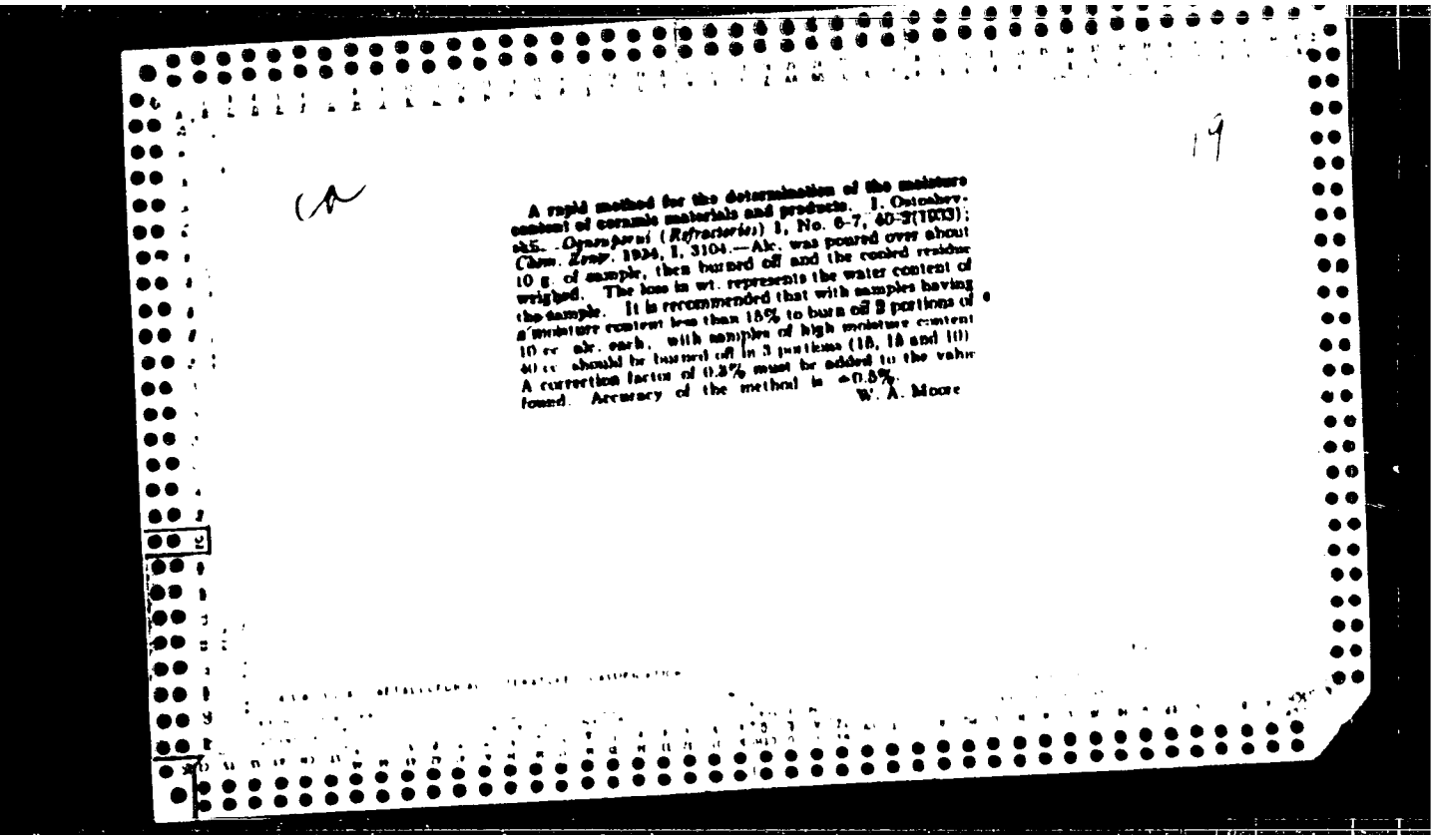
1. Voronezhskiy gosudarstvennyy universitet, kafedra neorganicheskoy khimii.

BV

B-I-7

Rapid method for determining the moisture content of ceramic materials and products. I. Ostroumov (Ogneupory, 1933, 1, No. 6–7, 40–42).—EtOH was poured over a 10-g. sample, burned off, and the cooled residue weighed. The loss in wt. represents the H_2O content of the sample. With < 15% of H_2O two, and with higher H_2O content three, treatments with EtOH are recommended. A correction factor of 0·3% is added to the val. found. CH. ABS. (e)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

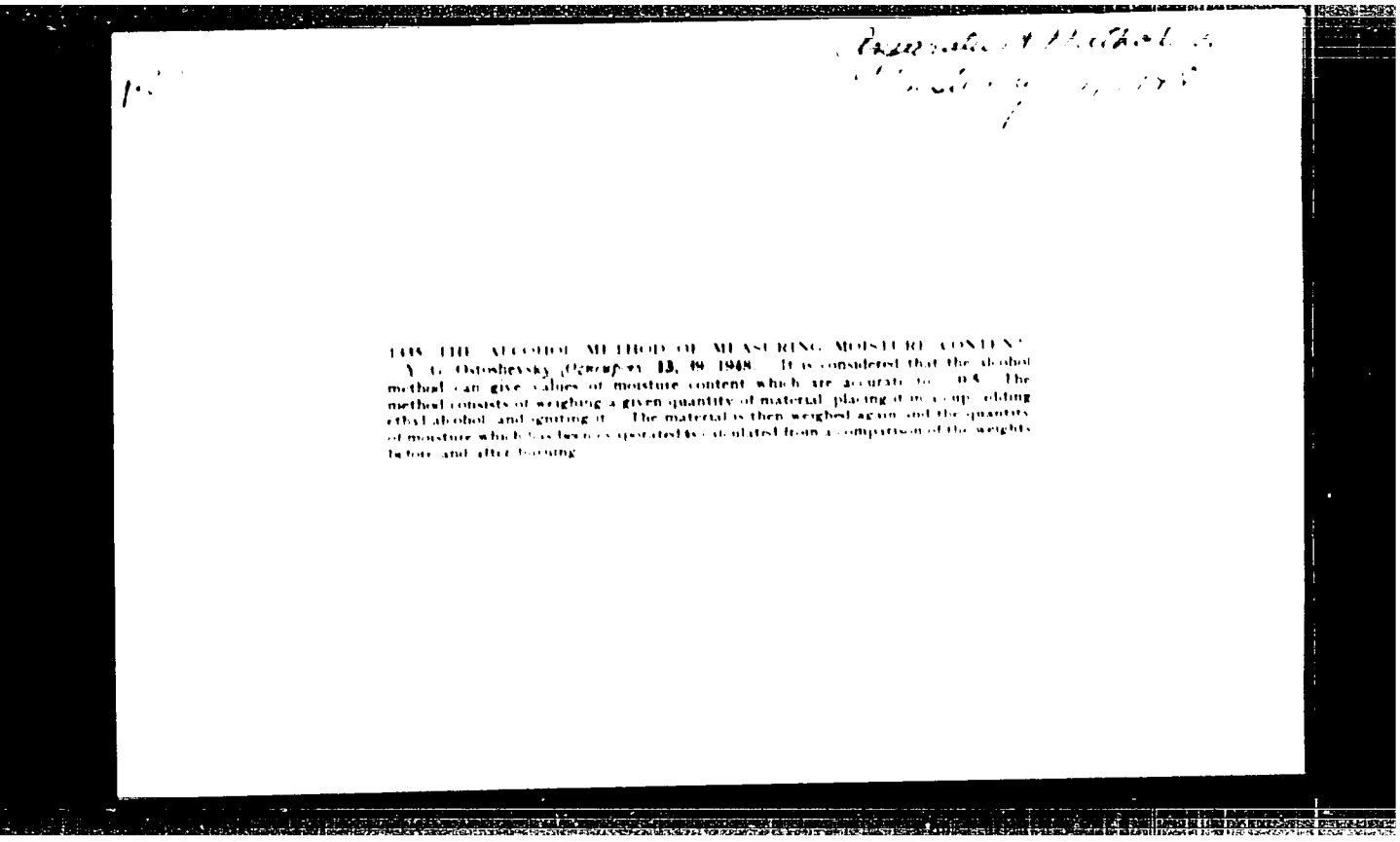


A rapid method for the determination of the moisture content of ceramic materials and products. I. Ostochev-skii. *Ogneupory* (*Refractories*) 1, No. 6-7, 40-3(1933); *Chem. Zentr.* 1934, I, 3104.—Abr. was poured over about 10 g. of sample, then burned off and the cooled residue weighed. The loss in wt. represents the water content of the sample. It is recommended that with samples having a moisture content less than 15% to burn off 3 portions of 10 cc. abr. each, with samples of high moisture content 40 cc. should be burned off in 3 portions (10, 15 and 15). A correction factor of 0.3% must be added to the value found. Accuracy of the method is ±0.8%.

W. A. Moore

[illegible] C-4. [illegible]

1848. **Alcohol method of measuring moisture content.** Y. G. Ostrobrytsky (Ogneupory, 1948, 13, 39; *Brit. Ceram. Abs.*, 1948, 227A).—Ethanol is added to a known amount of the material, which is then ignited in a cup. The amount of water is calc. from the difference in wt before and after ignition. The method is accurate to ± 0·3%. H. B. Clarke.



THE ALCOHOL METHOD OF MEASURING MOISTURE CONTENT

Y. G. Ostoshevsky (Comptes rendus, 13, 09 1948). It is considered that the alcohol method can give values of moisture content which are accurate to 0.5%. The method consists of weighing a given quantity of material, placing it in a cup, adding ethyl alcohol, and igniting it. The material is then weighed again, and the quantity of moisture which has been evaporated is calculated from a comparison of the weights before and after burning.

OSTOSHEVSKII, YU. G.

[illegible] for sinter metall[illegible] purposes. [illegible]ch-Alpine Montan[illegible]

The alcohol method for the determination of moisture. Yu. G. Ostoshevskii. Ogneupory 13, 39-40(1948); [illegible] 1948, [illegible].

The old alc. method is superior to drying at 150-200° for the detn. of moisture in ceramic raw materials. Ten cc. of 96% alc. is poured over a 10-g. sample in a porcelain or Fe dish and ignited. For samples contg. less than 15% moisture this process is repeated once. For moisture contents above 15%, 3 ignitions are carried out with 15 cc. of alc. being used for each of the first two. The moisture content is detd. as usual from the loss in wt. The method is accurate to within 0.5%.

M.G. Moore

[illegible] clipping

OSTOSHEVSKII, Yu. G.

Iron powder for sinter metallurgical purposes. Oesterreichisch-Alpine Montang

The alcohol method for the determination of moisture. Yu. G. Ostoshevskii. Ogneupory 13, 39-[illegible](1948); [illegible] 1949, [illegible]

The old alc. method is superior to drying at 180-200° for the detn. of moisture in ceramic raw materials. Ten cc. of 96% alc. is poured over a 10-g. sample in a porcelain or Fe dish and ignited. For samples contg. less than 15% moisture this process is repeated once. For moisture contents above 15%, 3 ignitions are carried out with 15 cc. of alc. being used for each of the first two. The moisture content is detd. as usual from the loss in wt. The method is accurate to within [illegible]. M.G. Moore

[illegible] clipping

CA

19

The alcohol method for the determination of moisture. Yu. G. [illegible]. *Ogneupory* 13, 39-40(1948); *Chem. Zentr.* 1949, I, 1128. The old alc. method is superior to drying at 180-200° for the detn. of moisture in ceramic raw materials. Ten cc. of 96% alc. is poured over a 10-g. sample in a porcelain or Fe dish and ignited. For samples contg. less than 15% moisture this process is repeated once. For moisture contents above 15%, 3 ignitions are carried out with 15 cc. of alc. being used for each of the first two. The moisture content is detd. as usual from the loss in wt. The method is accurate to within 0.5%. M. G. Moore

GOROVNIY, (fnu)

USSR/Geophysics - Irrigation Specialists Jun 52

"Chronicles: Conference on the Problem Concerning Methods for Irrigation of Agricultural Cultivation," A. I. Shklyarevskiy

"Gidrotekh i Melio" No 6, pp 75-80

During 12 - 14 Mar 52, in Moscow, the Hydrotechnics and Amelioration Sec of the All-Union Acad of Agri Sci imeni Lenin held a plenum, with participation of agricultural and hydrological administrators, directors, and main agronomists of MTS (machine-tractor stations), besides presidents of kolkhozs in irrigated districts of Kuybyshev and Saratov in Oblasts. Discussed were problems of utilizing irrigated [illegible] under conditions met beyond the Volga and in other new regions being irrigated. [illegible] heard from 22 lecturers.

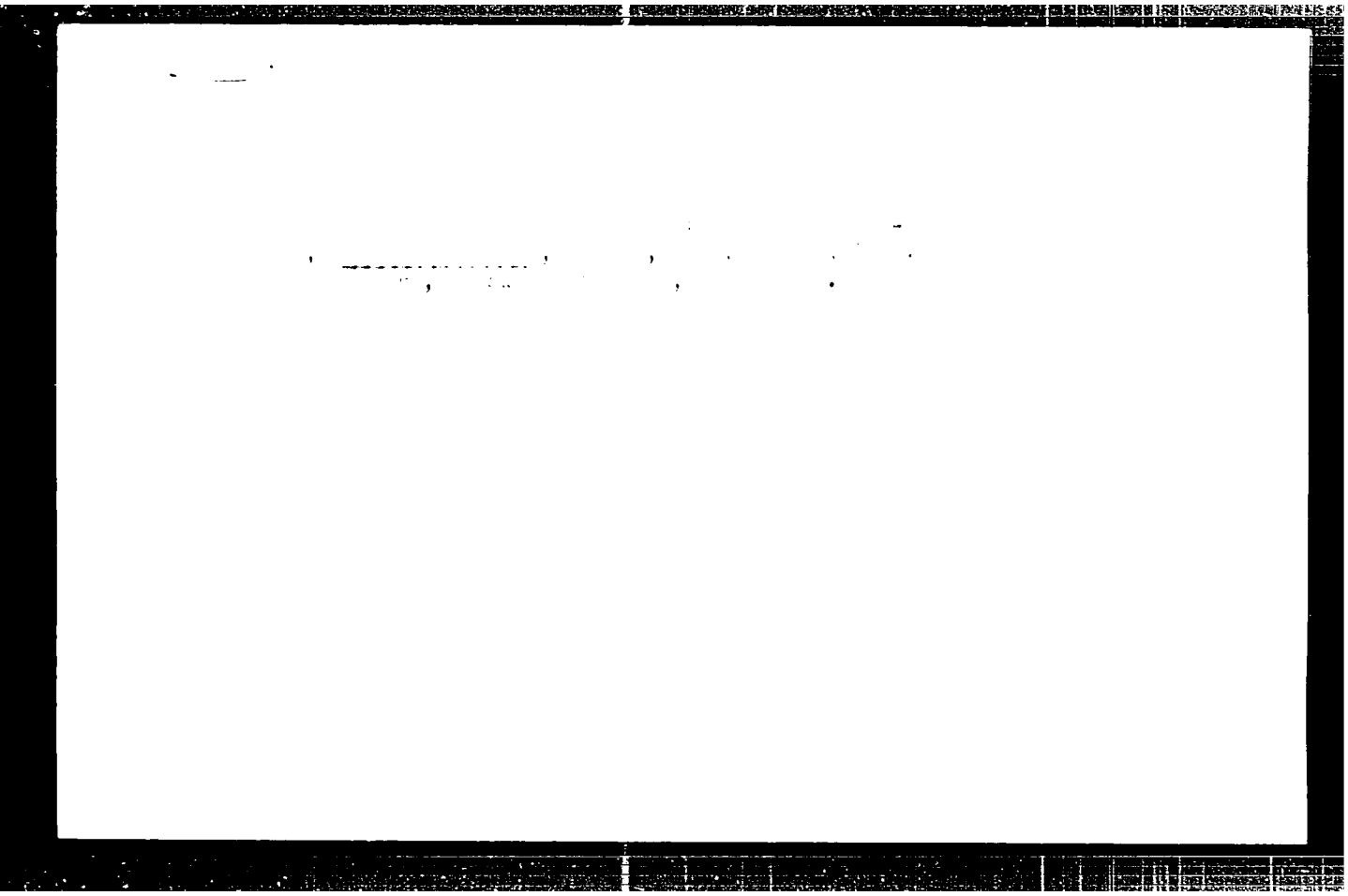
PA 227T46

OSETOWSKA, Ewa; WAZNA, Krystyna; MARKIEWICZ-CZAPSKA, Danuta

A case of encephalitis following vaccination against rabies. Neurol. neurochir. psychiat. pol. 12 no.1:123-126 '62.

1. Z Pracowni Warszawskiej Zakladu Neuropatologii PAN Kierownik Pracowni: doc. dr E. Osetowska z Kliniki Pediatrycznej AM w Lublinie Kierownik: [prof. dr W. Klepacki] z Kliniki Neurologicznej AM w Lublinie Kierownik Kliniki prof. dr W. Stein

(RABIES immunol) (VACCINATION compl)
(ENCEPHALITIS etiol)



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OSTROV, K D

Spravochnik po radioizmeritel'nym priboram. (By) K. D. Osipov (1) V.V. Pasykov. Moskva, "Sovetskoye Radio", 19 - V. illus., diagrs., graphs, tables.

Contents: ; v. 3: privory dlya izmereniya formy kolebaniy; v. 4: Spetsial'nyye izmeritel'nyye pribory i istochniki pitaniya;

2214. HAEMOPTYSIS IN PERIARTERITIS NODOSA (Russian text) - Oistrakh D.G. and Mochalova A.D. - KLIN.MED. (Mosk.) 1957, 35/4 (113-116) Illus. 2

In cases of periarteritis nodosa the lungs are seldom injured (in 12-25% of cases). In such cases the vascular process is associated with the development of small fibrinoid pneumoniae, fresh haemorrhagic infiltrates which show haemorrhagic tendencies. A description is given of one case with a fatal issue.

Frey - Baden-Baden (XV, 6)

BA

Original Properties
Molecular Structure

Emission of radiation from diatomic gases. III. Numerical emissivity calculations for carbon monoxide for low optical densities at 300° K. and atmospheric pressure. S S Penner, M H Ostrander, and H S Tsien *J. appl. Phys.*, 1952, **23**, 258—263. The calculations have been made for non-overlapping rotational lines using a dispersion formula for the line-shape representation. Use of the best available experimental data on integrated absorption and rotational line-width leads to calculated emissivities which are in excellent agreement with extrapolated empirical data published by Hottel and by Ullrich. In particular, the theoretical dependence of emissivity on optical density, for small optical densities at 300° K. has been shown to follow experimental observations with satisfactory precision. The calculation of emissivities can be simplified by the use of approx. treatments.

C. B. North