VARVAK, P.M.

The Institute of Building Mechanics of the Academy of Sciences of the Ukrainian SSR gives assistance to the Kakhovka Hydroelectric Power Station. Prykl.mekh.2 no.3:352-254 '56. (MLRA 9:10)
(Kakhovka Hydroelectric Power Station)

VARVAK, P.M., DLUGACH, M.Y.

"Calculation of durability, rigidity, resistance and vibrations"; Collection of articles complited by the Moscow Machine Tool and Instrument Institut, Reviewed by P.M.Varvak, M.Y.Dlugach. Prikl. mekh. 2 no.4:468-469 '56. (MLRA 10:3)
(Mechanical engineering) (Machine tools)

VARVAK, P.M.

Reports of the Seminar of Mechanics, Section of Techical Sciences, Academy of Sciences of the Ukrainian SSR. Prikl.mekh.2 no.4:470-471 '56.
(Mechanics) (MLRA 10:3)

SOV/124-59-1-752

Translation from: Referativnyy zhurnal. Mekhanika, 1959, Nr 1, p 110 (USSR)

AUTHORS: Varvak, P.M. and Guberman, I.O.

TITLE: The Calculation of Rectangular Plates Fixed Along the Contours

PERIODICAL: Sb. tr. In-ta stroit. mekhan. AS UkrSSR, 1956, Nr 21, pp 51-68

ABSTRACT: The calculation of the plates is given in numerical form. The differtial equation for bending is presented in finite differences. The calculation method makes it possible to consider given displacements of the contour points. A great number of auxiliary tables for plates with different side ratios is given. A square plate is considered as an example.

N.S. Kurdin

Card 1/1

SOV/124-57-8-9257

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 8, p 98 (USSR)

AUTHOR: Varvak, P. M.

TITLE: On the Solution of the Spatial Problem of the Theory of Elasticity (K resheniyu prostranstvennoy zadachi teorii uprugosti)

PERIODICAL: V sb.: Issledovaniya po vopr. ustoychivosti i prochnosti, Kiyev, AN UkrSSR, 1956, pp 93-101

ABSTRACT: For problems in respect to which the application of a single biharmonic function is sufficient the author uses the formulae of B. G. Galerkin's solutions [Sobr. soch. (Collected Works), Vol 1, Moscow, 1952]. By substituting the biharmonic equation with Galerkin's finite-difference expression the author develops a system of linear equations for the determination of the unknown functions in the grid joints. The formulae for deflections and stresses are also reduced to the values of the function sought in the grid joints.

I. S. Arzhanykh

Card 1/1

KORNOUKHOV, M.V.; VARVAK, P.M.

"Elastic plates and shells" by A.S. Vol'mir. Reviewed by M.V.Kornoukhov, P.M.Varvak. Prykl.mekh. 3 no.2:233-234 '57 (MLRA 10:9)

(Elastic plates and shells) (Vol'mir, A.S.)

VARVAK, P.M.

Lectures at the seminar of mechanics in the Department of Technical Sciences of the Academy of Sciences of the Ukrainian S.S.R. Prykl. mekh. 3 no.2:235 '57. (MLRA 10:9)

(Mechanical engineering)

VARVAK, P.M.

KORNOUKHOV, M.V.; VARVAK, P.M.

"Statics and Kinematics of girders" by A.A.Umanskii. Reviewed by M.V.Kornoukhov, P.M.Varvak. Prykl.mekh.3 no.3:350-351 '57. (MIRA 10:12)

(Girders) (Umanskii, A.A.)

VARVAK, P.M.

Leonhard Euler. Prykl.mekh.3 no.3:352-355 '57. (MIRA 10:12)
(Euler, Leonhard, 1707-1783)

VARVAK, P.M.

Activity of the seminar of mechanics of the Section of Technical Sciences at the Academy of Sciences of the Ukrainian S.S.R. Prykl. mekh.3 no.3:355-357 '57. (MIRA 10:12)

1. Uchenyy sekretar seminary z mekhaniki pri Viddili tekhnichnikh nauk AN URSR.

(Ukraine--Mechanical engineering)

SOV/124-58-10-11449

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 107 (USSR)

AUTHORS: Varvak, P.M., Guberman, I.O.

TITLE: The Bending of a Square Plate Under Various Edge Conditions (Izgib kvadratnoy plastinki s razlichnymi usloviyami na krayakh)

PERIODICAL: Inform. materialy. In-t stroit. mekhan. AN UkrSSR, 1957, Nr 10, pp 3-56

ABSTRACT: This article is part of a book by P.M. Varvak [Razvitiye i prilozheniye metoda setok k raschetu plastinok (Development and Application of a Method of Coordinate Networks for the Analysis of Plates), Part 2, Izd-vo AN UkrSSR, 1952]. A square plate is investigated for 9 variants of boundary conditions: 1-2) all edges are free, 3 or 4 corners of the plate being supported; 3-8) one edge, two adjacent or two non-adjacent sides are free, the others are either supported or clamped; 9) two non-adjacent sides are free, the third is freely supported, and the fourth is clamped. Typical difference equations are compiled for the deflections of internal points, points on the contour and points adjacent thereto. Deflections of points outside the contours are ruled out by the boundary conditions. If the squares of the

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The Bending of a Square Plate Under Various Edge Conditions SOV/124-58-10-11449

system of coordinates are spaced at intervals of 1/4 the length of a side of the plate, the following are derived for each of the nine variants indicated at two values of the Poisson ratio (1/6 and 3/10): a) Matrices for the coefficients of the difference equations; and b) matrices for the influence numbers of the free terms. The use of matrix (b) is illustrated by examples of analysis of plates for uniform and concentrated loads. The latter are treated as a load distributed over the area of a square, the side of the square being equal to one interval in the system of coordinates, while if there is a load on the free edge, the distribution is over the area of the adjacent half-square. It is shown that the results can also be employed for the analysis of rectangular plates superimposed on a square system of coordinates.

Ya. B. L'vin

Card 2/2

VARVAK, P.M. (Kiiv); VAYNBERG, D.V. (Kiiv); CHUDNOVSKIY, V.G. [Chudnovs'kyi, V.H.] (Kiiv); GUMENYUK, V.S. [Humeniuk, V.S.] (Kiiv).

Experimental investigation of the strength of concrete blocks with apertures [in Ukrainian with summaries in Russian and English]. Prykl. mekh. 4 no.1:19-29 '58. (MIRA 11:4)

1. Institut budivel'noi mekhaniki AN URSR.
(Concrete blocks--Testing)

VARVAK, P.M. [Varvak, P.M.]

Lectures at the Seminar on Mechanics in the first halfyear of 1958.
Prykl. mekh. 4 no.4:473-475 '58. (MIRA 11:12)
(Mechanics)

AUTHOR: Varvak, P.M. SOV/21-58-10-5/27

TITLE: On the Solution of the Spatial Problem of the Theory of Elasticity (K resheniyu prostranstvennoy zadachi teorii uprugosti)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 10, pp 1049 - 1053 (USSR)

ABSTRACT: In a previous paper [Ref. 1] the author solved the three-dimensional problem of the theory of elasticity with the aid of B.G. Galerkin's function and spatial lattices. In the present paper he makes use of the method of displacements for solving the spatial problem of the theory of elasticity under any boundary conditions, static or kinematic. He discusses the solution of this problem on the basis of Lamé equations of equilibrium, and the method of finite differences. He derives final expressions for the fundamental equations and stress components for the cases of parallelepiped and cubic lattices. The method used is illustrated by an

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On the Solution of the Spatial Problem of the Theory of Elasticity SOV/21-58-10-5/27

example of a cube subjected to compression. There are 2 diagrams, 1 set of graphs, 1 table and 2 Soviet references.

ASSOCIATION: Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Construction Mechanics of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, G.N. Savin

SUBMITTED: April 24, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Elasticity--Theory 2. Functions 3. Topology

Card 2/2

DYATLOVITSKIY, Lev Isaakovich; VARVAK, P.M., prof., doktor tekhn.nauk, retsenzent; BLAGOVESHCHENSKIY, Yu.V., kand.tekhn.nauk, retsenzent; PYSHKIN, B.A., otv.red.; NEMENKO, L.A., red.izd-va; SHTUL'MAN, I.F., red.izd-va; ROZENTSVEYG, Ye.N., tekhn.red.

[Stresses in gravity dams on earth foundations] Napriazheniia v gravitatsionnykh plotinakh na neskal'nykh osnovaniiakh. Kiev, Izd-vo Akad.nauk USSR, 1959. 338 p. (MIRA 12:10)

1. Chlen-korrespondent AN USSR (for Pyshkin).
(Dams) (Strains and stresses)

VARVAK, P.M., prof., doktor tekhn.nauk, starshiy nauchnyy sotrudnik; GUBERMAN, I.O., starshiy inzh.; MIROSHNICHENKO, M.M., inzh.; PREDTECHENSKIY, N.D., inzh.. Prinimali uchastiye: AMIRO, I.Ya., starshiy nauchnyy sotrudnik; DLUGACH, M.I., starshiy nauchnyy sotrudnik; BOBYR', B.A., inzh.; KUZNETSOVA, A.K., inzh.; PETRASHEN', R.N., inzh.; SOKOL'SKIY, M.M., inzh.. KAPLAN, Ya.L., red. izd-va; LABINOVA, N.M., red.izd-va

[Tables for designing rectangular slabs] Tablitsy dlia rascheta priamougol'nykh plit. Pod red. P.M.Varvaka. Kiev, Izd-vo Akad. nauk USSR, 1959. 418 p. (MIRA 12:11)

1. Institut stroitel'noy mekhaniki Akademii nauk USSR (for Varvak, Guberman, Amiro, Dlugach). 2. Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-issledovatel'skiy institut "Gidroproyekt" im. S.Ya.Zhuk (for Miroshnichenko, Predtechenskiy, Bobyr', Kuznetsova, Petrashen', Sokol'skiy).
(Concrete construction--Tables, calculations, etc.)
(Concrete slabs)

VARVAK, P.M.

Euler and the technical sciences. Ist.-mat. zbir. 1:77-85 '59.
(MIRA 14:2)
(Euler, Leonhard, 1707-1783)

16(1) SOV/21-59-2-5/26

AUTHOR: Varvak, P.M.

TITLE: Calculation of the Strains and Stresses in a Cube Under the Effect of its Own Weight (Raschet massivov n[illegible] sobstvennogo vesa)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 2, pp 130-132 (USSR)

ABSTRACT: This article is a continuation of the author's own work /Ref 1/ on the subject matter, showing that by using the method of finite differences, the problem of calculating strains and stresses in a cube squeezed in among its four lateral sides, and experiencing the influence of its own weight, can be solved. The agreed-upon designations (standard mathematical) are as follows: X,Y and Z stand for components of volumetrical forces, u,v and w are constituents of displacement parallel to axes x,y,z respectivelt, γ is the weight of a unit of volume. There are 2 diagrams,

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SOV/21-59-2-5/26

Calculation of the Strains and Stresses in a Cube Under the Effect of its own Weight

2 tables, and 1 Soviet reference.

ASSOCIATION: Institut stroitel'noy mekhaniki An UkrSSR (Institute of Construction Mechanics of the AS UkrSSR)

PRESENTED: By F.P. Belyankin, Member of the AS UkrSSR

SUBMITTED: November 18, 1958

Card 2/2

16(1) SOV/21-59-4-6/27

AUTHOR: Varvak, P.M.

TITLE: Dominant Displacements in a Spatial Problem of the Theory of Elasticity

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 4, pp 369-371 (USSR)

ABSTRACT: This is a supplement of the author's previous work [Ref 1] on the subject named in the title, showing the possibility of simplification of the problem's solution in cases when some displacements are known beforehand as being predominant. Ordinarily, every node of the spatial net calls for three 15-member equations. If, however, only the unknowns of the main direction are written in the formulation of the basic expressions for the displaced and ended differences of the node "0" (Figure 1) of the cubic net, the equations become 7-member equations and appear in the form (1), where u, v and w are displacements of nodes along axes x, y, z, and

Card 1/2

Dominant Displacements in a Spatial Problem of the Theory of Elasticity

$$B = 1-2 \quad ; \quad C = \frac{2(1+\ )(1-2\ )}{E} \ .$$

When it is known beforehand that some displacements are dominant, their approximate definition can be made with the use of only one of the three equations (1). The author illustrates this by an example, the result of which is shown in a table on page 370. The simplification applied has resulted in an error in the final result not exceeding 22.3% toward the increase. There are 2 sketches, 1 table and 1 Soviet reference.

ASSOCIATION: Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Construction Mechanics of the AS UkrSSR)

PRESENTED: By F.P. Belyankin, Member of the AS UkrSSR

SUBMITTED: November 18, 1958

VARVAK, P.M.

Reports at the seminar on mechanics during the second half of 1958. Prykl.mekh. 5 no.2:233-234 '59. (MIRA 12:9)
(Mechanics, Analytic)

VARVAK, P.M.

Reports at the seminar on mechanics at the Department of Technology of the Academy of Sciences of the Ukrainian S.S.R. Prykl. mekh. 5 no.4:456-457 '59. (MIRA 13:3)

(Technology)

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

35. N. M. Borodachev (Kuibyshev): On the solution of the dynamic contact problem for a half-space under conditions of axial symmetry.

36. J. Brilla (Bratislava). Anisotropic plates with discontinuous supports.

37. B. M. Broude (Moscow): On the essential non-linearity of certain problems on column stability.

38. K. G. Bugloy (Kiev), R. V. Sarkisyan (Moscow): On the determination of safety factors under alternating random loads.

39. A. V. Burlakov (Kharkov): An experimental investigation of creep of turbine diaphragm models.

40. K. P. Burmistrov (Saratov): On the stability of constructionally anisotropic circular ring plates.

41. St. Balan, V. Petcu, S. Rautu (Bucharest): The field of application of chronoplasticity.

42. D. D. Vainberg (Kiev): The state of stress of lamellar systems of regular configuration.

43. V. V. Vainshtok (Moscow): Thixotropic properties of lubricants as basis of their rheological characteristics.

44. G. A. Van-Fo-Fi, G. N. Savin (Kiev): Application of Mathieu functions to the investigation of shells.

45. B. M. Varvak (Kiev): Determination of stresses and deformations in massive bodies.

46. R. V. Vedeneev (Gorkii): The flow of bitumens and filled bitumens in pipes.

47. I. N. Vekua, N. I. Muskhelishvili (Tbilisi): Applications of analytic functions in the theory of elasticity.

48. L. Ia. Viner (Tbilisi), V. V. Pinadzhian (Erevan): Experimental investigation of the behavior of eccentrically compressed short columns for long loading times.

49. G. V. Vinogradov (Moscow), A. A. Manakov (Kazan), V. P. Pavlov (Moscow): Investigation of soft plastic bodies under combined states of stress.

50. G. V. Vinogradov, V. P. Pavlov (Moscow): Basic peculiarities of the mechanical properties of plastic lubricants.

51. A. I. Vinokur (Leningrad): Fundamentals of the linear theory of visco-elastic impact.

52. L. I. Vinokurov (Kharkov): The solution of dynamic contact problems for foundations using a simplified model.

53. B. F. Vlasov (Moscow): On the equilibrium equations of thick elastic plates.

54. S. S. Voitkovskii (Yakutsk): The creep of ice and frozen soils under combined stresses.

55. M. P. Volarovich, G. Ia. Voronkov, K. P. Kovalevskii, G. I. Kushnir (Moscow): Studies of viscoelastic properties of porous bodies (e.g. peat) by the ultrasonic pulse method.

56. M. P. Volarovich (Moscow), A. Kh. Kim (Minsk): The plane flow of a visco-plastic medium between two planes forming an acute angle.

57. M. P. Volarovich, K. N. Opekin (Moscow): Kinematics and dynamics of the flow of visco-plastic dispersed media past bodies of different shapes.

58. A. S. Volmir (Moscow): On the analysis of a short closed cylindrical shell.

59. S. D. Volkov, N. A. Klinskikh (Sverdlovsk): On the distribution of elastic constants in quasi-isotropic polycrystalline media.

60. I. I. Vorovich (Rostov-na-Donu): A statistical method in the stability theory of shells.

61. I. I. Vorovich (Rostov-na-Donu), A. S. Kosmodamianskii (Saratov): On stress concentration in a plane with an infinite number of holes.

62. A. P. Viazmenskii (Leningrad): Foundations of the general engineering theory of elastic beams.

63. S. S. Vialov (Moscow): The laws of deformation of ice.

64. S. S. Vialov (Moscow): The laws of motion of ice crusts and the theory of visco-plastic flow based on research in the Antarctic.

65. N. D. Gaillieev (Leningrad): A method of obtaining polynomial stress and displacement functions.

66. K. Z. Galimov (Kazan): A contribution to the theory of the finite deformations of thin shells.

67. M. P. Galin (Moscow): The propagation of elastic-plastic bending and shear waves in the axisymmetrical deformations of shells.

VARVAK, P.M.

Trapezoid girder wall. Zbir.prats'. Inst.mekh.AN URSR no.23:100-106 '61. (MIRA 14:12)

(Beams and girders)

VARVAK, P.M.; KIRIYENKO, V.I. [Kyryienko, V.I.]; CHUDNOVSKIY, V.G. [Chudnovs'kyi, V.H.]

"Designer's handbook for calculations and theory" edited by Professor A.A.Umanskii. Reviewed by P.M.Varvak, V.I.Kyryenko, V.G.Chudnovs'kyi. Prykl.mekh. 8 no.2:228-230 '62. (MIRA 15:3)
(Structures, Theory of) (Umanskii, A.A.)

VARVAK, P.M.

Three-dimensional problem in the theory of elasticity for a cube with a cubic cavity. Dop. AN URSR no.8:1020-1021 '62.

1. Kiyevskiy automobil'no-dorozhnyy institut. (MIRA 15:12)

DMITRIYEV, Leonid Georgiyevich; SOSIS, Petr Moiseyevich; VARVAK, P.M., doktor tekhn. nauk, prof., retsenzent; LETICHEVSKIY, A.A., kand. fiz.-mat. nauk, retsenzent; GONCHAR, A.S., red.; LEUSHCHENKO, N.L., tekhn. red.

[Programming the design of three-dimensional structures] Programmirovanie rascheta prostranstvennykh konstruktsii. Kiev, Gosstroiizdat USSR, 1963. 225 p. (MIRA 17:2)

BOVIN, Vsevolod Andreyevich; VARVAK, P.M., spets. red.; REZNICHENKO, I.Ye., red.; YEREMINA, I.A., tekhn. red.

[Difference and variation methods in structural mechanics] Raznostno-variatsionnye metody stroitel'noi mekhaniki. Kiev, Gosstroiizdat USSR, 1963. 397 p. (MIRA 16:5)
(Mechanics, Analytic)

ACCESSION NR: AP3006954 S/0021/63/000/008/1021/1025

AUTHOR: Varvak, P. M. and Varvak, A. P.

TITLE: Momentless shallow rectangular shells of equal resistance (in x- and y-directions)

SOURCE: AN UkrSSR. Dopovidi, no. 8, 1963, 1021-1025

TOPIC TAGS: momentless shell, shallow shell, membrane deflection, finite difference method

ABSTRACT: The problem of a momentless shallow rectangular shell-membrane without bending was considered. The shell is described by equation (1)

$$S_x \frac{\partial^2 z}{\partial x^2} + 2T_{xy} \frac{\partial^2 z}{\partial x\, \partial y} + S_y \frac{\partial^2 z}{\partial y^2} = -q \sqrt{1 + \left(\frac{\partial z}{\partial x}\right)^2 + \left(\frac{\partial z}{\partial y}\right)^2}. \qquad (1)$$

where S is a resistance. The shell was assumed to be so shallow that the right-hand side of equation (1) was equal to -q. The assumption was made [after G. S.

Card 1/2

ACCESSION NR: AP3006954

Ramaswamy, Civil Engng. and Public Works Rev., 53, 626, 899 (1958)7 that Txy = 0; Sx = Sy = S = const, so that equation (1) could be approximated by Poisson's equation

$$\frac{\partial^2 z}{\partial x^2}+\frac{\partial^2 z}{\partial y^2}=-\frac{q}{S}. \qquad (2)$$

The method of finite differences was applied in the solution. Tables for certain loads are given to find the corresponding shell profile and to calculate the reactions. Orig. art. has 5 numbered equations, 4 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 27Sep63 ENCL: 00

SUB CODE: AP, PH NO REF SOV: 002 OTHER: 001

Card 2/2

AMIRO, I.Ya.; VARVAK, P.M.

Mykola Vasyl'ovych Kornoukhov (on the occasion of his 60th birthday). Prykl.mekh. 9 no.5:573-576 '63. (MIRA 16:10)

VARVAK, P.M.(Kiev)

"Membrane shallow shells of constant strength with non-rectangular plan form"

report presented at 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964.

VARVAK, P.M.; VARVAK, A.P. [Varvak, O.P.]

Zero-moment shallow shells of equal resistance with an oblique-angled plane. Dop. AN URSR no.1:47-49 '64. (MIRA 17:4)

1. Kiivs'kiy avtomobil'no-dorozhnii institut i UkrshlyakhtransNADI. Predstavleno akademikom AN UkrSSR F.P.Belyankinym [Bieliankin, F.P.]

ACCESSION NR: AP4037440 S/0021/64/000/005/0586/0588

AUTHOR: Varvak, P. M.; Varvak, O. P.

TITLE: Membrane (zero-moment) shallow shells of equal resistance with curvilinear shapes

SOURCE: AN UkrRSR. Dopovidi, no. 5, 1964, 586-588

TOPIC TAGS: shallow shell, zero-moment shallow shell, circular membrane, stress distribution

ABSTRACT: This is an extension of two earlier papers by the authors [DAN UkrRSR, 1025 (1964); DAN UkrRSR, 47 (1964)] which is applicable to the problem of a curvilinear-shaped shell without bending and of equal resistance. The treatment is according to the method of finite differences in polar coordinates. Stress distributions are given in tabular form for circular, semi-circular, and quarter circular (wedge-shaped) shapes. Orig. art. has 7 numbered equations, 3 tables and 5 illustrations.

ASSOCIATION: Ky*yivs'ky*y abtodorozhniy insty*tut, Ukpshlyakhtrans NADI (Kiev

Card 1/2

ACCESSION NR: AP4037440

Highway Institute, Ukrainian Road Transport NADI)

SUBMITTED: 25Feb63 DATE ACQ: 03Jun64 ENCL: 00

SUB CODE: AS NO REF SOV: 003 OTHER: 000

Card 2/2

V.V.Vlasov, I.M.

Nonlinear problem involving a semi-moment shell of unit strength.
Rep. All USSR Conf. on Plate and Shell Theory, Kazan', 1961. (MIRA 18:9)

1. Kiyevskiy avtomobil'no-dorozhnyy institut.

AVRAMENKO, V.G.; YERYSHEV, B.Ya.; VARVANINA, G.V.

Syntheses based on ω-chloroalkanoic acids. Part 2: Alkylation of some amines by ω-chloroalkanoic acids. Zhur.ob.khim. 32 no.4:1122-1125 Ap '62. (MIRA 15:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva.
(Amines) (Alkylation) (Acids, Organic)

VARVARA, Gh., prof. (Buzau)

Hinsarului Lake. Natura Geografie 16 no. 2: 46-47
Mr-Ap '64.

FEIDER, Z.; SOLOMON, L.; SIMIONESCU, V.; VALENCIUC, N.; VARVARA, M.

Relative growth of the bream Abramis brama brama (l.) as studied with the aid of branchiosomatic coefficient. Comunicarile AR 11 no.8:951-956 '61.

1. Comunicare prezentata de Th. Busnita, membru corespondent al Academiei R.P.R.

CIRDEI, F.; BULIMAR, F.; VARVARA, M.

Data on the distribution of the species of the Lasius Fabr. genus (Formicidae family) in Moldavia. Anal St Jassy II 10: 109-112 '64.

VARVARENKO, N.; ORLYUK, S.; ANUKHIN, I.

Improving the quality of auditing in enterprises. Bukhg.uchet 14 no.7:41-47 Jl '57. (MLRA 10:7)

1. Revizor tresta "Kavsantekhmontazh," Rostov-na-Donu (for Varvarenko), 2. Revizor Ministerstva stroitel'stva Ukrainskoy SSR, Kiyev (for Orlyuk). 3. Trest "Lenryba," Leningrad (for Anukhin).
(Auditing)

VARVARICHEV, A.A.; ZARUBIN, L.M.; SOKOLOV, V.A.

Casting cylinder sleeves in a green sand mold with a shell core. Avt. prom. 31 no.3:39-40 Mr '65. (MIRA 18:7)

1. Yaroslavskiy motornyy zavod.

VARVARICHEVA, Aleksandra Il'inichna, inzh.; DUTKINSKAYA, Yelizaveta Kazimirovna, inzh.; AGREST, Faina Borisovna, inzh.; AKATOVA, N.V., inzh., red.; FREGER, D.P., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Use of organic reagents in the chemical analysis of electrolytes in electrolytic cells of nonferrous metals and alloys] Primenenie organicheskikh reagentov v khimicheskom analize elektrolitov gal'vanicheskikh vann, tsvetnykh metallov i splavov; opyt zavoda "Elektrik." Leningrad. 1961. 12 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Zashchitnye pokrytiia, no.10) (MIRA 15:6)
(Nonferrous metals--Analysis) (Electrolytes)

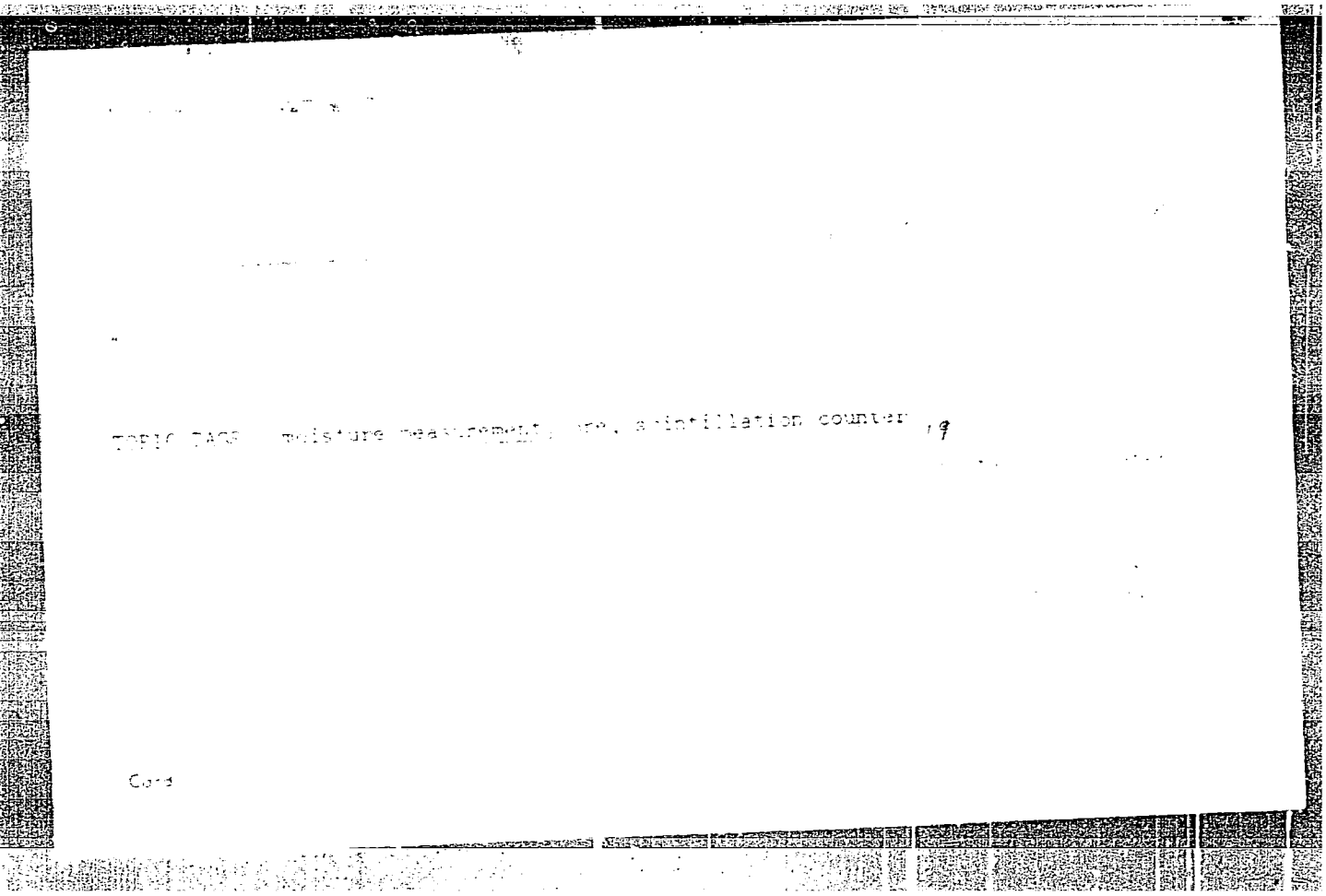
VARVARIN, G.B.; ZHAVORONKOV, V.Ya.; FILIPPOV, Ye.M.; BORISOV, V.B.; MELIK-STEPANOV, Yu.G.

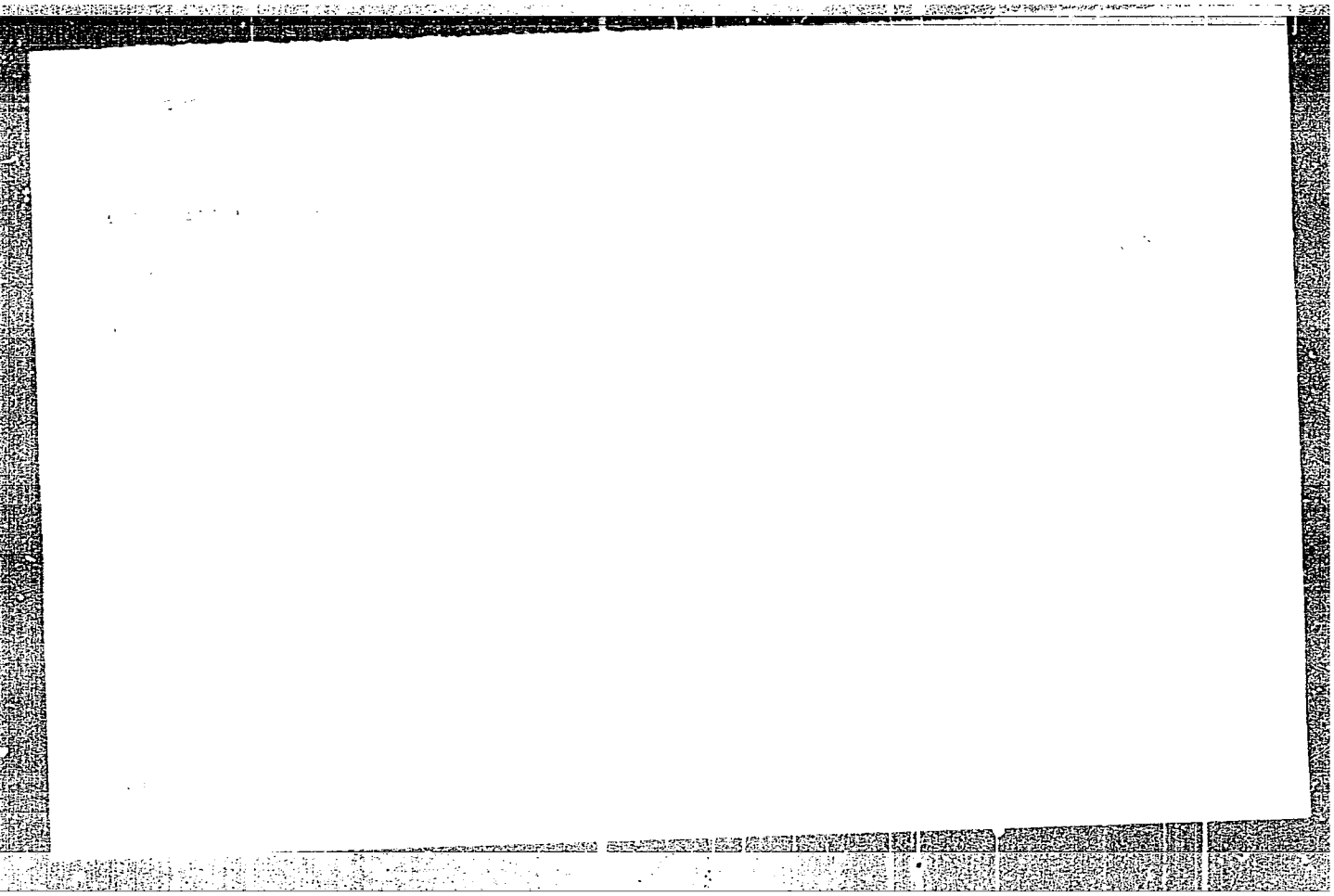
Determining the density of the flow of a mineral suspension during ore dressing on shaking troughs, using a source of gamma rays. (MIRA 16:8)
TSvet. met. 36 no.7:7-10 Jl '63.
(Ore dressing) (Suspensions (Chemistry)--Density)
(Gamma rays--Industrial applications)

ZHDANOV, S.M.; YARVANEN, [illegible]

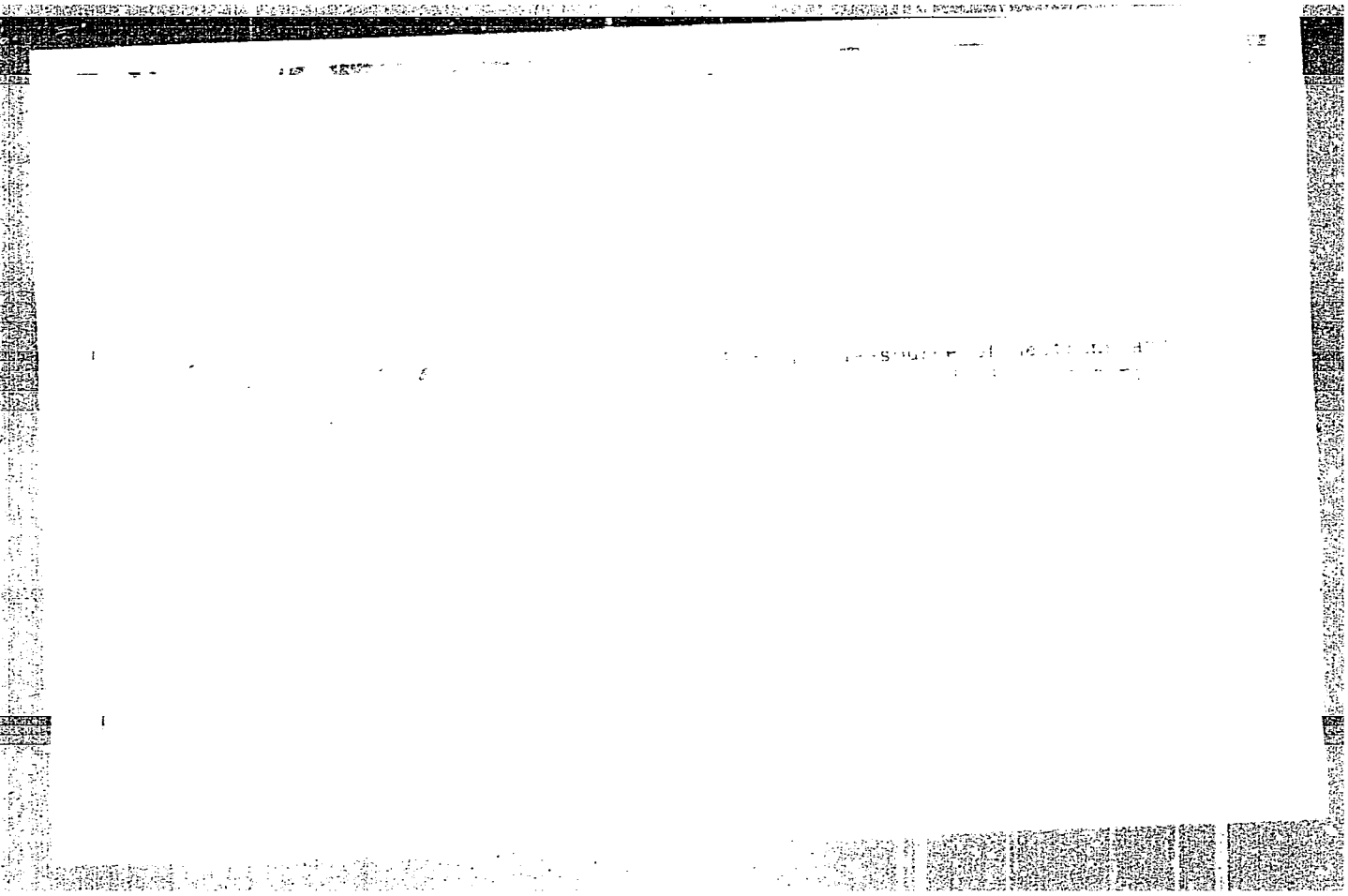
Use of piezoelectric transducers in detecting slides [illegible] rolling surfaces of car wheels. Izv. SO AN SSSR no.8 Ser. tekh. nauk no.2:104-111 '64. (MIRA 17:10)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR i Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.





APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858710017-3"



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858710017-3"

FROLOV, S.; VARVARIN, N.; REKUSHIN, A.; MASLOV, L.

Developing documentation for standard technical norms. Sots. trud 5 no.9:78-84 S '60. (MIRA 13:10)
(Shipbuilding--Production standards)

VARVARIN, N.; MASLOV, L.

Methodology for developing consolidated time norms for semiautomatic welding. Biul. nauch. inform.: trud i zar. plata 4 no.11:21-30 '61. (MIRA 14:12)

(Gorkiy--Electric welding--Production standards)

VARVARIN, N.

Method of establishing consolidated production norms for air-arc machining. Biul.nauch.inform.: trud i zar.plata 3 no.9: 31-34 '60. (MIRA 13:9)
(Gorkiy--Electric metal cutting--Production standards)

VARVARIN, N.; FROLOV, S.

Establishment of increased work norms in automatic and semiautomatic welding. Biul.nauch.inform.: trud i zar.plata no.12:34-38 '59. (MIRA 13:10)

(Welding—Production standards)

FROLOV, S.; KOSTIN, V.; VARVARIN, N.

Production organization and the establishing technical standards. Sots. trud 8 no.1:89-91 Ja '63. (MIRA 16:2)
(Machinery industry--Production standards)

L 33172-66 EWT(1) SCTB DD

ACC NR: AP6015006 SOURCE CODE: UR/0209/66/000/005/0069/0070

AUTHOR: Varvarin, V. (Lieutenant colonel in medical corps)

52
B

ORG: none

TITLE: Ultraviolet rays and the physical conditioning of flyers

SOURCE: Aviatsiya i kosmonavtika, no. 5, 1966, 69-70

TOPIC TAGS: UV irradiation, solar radiation, flight physiology

ABSTRACT: The article deals with the health of flyers and the physical conditioning of their bodies for flying activities which require great endurance. Ultraviolet rays are one of the most important factors for increasing the capacity for work. The main source of ultraviolet rays is solar ultraviolet radiation to which flyers must be exposed daily on a gradual basis. The author recommends a special plan for the correct use of solar ultraviolet radiation. In the autumn and winter months, the use of a quartz mercury-vapor lamp is recommended. [NT]

SUB CODE: 06, 15/ SUBM DATE: none

Card 1/1 hmc

VOLKOVA, L.V.; SHVETS, V.I.; RYZHENKOVA, S.F.; VARVARINA, N.B.; SMOLOVIK, I.V.; PREOBRAZHENSKIY, N.A.

Lipides. Part 10: Synthesis of mixed α,β-diglycerides containing residues of higher acids of the aliphatic series. Zhur.ob.khim. 32 no.6:1764-1768 Je '62. (MIRA 15:6)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.

(Glycerides) (Acids, Fatty)

KOSTIN, V.A. , inzh.; VARVARIN, N.N., inzh.; REKUSHIN, A.N., inzh.

Reduction of labor necessary for shipbuilding at the "Krasnoe Sormovo" Shipyard. Sudostroenie 25 no.1:69-71 Ja '59.(MIRA 12:3)
(Gorkiy Province--Shipbuilding)

VARVARIN, N.N.

MYASNIKOV, B.K., inzh.; VARVARIN, N.N., inzh.

Reducing and simplifying technological specifications and standardization papers. Sudostroenie 23 no.8:62 Ag '57.
(MIRA 10:11)
(Shipbuilding--Contracts and specifications)

USSR/Medicine - Veterinary, Horseshoeing

Card 1/1

Author : Varvarin, P. S., Docent

Title : Greater attention to shoeing and care of hoofs of horses

Periodical : Veterinariya, 31, 49-52, Apr 1954

Abstract : The decree dealing with proper care of work animals was promulgated by the Council of People's Commissars of the USSR and the Central Committee of the All-Union Communist Party (b) on February 10, 1933. A number of decrees issued since then contained instructions in proper methods of shoeing horses. The work in proper care and maintenance of work animals is lagging. Suggests classes for veterinary blacksmiths conducted by qualified instructors, and courses in veterinary orthopedics and proper horseshoeing.

Institution : Moscow Veterinary Academy

Submitted :

BRYANOV, I.I.; VARVARIN, V.P. (Moskva)

Treating patients with chronic tonsillitis. Vest.oto-rin. 19 no.6:94-95 N-D '57 (MIRA 11:3)
(TONSILS--DISEASES) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

VARVARIN, V.P., podpolkovnik med. sluzhby

Detection of early and latent forms of thyrotoxicosis by the method of determination of thyroid gland function with radioactive iodine.
(HYPERTHYROIDISM, diag.
radioiodine test in early & concealed forms (Rus))
(IODINE, radioactive
diag. of hyperthyroidism, early & concealed forms (Rus))

VARVARIN, V.P., podpolkovnik meditsinskoy sluzhby; PANFILOV, A.S., podpolkovnik meditsinskoy sluzhby

Dysfunction of the thyroid gland in the etiology of vascular-vegetative disorders. Voen.-med.zhur. no.9:66-68 S '59. (MIRA 13:1)
(NEUROCIRCULATORY ASTHENIA, etiology)
(THYROID GLAND, diseases)
(AVIATORS, diseases)

VARVARIN, V.P.; KARELIN, V.A.

Iontophoretic administration of radioactive iodine in obliterating endarteritis. Klin.med. 37 no.8:122-125 Ag '59. (MIRA 12:11)

(IODINE, radioactive)
(THROMBOANGIITIS OBLITERANS, therapy)
(IONTOPHORESIS)

VARVARIN, V.P., podpolkovnik meditsinskoy sluzhby

Effect on the skin of the preliminary local action of a series of physical agents in iontophoresis of radioactive iodine. Voen.-med. zhur. no. 6:81 Je '60. (MIRA 13:7)
(IODINE IN THE BODY)

VAIVARIH, V.P.

Application of autoradiography to the study of some problems of electrophoresis. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.5:443-444 S-O '61. (MIRA 14:11)
(ELECTROPHORESIS) (AUTORADIOGRAPHY)

PANFILOV, A.S., podpolkovnik med. sluzhby; VARVARIN, V.P., podpolkovnik med. sluzhby

Study of thermoregulation in flight personnel for the use of aviation medical expertise. Voen.-med.zhur. no.11:56-57 '64. (MIRA 18:5)

LANDE, P.A. [deceased]; VARVARINA, A.I.; IVANOVA, Z.N.

Using the sound method in the quality control of stoppers for steel pouring ladles. Ogneupory 28 no.10:466-468 '63. (MIRA 16:11)

1. Chelyabinskiy metallurgicheskiy zavod.

L 45190-66 FSS-2 TT

ACC NR: AP6028102 SOURCE CODE: BU/0010/66/000/005/0004/0005

AUTHOR: Varvarov, N., (Engineer)

49
B

ORG: none

TITLE: Cosmic meteorologic satellites and stations

SOURCE: Aviatsiya i kosmonavtika, no. 5, 1966, 4-5

TOPIC TAGS: meteorologic satellites, weather chart, weather forecasting

ABSTRACT: The use of a satellite system in weather forecasting is explained. The data collected with such a system will be used to draw meteorological maps and, by using computers, equations will be formulated which relate the many factors that determine weather conditions. Simultaneous solution of these equations by computer will contribute to more accurate weather forecasting. Orig. art. has: 3 figures. [IV]

SUB CODE: 04/ SUBM DATE: none/

Card 1/1

VARVAROV, N.A.

VARVAROV, N.A.; DOBRONRAVOV, V.V., professor, doktor fiziko-matematicheskikh nauk; MERKULOV, I.A., inzhener-konstruktor; SERYAPIN, A.D., laureat Stalinskoy premii; STANYUKOVICH, K.P., professor, doktor tekhnicheskikh nauk; KHLEVTSEVICH, Yu.S., kandidat tekhnicheskikh nauk; SHTERNFEL'D, A.A., laureat mezhdunarodnoy pooshchritel'noy premii po astronavtike.

Enroute to the stars. Tekh.mol. 22 no.7:1-7 Jl '54.

1. Predsedatel' sektsii astronavtiki pri TSentral'nom aeroklube SSSR imeni Chkalova (for Varvarov). 2. Zamestitel' predsedatelia nauchno-tekhnicheskogo komiteta po kosmicheskoy navigatsii, sektsiia astronavtiki (for Dobronravov). 3. Predsedatel' nauchno-tekhnicheskogo komiteta po raketnoy tekhnike, sektsiia astronavtiki (for Merkulov). 4. Predsedatel' nauchno-tekhnicheskogo komiteta po biologii kosmicheskogo poleta, sektsiia astronavtiki (for Seryapin). 5. Chlen nauchno-tekhnicheskogo komiteta po astronomicheskim i fizicheskim problemam (for Stanyukovich), sektsiia astronavtiki.6. Predsedatel' nauchno-tekhnicheskogo komiteta po radio-teleupravleniyu (for Khlebtsevich), sektsiia astronavtiki. 7. Predsedatel' nauchno-tekhnicheskogo komiteta po kosmicheskoy navigatsii (for Shternfel'd), sektsiia astronavtiki.
(Interplanetary voyages) (Space ships) (MLRA 7:6)

VARVAROV, N

Subject : USSR/Aeronautics AID P - 1050

Card 1/1 Pub. 135 - 4/24

Author : Varvarov, N., Lt. Col. of the Guard

Title : Bombing aircraft maneuvers to evade anti-aircraft fire

Periodical : Vest. vozd. flota, 1, 20-29, Ja 1955

Abstract : The author analyzes the following main problems on which a bomber aircraft successful evasion of anti-aircraft artillery (a.a.a.) fire depend: 1. Location of a.a. guns; 2. Tactical and technical data on a.a. weapons; and 3. Tactics of a.a.a. fire for the defense of a given objective. The author gives diagrams of: a) sighting and firing of a.a. battery and of the evasive maneuver of the aircraft; b) evasive maneuver with a changing speed; c) graphical computation of the width of the a.a. firing sector; d) graphical representation of the method of calculation of the degree of participation of a.a.a. defending a given position from air attack.

Institution : None

Submitted : No date

Summary D-256291, 1 Jun 55

VARVAROV, N.

New stage of space conquest. NTO 5 no.8:6-8 Ag '63.
(MIRA 16:10)

VARVAROV, N.

About new books. ("Discovery of the world," B.Liapunov. Reviewed by N.Varvarov) Tekh.mol.23 no.9:29 S'55. (MLRA 8:12)

1. Predsedatel' sektsii astronavtiki pri TSentral'nom aeroklube imeni V.P.Chkalova
(Space flight) (Liapunov, B.)

"Problemy poleta v kosmicheskoe prostranstvo" (Problems of flight into cosmic space), Sovetskii Flot, May 29, 1955, p. 2
For translation, see Appendix XI.

9006302-V

Rand RM-1760 trans. - 21 Aug 56 - in library IEL

Chairman, Astronautical Section, V. P. Chkalov Central Aeroclub, USSR

VARVAROV, Nikolay Aleksandrovich; GOLUBKOVA, V.A., red.; KLEYEVA, G.I., tekhn.red.

[Artificial earth satellites] Iskusstvennye sputniki zemli [Moskva] [illegible] 15 p. 1957. (MIRA 11:4)
(Artificial satellites)

VARVAROV, N. A.

"Artificial Earth Satellites," by N. A. Varvarov, chairman of the Section on Astronautics of the Central Aeroclub of the USSR, Nauka i Zhizn', No 2, Feb 57, pp 17-21

This article reviews the artificial satellite theme on a popular level. It presents the theoretical concepts as to altitude and velocity considerations.

Under the heading, "Plans for Satellites," the author states that the majority of proposals for artificial satellites give the vehicle a spherical form.. He divides the satellites into two groups, active and passive. The active group is characterized by the presence of various measuring instruments, radiotelemetering devices for transmission of data back to earth and a source of power supply. The first such satellites will be a rigid sphere having a diameter of 40-60 cm and weighing about 10 kg, of which approximately 30 percent will be occupied by instrumentation.

The author notes that the investigation of some of the problems will not require any kind of apparatus on the satellite; he says, for example, that the atmospheric density can be determined by visual observation of the satellite as it plunges further and further into the dense layers of the atmosphere surrounding the earth.

SUM-1345

VARVAROV, N. A.

Passive devices, he states, are those which are not supplied with instruments; they would have a diameter of 2 or more meters and weight of the order of several kilograms.

The methods of getting the satellite into its orbit are discussed, including a reiteration of Tsiolkovskiy's ideas.

After a discussion of the American Project Vanguard, the author notes the considerations necessary for launching rockets carrying larger satellites, and ultimately rockets directed to the moon. He points out that much fuel can be saved and control can be simplified by using turbo-jet and ram-jet engines in the lower layers of the atmosphere where oxygen is available. Two methods are cited which make use of this type of pro-pulsion. In the first it is recommended that a turbojet be used to an altitude of 20-25 kilometers, achieving an ultimate speed of 2,000 km per hour, followed by the cutting in of a ram-jet which would carry up to 35-40 km and achieve a speed of about 5,000 km per hour. Both engines would be jettisoned at the altitudes indicated and a liquid fuel rocket would continue from the altitude of 40 km.

54M.1345

VARVARDY, N. A

In the second method, he cites the economic inadvisability of jettisoning the engines and suggests that the turbojet and ram-jet might be used in aircraft-type carriers which could be landed after they had performed their function. He further notes that the same system might be used in the future when atomic engines become available.

He notes in conclusion the scientific advantages to be gained from the use of artificial satellites, and states that these data will undoubtedly be put to use by designers of ionospheric aircraft and cosmic rockets. He notes the possibility of photographing the surface of the earth from an artificial satellite, but fails to mention any provisions for recovery. (U)

Sum. 1345

VARVAROV, N., gvardii polkovnik.

Vertical takeoff airplanes. IUn. tekh. no.4:29-31 Ap '57.
(Vertically rising airplanes) (MLRA 10:6)

VARVAROV, N.

VARVAROV, N.

The first and the second. IUn.tekh.no.12:33-39 D '57. (MIRA 10:12)

1. Predsedatel' sektsii aeronavtiki TSentral'nogo aeroklubn SSSR.
(Artificial satellites)

VARVAROV, N., gvardii polkovnik.

Future of aviation. IUn. tekh. 2 no.9:34-36 S '57. (MLRA 10:9)
(Atomic planes)

L 19157-63 EWT(1)/FS(s)/BDS AFFTC/AFMDC/ESD-3/APGC/SSD Pi-4/Po-4/Pq-4
ACCESSION NR: AP3005961 TT/JXT(NP) B/0010/63/000/003/0010/0010

AUTHOR: Varvarov, N.

72
71

TITLE: Launching from lunar orbit

SOURCE: Aviatsiya i kosmonavtika, no. 3, 1963, 10

TOPIC TAGS: moon flight, lunar exploration, lunar landing, manned lunar mission, manned satellite, space station, artificial satellite, spacecraft, space rendezvous, launching

ABSTRACT: Discussed in general are the advantages of launching space vehicles from artificial satellites in orbit around the Earth or Moon as against launching from the surface of heavenly bodies; and in particular launching from an artificial satellite in orbit around the Moon. To accomplish a flight to the Moon and back, artificial satellites of both the Earth and Moon must be used for launching positions. Direct flight is precluded as it is impossible to launch a sizeable lunar craft from Earth (one with useful load of 10 tons would have a launching weight of 3,000 tons -- 300 times more than the most powerful present-day rockets can lift) and it would be very complicated to land

Card 1/4

a ship of the Moon with initial flight weight of 1000 tons. A flight method is proposed, as follows: A space ship (or group of ships) with lunar expeditionary vehicles on board is to be launched from a space station in orbit around the Earth; the space ship on approaching within 200 km. of the Moon reduces its speed to that necessary (1600 meters/second) for movement around the Moon as its artificial satellite; lunar expeditionary vehicles are dispatched for lunar landing while the mother-ship remains in orbit; the vehicles return in due course to the mother-ship; the expedition then takes course for return flight to the Earth by way of the space station in Earth orbit; thence members of the expedition return to Earth by special rocket aircraft: for such flight lunar ships will be needed weighing only several "tens of tons." Hence arises the need to consider the problem of launching from lunar orbit for two purposes: the lunar landing of expeditionary vessels, and the return flight to Earth. The experience of Soviet space researchers who have three times launched space "apparatuses" from on board heavy artificial satellites of the Earth will be most useful. Launching for a lunar landing is a difficult problem, requiring the expeditionary vessel to break away smoothly

and go into independent orbit without occasioning a reduction in the speed or a change in the orbit of the mother-ship; the vessel must then pass from orbit to the computed trajectory for lunar landing, reduce horizontal and vertical speed, and come in for a smooth landing. Such a technique has definite advantages: it does not require the power that is required for launching from a heavenly body; it is easier to retard the vertical descent of a lunar vessel than it is to reduce interplanetary speed (when the second Soviet rocket hit the Moon, its speed was 3.3 km. per second); by this technique landing can be effected in any region of the Moon. Launching from lunar orbit for the return flight to Earth has to be effected at a tangent to the orbit in direction of movement around the Moon, thus merging the additional speed needed for return to Earth with the orbital speed of the ship; and the moment for such launching must be calculated in such a way that the ship is assured a strictly defined speed and direction of flight at the end of the sector of acceleration. Orig. art. has: 1 illustration.

ASSOCIATION: none

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858710017-3"

VARVAROV-N-A

28

PHASE I BOOK EXPLOITATION SOV/5494

Vasil'yev, Mikhail Vasil'yevich, and Sergey Zakharovich Gushchev

Reportazh iz XXI veka; my zapisali rasskazy dvadtsati devyati sovetskikh uchenykh o nauke i tekhnike budushchego (Reports From the Twenty-First Century; Stories of Twenty-Nine Soviet Scientists on Science and Engineering of the Future) [Moscow] Izd-vo Sovetskaya Rossiya, 1958. 243 p. 50,000 copies printed.

Ed.: V. A. Golubkova; Tech. Ed.: G. I. Kleyeva.

PURPOSE : This book is intended for the general reader.

COVERAGE: The book contains 27 articles (told reporters by Soviet scientists) dealing with probable future progress in physics, chemistry, electricity, metallurgy, engineering, mining, medicine, biology, agriculture, zoology, transportation, exploration of space, and photography. Attention is given to automation, automatic underground gasification of coal stations, new metals, modernization of oil fields, atomic electric stations, production of metal parts by the process of explosion, explosions

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Reports From the Twenty-First (Cont.) SOV/5494

in dam construction, cancer, internal longevity reserves, machine diagnoses of illnesses, surgery vs. treatment by ultrasonic vibrations, mechanical heart substitutes, human body banks, "medical engineering," enriched fodder, "superpetrifikators," artificial snowfalls, agriculture vs. "agriculture," radiochemistry, power ban vs. fire, machines doing intellectual work, "artificial sun" mobiles" (with "radio motors") electromagnetic rays focused above a city which cause heated molecules to shine), future ocean ships, railway droughts," Moscow of the future, moving pavements, wheelless and driverless automobiles, electric cameras, the industrialization of Siberia, use of underground heat, climate controlling on the moon, antimatter, and photon jet. Names of the interviewed scientists are given. There are no references.

TABLE OF CONTENTS:

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MASTERS OF THE PLANET

AVAILABLE: Library of Congress

Card 7/7

AC/dfk/jw
10-9-61

SOV/25-58-12-21/40

AUTHOR: Varvarov, N.A., Chief of the Section

TITLE: The Way of the Stars (Put' k zvëzdam)

PERIODICAL: Nauka i zhizn', 1958, Nr 12, pp 61-64, and p 3 of centerfold (USSR)

ABSTRACT: Based on the experiences gained with artificial satellites of the Earth, the author examines the prospects for space travel with the aid of photon rockets. He mentions the Soviet scientists A.N. Deych, A.I. Oparin, V.G. Fesenkov and the German Engineer E. Saenger and A. Sternfeld. There are 2 diagrams, 1 drawing and 1 colored picture.

ASSOCIATION: Sektsiya astronavtiki DOSAAF SSSR (Astronautical Section of the DOSAAF USSR)

Card 1/1

BRYUKHANOV, Valentin Andreyevich [deceased]; FADDEYEV, Ye.T., otv.red.; VARVAROV, N.A., otv.red.; STEPANYAN, N.I., red.; ROZEN, E.A., tekhn.red.

[Great achievement of mankind; problem of interplanetary flights and atheism] Velikii shag chelovechestva; problema mezhplanetnykh poletov i ateizm. Moskva, Izd-vo "Sovetskaia Rossiia," 1959. 98 p. (MIRA 13:3)
(Interplanetary voyages) (Atheism)

PHASE I BOOK EXPLOITATION SOV/4693

Mezhdunarodnyy tsiklon Vselennoy (Introduction Paths of the Universe) Moscow, Izd-vo "Pravda," 1959. 63 p. (Series: Biblioteka "Kosmicheskiy pravdy," no. 11) 131,000 copies printed.

Ed.: V. Shkunshkin; Tech. Ed.: L. Novikova.

PURPOSE: This popular science booklet is intended for the general reader.

COVERAGE: The booklet contains 14 articles dealing with early and recent efforts and accomplishments in space exploration. Though popular in style, the articles are written by leading Soviet scientists in the field. The contributions of K. E. Tsiolkovskiy to space science are briefly presented. Satellites, space rockets, future space craft, and certain pertinent engineering problems are discussed. No personalities are mentioned. No references are given.

AVAILABLE: Library of Congress

ISAKOV, Petr Kuz'mich; KAZNEVSKIY, Viktor Pavlovich; LUTSKIY, Valeriy Konstantinovich; RAPOPORT, Tamara Lyudvigovna; DOBRONRAVOV, V.V., prof., retsenzent; FOMIN, N.A., prof., retsenzent; MERKULOV, I.A., retsenzent; IL'YASHENKO, S.M., kand.tekhn. nauk, retsenzent; VARVAROV, N.A., retsenzent; PANTELEYEV, V.G., retsenzent; GLUKHOV, V.V., retsenzent; GORODENSKIY, L.M., red.; FURMAN, G.V., tekhred.

[Artificial earth satellites; 100 questions and answers] Iskusstvennye sputniki zemli; 100 voprosov i otvetov. Pod red. V.P.Kaznevskogo. Moskva, Obshchestvo po rasprostraneniiu polit. i nauchn.znanii, 1959. 95 p. (MIRA 12:6)
(Artificial satellites)

VARVAROV, N.

21(2) PHASE I BOOK EXPLOITATION SOV/2708

Atomnaya energiya i flot; sbornik statey (Atomic Energy and the Navy; Collection of Articles) Moscow, Voyenizdat, 1959. 232 p. (Series: Nauchno-populyarnaya biblioteka) Number of copies printed not given.

Ed.: Ya. M. Kader; Tech. Ed.: A.M. Gavrilova; Ed. and Compiler: L. D. Chernous'ko, Engineer, Captain.

PURPOSE: This book is intended for the general reader.

COVERAGE: The papers in this collection discuss in popular style, and on the basis of data published in the Soviet and non-Soviet press, problems of the use of atomic and hydrogen weapons in combat operations at sea. The collection includes reports on the damaging factors of a nuclear explosion and on the immense power of this weapon of mass destruction. A number of articles are devoted to the antinuclear defense of ships and of shore objects, and to the introduction of nuclear power plants in naval vessels. Also included in the collection are papers dealing with the future prospects for naval use of nuclear energy, and with the construction of the world's first atomic icebreaker, the "Lenin", which is expected to play an important part in the further conquest of the Arctic regions. The collection also contains papers published in the journal Sovetskiy flot in 1955 - 1958, in revised and supplemented form.

AVAILABLE: Library of Congress (UF767.C39)

30(12) SOV/25-59-3-15/46

AUTHOR: Varvarov, N.A., Chairman

TITLE: Sputniks and Religion (Sputniki i religiya)

PERIODICAL: Nauka i zhizn', 1959, Nr 3, pp 44-48 (USSR)

ABSTRACT: This is an anti-religious article describing success and progress in science, above all the launching of Soviet sputniks and space rockets, as proof against religious conceptions and beliefs. In this connection, the following Soviet scientists are mentioned: Academician V.A. Ambartsumyan, O.Yu. Shmidt and V.G. Fesenkov. There are 3 sketches.

ASSOCIATION: Sektsiya astronavtiki DOSAAF SSSR (The Section of Astronautics of the DOSAAF USSR)

Card 1/1

6(29(SOV/25-59-7-10/53

AUTHOR: Varvarov, N., Chairman of the Department of Astronautics of the DOSAAF SSSR

TITLE: World-Wide TV

PERIODICAL: Nauka i zhizn', 1959, Nr 7, pp 26-28 (USSR)

ABSTRACT: The article describes how world-wide, continuous TV can be achieved by launching 3 artificial satellites to act as retelecasting stations. Each satellite must be equipped with TV transceiver gear. The satellites must be shot into orbit at 35,800 km height above the earth from a point located on the equator at 8 hour intervals, which means that their orbit's central angle will be 120°. The satellites will move at 3,076 km/hr, i.e., they will circle the earth once in 24 hours. In addition to their TV functions, the satellites will also be able to replace a multitude of radio, phone and telegraph networks, increase their range, and greatly improve reception of broadcasting stations. There are 2 diagrams.

Card 1/1

VARVAROV, N.

Helioelectric power stations in the cosmos. IUn.tekh. 3 no.3:24-25 Mr '59. (MIRA 12:4)

1. Predsedatel' sektsii astronavtiki Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR.
(Solar energy)

VARVAROV, N.

Cosmic projectors. IUn.tekh. 3 no.5:25 My '59. (MIRA 12:7)

(Solar energy)

VARVAROV, N.

Moon altimeter. Ilh.tekh. 4 no.11:12-13 N '59. (MIRA 13:4)
(Flight to moon) (Altimeter)

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SOV/29-60-1-2/25

AUTHOR: Varvarov, N. A.

TITLE: Satellites for Peaceful Purposes

PERIODICAL: Tekhnika molodezhi, 1960, Nr 1, pp 1, 3, 6, 15, 17, 30, 34, 38 (USSR)

ABSTRACT: The author, whose portrait is to be found on p 1, writes about the possibility of using artificial earth satellites in the short articles published under Nr 1 to Nr 10. Nr 1. Observatory beyond the terrestrial atmosphere (p 3). By means of such a cosmic observatory it will be possible to form a correct idea of celestial bodies without distortions by atmospheric influence. - Nr 2. Cosmic land surveyors (p 6). The Soviet scientist F. Krasovskiy calculated that the distance from the center of the Earth to the equator must be by 21,382 m longer than to the pole. By means of the gravitational law the shape of the Earth may be exactly determined on the basis of the velocity of the satellite's flight. Great possibilities are also offered also for taking photographs of the Earth's surface. Nr 3. Satellites as a means of investigating the Earth's interior (p 6). By observing the changed motion of flight of the

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satellite under the influence of the gravitational field the terrestrial structure and the heterogeneity of the Earth's crust may be determined. It will also be possible to detect deposits of various minerals, above all in the region of the oceans. Nr 4. The mystery of time and the satellites (p 15). Corresponding Member of the Academy of Sciences, USSR, V. L. Ginzburg points out that it would be necessary to equip the satellites with atomic-molecular special clocks, in order to be able experimentally to determine the difference in time predicted by the theory of relativity due to velocity. The result obtained might supply a solution of the question as to what distance man is able to penetrate into cosmic space. Nr 5. Satellites as glow-worms (p 17). In order to be able to observe the orbit of a satellite by means of optical instruments also by night, the satellites must be equipped with periodically flashing up light sources. At the same time, also radio pulses must be emitted. - Nr 6. Cosmic radio-range beacons (p 17). For the orientation of space ships, satellites fitted out with powerful radio stations may be used. It is entirely within the range of possibility to establish such radio-range beacons on the satellites of other planets as well

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as on the planet itself. - Nr 7. Bio-satellites (p 30). By means of satellites fitted out as cosmic medical laboratories, it is possible experimentally to investigate cosmic conditions to which a living organism will be exposed in the course of a space flight of long duration. - Nr 8. Cosmic solar power stations (p 34). A detailed report has already been given in "Tekhnika - molodezhi", 1959, Nr 10 on solar batteries, that may be used for power works. The exploitation of solar energy might warrant unrestricted current supply. - Nr 9. Cosmic search lights (p 34). These are cosmic solar power plants which are fitted out with special light reflectors and may be used for the purpose of artificially illuminating certain regions by night. - Nr 10. Meteorological stations in cosmic space (p 38). By using satellites and electronic computers it will be possible to improve not only the methods of weather forecasts a long time ahead, but also a new branch of science, cosmic meteorology, will be created. There are 9 figures.

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