"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, B.A.

Effect of the size of the outlet on the conditions of flow in the Eiffel chamber of a supersonic wind tunnel. Vest. LGU 20 no.7:87-94 '65.

Propagation of a supersonic jet in a bounded space. Ibid.:157-159
(MIRA 18:5)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KONOVALOV, I., doktor tekhn.nauk; PARFENOV, A.; BALANIN, V., kand.tekhn.nauk; SHCHERBAKOVA, R., kand.tekhn.nauk; BAKHTIN, A.; BALIN, N.

Measures for preventing ice jams on the lesser and greater Northern Dvina. Rech. transp. 21 no.2:44-46 F '62. (MIRA 15:3)

1. Predsedatel' Kotlasskogo ispolnitel'nogo komiteta deputatov trudyashchikhsya (for Parfenov). 2. Nachal'nik Kotlasskogo tekhnicheskogo uchastka Severnogo basseynovogo upravleniya puti (for Bakhtin). 3. Glavnyy inspektor Kotlasskogo tekhnicheskogo uchastka (for Balin).

(Northern Dvina River--Ice on rivers, lakes, etc.)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V., kand.tekhn.nauk

Wave damping in the lower approach channels of navigation locks.
Rech. transp. 21 no.2:46-48 F '62. (MIRA 15:3)
(Waves, Calming of) (Locks (Hydraulic engineering))

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

CHEREVKO, P., rukovoditel' sovetskoy delegatsii na XX mezhdunarodnom sudokhodnom kongresse v Baltimore (SShA); BALANIN, V., chlen delegatsii na XX mezhdunarodnom sudokhodnom kongresse v Baltimore (SShA)

Twentieth International Congress of Navigation. Rech.transp 21 no.4:49-53 Ap '62. (MIRA 15:4)
(Navigation—Congresses)

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V., kand.tekhn.nauk; KARASIN, M., inzh.

Improve the mooring of ships in navigation lock chambers. Mech. transp. 22 no.6:36-38 Je '63. (MIRA 16:9)
(Locks (Hydraulic engineering))

Approved for Release: Wednesday, June 21, 2000

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

CHEKRENEV, A., doktor tekhn.nauk; BALANIN, V., kand.tekhn.nauk; ANTONOV, B., kand.tekhn.nauk

Result of investigations on prolonging the navigation season. Rech. transp. 22 no.11:39-41 N '63. (MIRA 16:12)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V., kand. tekhn. nauk; KARASIN, M., inzh.

Conditions of the passage of ships through the lock chamber. Rech. transp. 24 no.11:30-32 '65. (MIRA 19:1)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, O.Y., kand.sel'skokhozyaystvennykh nauk; KOVIN'KO, D.A., kand.biologicheskiy nauk

Possibilities of the development of poultry farming in Kazakhstan. Zhivotnovodstvo 23 no.7:31-35 Jl '61. (MIRA 16:2)

1. Kazakhskiy institut zhivotnovodstva (for Kovin'ko).
(Kazakhstan—Poultry)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

SOV/124-57-4-4287

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 61 (USSR)

AUTHOR: Balanin, V. V.

TITLE: Laboratory Investigations on the Phenomena Prevailing in a Flow Past a Cofferdam (Laboratornyye issledovaniya yavleniya obtekaniya potokom peremychki)

PERIODICAL: Tr. Akad. rechnogo transporta, 1953, Nr 2, pp 178-197

ABSTRACT: The paper is devoted to laboratory investigations on a flow past a cofferdam on models equipped with a variable bottom. The trough in which the experiments were conducted was 6.25 m long, 1.06 m wide and 0.18 m high. Investigations were made with a flow rate of 16.2 liter/sec with a velocity of 15 cm/sec, a stream depth of 10 cm, and a Reynolds number of 11520. The basic series of experiments were conducted with a 30-90° angle between the transverse walls of the cofferdam (the "wings") and the longitudinal wall of the trough, a 0.35 - 0.80 ratio of the constricted width of the trough to its clear width, and with the longitudinal wall of the cofferdam up to 1.45 m long. The following tests were made for the purpose of protecting the upstream corners of the cofferdam from eroding: The use of blind

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rectilinear and curvilinear spurs; the use of permeable spurs; and the change of the contour of the upstream corner of the cofferdam. The experimental investigations of the above-mentioned series were conducted with one particular type of cofferdam. The angle between the transverse walls of the cofferdam and the longitudinal wall equaled 90°. The jet-separation boundaries and the contours of the turbulent jet-flow and stagnant areas were investigated, the magnitudes of the surface and bottom velocities were measured, and the magnitude and nature of the river-channel deformation were determined. The author was able to note, on the basis of the experimental investigations, that it was possible to isolate the following zones in the flow past a cofferdam: a) A zone without eddies having a vertical axis; b) a zone with vertical-axis eddies, in which the particles of the fluid, while circulating around a vertical axis, are simultaneously carried downstream; c) a zone of return flow in which the current flows in the direction opposite to the basic flow; d) a downstream circulation zone between the end of the cofferdam, the edge of the trough, and the return-flow zone; and e) a circulation zone at the edge of the trough upstream of the cofferdam. According to the experimental investigations, the erosion boundaries generally correspond to the velocity isolines (isotachs) in the plan view. The line of maximum erosion is displaced upstream as referred to the line of maximum bottom velocities. An intensive precipitation of sediments,

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as was to be expected, was observed in the zones of return flow and partially in the zone of vertical-axis eddies. The constriction curves constructed in accordance with the theoretical relationship of I. M. Konovalov are located below the experimental curves, and the divergence between the theoretical curves and those obtained in the experimental investigations increases with increased constriction of the flow. The erosion profiles in the experimental investigations, at any value of the constriction, generally corresponded to the velocity isolines. With a decrease of the angle between the "wings" and the longitudinal wall of the trough the flow-constriction curves become shallow and approximate the theoretical curves (in accordance with I. M. Konovalov), while both the zone and intensity of the erosion are simultaneously decreased. The experimental investigations showed also that changes in the length of the longitudinal wall of a cofferdam have no effect on the characteristics of the flow which determine the shape and dimension of a stream channel. The author indicates certain measures which were experimentally proved to be the most effective for the protection of the upstream corners of cofferdams from erosion. In spite of the fact that the presence of transverse currents is mentioned in the paper, no investigation was made of any measures for the excitation of artificial transverse circulation in the stream flow. All experiments were conducted with the same flow rates and depths, which impairs the conclusiveness of the deductions.

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V. A. Shaumyan, Kh. S. Shapiro

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V. V.

On the Influence of Vertical Vortexes on the Erosion of a River Bed Near Bars

As a result of an analysis of the diffusion of vortexes the author concludes that the reason for the lack of correspondence between the deformation of a river bed in nature and on a model for a region containing vortexes with vertical axis of revolution is the sharp difference of the velocities of diffusion of the vortex in the two cases. He makes recommendations for further investigations. (RZhMekh, No. 6, 1955) Tr. Leningr. in-ta Inzh. Vodn. Transp., No. 21, 1954, 64-76.

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN,V.V., inzhener; GORODENSKIY,N.V., inzhener

Investigations of navigability and operations for structures, hydraulic installations, and free waterways. Rech.transp. 14 no.9: 18-20 S'55. (MIRA 8:12)

(Inland navigation)

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

124-57-1-744

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 96 (USSR)

AUTHOR: Balanin, V.V.

TITLE: An Approximate Method for the Calculation of the Water Discharge Seeping Through a Cofferdam (Priblizhennyy sposob rascheta raskhoda vody, fil'truyushcheysya cherez peremychku)

PERIODICAL: Tr. Leningr. in-ta inzh. vod. transp., 1955, Nr 22, pp 119-132

ABSTRACT: An approximate calculation method is given for the discharge of water seeping through cofferdams of different construction under the following assumptions: 1) plane, stationary motion of the water; 2) relatively shallow embeddedness of the water-retaining structure; 3) relatively large width of the foundation trench; and 4) absolute imperviousness to water of the grooves (joints). Using the electro-hydrodynamic analog method for some specified typical cross section of the cofferdam, the ratio of the seepage discharge to the product of the seepage coefficient of the soil by the head acting upon the cofferdam is found. Diagrams are adduced, also based on the EGDA method, with the aid of which corrections may be deter-

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An Approximate Method for the Calculation (cont.)

mined for the consideration of the variations of the aboveindicated ratio as a function of the variation of one or the other dimension of the typical cofferdam cross section. In conclusion, certain design considerations relative to the selection of a practicable cross-sectional cofferdam profile are offered. The author confuses the concepts of the "active counterpressure seepage zone" with the "active seepage discharge zone" (relative to the latter, ref. Izv. Vses. n.-i. in-ta gidrotekhn., 1938, Vol 22, p 51). The method proposed in the article for the calculation of the seepage from a pressure aquifer imbedded underneath the cofferdam and its foundation trench appears without substance.

R. R. Chugayev

1. Dams--Seepage--Approximate computations 2. Fluid flow--Measurement

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kandidat tekhnicheskikh nauk; SELEZNEV, V.M., inzhener.

Hydraulic phenomena of flow around a half dam in a stream. Rech. transp.15 no.11:14-17 N '56. (MLRA 10:2)
(Fluid dynamics)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 9, SOV/112-57-9-18461
pp 52-53 (USSR)

AUTHOR: Balanin, V. V.

TITLE: Hydraulic Characteristics of Special Butterfly Gates (Gidravlicheskiye kharakteristiki spetsial'nykh tipov drossel'nykh zatvorov)

PERIODICAL: Tr. Leningr. in-ta inzh. vod. transp., 1956, Nr 23, pp 110-122

ABSTRACT: In connection with poor sealing of lens-type butterfly gates and their heavy seepage in areas close to the shaft, new gate designs with inclined or simply displaced sealing planes have been developed recently. To insure a smooth flow through the gate, special streamlining devices had to be installed. The above changes in disk configuration influence its hydraulic parameters. The article is devoted to the performance characteristics of new types of gates. Resistance coefficients and torques of gate shafts were investigated. As a result of investigation, the resistance factor was determined for 8 gate types, and the effect of liquid expansion on the resistance factor was discovered; it was established that the gate characteristic should be plotted not against the slope

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Hydraulic Characteristics of Special Butterfly Gates

angle α but against the relative gate opening $\frac{\omega}{\omega_0}$. A check of analytical methods for determining resistance factors revealed their adequate reliability in the whole range of openings, except for the extreme regions next to full opening and full closure. Experiments revealed that the influence of streamlining devices (installed near cylindrical-shaped dampers) upon the resistance factor is appreciable only at the angles near the full-open position. In the course of investigation of the damper-shaft torque, curves were constructed that showed the effect of the opening angle α on the torque M for the above 8 gate types. The fundamental difference in torque characteristics of variously shaped gates can be determined, according to the author, from the formula $M = \mu\gamma^1 D^3$ which includes a "reduced gate torque" μ. The new parameter expressed as curves $\mu = f(\alpha)$ adequately represents all changes in hydraulic conditions of the flow through the gate. The shape of the curves is different for different gate configurations. Detailed graphical and tabulated material is supplied.

N.D.P.

Card 2/2

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kand. tekhn. nauk; SELEZNEV, V.M., inzh.

Investigation the effect of spaces between dikes on the over-all condition of straightened sections of rivers. Rech. transp. 17 no. 6:31-34 Je '58. (MIRA 11:7)

(Rivers)
(Hydraulic engineering)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KONOVALOV, I.N., doktor tekhn.nauk, prof.; BALANIN, V.V., kand.tekhn.nauk, dotsent

Formation of river beds. Trudy LIIVT no.26:3-20 '59. (MIRA 14:9)
(Rivers)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kand.tekhn.nauk, dotsent; SELEZNEV, V.M., inzh.

Calculating the field of speeds beyond a semi-dike. Trudy LIIVT no.26:42-53 '59. (MIRA 14:9)

(Hydrodynamics) (Jetties)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KONOVALOV, I.M., prof.; BALANIN, V.V., dots.; BORODKIN, B.S., kand. tekhn.nauk; SHCHERBAKOVA, R.I., kand.tekhn.nauk

Extending navigation on inland waters and possibilities of year-round operation. Rech.transp. 18 no.9:33-37 S '59. (MIRA 13:2)
(Ice on rivers, lakes, etc.) (Ice-breaking vessels)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kand.tekhn.nauk

Effect of aquatic plants in weakening the momentum of waves.
Rech.transp. 18 no.10:51 O '59. (MIRA 13:2)
(Aquatic plants)
(Shore protection)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kand.tekhn.nauk; SHCHERBAKOVA, R.I., kand.tekhn.nauk

Discussing the effect of ice on navigational waterways at the 19th International Shipping Congress. Rech.transp. 18 no.11: 34-36 N '59. (MIRA 13:4)
(Ice on rivers, lakes, etc.)
(Inland navigation)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V.V., kand.tekhn.nauk, dotsent; SELEZNEV, V.M., kand.tekhn.nauk

Hydraulic conditions in areas of flow hindering structures. Trudy LIVT no.7:5-16 '60. (MIRA 15:2)
(Hydraulic structures) (Stream measurements)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

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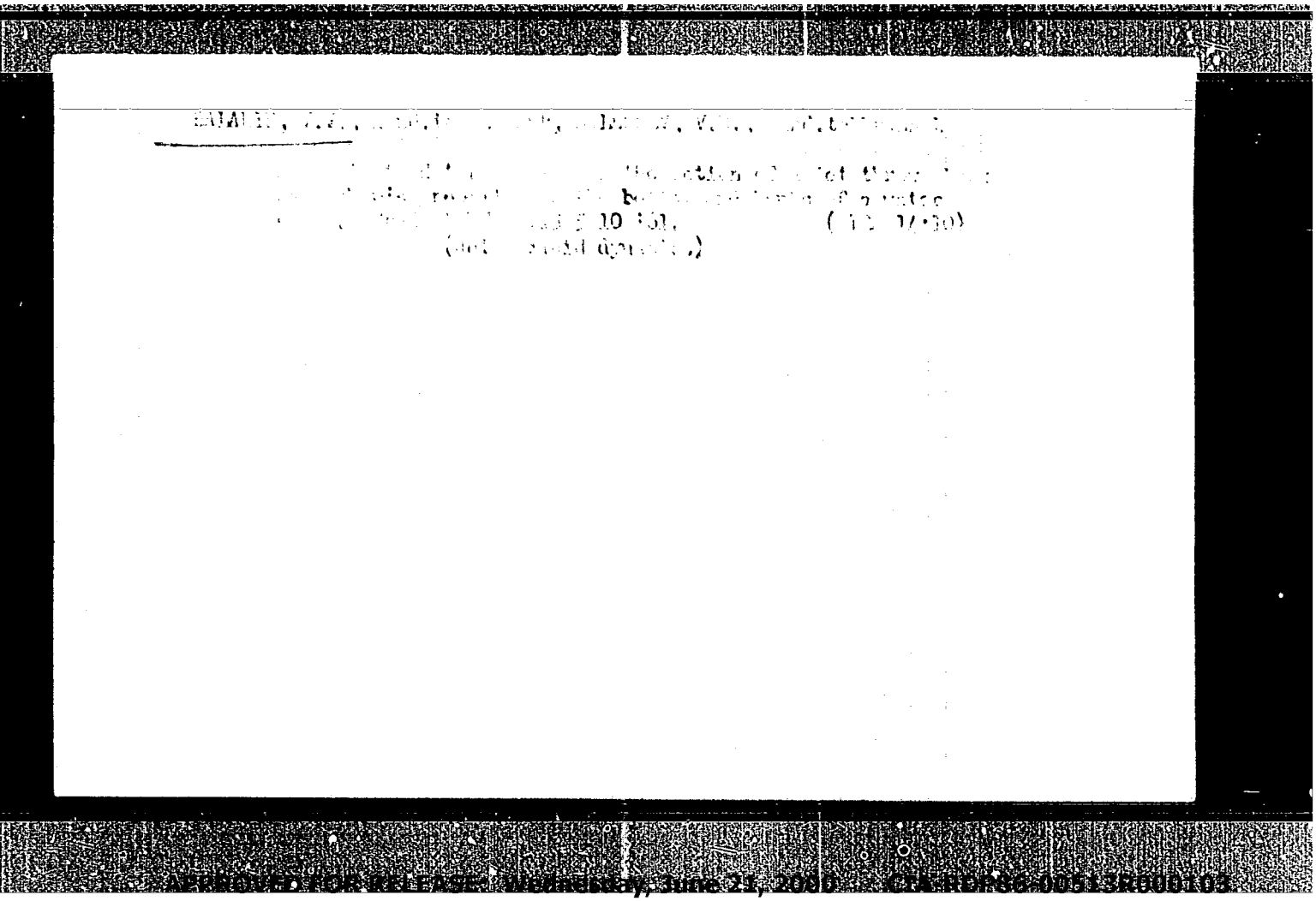

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, V., kand.tekhn.nauk

Calculating the stabilization of channel banks at structure corners presenting a streamlining problem. Rech. transp. 20 no.5:31-33 My '61. (MIRA 14:5)

(Rivers--Regulation)

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EPR/EPA(b)/EWT(1)/BDS AFFTC/ASD Pd-4/Ps WW

ACCESSION NR: AR3002679 S/0124/63/000/005/B115/B115

SOURCE: Rzh. Mekhanika, Abs. 5B703

65

AUTHOR: Konovalov, I.M.; Balanin, V. V.; Seleznev, V. M.

TITLE: New theory of turbulent jets and some of its applications in hydrotechnics

CITED SOURCE: Tr. Leningr. in-ta vodn. transp., vyp. 26, 1962, 24-34

TOPIC TAGS: Reynolds equation, turbulence, turbulent exchange, friction, hydraulics, turbulent flow, pulsation, widening, expansion, method, calculation

TRANSLATION: The Reynolds equation, as is known, represents a non-closed system, for besides the parameters of averaged motion it contains the supplementary pulsation terms, on which the two fold correlation of velocities, called the turbulent friction is based. For the completion of this system of equations, various formulas relating pulsation terms with the parameters of the averaged current are introduced. For example, the Trubchikov, Prandtl (new and old), and Taylor formulas are known. All these familiar formulas are based on definite physical representations of the mechanism of turbulent exchange.

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The authors of the "new theory of turbulent jets" do not allude to any physical concept at all, and introduce into the system of equations a "new" link between friction and the parameters of the averaged motion and thus avoid the analogous, but more usual formula, which has already long figured in the theory of jets as the formula of Reichardt, (see Abramovich, G.N., Theory of Turbulent Jets M. Fizmathiz, 1960, 715 pages) which attained significant development in the work of L. A. Vulis and his collaborators.

The authors consider the problems of the propagation of plane parallel turbulent jets of incompressible liquid in a stationary medium and in current jets; of the velocity field during longitudinal flow around a flat plate; and of the expansion of an infinite series of plane turbulent jets arising in the surrounding liquid. A similar analysis is made of the velocity field during the propagation of the turbulent jet in the flat channel with sudden widening. Comparisons are made with the experiments of B.A. Fidman, and A.N. Rakhmanov. It is noted that satisfactory agreement between the calculated and the experimental results is attained due to arbitrary variation of the constant coefficient which is contained in the calculation relations (0.02 for free plane

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739-63

ACCESSION NR: AR3002679

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Jets, 0.08 for channel jets, 0.04 in some general case). It is clear that the noted circumstance significantly lowers the value of the given method, for during the solution of new problems, the value of the indicated coefficient is, at first, unknown. Bibl. 19 names. O.V. Yakovlevskiy

DATE ACQ: 14Jun63 SUB CODE: AI ENCL: 00

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APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KONOVALOV, I.M., doktor tekhn.nauk, prof.; BALANIN, V.V., kand.tekhn.nauk;
SELEZNEV, V.M., kand.tekhn.nauk

Plotting the field of speeds in the region of a submerged hydraulic jump. Gidr.stroi. 32 no.7:40-43 Jl '62. (MIRA 15:7)
(Hydraulics)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KONOVALOV, I.M., dr., tekhn. nauk, prof.; CHEKRENEV, A.I., dr. tekhn. nauk, prof.; BALANIN, V.V., kand. tekhn. nauk, dotsent; ANTONOV, B.S., kand. tekhn. nauk

Methods of prolonging the navigation period on inland waterways. Trudy LIVT no.46:30-37 '63 (MIRA 17:7)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

CHEKREVEV, A.I., dr. tekhn. nauk, prof.; BALANIN, V.V., kand. tekhn. nauk, dotsent; SHCHERBAKOVA, R.I., kand. tekhn. nauk; MAKARCHUK, N.Ye., inzh.

Freezing of the Northern Dvina River in the autumn of 1961 and the effect of autumn ice jammings on the process of its opening in 1962. Trudy LIVT no.46:66-71 '63 (MIRA 17:7)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANIN, Vasiliy Vasil'yevich, kand. tekhn. nauk, dots.; BORODKIN, Boris Solomonovich, kand. tekhn. nauk, dots.; MELKONYAN, Georgiy Ivanovich, kand. tekhn. nauk, dots.; KONOVALOV, I.M., prof., red.; LOBANOV, Ye.M., red.

[Utilizing the heat of deep waters to maintain ice-free water areas] Ispol'zovanie tepla glubinnykh vod vodoemov dlia podderzhaniia nezamerzaiushchikh akvatorii. Moskva, Transport, 1964. 271 p. (MIRA 18:2)

1. Leningradskiy institut vodnogo transporta (for Balanin, Borodkin, Melkonyan).

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

CHEKMAREV, A.[illegible], [illegible]-mat.nauk, prof.; BALANIN, V.V., kand.tekhn.
[illegible], dotsent; SHCHERBAKOVA, R.I., kand.tekhn.nauk; KOMAROV, N.K.,
[illegible].

Effect of ice jams in the lower reaches of the Northern Dvina River on the breaking up of its delta. Trudy LIVT no.61:164-[illegible] 164.
(MIRA 18:11)

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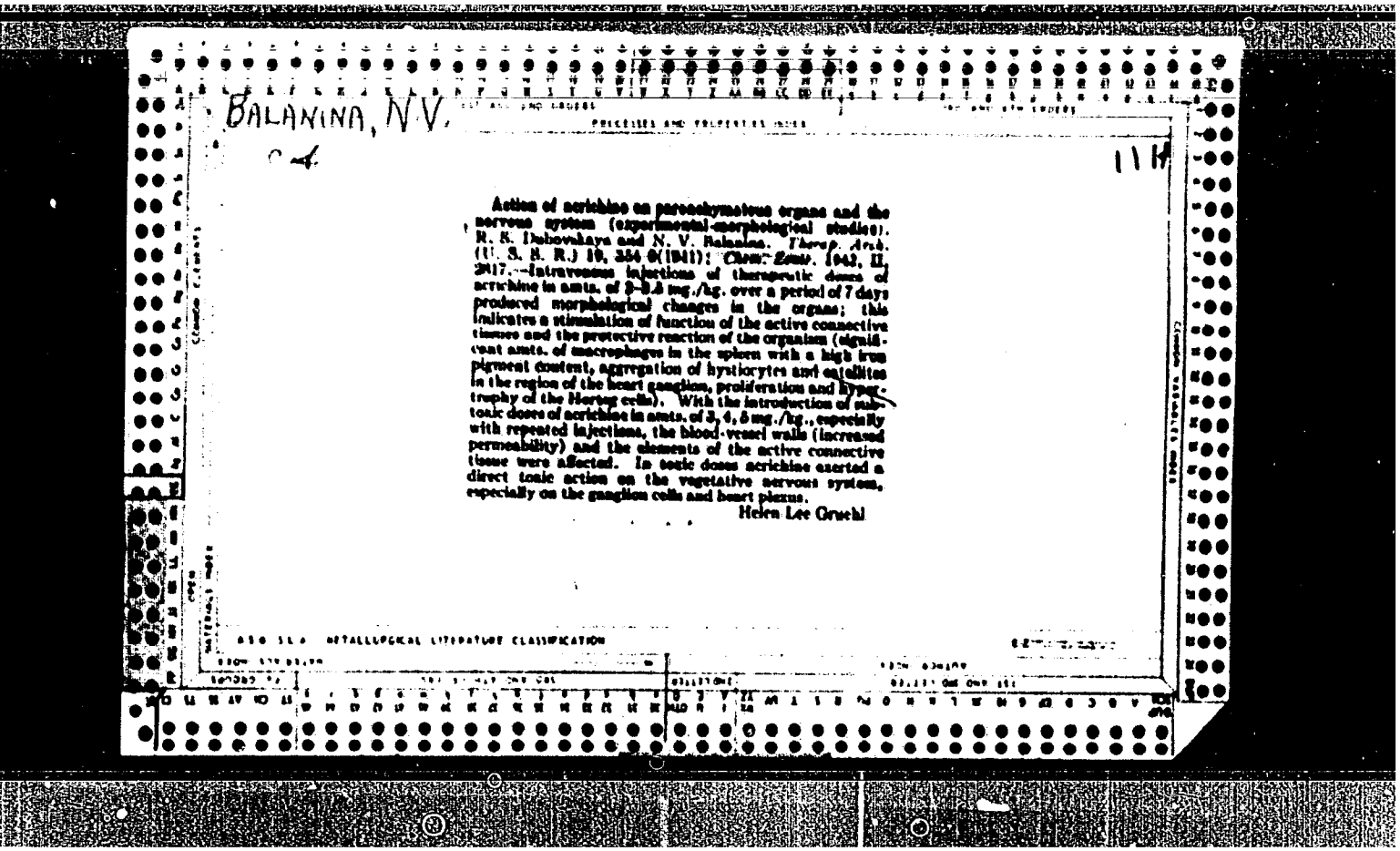
"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010



BALANINA, N.V.

11H

Action of acrichine on parenchymatous organs and the nervous system (experimental-morphological studies). R. S. Dubovskaya and N. V. Balanina. *Therap. Arch.* (U. S. S. R.) 19, 334-6(1941); *Chem. Zentr.* 1942, II, 2817.—Intravenous injections of therapeutic doses of acrichine in rats, of 3–3.5 mg./kg. over a period of 7 days produced morphological changes in the organs; this indicates a stimulation of function of the active connective tissues and the protective reaction of the organism (significant rats. of macrophages in the spleen with a high iron pigment content, aggregation of histiocytes and satellites in the region of the heart ganglion, proliferation and hypertrophy of the Hertag cells). With the introduction of subtoxic doses of acrichine in rats. of 3, 4, 5 mg./kg., especially with repeated injections, the blood-vessel walls (increased permeability) and the elements of the active connective tissue were affected. In toxic doses acrichine exerted a direct toxic action on the vegetative nervous system, especially on the ganglion cells and heart plexus.

Helen Lee Gruehl

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010:

PA 41T72

BALANINA, N. V.

USSR/Medicine - Tissues, Connective   Jan/Feb 1948
Medicine - Pressure

"Changes in the Active Connective Tissues (of Kupffer's Cells) Due to a Reduction of Barometric Pressure," N. V. Balanina, Moscow, Chair of Pathol Anat, Pediatrics Faculty, Second Med Inst imeni Stalin, 2 pp

"Arkhiv Patol" Vol X, No 1

Several scientists have worked on the subject of adiposity of Kupffer's cells during hypoxemia caused by a lowering of barometric pressure. However, they have done little to clarify the significance of Kupffer's cells in the phenomenon of gas interchange. Author gives results of experiments he conducted to

[redacted] 41T72

USSR/Medicine - Tissues, Connective   Jan/Feb 1948
(Contd)

study the role played by Kupffer's cells in the phenomenon of gas interchange. Submitted, 1 Nov 1946. Deputy of Chair of Pathological Anatomy is B. N. Mogil'nitskiy, Honorary Scientific Collaborator.

[redacted] 41T72

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANINA, N.V.

USSR / Pharmacology, Toxicology. General Problems. U-1

Abs Jour : Ref. Zh.-Biol. No 2, 1958, No 7802

Author : Balanina, N.V.

Inst :

Title : The Effect of Certain Pharmacological Agents in Conditions Characterized by a Decreased Barometric Pressure. (Experimental Morphological Research)

Orig Pub : Arkhiv Patologii, 1957, 19, No.1, 37-40

Abstract : Rats placed in a barometric chamber succumbed when the barometric pressure became equal to that at 12,000 meters above sea level. The animals anesthetized with urethan easily tolerated this "ascent" to 14,000 meters. When the dose of urethan was above or below the optimal one, the anesthetized animals died even earlier than the unanesthetized

Card : 1/2

Iz kafedry patologicheskoy anatomii (zav.-chlen-korrespondent AMN SSSR prof. B. N. Mogil'nitskii /deceased/ pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni I. V. Stalina.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

USSR / Pharmacology. Toxicology. General Problems. U-

Abs Jour : Ref. Zh.-Biol., No 2, 1958, No 7882

Abstract : ones. The protective effect of the optimal dose (1 ml of a 20% solution per 100 g) occurred 25-30 min after introduction of the urethan, and lasted between 30 min and 3 hours. The circulatory changes, as well as the secondary dystrophic and necrobiotic tissue alterations in the internal organs and CNS of the animals, which had been caused by the hypoxemia of the "ascent," were less pronounced in the animals anesthetized by the optimal dose of urethan than in the unanesthetized ones.

Card : 2/2

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EXCERPTA MEDICA Sec 2 Vol 12/12 Physiology Dec 59

5833. EFFECTS OF AMPHETAMINE AND URETHAN ON GLYCOGEN LEVELS IN ANIMALS UNDER REDUCED ATMOSPHERIC PRESSURE (Russian text) - Galanina N. V. ARKH. PATOL. 1958, 20/11 (15-21) Tables 1 Illus. 2

Amphetamine possesses stimulating, antinarcotic and cumulative properties and influences the blood pressure. Rat experiments were made with a 2% amphetamine solution (1-8 times s.c.) and with a 20% urethan solution (2-8 times s.c.) with and without reduction of the atmospheric pressure (to a simulated altitude of 16,000 m.). A great similarity between the effects of amphetamine and adrenaline was noted. On reduction of atmospheric pressure and administration of amphetamine glycogen disappeared from the liver and brain cells, with tigrolysis in the latter. In control animals under administration of urethan and reduced atmospheric pressure the glycogen content of the liver cells was preserved for 4 to 5 hr. after death. A certain parallelism between the glycogen loss and the concentrations of adrenaline amphetamine and vit. C in the blood was observed.

Brandt - Berlin

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

[illegible], S. V.

35385. Vliyanie Kormleniya Na Udoy I Organicheskiy Sostav Moloka. Sov. Zootekhniya, 1949, No. 7, S. 27-37.--Bibliogr: 14 NAZV.

SO: Letopis' Zhurnal'nykh Statey Vol. 34, Moskva, 1949

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BABIY, L.T., kand. sel'khoz. nauk; STOLLYAR, T.A., kand. sel'khoz. nauk; ASANOV, P.M., assistent; SELYANSKIY, V.M., kand. sel'-khoz. nauk; LOBIN, N.V., kand. sel'khoz. nauk; KOVIN'KO, D.A., kand. biol. nauk; MASLIYEVA, O.I., kand. sel'khoz. nauk; PETROV, V.M., kand. veter. nauk; ANAN'YEV, P.K., kand. veter. nauk; PENIONZHKEVICH, E.E., doktor biol. nauk, prof.; SERGEYEVA, A.M., kand. sel'khoz. nauk; BALANINA, O.V., kand. sel'khoz. nauk; GRIGOR'YEV, G.K., st. nauchnyy sotr.; KRIKUN, A.A., Geroy Sotsialisticheskogo Truda, kand. sel'khoz. nauk; YAROVOY, P.F., kand. veter. nauk; BELOKOBYLENKO, V.T., na-uchnyy sotr.; GROMOV, A.M., kand. sel'khoz. nauk; MOSIYASH, S., red.; NAGIBIN, P., tekhn. red.

[Handbook for poultrymen] Kniga ptitsevoda. Alma-Ata, Kaz-sel'khozgiz, 1962. 354 p. (MIRA 16:5)
(Kazakhstan--Poultry)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

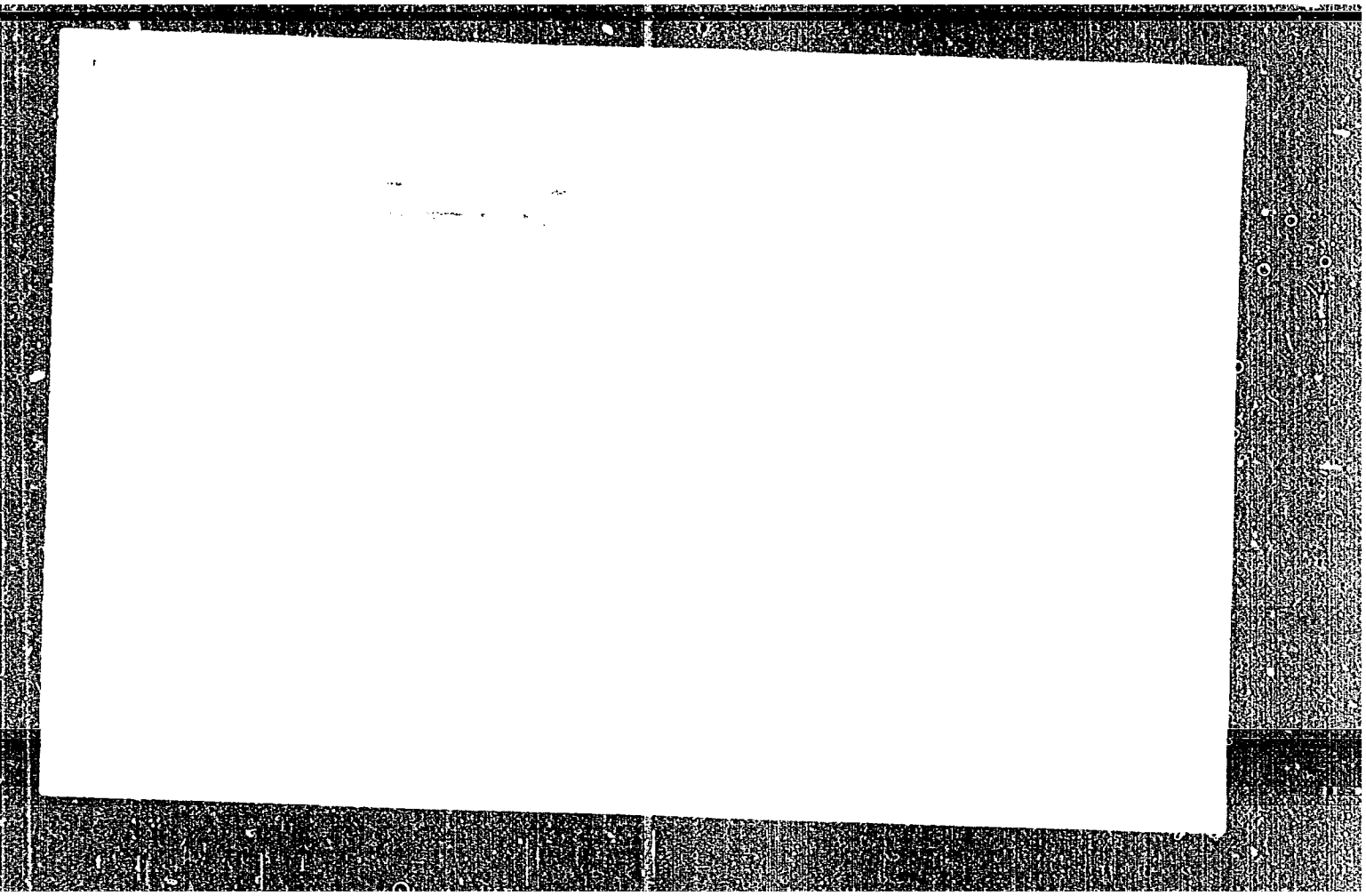
"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANINA, O., kand. sel'khoz. nauk; LEVINA, L., nauchn. sotr.;
NAZARENKO, L., red.; NAGIBIN, P., tekhn. red.

[Practices in growing chicks for meat in Kazakhstan]
Opyt vyrashchivaniia miasnykh tsypliat v Kazakhstane.
Alma-Ata, Kazsel'khozgiz, 1962. 26 nos. in 1 v. 13 p.
(MIRA 17:1)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

Dissertation: "Surface Phenomena during the Electrolytic Refining of Aluminum." Cand Tech Sci, Moscow Institute of Nonferrous Metals and Gold, Moscow, 1953. (Referativnyy Zhurnal-Khimiya, no 11, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

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78241
SOV/80-33-3-42/47

AUTHOR: Balanina, S. M.

TITLE: Brief Communications. Concerning the Determination of the Mutual Wetting of Immiscible Liquids

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 3, pp 739-742 (USSR)

ABSTRACT: It was suggested by the authors that the wetting characteristics of two immiscible liquids 1 and 2 are better defined by the value of the angle α than by the wetting angle θ formed by the vectors of the surface tensions: 1 liquid-gas ($\sigma_{2,3}$) and liquid-solid surface ($\sigma_{1,2}$). Angle α was measured by projecting on a screen the magnified contour of a drop of molten aluminum placed on the surface of molten electrolyte containing various amounts of AlF_2. It was established that α increased 24^0-41^0

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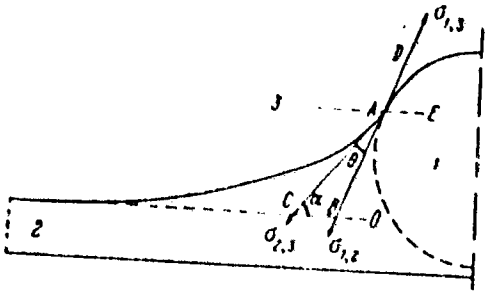

Fig. 2. Relationship between wetting angles α and θ.

when the AlF_2 increased 15-40%. Hence, the value

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of U can serve to define the surface and wetting characteristics of molten electrolytes on their boundary with molten aluminum, as well as the role played by the electrolyte components and admixtures in the electrolytic refining of aluminum. There are 5 figures.

SUBMITTED: October 20, 1958

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APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

GOROKHOV, K.D., slesar'; BALANOV, A.M., insh.

Automatic flow-line equipment for processing straight barlike wooden details. Suggested by K.D.Gorokhov, A.M.Balanova. Rats.i izobr.predl.v stroi. no.14:23-25 '60. (MIRA 13:6)

1. Fabrika myagkoy mebeli Rostovskogo sovnarkhoza, Rostov-na-Donu, ul. Voyennaya, 70.
(Woodworking machinery)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOV, A.T., TSYKIN, G.S.

Some questions on the use of rectifiers as a source of power for low frequency transistor cascades in class B operation. Elektrosviaz' 14 no.3:26-33 Mr '60.
(MIRA 13:6)

(Transistors) (Electric current rectifiers)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

26210
S/106/60/000/003/002/003
A055/A133

9.2520

AUTHORS: Balanov, A.T.; Tsykin, O.S.

TITLE: Some problems concerning transistorized audio-frequency class B stages using power-supply rectifiers

PERIODICAL: Elektrosvyaz', no. 3, 1960, 26 - 33

TEXT: After enumerating the various causes of non-linear distortions in transistorized audio-frequency class B stages using power-supply rectifiers (and namely the distortion due to the power-source impedance Z_{source} when this impedance is commensurable with the amplifier load R_e), the authors discuss the adequate choice of the parameters of the smoothing filter ensuring an undistorted operation of the amplifier. Sound signals with time-varying level can be considered as a certain carrier modulated by a relatively slow varying function [Ref. 2: Yu.S. Bykov, Teoriya razborchivosti rechi i povysheniye effektivnosti radiotelefonnoy svyazi (Theory of speech intelligibility and increase of radio-telephone communication efficiency), Gosenergoizdat, 1959]. For simplicity, the authors assume that the level of the input signal at sound frequency ω varies cosinusoidally with the modulating frequency Ω, i.e.:

$$i_{inp}(t) = I_{inp\ mod}(1 + m \cos \Omega t) \sin \omega t, \qquad (3)$$

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Some problems concerning transistorized ....

where m is the sound-frequency modulation factor. Taking into account the cutoff in class B amplifiers, the collector currents of the triodes can be expressed as:

$$i_{k1}(t) = I_{k\ mod}(1 + m\cos\Omega t)\left[\frac{1}{\pi} + \frac{1}{2}\sin\omega t - \frac{2}{\pi}\sum_{n=1}^{\infty}\frac{\cos 2n\omega t}{4n^2 - 1}\right], \quad (4)$$

$$i_{k2}(t) = I_{k\ mod}(1 + m\cos\Omega t)\left[\frac{1}{\pi} + \frac{1}{2}\sin(\omega t - \pi) - \frac{2}{\pi}\sum_{n=1}^{\infty}\frac{\cos 2n(\omega t - \pi)}{4n^2 - 1}\right], \quad (5)$$

where $I_{k\ mod} = kI_{inp\ mod}$, and k = constant is the current amplification factor. Expressions in brackets represent a development into Fourier series of half-sinusoidal pulses of frequency ω, where pulses $i_{k2}(t)$ lag by π behind pulses $i_{k1}(t)$. The equivalent circuit of the investigated transistorized stage is given. The collector voltage is the sum of the voltage of half the primary winding of the output transformer $u_T(t)$ (which does not contain components at the envelope frequency), and of the voltage drop across the power-source impedance due to current $i_f(t)$ (which contains the modulating frequency Ω). Since $\Omega \ll 2n\omega$, and the filter resonant frequency $\Omega_{res} \ll 2n\omega$, the voltage drop across Z_{source} corresponding to components at frequency $2n\omega$ can be neglected. On the other hand, tak-

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Some problems concerning transistorized....

ing into account the statistical independence of ω and Ω, and the fact that $\Omega < \omega$, only the voltage amplitude on half the primary winding of the output transformer can be taken into consideration. The upper envelope of the collector voltage will then be:

$$u_k(t) = -\left[E_k - \frac{2}{\pi} I_{k\,mod}\, r_{rect} - \frac{2}{\pi} m\, I_{k\,mod}\, Z_{source} \cos(\Omega t + \varphi_{source}) - I_{k\,mod} R_e \cdot (1 + m \cos \Omega t)\right], \quad (8)$$

where Z_{source} and φ_{source} correspond to the impedance of the supply circuit. To avoid limitation of the signal, the minimum absolute magnitude of the collector voltage must not be below: $|E_{ko}(1 - \xi_{max})| \leqslant |u_{k\,min}|$, (9) at all envelope frequencies. [In formula (9), E_{ko} is the collector voltage in the chosen operating point and ξ_{max} is the maximum possible utilization factor of collector voltage determining critical operation.] Z_{source} becomes here purely active and equal to $\frac{L}{C\, r_{rect}}$, $\varphi_{source} = 0$, and $u_{k\,min}$ is determined by the left-hand part of the inequality:

$$-E_k + \frac{2}{\pi} I_{k\,mod}\, r_{rect} + \frac{2}{\pi} m\, I_{k\,mod} \frac{L}{C\, r_{rect}} + I_{k\,mod} R_e (1 + m) \leqslant -E_{ko}(1 - \xi_{max}). \quad (10)$$

Distortions due to the upper cutoff of collector current can occur also if the amplitude of the amplified signal is constant, this because of the presence of the rectifier impedance r_{rect}. Distortions will not arise if collector voltage

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Some problem concerning transistorized....

E_{ko} is selected so as to satisfy the following condition: $E_{ko} = E_k - \frac{2}{\pi} I'_{k\,max} r_{rect}$, (11) where $I'_{k\,max}$ is the maximum admissible collector current amplitude, on the basis of which the load impedance is calculated according to:

$$R_e = \frac{\xi_{max} E_{ko}}{I'_{k\,max}} . \qquad (2)$$

Substituting (2) and (11) in (10), and introducing the parameters $q = \frac{r_{rect}}{R_e}$ and $\delta = \frac{2 I_{k\,mod}}{I'_{k\,max}}$, the authors find: $\frac{L}{C} < \frac{q \pi R_\ell^2}{2m\delta} \left[\left(1 + \frac{2}{\pi} q\right)(2 - \delta) - \delta m\right] .$ (12)

Coefficient δ characterizes the under-utilization of the triodes as regards collector current, necessary in the examined case for ensuring undistorted operation of the stage. Since $\Omega_o = \frac{1}{\sqrt{LC}}$ can be easily determined by the required smoothing factor, it is possible to calculate, using the following relationships, the magnitude of the parameters of the filter: $L_{max} < \frac{R_e B}{\Omega_o}$, (13); $C_{min} > \frac{1}{\Omega_o R_e B}$ (13'), where $B = \sqrt{\frac{q}{\delta}\left[(\pi + q)(1 - \delta) + q\right]}$. Since the magnitude of C_{min} as given by (13') proves often extremely large, it is interesting to find out how much it can be reduced if a slight upper cutoff of collector current is tolerated. For this purpose, the authors assume that the ratio $\frac{L}{C}$, as calculated according to (12),

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Some problems concerning transistorized....

must be increased h times, δ, q and Ω_o remaining unchanged. They find that, in that case, it is hardly possible to reduce considerably the magnitude in question. The new magnitude is $C'_{min} = \frac{C_{min}}{\sqrt{h}}$, and the numerical calculation of the maximum harmonic coefficient shows that this coefficient increases rapidly with h. In a practical case, the authors found that a 17% and 23% reduction of C_{min} brings about distortions of 5.6 and 12.2%, respectively. The fundamental formulae deduced in this article were checked experimentally by the authors on a transistorized stage with "P4-B" triodes on a common base, using either a rectifier or a d-c power supply. In both cases, the experimental results coincided, with a practically sufficient accuracy, with the calculated magnitudes. [Abstracter's note: Subscript mod (modulation) stands for the Russian мод; l (load) for н; f (filter) for ф; rect (rectifier) for в; source for ист; res (resonant) for р; max (maximum) for макс; min (minimum) for мин; outp (output) for вых; inp (input) for вх.] There are 8 figures and 5 Soviet-bloc references.

SUBMITTED: November 30, 1959

Card 5/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

9,2510 (1020, 1159, 1532)

S/108/60/015/007/013/013/XX
B010/B070

AUTHOR: Balanov, A. T.

TITLE: Investigation of the Transition Processes Due to the Complex Internal Impedances of the Source of the Working Voltage in Class-B Amplifiers

PERIODICAL: Radiotekhnika, 1960, Vol. 15, No. 7, pp. 67-74

TEXT: In low-frequency power amplifiers with final B-push-pull stages, nonlinear distortions appear during the period of mutual current transfer due to the capacitive components of the internal impedances of the source of the working potential, eveh when the I_a-U_g characteristic of the final tubes is assumed to be ideal. The distortions are calculated, and the effect of the negative feedback of current and voltage is discussed. The results give some hints about the design of the filter capacitor of the anode voltage source and of the cathode capacitors. If the tubes are replaced by two-terminal sources, the equivalent-circuit diagram of a final push-pull stage represents two circuits which are coupled by the total

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Investigation of the Transition Processes Due to the Complex Internal Impedances of the Source of the Working Voltage in Class-B Amplifiers

S/108/60/015/007/013/013/XX
B010/B070

source of anode voltage. The voltage ratios in each of the two meshes for different intervals during the period of the signal are given by two differential equations according to Kirchhoff's laws. In the solution of these equations, there appear besides the signal frequency, additional higher-frequency functions whose expansion in Fourier series determines the distortion factor numerically (see Fig. 5, $\delta_2 = \frac{1}{\Omega C(R_N + R_i)}$, where $\alpha = \frac{R_N}{R_i}$, where R_i and R_N are the internal and external impedances, respectively, of the tubes, C is the filter capacitance, and Ω is the signal frequency). The application of a negative feedback of current reduces the nonlinear distortions since it increases the external dynamic resistance. On the other hand, the negative feedback of voltage decreases the internal impedance of the tubes and thus favors the appearance of nonlinear distortions. The quantitative relationship as a function of the negative

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Investigation of the Transition Processes Due to the Complex Internal Impedances of the Source of the Working Voltage in Class-B Amplifiers

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B010/B070

feedback coefficient is easily obtained by the usual modification of the two-pole parameter of the amplifier tubes. The R-C part of the automatic grid bias production is an additional source of distortion which is particularly significant for tubes with mutual inductance. The following circuit constants are recommended for keeping the distortions small in the absence of negative feedback: For the cathode capacitor, $C_k \geq \frac{10S}{\Omega_N(1+\alpha)}$,

where S is the mutual inductance in a/v; for the filter capacitor, $C \geq \frac{(8,3 \div 12,5)}{\Omega_n(R_N+R_i)}$. Practical measurements of the distortion factor and oscillograms confirm the results of calculation. G. S. Tsykin assisted in the work. There are 5 figures and 6 references.

SUBMITTED: January 8, 1960

Card 3/4

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

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B010/B070

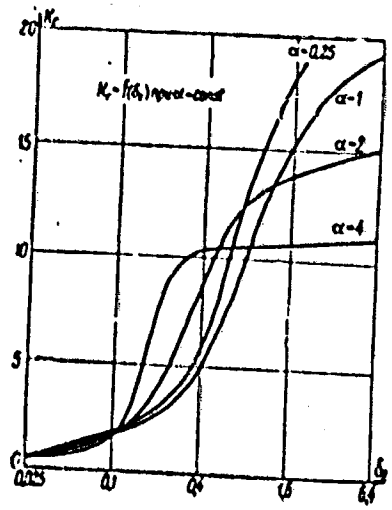

Рис. 5

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

S/106/61/000/012/003/010
A055/A127

9,3280 (1147, 1159)

AUTHORS: Timishchenko, M. G., Balanov, A. T.

TITLE: Analysis of a wide-band limiter

PERIODICAL: Elektrosvyaz', no. 12, 1961, 19 - 28

TEXT: This article is a theoretical analysis of a wide-band limiter with "ideal" diodes whose internal resistance in the conductance direction is equal to zero. Fig. 1 shows the circuit of the limiter. The LC_k circuit (anode load of the tube), shunted by R_{sh}, contains two crystal diodes. If the oscillating voltage exceeds the retarding voltage E_{ret}, the diode current begins to flow and prevents a further increase of the circuit voltage, which is the underlying operation principle of the examined limiter. Fig. 2 is the equivalent circuit of the limiter. The tube is represented here by the generator of current $i_k = I_k \sin\omega t$, where $I_k = SV_{inp}$. The initial conditions correspond to the voltages $-E_{ret}$ and E_{ret} across C, and to the currents I_{01} and I_{02} in L at the moments $t_1 = -\psi_1/\omega$ and $t_2 = \psi_2/\omega$ respectively. At these moments, one of the diodes is being either unblocked ($\omega t = \psi_2$) or blocked ($\omega t = -\psi_1$ or $\omega t = \pi - \psi_1$). The internal resistance of the diodes in the conductance direction can be neglected and considered as equal

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Analysis of a wide-band limiter

to zero. The authors examine separately: a) that part of the period when both diodes are blocked: $-\psi_2 < \omega t < \psi_2$; b) that part of the period when one of the diodes is unblocked: $\psi_2 < \omega t < \pi - \psi_1$. The initial equations (in operator form) for part a) of the period are:

$$\left.\begin{aligned} U_{c1}(p) &= \frac{I_{c1}(p)}{pC} + \frac{R_{ret}}{p} \\ U_{L1}(p) &= pLI_{L1}(p) - LI_{01} \\ U_{R1}(p) &= RI_{R1}(p), \\ \frac{I_k}{\omega^2+p^2}(\omega\cos\psi_1 - p\sin\psi_1) &= I_{c1}(p) + I_{L1}(p) + I_{R1}(p) \end{aligned}\right\} \quad (1)$$

where $I_{C1}(p)$, $I_{L1}(p)$ and $I_{R1}(p)$ represent the currents in the C, L and R arms respectively. Solving (1), the authors find first the current $I_{R1}(p)$ in operator form, and then, using the Laplace inverse transformation method, they obtain the expression for the current $i_{R1}(t)$. This expression is:

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Analysis of a wide-band limiter

$$i_{R1}(t) = \frac{I_k y d}{z_\omega} \cos(\omega t - \varphi_\omega) \div e^{-\delta \frac{\omega_0}{\omega_p}} \left\{ I_k d \left[\frac{z_\gamma \gamma}{z_\omega} \sin(\theta - \beta_z - \beta_\gamma + \beta_0) - \right. \right.$$

$$\left. \left. - \sin\vartheta_1 \sin\psi_1 \right] + \frac{R_{ant}}{R} \sin(\theta + \varphi_\omega) \right\}, \qquad (4)$$

where:

$$y = \frac{\omega_0}{\omega}; \quad \omega_0 = \frac{1}{\sqrt{LC}}; \quad d = \frac{1}{\omega_0 CR}$$

$$\omega_p = \omega \sqrt{1 - \frac{d^2}{4}}; \quad \theta = \frac{\omega_{A1}}{\omega}(\omega t + \phi_1); \quad \gamma = \frac{yd}{2}(\omega t + \phi_1)$$

$$z_\omega = \sqrt{(y^2-1)^2 + y^2 d^2};$$

$$z_\gamma = \sqrt{\cos^2\phi_1 + yd \sin\phi_1 \cos\phi_1 + y^2 \sin^2\phi_1} \qquad (5)$$

$$\varphi_\omega = \operatorname{arctg} \frac{yd}{y^2 - 1}; \quad \varphi_\gamma = \operatorname{arctg} 2RC\omega_p$$

$$\varphi_\gamma = \operatorname{arctg} \frac{\frac{\omega_p}{\omega} \sin\phi_1}{\cos\phi_1 + \frac{yd}{2} \sin\phi_1}; \quad \varphi_0 = \operatorname{arctg} \frac{yd \frac{\omega_p}{\omega}}{1 - y^2 + \frac{y^2 d^2}{2}}$$

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Analysis of a wide-band limiter

Having thus determined $i_{R1}(t)$, the authors obtain analogous expressions for the currents $i_{C1}(t)$ and $i_{L1}(t)$, and also for the voltage $U_{R1}(t)$ at the output of the limiter. For part b) of the period:

$$\frac{U_{R2}(t)}{E_{ret}} = 1 \qquad (14)$$

and

$$i_{L2}(t) = I_K \sin\gamma_1 - \frac{E_{ret}}{R} + \frac{E_{ret}\gamma}{Rd}(\omega t - \pi + \gamma_1). \qquad (15)$$

The current in the capacitance arm of the circuit is here equal to zero. The obtained formulae show that the values of the currents and voltages in the limiter depend on its parameters R, L, C, on the relative detuning y and on the cutoff angles γ_1 and γ_2. Two equations permitting to calculate γ_1 and γ_2 are given by the authors, and a method is described for computing their sum $\gamma_1 + \gamma_2 = \beta$, the knowledge of β being necessary for the calculation of γ_1 and γ_2. The authors conclude by giving a set of formulae permitting to calculate the amplitude and phase of the first harmonic of the limiter output voltage. They also reproduce a numerical example, i.e. the practical calculation of a wide-band limiter. There

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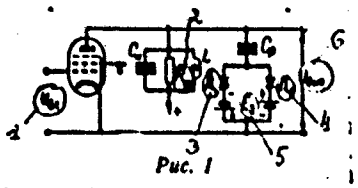
31199
S/106/61/000/012/003/010
A055/A127

Analysis of a wide-band limiter

are 8 figures, 5 Soviet-bloc references and 2 non-Soviet-bloc references. The following names of Soviet authors or scientists are mentioned in the article: Kontorovich, M. I., Gonorovskiy, I. S., Dech, G., Broyde, A. M.,and Tarasov, F. I.

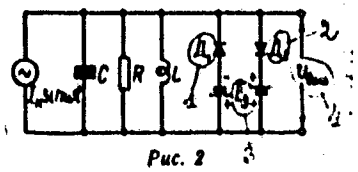
SUBMITTED: April 26, 1961

Fig. 1.
Legend: 1 - U_{inp} 4 - D_2
2 - R_{sh} 5 - E_{ret}
3 - D_1 6 - U_{outp}



Puc. 1

Fig. 2.
Legend: 1 - D_1 3 - E_{ret}
2 - D_2 4 - U_{outp}



Puc. 2

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APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

ACCESSION NR: AT4031805 S/0000/62/000/000/0126/0132

AUTHOR: Balanov, A. T.

TITLE: Response of a linear system to a periodic signal of complicated form, without the use of the summation of Fourier series

SOURCE: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvarki. Radioelektronika v narodnom khozyaystve SSSR (Radio electronics in the U.S.S.R. national economy); sbornik trudov nauchno-tekhn. konferentsiy. Kuyby*shev, 1962, 126-132

TOPIC TAGS: circuit theory, Laplace transformation, Fourier series, operational calculus, periodic function

ABSTRACT: A simple method applicable to periodic signals is proposed for circuit analysis, based on the use of the theory of operator calculus. In this method the driving-signal Laplace transform is obtained, for each of the equations describing its behavior at the

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corresponding segments of the period with the aid of Laplace transform tables with allowance for the delay theorem. An expression is then set up for the operator impedance (by the methods of operational calculus) and the "nonzero initial conditions," which take into account the influences of all the preceding periods or fractions of the period under consideration on the character of the transients in the given segment of the period, are introduced. The inverse transforms of the quantities of interest are then obtained with the aid of the expansion theorem or if necessary by the residue theorem. The unknown initial conditions are then evaluated. The method is most advantageous when the system is not too complicated, and is a particular case of a method employed by the author elsewhere (Elektrosvyaz', 1960, No. 3, and Radiotekhnika, v. 15, 1960, No. 7) for the solution of some more complicated problems. Orig. art. has: 2 figures and 3 formulas.

ASSOCIATION: None

Card 2/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

ACCESSION NR: AT4031805

SUBMITTED: 0000062 DATE ACQ: 17Apr64 ENCL: 00

SUB CODE: EC, MA NR REF SOV: 009 OTHER: 000

Card 3/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

L 38982-66 EWT(d)/EWP(1) IJP(c) BC/GD

ACC NR: AT6022336 SOURCE CODE: UR/0000/66/000/000/0020/0026

AUTHOR: Balanov, A. T.; Soleznev, A. V.; Soleznev, I. I.

4 B+1

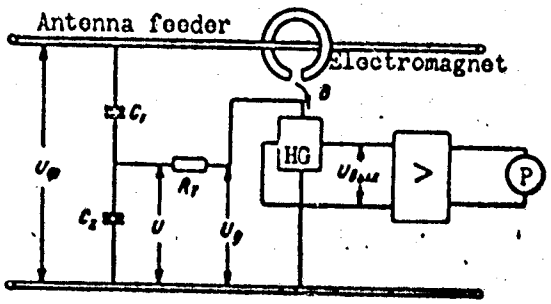
ORG: none

TITLE: Constructing Hall-generator wattmeters for radio transmitters

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya radioperedayushchikh ustroystv. Doklady. Moscow, 1966, 20-26

TOPIC TAGS: wattmeter, Hall generator, radio transmitter, antenna feed, magnetic induction

ABSTRACT: The problem of constructing Hall-generator-type wattmeters for measuring radio transmitter output at low, medium, and high radiofrequencies is discussed. The current in the antenna feeder is measured by a ferrite ring with an air-gap (see Fig. 1). The voltage is measured by C_1C_2 capacitive divider connected, via limiting resistor R_r to the current electrodes of the Hall generator. The output represents the r-f power indicated



Card 1/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

L 38982-66

ACC NR: AT6022336

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by wattmeter P connected via an amplifier. Curves are plotted which show that a magnetic induction of 50—500 gs for medium frequencies and of 15—150 gs for high frequencies can be expected from a single-turn ferrite magnet. To reduce the undesirable effect of temperature on thin InSb films, a series temperature-compensation circuit is suggested. Preliminary experiments with a 125-w, 100—600-kc transmitter showed that the Hall emf has a linear relation to the r-f power and that the emf is sufficient for driving the output amplifier. Orig. art. has: 3 figures and 5 formulas. [03]

SUB CODE: 09 / SUBM DATE: 31Mar66 / ORIG REF: 002 / OTH REF: 001/ ATD PRESS: 5050

Card 2/2 HS

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

(\ ) [illegible]

Author: [illegible]v, L. S.; Cheksmanov, V. I.

Org: None

TITLE: Stability of the statistical and dynamic characteristics of a pneumatic power [illegible] system

SOURCE: Teoriya mashin-avtomatov i pnevmo-gidroprivodov (Theory of automatic machinery and pneumatic and hydraulic drives); sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1968, 256-265

TOPIC TAGS: pneumatic control system, pneumatic servomechanism, control system stability

ABSTRACT: The authors study the effect of variations in the parameters of the compressed air supply on the basic characteristics of a pneumatic drive and closed power system. A schematic diagram of the pneumatic servomechanism is shown in the figure. The steady-state operating conditions of a pneumatic drive with a constant external power load are described by the mechanical characteristics, output power and efficiency. The stability of the mechanical characteristics is determined from the variation in the no-load speed and braking force. The stability of the power characteristics is evaluated from the variation in efficiency and output power. It is shown that the no-load speed is stable with respect to variations in pressure and that the braking force is

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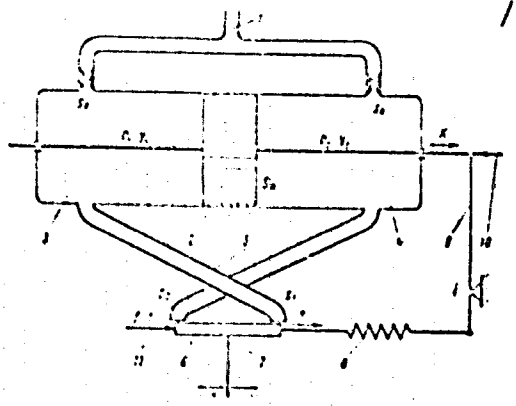
"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

ACC NR: AT6031166

stable with respect to variations in temperature. Graphs are given showing the efficiency as a function of load and the power characteristics for drives with various parameters. Expressions are derived which may be used in designing pneumatic control systems for selecting the parameters which give the required stability of static and dynamic characteristics and for determining the permissible range of variations in the parameters of the working fluid for given requirements with respect to the stability of static and dynamic characteristics of power control systems. Orig. art. has: 5 figures, 1 table, 20 formulas.



1,5--air lines; 2--piston; 3,4--first and second working cavities; 6--slide valve; 7--valve spring; 8--feedback spring; 9--feedback lever; 10--external load; 11--control signal

SUB CODE: 13/ SUBM DATE: 12Jan66/ ORIG REF: 003

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

TRAUGOTT, N. N.; BALANOV, L. Ia.; KAUFMAN, D. A.

Data on the nature of action of amytal sodium and aminazin on the central nervous system in man. Activ. nerv. sup. 3 no.4:381-388 '61.

1. Institut evoliutsionnoy fiziologii im. I. T. Sechenova AN SSSR (Direktor - chlen-korr. AN SSSR Ye. T. Kreps)

(AMORARBITAL pharmacol) (CHLORPROMAZINE pharmacol)
(CENTRAL NERVOUS SYSTEM pharmacol)
(REFLEX CONDITIONS pharmacol)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

FRANKL', F.I. and T. BALANOV.

Narastanie sloia Prandtlia v priamougol'nykh trubakh pri laminarnom rezhime. (TSAGI. Trudy, 1934, no. 176, p.19-32, diagrs.)

Summary in English.

Title tr.: Growth of the Prandtl boundary layer in rectangular tubes with laminar flow.

QA911.M65 no.176

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

S/044/62/000/007/019/100
C111/C333

AUTHOR: Balanov, T. I.

TITLE: On the motion of a heavy rigid body around a fixed point (the case of dynamic symmetry)

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 38, abstract 7B184. ("Tr. Samarkandsk. un-ta", 1960(1961), no. 107, 113-128)

TEXT: The author investigates the motion of a gyroscope (case $A = B$, $x_0 = 0$), the centre of gravity of which lies in an arbitrary point, i. e. a more general case than the classical cases of Lagrange and Kovalevskaya is considered. The author does not accomplish the solution of the problem to the end. Anyway he obtains (after having introduced into the Euler equations instead of p, q and r, the Euler coordinates φ, ψ and θ) after a number of deformations a system of two differential equations with two unknown functions. This system is - according to the opinion of the author - more simple than that system which in this case is obtained according to the method of Hess-Schiffer (look e. g: Golubev, V. V.: Lektsii po integrirovaniyu uravneniy dvizheniya

Card 1/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

On the motion of a heavy rigid . . . S/044/62/000/007/019/100
C111/C333

tyezhelogo tverdogo tela okolo nepodvizhnoy tochki [Lectures on the integration of the motion equations of an rigid heavy body with a fixed point] M., 1951). The author also investigates the conditions, under which in the considered case a regular precession is possible. Further on the author puts up the linear Matthieu differential equation

$$\frac{d^2\varepsilon}{dt^2} + \varepsilon(m - a \sin r_0 t) = 0$$

for the pseudoregular precession, where $\varepsilon = \theta - \frac{\pi}{2}$ is a small nutation m, r_0 and a being parameters.

[Abstracter's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

S/076/63/037/001/019/029
B101/B186

AUTHORS: Volynskaya (Klevtsova), M. P., Kuznetsov, V. A., Balanova, S.Ya.

TITLE: Electrocapillary effects on Tl-Sb alloys

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 186 - 189

TEXT: Tl and Sb, chosen because their zero-charge potentials differ considerably, were used to investigate the dependence of the zero-charge potential on the composition of binary alloys. The zero-charge potentials of Tl and Tl-Sb alloys were determined from the maximum potential of electrocapillary curves at 475°C. A mixture of molten LiCl-KCl served as electrolyte and molten lead as reference electrode. Since a solid phase precipitated at 475°C it was not possible to investigate alloys containing more than 63 at% of Sb. The emf of the galvanic elements, type

Tl^{-} | LiCl-KCl + 3% by weight TlCl | $Tl\text{-}Sb^{+}$ alloy, was measured in order to determine the activities of Tl and Sb. The curves representing the activities differed only slightly from Raoult's law. The electrocapillary curves show that the surface tension acting on the interface alloy-electrolyte decreases with increasing content of Sb, and that the zero-charge potential

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

Electrocapillary effects on Tl-Sb alloys S/076/63/037/001/019/029
B101/B186

shifts toward the positive direction. The adsorption of Tl and Sb at the surface, the surface concentration of the two components and the portion θ of the surface occupied by the two components are calculated. The following values are given for the Sb content given in atomic parts (θ_{Tl},θ_{Sb}): 0.05, 0.82, 0.15; 0.20, 0.65, 0.33; 0.40, 0.52, 0.47; 0.63, 0.30, 0.67. The zero-charge potential was calculated from the equation $\Delta\varphi^0 = \varphi^0_{all} + \varphi^0_{Tl} - (\varphi^0_{Sb} - \varphi^0_{Tl})\cdot\theta_{Sb}$. For the Sb content in atomic parts, φ^0_{calcul} and φ^0_{exper} are given: 0.05, -0.45, -0.53; 0.20, -0.39, -0.46; 0.40, -0.31, -0.42; 0.63, -0.20, -0.30. The discrepancy between the values of φ^0 as calculated and those obtained experimentally is attributed to the fact that the applied equation takes no account of a certain type of interaction of the alloy components. There are 4 figures and 2 tables.

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A. M. Gor'kogo
(Ural State University imeni A. M. Gor'kiy)

SUBMITTED: October 28, 1961

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

VOLYNSKAYA, M.P. (Klevtsova); KUZNETSOV, V.A.; BALANOVA, S.Ya.

Electrocapillary phenomena in Tl-Sb alloys. Zhur.fiz.khim. 37 no.1:186-189 Ja '63. (MIRA 17:3)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVICH, A.

Complaints against designers and builders. Zhil.-kom.khoz. 6 no.5:10 '56. (MLRA 9:11)
(Stalingrad--Apartment houses)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, S.A

Training petroleum workers in related professions. Prof.-tekh.obr. 11 no.6:29 S '54. (MLRA 7:10)

1. Nachal'nik otdela podgotovki kadrov Upravleniya rabochikh kadrov, truda i zarplaty Ministerstva neftyanoy promyshlennosti.
(Petroleum workers--Education)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

GUREVICH, Ya.D.; SMIRNOV, A.S.; LIVSHITS, Z.I.; LOSEV, M.T.; BAIANOVSKIY, S.A.; UDYANSKIY, N.Ye.; MURAV'YEV, V.M.; AMIYAN, V.A.; LOZOACHEV, P.M.; OFROSIMOV, V.S.; POPOV, S.S.; MATSKIN, L.A.; RATUSH, P.P.; PARFENOV, Ye.I.; DUBROVINA, N.D., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Soviet petroleum industry] Neftianaia promyshlennost' SSSR. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1958. 330 p. (MIRA 11:3)
(Petroleum industry)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzhener.

Rock falling during shaft sinking. Bezop.truda v prom. 1 no.6:7-8 Je '57. (MIRA 10:7)

(Mine accidents)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., gornyy inzhener.

PRSH-1 dust respirator. Shakht. stroi. no.8:22-23 Ag '57.
(Mine dust) (Respirators) (MLRA 10:9)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.

Results of the analysis of rocks in the Donets Basin. Bezop. truda v prom. 2 no.1:36 Ja '58. (MIRA 11:1)
(Donets Basin--Coal mines and mining--Safety measures)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.P., inzh.

Dust control as factor for increasing the rate of development mining operations. Shakht. stroi. no.3:12-14 '58. (MIRA 11:3)
(Mine dusts) (Boring)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALAMOVSKIY, V.F., insh.

Preliminary rock cementation in Donets Basin shaft sinking.
Shakht. stroi. no.9:6-9 '58. (MIRA 11:10)
(Donets Basin--Shaft sinking) (Grouting)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.

Replacing shale barriers by water. Shakht.stroi. no.3:13-14 Mr '59.
(MIRA 12:4)
(Mine dusts) (Coal mines and mining--Safety measures)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.

Water sprayers used in Donets-Basin mines. Bezop.truda v prom. 3 no.1:9-10 Ja '59. (MIRA 12:3)
(Donets Basin--Coal mines and mining)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F.

Improve the structure of coal mine management. Ugol' 34 no.1:51-53 Ja '59. (MIRA 12:1)

1.Stalinskiy Sovet narodnogo khozyaystva.
(Mine management) (Coal mines and mining)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., insh.

Water barrier in the mines of Austria. Shakht.stroi. 5 no.4:32 Ap '61. (MIRA 14:5)

(Austria—Blasting—Safety measures)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., gornyy inzh.

Investigating the effect of certain factors on the qualitative changes of inert dust. Ugol' Ukr. 5 no.4:28 Ap '61. (MIRA 14:4)
(Coal mines and mining--Safety measures)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.; BRAYNIN, M.I., inzh.

Explosion problem in a methane and dust atmosphere. Shakht. stroi. 5 no.10:17 O '61. (MIRA 16:7)

1. Institut gornogo dela AN UkrSSR.
(Mine explosions)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., gornyy inzh.

Problems of air conditioning in the coal mines of the Ukraine.
Ugol' 36 no.8:58-59 Ag '61. (MIRA 14:9)
(Ukraine--Coal mines and mining--Air conditioning)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.

Urgent problems of air conditioning in the Donets Basin mines.
Ugol' 37 no.1:63-64 Ja '62. (MIRA 15:2)
(Donets Basin—Coal mines and mining—Air conditioning)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KRAVETS, V.I., kand.tekhn.nauk; BALANOVSKIY, V.F., inzh.; ZINCHENKO, V.V., inzh.; KOPYLOV, V.F., inzh.; SHEVCHENKO, L.I., inzh.

Efficiency of water curtains for directed protection against the air wave impact. Ugol' Ukr. 6 no.5:38-41 My '62. (MIRA 15:11)
(Coal mines and mining--Fires and fire prevention)
(Blasting--Safety measures)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.F., inzh.

Conference on the mechanization and automation of ventilation in coal and ore mines. Ugol' 37 no.9:59-60 S '62. (MIRA 15:9)

(Mine ventilation) (Automatic control)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

KUSOV, Vl. (Krasnodar); BALANSKIY, V. (Leningrad); KOZLOV, P.; KARPOV, V. (Magadan)

From the editor's mail. Sov. profsoiuzy 19 no.12:19 Je '63. (MIRA 16:8)

1. Neshtatnyy korrespondent zhurnala "Sovetskiye profsoyuzy", Rovno (for Kozlov).
(Technological innovations) (Bonus system) (Trade unions)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

BALANOVSKIY, V.I.

On the "Fergana" State Fruit and Grape Farm. Zashch. rast. ot vred. i bol. 9 no.10:11-12 '64 (MIRA 18:1)

1. Glavnyy agronom sadvinsovkhoza "Fergana". Fergunskaya oblast'.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

TULASHVILI, N.D.; SAMUNDZHEVA, E.M.; RACHVELISHVILI, E.V.; ANTONOVA, V.P., dotsent; MALEZHIK, G.M.; SMIRNOV, B.M., doktor sel'skokhoz.nauk; MATVEYENKO, G.A., aspirantka; BALANTAYEVA, M.R.; GARNAGA, G.K.

From the practices of the use of poisonous chemicals. Zashch.rast. ot vred. i bol. 8 no.12:28-29 D '63. (MIRA 17:3)

1. Gruzinskiy institut zashchity rasteniy (for Tulashvili, Samundzheva, Rachvelishvili). 2. Kishinevskiy sel'skokhozyaystvennyy institut (for Antonova). 3. Zaveduyushchiy otdelom zashchity rasteniy Sumskoy opytnoy stantsii (for Malezhik). 4. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Yugo-Vostoka (for Smirnov, Matveyenko). 5. Nauchno-issledovatel'skiy institut bogarnogo zemledeliya, Gallya-Aral (for Balantayeva, Garnaga).

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R000103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00010

LOSIK, L.I.; MALANTER, I.I.

Organizing the complete processing of corn. Sakh. prom. 33 no.8:58-61 Ag '59. (MIRA 12:11)

1.Giprospirtvino.
(Cornstarch) (Starch industry--Equipment and supplies)

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