MEL'NIKOV, A.K.; SHTIPEL'MAN, S.D.

Horizontal automatic "Chappuis" machines for strip stamping. Kuz.-shtam. proizv. 4 no.5:34-38 My '62. (MIRA 16:5)
(Sheet metal working machinery)

MARKOVICH, B.N., kand.tekhn.nauk; MEL'NIKOV, A.K., inzh.

Performance of the flywheel and electric motor on crank presses with adjustable drive. [Nauch. trudy] ENIKMASha 63 21 '63. (MIRA 16:9)

(Power presses--Electric driving)

L 413[illegible]-66 EWT(m)
ACC NR: AP6013729 (A) SOURCE CODE: UR/0089/66/020/004/0342/0342

AUTHOR: Nefedov, V. N.; Kroshkin, N. I.; Kharin, V. P.; Mel'nikov, A. K.

ORG: none

TITLE: The mean neutron spectra from double or triple U^{235} fission by thermal neutrons 79

SOURCE: Atomnaya energiya, v. 20, no. 4, 1966, 342

TOPIC TAGS: nuclear fission, uranium, neutron spectrum, thermal neutron

ABSTRACT: Using the time-of-flight method (40 cm of distance) the authors measured the spectrum of prompt neutrons during double and triple fission of U^{235} nuclei by thermal neutron (see Fig. 1) from the SM-2 reactor. The uranyl nitrate target was 20 mm in diameter and ~2 mg/cm thick. An analysis of the results shows that triple fission is accompanied by ~6.0—6.5 γ-quanta. The γ-spectrum of the triple fission is somewhat harder than the one from double fission. Orig. art. has: 1 figure.

Card 1/2 UDC: 539.173.84.539.121.64

ACC NR: AP6013729

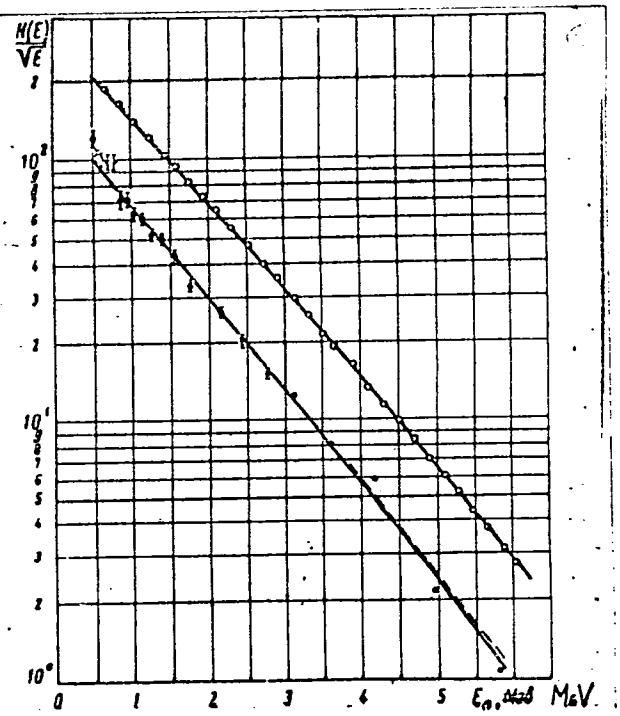


Fig. 1 The spectrum of fission neutrons in the laboratory system of coordinates. O - double fission; ● - triple fission; - - - - Maxwell distribution (T = 1.2 MeV); ——— — Watt's distribution (for double fission T = 0.965 MeV, E_f = 0.533 MeV, $\bar{E}$=1.98 MeV; for triple fission T = 0.9 MeV, E_f = 0.5 MeV, $\bar{E}$ = 1.8 MeV).

SUB CODE: 18/ SUBM DATE: 07Dec65/ ORIG REF: 001/ OTH REF: 000

MEL'NIKOV, A.M., inzh.

Mechanization of loading and unloading on the Sverdlovsk Railroad. Mekh.i avtom.proiz. 14 no.6:19-21 Je '60. (MIRA 13:7)
(Sverdlovsk--Railroads--Freight)

MEL'NIKOV, A.M.

Causes of s[illegible] of the main deck carling on the motorship "Michurinsk." Inform. sbor. TSNIIMF no.53:92-95 '60. (MIRA 14:12)
(Hulls (Naval architecture))

MEL'NIKOV, A. M.

20666 Mel'nikov, A.M. Opyt Konteynekizatsii na stroykakh tresta "Uralmas·stroy". Mekhanizatsiya stroit-va, 1949, No. 6, s. 4-6

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

14(6, 10) SOV/112-59-4-6761

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 51 (USSR)

AUTHOR: Mel'nikov, A. M.

TITLE: Cutting the Cost of Concrete Work Is the Most Important Factor in Making Hydraulic Structures Cheaper

PERIODICAL: V sb.: Kompleksn. mekhaniz. beton. rabot i organiz. zimn. betonirovaniya. Nr 1, Kuybyshev, 1957, pp 3-51

ABSTRACT: The scope of concrete work will reach 7,000,000 m^3 in Soviet hydroelectric developments in 1959. The concrete work constitutes about 45% of the total cost in hydroelectric-station construction. Cutting its cost can be accomplished by rational planning of individual structures and by cutting the cost of labor. Specifically, concrete dams should be planned only for those cases when the dams cannot be built from local materials that cost 1.5-2 times less than concrete. General layout of hydroprojects should be planned with a higher economy in view, the design norms should be revised toward

Card 1/2

Cutting the Cost of Concrete Work Is the Most Important Factor in Making . . . .

lower safety factors, cement-substituting additions, such as flyashes from electric stations, should be widely used; automation should be used in crushing and concrete plants, continuous concrete-mixing plants should be adopted, as well as a continuous cement placing. Reuse of formwork should be increased, screen-type formwork should be widely used, as well as reinforced-panel blocks, and lining slabs with the least possible number of their types.

A.A.K.

8(6), 14(10) SOV/112-59-3-4712

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 58 (USSR)

AUTHOR: Mel'nikov, A. M.

TITLE: Work of the Institute of Planning the Organization of Power-Engineering Construction, "Orgenergostroy" (Rabota Instituta po proyektirovaniyu organizatsii energeticheskogo stroitel'stva "Orgenergostroy")

PERIODICAL: V sb.: Energ. str-vo SSSR za 40 let. M.-L., Gosenergoizdat, 1958, pp 301-306

ABSTRACT: A brief description of the work done by the Institute and its branch offices for the hydraulic-construction organizations: reinforced slabs, wooden formwork usable many times, a slit construction for reinforced-concrete slab gates, a preliminary project of an improved outdoor hydraulic unit for 15-30-m heads with a 9.3-m rotor, use of photogrammetry at the construction site, etc. For thermal electric generating stations: plans for organizing the construction work on main buildings and erecting boiler units of 170-230 ton/hour and higher,

Card 1/2

8(6), 14(10) SOV/112-59-3-4712

Work of the Institute of Planning the Organization of Power-Engineering . . . .

a plan for large-assembly erection of station pipelines, etc. For electric transmission lines and substations: various types of reinforced-concrete towers, a hinged metal 220-kv guyed tower, etc. A number of projects concerned automation of auxiliary plants and construction economics. The Institute publishes a journal, entitled "Energeticheskoye stroitel'stvo," and current information.

V.V.M.

Card 2/2

MEL'NIKOV, A.M.

Surface of the crystalline base rock in the Tatar ASSR and neighboring regions. Dokl.AN SSSR 103 no.5:897-899 Ag '55.

1.Predstavleno akademikom S.I.Mironovym.
(Tatar A.S.S.R.--Rocks, Crystalline and metamorphic)

Mel'nikov, A.M.

YEGOROV, S.P.; MEL'NIKOV, A.M.

Petroleum resources of the Tatar A.S.S.R. Uch.zap.Kaz.un. 115 no.10:93 '55. (MLRA 10:5)
(Tatar A.S.S.R.--Petroleum geology)

MEL'NIKOV, A.M.; DOBROSERDOV, L.I.

Samara petroleum of the Tatar A.S.S.R. Neft.khoz.34 no.6:46-48 Je '56. (Tatar A.S.S.R.--Petroleum geology) (MIRA 9:9)

MEL'NIKOV, A.M.

Ancient foundation uplifts in the Volga Valley. Geol. nefti 1 no.1: 34-38 Ja '57. (MLRA 10:8)
(Volga Valley--Geology, Stratigraphic)

MELNIKOV, A.M.

3(5) PHASE I BOOK EXPLOITATION SOV/2284

Moscow. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy neftyanoy institut

Perspektivy nefte-gazonosnosti i napravleniya geologorazvedochnykh rabot v severo-vostochnykh rayonakh Ural'o-Volzhskoy neftenosnoy oblasti; Vypusk 1 (Trudy Vsesoyuznogo soveta VNIGNI, Dekabr'1956 g., Kazan') (Oil-and Gas-bearing Possibilities and the Direction of Geological Exploration in the Northeastern Regions of the Volga-Ural Petroliferous Region. Session of the Scientific Council of the All-Union Petroleum Scientific Research Institute for Geological Exploration Held at Kazan', December 1956) Moscow, Gostoptekhizdat, 1958. 257 p. Errata slip inserted. 1,000 copies printed.

Additional Sponsoring Agency: USSR- Ministerstvo geologii i okhrany nedr.

Ed.: A.I. Kleshchev, Candidate of Geological and Mineralogical Sciences; Executive Ed.: P.N. Yershov; Tech. Ed.: E.A. Mukhina.

PURPOSE: This book is intended for petroleum geologist.

COVERAGE: This collection of articles is the result of a field session held in Kazan' in December 1956 by the scientific council of the All-Union Petroleum Scientific Research Institute for Geological Exploration. The session was attended by members of the geological services of the various petroleum research and industrial institutions of Kazan', Bugul'ma, Ufa, Perm', Kuybyshev, etc. The Council discussed the prospects and possibilities of oil and gas production in the northeastern parts of the Volga-Ural oil-bearing district, its current problems in geological surveying and exploration, and plans for future drilling. All reports, presentations, replies to queries, the resolutions and recommendations made by the council, and the chairman's concluding remarks, are reproduced in the collection. The articles are accompanied by diagrams and tables. No references are given.

TABLE OF CONTENTS:

Card 3/7

5

MEL'NIKOV, A.M.; SHPIL'MAN, I.A.

Current problems relative to exploratory deep-well drilling in the Tatar A.S.S.R. Geol.nefti 2 no.10:17-24 O '58. (MIRA 11:11)

1. Trest Tatneftegazrazvedka.
(Boring)

MEL'NIKOV, A.M.; GRIGOR'YEVA, T.Ye.

Bondyuzhskoye oil field. Geol.nefti i gaza 3 no.5:50-53 My '59.
(MIRA 12:7)

1. Trest Tatneftegazrazvedka.
(Bondyuzhskiy District--Oil fields)

MEL'NIKOV, A.M.

Zonal distribution of oil pools in the Tatar A.S.S.R.
Geol.nefti i gaza 3 no.10:25-29 O '59. (MIRA 12:12)
(Tatar A.S.S.R.--Petroleum geology)

MEL'NIKOV, A.M.

Results of oil and gas prospecting in the Tatar A.S.S.R. and prospects for the sixth five-year plan. Izv. Kazan. fil. AN SSSR. Ser. geol. nauk no. 7:221-236 '59. (MIRA 14:4)
(Tatar A.S.S.R.—Petroleum geology)
(Tatar A.S.S.R.—Gas, Natural—Geology)

KONDRIKOV, D.V., student; MEL'NIKOV, A.M., student

Experimental investigation of the elastic stability of cylindrical and spherical shells. Trudy LKI no.29:211-219 '59. (MIRA 14:7)

1. Leningradskiy korablestroitel'nyy institut, korablestroitel'nyy fakul'tet. Predstavleno professorom A.A.Kurdyumovym.
(Elastic plates and shells)

MEL'NIKOV, A.M.; VOYTOVICH, Ye.D.

Prospecting for buried Devonian structures on the eastern margin of the Melekess depression. Geol. nefti i gaza 4 no.5:9-13 My '60. (MIRA 13:9)

1. Tatneftegazrazvedka.
(Tatar A.S.S.R.--Petroleum geology)

MEL'NIKOV, A.M.

Characteristics of the distribution of Devonian oil fields in Tatarstan. Izv.Kazan.fil. AN SSSR. Ser.geol.nauk no.9:19-22 '60. (MIRA 15:12)

(Tatar A.S.S.R.—Petroleum geology)

MEL'NIKOV, A.M.

Oil potential of the Devonian sediments of the Syr'yany area.
Geol.nefti i gaza 5 no.9:49-53 S '61. (MIRA 14:10)

1. Trest Tatneftegazrazvedka.
(Syr'yany region--Petroleum geology)

MEL'NIKOV, A.M.; [redacted]OYTOVICH, Ye.D.

Oil potential of the terrigenous Devonian in the western part of the Melekes Depression. Geol.nefti i gaza 6 no.4:9-15 Ap '62. (MIRA 15:4)

1. Trest Tatneftegazrazvedka.
(Melekes Depression—Petroleum geology)

MEL'NIKOV, A.M.

Determining the dimensions of bottom girders of petroleum tankers. (MIRA 16:3)
Trudy TSNIIMF no.41:67-80 '62.
(Hulls (Naval architecture)) (Tank vessels)

MEL'NIKOV, A.M.

Effect of ancient basement upheavals on the distribution of Devonian oil fields in the Volga-Ural region. Dokl. AN SSSR 148 no.1:172-175 Ja '63. (MIRA 16:2)

1. Predstavleno akademikom A.A. Trofimukom.
(Volga-Ural region—Oil fields)
(Volga-Ural region—Geology, Structural)

PRITULA, Yu.A.; ABRIKOSOV, I.Kh.; AVROV, P.Ya.; KAZACHENKO, A.A.; KILIGINA, N.I.; KULIKOV, F.S.; MEL'NIKOV, A.M.; TATARINOV, A.G.; TROYEPOL'SKIY, V.I.; TSYPLENKOV, G.G.; SHPIL'MAN, A.I.; DAYEV, G.A., vedushchiy red.; LINDTROP, N.T., red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Volga-Ural oil-bearing region; oil potential] Volgo-Uralskaia neftenosnaia oblast'; neftenosnost'. Leningrad, Gostoptekhizdat, 1957. 175 p. (Leningrad, Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.104). (MIRA 16:8)
(Volga-Ural region--Petroleum geology)

MEL'NIKOV, A.M.; BUSEL, G.F.

New data on the oil potential of Tournai sediments in the Tatar A.S.S.R. Geol. nefti i gaza 9 no.9:13-15 S '65. (MIRA 18:9)

1. Gosudarstvennyy geologo-razvedochnyy trest neftyanoy i gazovoy promyshlennosti Tatarskoy ASSR.

L 05653-67 EWP(k)/EWT(m)/EWP(w)/EWP(v) IJP(c) EM/WW

ACC NR: AT6025578 (N) SOURCE CODE: UR/2752/66/000/072/0124/0131

50
B+1

AUTHOR: Mel'nikov, A. M.

ORG: None

TITLE: Effect of liquid in partially filled compartments on the elastic vertical oscillations of a hull

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 72, 1966. Gidromekhanika sudna (Hydromechanics of ships), 124-131

TOPIC TAGS: oscillation, parametric resonance, ship, motion mechanics, shipbuilding engineering

ABSTRACT: The author considers the hull of a tanker treated as an elastic girder with free ends and the inner cavity divided by longitudinal and transverse partitions into a number of compartments in the shape of parallelepipeds. It is assumed that these compartments are partially filled with an ideal heavy incompressible liquid. Formulas are derived for determining the effect of wave motion in this liquid on the pitching and heaving parameters of the vessel. It is shown that when conditions are favorable for the excitation of parametric oscillations of the liquid, the amplitude of forced vertical oscillations of the compartments on a vessel with a liquid cargo should be determined with regard to the reduction in the inertial mass of the vessel

UDC: 629.12:532.5

Card 1/2

L 05653-67

ACC NR: AT6025578

and the effect of the additional disturbing force. The amplitudes of vertical displacements induced by pitching and heaving on frequencies favorable for excitation of parametric liquid oscillations are quantities of small order at existing tanker speeds for presently used dimensions of cargo compartments. This precludes the necessity for taking account of the behavior of the liquid in the compartments in determining the amplitude of vertical displacements of the vessel as a solid. It is necessary to account for wave motion only in those compartments where the vertical oscillations correspond to regions of dynamic instability of the liquid. However, accounting for the effect in these sections may increase the amplitude of elastic vertical oscillations of the hull which induces parametric oscillations of the liquid in compartments which were previously disregarded. Thus the effect of the liquid on the amplitude of forced vibration of the hull must be determined with successive consideration to new compartments where increased amplitude results in parametric oscillations of the liquid. The effect of secondary force may result in a maximum amplitude of elastic hull vibrations which exceeds the amplitude determined under conditions of resonance without accounting for the oscillatory motion of the liquid. Orig. art. has: 1 figure, 6 formulas.

SUB CODE: 13,20/SUBM DATE: None/ ORIG REF: 007

Card 2/2

L 08204-67 EWT(m)/EWP(t)/ETI IJP(c) DS/JD/WB

ACC NR: AP6002206 SOURCE CODE: UR/0153/65/008/005/0804/0807

AUTHOR: Agapov, A. M.; Mol'nikov, A. M.; Kuz'min, L. L.

ORG: Ivanovo Chemical-Technological Institute, Department of Technology of Electrochemical Products (Ivanovskiy khimiko-tekhnologicheskiy institut, Kafedra tekhnologii elektrokhimicheskikh proizvodstv)

TITLE: Possibility of using a titanium anode in a galvanic cell. I. Corrosion of titanium in acid electrolytes

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 5, 1965, 804-807

TOPIC TAGS: titanium, corrosion resistance, electrolysis, perchloric acid, hydrofluoric acid, oxide formation

ABSTRACT: The corrosion resistance of Ti was determined by weighing 10 x 10 x 0.5 mm samples of titanium BT-1 sheets suspended in a polyethylene vessel and exposed to the effect of 30 ml acid solution ($HClO_4$, HF, and their mixtures) at 25C. The Ti had a high corrosion resistance in $HClO_4$: no decrease in weight and no visible changes were observed in samples exposed for 6 months to $HClO_4$ having concentrations of 100-800 g/l although the stationary potential of Ti increased with increased concentration of $HClO_4$ from 0.160 to 0.309 v. The addition of HF to the $HClO_4$ solution sharply decreased the corrosion resistance of Ti up to a certain maximum. The corrosion of Ti

UDC: 620.193.41+621.352.8

Card 1/2

ACC NR: AP6002206

in a pure HF solution increased proportionally with an increase in the concentration of HF. The presence of HF in the $HClO_4$ solution in all cases caused the activation of the Ti surface probably because of the destruction of the oxide film by fluoride ions. The activation effect of HF decreased at a larger rate at a higher concentration of $HClO_4$ in solution. An increase of the $HClO_4$ concentration from 100 to 800 g/l increased its activity from 0.932 to 1138. The concentration of fluoride ions, therefore, decreased with increased concentration of $HClO_4$. This caused a rapid accumulation of corrosion products on the surface of Ti. The dissolving of Ti in $HClO_4$, containing HF, occurred under mixed anode-cathode control and the process was decelerated equally on the anode and the cathode. The increase in concentration of $HClO_4$ promoted (1) an increase in thickness of the oxide film, which was indicated by changes in the values of the stationary potential, and (2) an increase in activity of H ions facilitating depolarization of H and causing the formation of maximums on the corrosion rate curve. The displacement of the maximum to the left side of the curve, i.e., to the side of lower concetrantions, during enrichment in HF of the solution, was related to a stronger effect of corrosion agents resulting in rapid passivation of the anode sections. Orig. art. has: 2 fig. and 2 tables.

SUB CODE: 09,11/ SUBM DATE: 15Jun64/ ORIG REF: 002/ OTH REF: 004

ALEKSEYEV, G.P.; ANDON'YEV, V.S.; ARNGOL'D, A.V.; BASKIN, S.M.; BASHMAKOV, N.A.; BEREZIN, V.D.; BERMAN, V.A.; BIYANOV, T.F.; GORBACHEV, V.N.; GRECHKO, I.A.; GRINBUKH, G.S.; GROMOV, M.F.; GUSEV, A.I.; DEMENT'YEV, N.S.; DMITRIYEV, V.P.; DUL'KIN, V.Ya.; ZVANSKIY, M.I.; ZENKEVICH, D.K.; IVANOV, B.V.; INYAKIN, A.Ya.; ISAYENKO, P.I.; KIPRIYANOV, I.A.; KITASHOV, I.S.; KOZHEVNIKOV, N.N.; KORMYAGIN, B.V.; KROKHIN, S.A.; KUDOYAROV, L.I.; KUDRYAVTSEV, G.N.; LARIN, S.G.; LEBEDEV , V.P.; LEVCHENKOV, P.N.; LEMZIKOV, A.K.; LIPGART, B.K.; LOPAREV, A.T.; MALYGIN, G.F.; MILOVIDOVA, S.A.; MIRONOV, P.I.; MIKHAYLOV, B.V., kand. tekhn. nauk; MUSTAFIN, Kh.Sh., kand. tekhn. nauk; NAZIMOV, A.D.; NEFEDOV, D.Ye.; NIKIFOROV, I.V.; NIKULIN, I.A.; OKOROCHKOV, V.P.; PAVLENKO, I.M.; PODROBINNIK, G.M.; POLYAKOV, G.Ya.; PUTILIN, V.S.; RUDNIK, A.G.; RUMYANTSEV, Yu.S.; SAZONOV, N.N.; SAZONOV, N.F.; SAULIDI, I.P.; SDOBNIKOV, D.V.; SEMENOV, N.A.; SKRIPCHINSKIY, I.I.; SOKOLOV, N.F.; STEPANOV, P.P.; TARAKANOV, V.S.; TREGUBOV, A.I.; TRIGER, N.L.; TROITSKIY, A.D.; FOKIN, F.F.; TSAREV, B.F.; TSETSULIN, N.A.; CHUBOV, V.Ye., kand. tekhn. nauk; ENGEL', F.F.; YUROVSKIY, Ya.G.; YAKUBOVSKIY, B.Ya., prof.; YASTREBOV, M.P.; KAMZIN, I.V., prof., glav. red.; MALYSHEV, N.A., zam. glav. red.; MEL'NIKOV, A.M., zam. glav. red.; RAZIN, N.V., zam. glav. red. i red. toma; VARPAKHOVICH, A.F., red.; PETROV, G.D., red.; SARKISOV, M.A., prof., red.; SARUKHANOV, G.L., red.; SEVAST'YANOV, V.I., red.; SMIRNOV, K.I., red.; GOTMAN, T.P., red.; BUL'DYAYEV, N.A., tekhn. red.

(Continued on next card)

ALEKSEYEV, G.P.---(continued). Card 2.

[Volga Hydroelectric Power Station; a technical report on the design and construction of the Volga Hydroelectric Power Station (Lenin), 1950-1958] Volzhskaia gidroelektrostantsiia; tekhnicheskii otchet o proektirovanii i stroitel'stve Volzhskoi GES imeni V.I.Lenina, 1950-1958 gg. V dvukh tomakh. Moskva, Gosenergoizdat. Vol.2.[Organization and execution of construtions and assembly work] Organizatsiia i proizvodstvo stroitel'no-montazhnykh rabot. Red. toma: N.V.Razin, A.V.Arngol'd, N.L. Triger. 1962. 591 p. (MIRA 16:2)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Razin).
(Volga Hydroelectric Power Station (Lenin)--Design and construction)

MEL'NIKOV, A.M.

Waves of a liquid in a vertical oscillating vessel.
Trudy TSNIIMF no.66:9-20 '65. (MIRA 18:12)

SOV/98-59-3-11/17

AUTHOR: Mel'nikov, A.N., Engineer

TITLE: The Criterion for the Transition of a Perfect Hydraulic Surge Into an Imperfect in a Rectangular Prismatic Trough With a Horizontal Bottom (O kriterii pereknoda sovershennogo pryzhka vody v neso- vershennyy v pryamougol'nom prizmaticheskom rusle s gorizontal'nym dnom)

PERIODICAL: Gidrotekhnicheskoy stroitel'stvo, 1959, Nr 3, pp 49-51 (USSR)

ABSTRACT: The author presents analytical and graphic calculations to prove that the constant value of Froude's number (Fr_1) in an initial section of the surge, which is equal 3 (up to now considered as a criterion of transition of a perfect hydraulic surge into an imperfect one), can be considered as such only in cases when the surge occurs in the compressed section of the stream. A series of tests was conducted in two rectangular troughs, and the surge was formed when water flowed beneath a shield placed in different

Card 1/2

diametrical sections of the trough. At a precisely calculated water debit, corresponding to a given elevation of the shield, the transition of a perfect surge into an imperfect one occurred. From data obtained from this series of tests, the author established that this transition does not occur at the constant value of Froude's number in the initial section of the surge, but at its variation from 2,3 to 10.8. The higher the shield is elevated, the smaller is Froude's number. Therefore, the present criterion of the transition of a perfect hydraulic surge into an imperfect one must be considered only as a particular case of surge formation in compressed sections of the stream. There are 1 diagram, 1 graph, 1 table and 3 Soviet references.

MEL'NIKOV, A.N. (Omsk)

Wheel slip protection on electrified units. Elek. i tepl. tiaga 3 no.3:15-16 Mr '59. (MIRA 12:5)
(Wheel pairs) (Electric railroads--Equipment and supplies)

HEL'NIKOV, A.P.; SNAGOVSKIY, Ye.S., otvetstvennyy redaktor; KOROVENKOVA, Z.K., tekhnicheskiy redaktor.

[Signalling, central control and block system (STsB) in underground mine transportation] Signalizatsiia, tsentralizatsiia i blokirovka (STsB) na podzemnom transporte shakht. Moskva, Ugletekhizdat, 1953. 95 p. [Microfilm] (MLRA 7:11)
(Mine railroads) (Railroads--Signaling)

MEL'NIKOV, A.P.

K teorii pogranichnogo sloia kryla. (Leningrad. Institut inzhenerov grazhdanskogo vozdushnogo flota, 1938, no. 12, p. 73-141, tables, diagrs.)

Title tr.: Theory of the boundary layer of a wing.

TL 725.A1L4 1938, no.12

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

MEL'NIKOV, A., professor, doktor tekhnicheskikh nauk.

S.A.Chalygin is an outstanding Soviet aerodynamicist. Kryl. rod. 2 no.10:7-9 O '51. (MLRA 8:8)
(Chalygin, Sergei Alekseevich, 1869-)

MEL'NIKOV, A. P.

Among the papers [illegible] First All-[illegible] Conference [illegible]
[illegible] ([illegible]) [illegible]
Mel'nikov, A [illegible] USSR, [illegible]:

"Questions on the Stability of Laminar Boundary Layers and the Calculation of the Point of Turbulent Passing Over on a Wing" by Mel'nikov, A. P.

SO: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk, No. [illegible], Moscow, June 1953, (W- 30772, 12 July 1954)

MEL'NIKOV, A.P.

KHYLOV, V.Ya., kandidat tekhnicheskikh nauk; MEL'NIKOV, A.P., doktor tekhnicheskikh nauk, redaktor.

[Development of helicopter construction in the U.S.S.R.] Razvitie vertoletostroeniia v SSSR. Leningrad, Vses. ob-vo po rasprostraneniiu polit. i nauchn.znanii, Leningradskoe otd-nie 1955. 42 p. [Microfilm] (MLRA 9:1)
(Helicopters)

Mel'Nikov, A.

AID P - 2247

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 11/19

Author : Mel'nikov, A., Col. Engineer, Doc. of Tech. Sci.

Title : Lifting force and wave resistance of wings in supersonic flow

Periodical: Vest. vozd. flota, 7, 50-63, Jl 1955

Abstract : The author considers two kinds of supersonic airfoils: the lens type and the rhomboidal. In particular, he discusses the following topics: thin supersonic wing of arbitrary form in the plane, basic aerodynamic characteristics of wings of infinite span in supersonic flow, influence of wing tips, lifting force and inductive-wave resistance of a thin rectangular wing of finite span in supersonic flow, lifting force and inductive-wave resistance of triangular wings in supersonic flow, influence of the thickness and shape of the profile of the wing on its resistance in supersonic flow; and friction resistance in a supersonic flow.

Institution: None

Submitted : No date

AID P - 3685

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 12/22

Author : Mel'nikov, A. P., Eng. Col., Prof., Dotsent of Tech. Sci.

Title : Boundary layer in supersonic speed

Periodical : Vest. vozd. flota, 1, 45-58, Ja 1956

Abstract : This is a brief and elementary but very comprehensive study of the boundary layer (BL) at supersonic speed. In particular the author analyzes the following problems: Structure of the BL, laminar and turbulent BL, separation of the BL, thickness of the BL, passage of the laminar BL into a turbulent flow, the point of separation, influence of the M number and temperature of the surface on the position of the point of separation, interaction of the BL, and shock waves in transsonic regions.

Institution : None

Submitted : No date

AID P - 4730

Subject : USSR/Aeronautics - aerodynamics

Card 1/1 Pub. 135 - 11/23

Author : Mel'nikov, A. P., Eng.-Col., Prof., Dr. of tech. sci.

Title : Kinetic heating at supersonic flight speeds

Periodical : Vest. vozd. flota, 7, 52-63, Jl 1956

Abstract : The problem of kinetic heating at supersonic speeds is discussed. The article contains 4 subheadings as follows: 1. Retardation of gas as the cause of kinetic heating; 2. The increase of air temperature in the boundary layer at the surface of a body; 3. The transfer of heat from the retarded air to the aircraft. The effect of time on heating; 4. The "thermal barrier" and means for its prevention. Seven diagrams and graphs, 2 photos. The article merits attention.

Institution : None

Submitted : No date

AID P - 4632

Subject : USSR/Aeronautics - bibliography

Card 1/1 Pub. 135 - 21/23

Author : Mel'nikov, A. P., Eng.-Col., Prof., Dr. of tech. sci.

Title : High-speed aerodynamics

Periodical : Vest. vozd. flota, 4, 85-87, Ap 1956

Abstract : A critical review of the book "High-speed aerodynamics" by W. F. Hilton, translated from English and published by the publishing house of foreign literature, Moskva, 1955, 504 pages.

Institution : None

Submitted : No date

MEL'NIKOV, A.P.

86-1-16/30

AUTHOR: Mel'nikov, A.P., Eng Col, Professor, Doctor of Technical Sciences

TITLE: Aerodynamics of Delta Wing (Aerodinamika treugol'nogo kryla)

PERIODICAL: Vestnik Vozdushnogo Flota, 1958, Nr 1, pp. 45-52 (USSR)

ABSTRACT: The author briefly describes the aerodynamical properties of a delta wing. He states that in 1923 gliders of B.I. Cheranovskiy, whose wings were almost of a triangular planform and which had a small aspect ratio, already flew, as well as in 1936 an experimental plane of A.S. Moskalev, whose delta wing had an aspect ratio $\lambda \approx 1$; that up to 1945, planes with aspect ratio less than 5 were unusual, and that the arrow wings and empennages were employed in order to overcome the "sonic barrier". In Fig. 1 and 2, the author compares the polars and curves c_y f (α) of a

Card 1/4

Aerodynamics of Delta Wing (Cont.)

rectangular and an arrow wing whose aspect ratio is $\lambda = 5$ with those of a delta wing whose aspect ratio is $\lambda = 2$. In Fig. 3 he shows the dependence of the resistance $Q = c_x \frac{\rho V^2}{2} S$ on M for two rectilinear wings of a small thickness (5 and 3%). He points out that according to the theoretical and experimental data the delta wings are not superior, from the aerodynamical point of view, to the arrow and rectangular wings when their geometrical parameters (thickness, aspect ratio) are identical. Presently the aerodynamical characteristics of wings have been determined by means of, so called, linear theory. In Fig. 4 the author presents the maximum aerodynamic efficiency K_{max} for wings of three different forms, calculated by the linear theory. By means of Fig. 5a, where the dependence of c_{xp} on the effective aspect ratio $\lambda_э = \lambda\sqrt{M^2-1}$ is presented, the author compares, with reference to the relative coefficient of minimum wave resistance, the delta and the arrow wings at M slightly higher than unit (at $\lambda_э$ less than 2). In Fig. 5b he compares, with reference to the relative lift force coefficient, the delta, rectangular and arrow wings. The comparison

Aerodynamics of Delta Wing (Cont.)

is based on calculations done by means of linear theory. In Fig. 6 the author compares the resistance of arrow and delta wings by means of curves, representing the minimum resistance, plotted for two arrow and two delta wings. Further, the author discusses briefly the wing characteristics, characterizing the moments which affect the stability and controllability. In Fig. 8 he shows the variation of the lateral and directional stabilities of the delta and arrow wing aircraft. The lateral stability, caused by sweep back, he expresses by a formula $m_x \beta_{sweep} = k_1 c_y \tan \chi$, and the directional stability by a formula $m_y \beta_{sweep} = k_2 c_y^2 \tan \chi$. In Fig. 10 he shows how the deflection of the ailerons affects the polar of a tailless delta wing aircraft.

Card 3/4

Aerodynamics of Delta Wing (Cont.)

The author arrives at the conclusion that the most essential disadvantage of a tailless delta wing aircraft is the highly reduced maneuverability. In addition, the deflection of ailerons, which balance the aircraft during a flight at large angle of attack, reduces c_y and increases c_x of the wing. There are 3 photos and 10 diagrams.

AVAILABLE: Library of Congress

Card 4/4

MEL'NIKOV, A.P., inzh.-polkovnik, prof., doktor tekhn. nauk; GREBNEV, O.K., inzh.-podpolkovnik, dots., kand. tekhn. nauk.

"Aerodynamics of rotating bodies" by N.F. Krasnov. Reviewed by A.P. Mel'nikov and O.K. Grebnev. Vest. Vozd. Fl. 41 no.12:81-82 D '58. (MIRA 11:12)

(Aerodynamics)
(Krasnov, N.F.)

PHASE I BOOK EXPLOITATION SOV/5969

Mel'nikov, Aleksandr Petrovich, Professor, Doctor of Technical Sciences

Aerodinamika bol'shikh skorostey; osnovy gazodinamiki letatel'nykh apparatov (High-Speed Aerodynamics; Principles of Aircraft Gas Dynamics) Moscow, Voyennoye izd-vo M-va obor. SSSR, 1961. 423 p. 16,000 copies printed.

Ed.: A. N. Shil'tsev; Tech. Ed.: R. L. Solomonik.

PURPOSE: This book is intended for the flying, engineering, and technical personnel of the Soviet Air Force, the Civil Air Fleet, and the All-Union Voluntary Society for the Promotion of the Army, Aviation, and Navy. It may also be useful to students at aviation schools.

COVERAGE: The book discusses the fundamentals of aerodynamics and the application of aerodynamics to modern aircraft for Mach numbers from those close to zero to about Mach 20. Particular attention is

Card 1/4

given to flows about bodies at near-sonic and supersonic speeds with air compressibility and aerodynamic heating taken into account. No personalities are mentioned. The book is based on Soviet and non-Soviet open sources. There are 14 references, all Soviet, (3 translations). The bibliography also refers to non-Soviet periodicals.

TABLE OF CONTENTS [Abridged]:

AVAILABLE: Library of Congress (TL571.M4)

SUBJECT: Aerospace

Card 4/4

AD/wrc/ldc
8/10/62

MELNIKOV, A.S.

24(1) PHASE I BOOK EXPLOITATION SOV/3150

Vsesoyuznaya konferentsiya prepodavateley pedagogicheskikh institutov

Primeneniye ul'trakustiki k issledovaniyu veshchestva; trudy konferentsii, Vyp. 7 (Application of Ultrasonics for Analysis of Substances; Transactions of the All-Russian Conference of Professors and Teachers of Pedagogical Institutes, Nr 7) Moscow, Izd. MOPI, 1958. 283 p. 1,500 copies printed.

Tech. Ed.: S. P. Zhitov; Eds.: V. P. Nozdrev, Professor, and B. B. Kudryavtsev.

PURPOSE: This book is intended for physicists, technicians, aeronautical engineers and other persons concerned with ultrasonics.

COVERAGE: The book contains twenty eight articles which treat ultrasonic phenomena in five general categories: 1) historical data on the development of ultrasonics in the Soviet Union over the past forty years; 2) the speed of sound in suspensions of varying concentration and number and type of components and the relationship between sound velocity and the compressibility of electrolytes; 3) ultrasonic investigations of physical and chemical properties of materials and the determination of physical and chemical constants, e. g. density of aqueous solutions, adiabatic compressibility, polarity of solutions (with given temperatures), viscosity, surface tension, saturation pressure and also ultrasonic investigation of the carbon content and petrographic state of coal; 4) industrial applications of ultrasonics, e. g. emulsification of reagents, cleansing of textile fibers and enhancing the susceptibility of some synthetic fibers to dyeing, etc.; and 5) apparatus which produce ultrasonic waves. No personalities are mentioned. References accompany each article.

Card 6/7

KUDRYAVTSEV, Yuriy Georgiyevich; MELAMED, Vladimir Ionovich, kand.tekhn.nauk; MEL'NIKOV, Andrey Sergeyevich; KUTUKOV, V.F., inzh., retsenzent; ROZENTSVEYG, V.D., inzh., retsenzent; KUNIN, N.F., doktor fiz.-mat. nauk, red.; DUGINA, N.A., tekhn. red.

[Production and use of ceramic articles in the machinery industry] Proizvodstvo i primenenie mineralokeramicheskikh izdelii v mashinostroenii. Pod red. N.F.Kunina i V.I.Melameda. Moskva, Mashgiz, 1962. 157 p. (MIRA 15:10)
(Machinery industry) (Ceramics)

MEL'NIKOV, Aleksandr Stepanovich; MIKHAYLOVSKIY, Vladimir Ivanovich; NOVOSPASSKIY, V.V., redaktor; RAKOV, S.I., tekhn.redaktor.

[From Sochi to Krasnaya Polyana] Ot Sochi do Krasnoi Poliany. [Moskva] Izd-vo VTsSPS Profizdat, 1955. 127 p. (MLRA 9:4)
(Krasnodar Territory--Guidebooks)

[illegible]L'[illegible], A. S., Cand Geol-Mineral Sci — [illegible] "[illegible] volcanism and [illegible] mineralization [illegible]," [illegible]-Kazan', 1[illegible], 19 pp (Kazan' State Univ [illegible] Ul'[illegible]-Lenin) ([illegible]L, [illegible], 1[illegible])

OVCHINNIKOV, L.N.; YAROSH, N.A.; MEL'NIKOV, A.S.

Chernaya Sopka skarns. Trudy Gor.-geol. inst. UFAN SSSR no. 35:3-19 '60. (MIRA 14:1)
(Chernaya Sopka Massif (Northern Urals)--Skarns)

KEL'NIKOV, A.S.

Zunyite in secondary quartzites of the Ivdel' region (Northern Urals). Trudy Gor.-geol. inst. UFAN SSSR no. 35:133-135 '60.
(MIRA 14:1)

(Ivdel' region--Zunyite)

MEL'NIKOV, A.S.; VOLKOV, S.N.; YEROSHEVSKAYA, R.I.

Silurian and Devonian of the Northern Sos'va region. Trudy VSEGEI 86:87-101 '62. (MIRA 17:11)

VARVARZHOVSKIY, Ludvig [Varvarovsky, Ludvik]; GRACHEV, I.G. [translator]; MEL'NIKOV, A.S. [translator]; PASHKOV, A.V., kand. voyen. nauk, polkovnik, red.; BULATOV, A.A., kand. voyen. nauk, polkovnik, red.; PAVLOV, P.L., red.; SRIBNIS, N.V., tekhn. red.

[Maneuverability] Manevrennost'. Moskva, Voenizdat, 1963. 172 p. Translated from the Czech. (MIRA 16:10)
(Germany--Military meneuvers)
(Germany--Strategy)

MEL'NIKOV, A.S.

Some demonstrative experiments in acoustics. Mat i fiz Enlg 8 no.1:54-56 Ja-F '65.

1. N.K.Krupskaya Pedagogic Institute, Moscow.

ROMANOV, V.V., kand.tekhn.nauk; MEL'NIKOV, A.V., inzh.

Devices for charging silver-zinc storage batteries with an asymmetric alternating current. Vest. elektroprom. 32 no 7: 73-75 Jl '61. (MIRA 14:10)

(Storage batteries)

AUTHORS: Morozov, A. A., Mel'nikov, [illegible] V., Skripov, F. L. SOV/48-22-9-37/40

TITLE: Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power (Metodika svobodnoy yadernoy induktsii v slabykh magnitnykh polyakh v primenenii k nekotorym zadacham radiospektroskopii vysokoy razreshayushchey sily)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958, Vol 22, Nr 9, pp 1141 - 1144 (USSR)

ABSTRACT: In the paper cited by reference 1 a new method of observation of free nuclear precession was found which permits to extend the investigations of this phenomenon to the region of very weak magnetic fields. This report gives two examples of the application of this method in radiospectroscopy. The first problem is the investigation of the fine structure of the nuclear resonance signals. This type of structure is caused by the indirect interaction of non-equivalent nuclei in the molecule.

Card 1/4

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power

$O=P(-O-CH_2-CH_2-CH_2-CH_3)_3$ was chosen as specimen for the examination. When only the earth's magnetic field is present the chemical displacements disappear. Hence such splittings disappear which were caused by the indirect magnetic interaction between the proton groups (the condition $|\nu_A - \nu_B| \gg a/h$ not being satisfied). Such a simplification of the spectrum permits to emphasize the individual mutual nuclear actions (in this case H^1 and P^{31}). This is a great advantage offered by the method of weak fields. Notwithstanding the fact that the spectrum is simplified to a certain degree, a certain variety in the valence of the protons is still retained. It is caused by a different interaction with the P^{31} nucleus. This variety apparently is sufficient to permit the spin-spin bindings of the protons with each other to begin to exert a noticeable influence on the character of the spectrum. The interrelations of the resonance

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power

SOV/48-22-3-37/42

frequencies $\nu(F^{19})/\nu(H^1) = k(F^{19})/k(H^1)$ in the magnetic field of the earth were determined experimentally and the results were compared with evidence existing for the range of strong fields. After a generalization based upon several measurements these results were obtained:

$CF_2CL - CFCL_2$ and H_2O: $k(F^{19})/k(H^1)=0,940920 \pm 0,000020$;

$CFCL_3$ and H_2O: $k(F^{19})/k(H^1)= 0,940987 \pm 0,000030$.

The difference between the data for strong and for weak fields is only 0,0015% and does not exceed the experimental error. As regards the pair $CFCl_3$-water, no data are known for it in strong fields. Nevertheless it was possible to compute the chemical displacement of the signal F^{19} between $CF_2Cl - CFCl_2$ and $CFCl_3$ in the earth's magnetic field. The measurements of this quantity in strong fields (Ref 8) furnished a difference which also does not exceed the experimental error. There are 2 figures

Card 3/4

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power SOV/48-22-9-37/40

and 8 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos.universiteta im.A.A.Zhdanova (Scientific Research Institute of Physics at the Leningrad State University imeni A.A.Zhdanov)

Card 4/4

L 21198-66 EWT(1)/FCC IJP(c) WH/GG/GS/GH

ACC NR: AT6004605 (N) SOURCE CODE: UR/0000/65/000/000/0049/0063

49
B+1

AUTHOR: Mel'nikov, A. V.

ORG: none

21,49,55

TITLE: Use of nuclear magnetic resonance for differential measurements in the magnetic field of the earth

12,44,55

SOURCE: Leningrad. Universitet. Yadernyy magnitnyy rezonans (Nuclear magnetic resonance). no. 1, 1965, 49-63

TOPIC TAGS: nuclear magnetic resonance, earth magnetic field, magnetometer

ABSTRACT: The author discusses the principles for constructing systems to use the nuclear magnetic resonance method for differential measurements in the magnetic field of the earth and some of the physical problems involved in putting these systems into operation. The literature on differential magnetometers is reviewed and the problems of reducing inherent noises and shielding from external interference are considered. An approximate comparative evaluation is made of the freedom from interference in various differential magnetometers with the following simplifying

2

Card 1/2

L 21198-66
ACC NR: AT6004605

assumptions: 1. the spectral density of the input noises for the equipment in the working frequency range is constant; 2. the noise factor for all systems is identical and is determined by the devices preceding the indicator. Some additional sources of error are discussed. Orig. art. has: 7 figures, 15 formulas.

SUB CODE: 08,20/ SUBM DATE: 03Nov65/ ORIG REF: 013/ OTH REF: 008

Card 2/2 dda

L 21199-66 EWT(1) IJP(c) GS
ACC NR: AT6004606 (N) SOURCE CODE: UR/0000/65/000/000/0064/0075

AUTHOR: Madiyevskaya, E. Kh.; Mel'nikov, A. V.; Moskalev, V. V.

ORG: none

TITLE: Behavior of the vector of nuclear magnetization when the polarizing magnetic field is cut off

SOURCE: Leningrad. Universitet. Yadernyy magnitnyy rezonans (Nuclear magnetic resonance). no. 1, 1965, 64-75

TOPIC TAGS: nuclear magnetic resonance, magnetic field, relaxation process

ABSTRACT: The authors consider the method of free nuclear precession in weak magnetic fields and study the transition processes which take place when the polarizing magnetic field is cut off. The behavior of the nuclear magnetization vector is considered for two simple cases: 1. a change in the external field intensity while the orientation is held constant; 2. uniform rotation of the field while its intensity is held constant. In the first case, the vector of nuclear magnetization, which is directed initially along the field, does not change its direction. After

Card 1/2

a certain relaxation time, its intensity also remains constant. In the second case, the behavior of the vector is considerably dependent on the ratio of angular velocities for the Larmor precession and field rotation. The cases of fast and slow cutoff are considered. Approximate formulas are derived for calculating practical switch-off methods when using the free nuclear precession method for solving problems in metrology, geophysics and geology, radiospectroscopy, archeology, etc. Orig. art. has: 8 figures, 30 formulas.

SUB CODE: 20/ SUBM DATE: 03Nov65/ ORIG REF: 004/ OTH REF: 006

RYSS, M.A.; DMITRIYEVA, G.V.; SMIRNOVA, A.S.; Prinimali uchastiye: RUKAVISHNIKOVA, V.V.; KOTEL'NIKOVA, I.A.; ZHIVYKH, T.I.; BAZHENOV, A.N.; MEL'NIKOV, A.V.

Ways of improving the performance characteristics of electrodes for steel smelting furnaces. Stal' 25 no.5:423-425 My '65. (MIRA 18:6)

MEL'NIKOV, A.Ya.

Hydrostatic leveling instrument for determining the elevation of points in geophysical observations. Razved. geofiz no.2:104-107 '64. (MIRA 18:5)

ACC NR: AP6025607 SOURCE CODE: UR/0413/66/000/013/0049/0049

INVENTORS: Aksenov, B. Ye.; Shpak, B. T.; Mol'nikov, A. Ya.

ORG: none

TITLE: A device for burning holes in aircraft blades. Class 21, No. 183297

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 49

TOPIC TAGS: aircraft propeller, electric equipment, electric device, flaw detection

ABSTRACT: This Author Certificate presents a device for burning holes in aircraft propeller blades. The equipment consists of a holder with electric cables fixed to it and of electric needles fixed in its body. To locate hidden holes in the rubber coating and to burn them through, two needle-like pinches are fixed to the body. These pinches enter the previously located holes in the propeller, while the electric needle is placed at a desired distance from them.

SUB CODE: 13/ SUBM DATE: 30Jun64

Card 1/1 UDC: 621.365 629.13.01/06

MEL'NIKOV, B.P., kandidat tekhnicheskikh nauk; TSIRLIN, Yu.A., kandidat tekhnicheskikh nauk; KEVER, K.A.

A new simplified system for producing furfurole in hydrolysis plants. Gidroliz. i lesokhim. prom. 8 no.2:10-12 '55. (MLRA 8:10)

1. Starshiy laborant Vsesoyuznogo Nauchno-issledovatel'skogo instituta gidroliznoy i sul'fitno-spirtovoy promyshlennosti (for Kever) (Furaldehyde)

AUTHORS: Mel'nikov A V Morozov A A. 57-28-4-36/39
Rotshteyn A. Ya Skripov F I
Smirnov S. V.

TITLE: A Method of Free Nuclear Induction for Measuring Weak Magnetic Fields (Metodika svobodnoy yadernoy induktsii dlya izmereniya slabykh magnitnykh poley)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki 1958 Vol 28. Nr 4, pp 910-912 (USSR)

ABSTRACT: A laboratory apparatus for the measurement of weak magnetic fields according to the method of free nuclear induction was here set up and tested. The fundamental data of this apparatus are given here. The sender: the proton-resonance in distilled water (k=0.23483 Gauss/kilocycles, $T_2 \simeq 3$ sec) was used. The receiving coil had 8000 windings and formed part of the resonance-circuit with a figure of merit of about 30 and a natural frequency variable around 2 kilocycles. The auxiliary field was produced by a one-layered solenoid of a square cross sec-

Card 1/3

tion It was possible to use an amperage of up to 15 A in the case of 1'mm wire diameter which guaranteed an H^{*} = 1oo Gauss The amplifier: from the input circuit the signal proceeds to the input of a three-cascade-R C -amplifier with pentodes An amplification-factor of about $1o^{5}$ was usually used The band width of the amplifier is about 3 kilocycles the effective band for the noise is determined by the circuit and is about 7o cycles. The ob= servation of the free nuclear induction: When the signal is after the amplifier transmissed across a cathode follower to a loop-oscillograph the envelope curve of the signal is obtained on the picture in the case of a low velocity of the film. At a high velocity it is also possible to dissolve individual oscillations For the exact frequency-measuremen- of the free nuclear induction the method of beating with the standardized frequency of 2142.3 cycles was employed The measurement of the field-gradients: When 2 coils of a static free sender are fastened in points, where the magnetic field strength is different, due to the frequency difference of the precession in the signal of nuclear induction itself a beating forms whose frequency is a measure for the field difference. The

A Method of Free Nuclear Induction for Measuring Weak Magnetic Fields

57-28-4-36/39

management of the Scientific Research Institute for Metrology and Yanovskiy, B. M., Professor, made it possible to perform the experiments in the rooms of the Magnetic Laboratory of the VNIIM in Kavgolovo. There are 1 figure and 10 references.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gosudarstvennogo universiteta (Leningrad, Scientific Research Institute for Physics of the State University). Vsesoyuznyy institut metodiki i tekhniki razvedki Ministerstva geologii i okhrany nedr (All-Union Institute for Geological Prospecting Methods and Techniques at the Ministery for Geology and Protection of Mineral Resources)

SUBMITTED: October 11, 1956

Card 3/3

MEL'NIKOV, A.V., tekhnik.

More accurate recording vacuum gauge. Elek. sta. 27 no.10:54 O '56.
(Vacuum gauges) (MLRA 9:12)

SOV/58-59-9-21044

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 9, p 234 (USSR)

AUTHORS: Molchanov, A.P., Gyunninen, E.M., Mel'nikov, A.V., Molchanov, Al.P., Myasnikov, L.L., Rysakov, V.N., Skripov, F.I., Filippov, M.M.

TITLE: Results of the Observations of the Solar Eclipses of 1952 and 1954 at a Wavelength of 3.2 cm

PERIODICAL: V sb.: Polnyye solnechn. zatmeniya 25 fevr. 1952 g. i 30 iyunya 1954 g. Moscow, AN SSSR, 1958, pp 331 - 332

ABSTRACT: The authors give the results of the radio observations of the solar eclipses of 25 Feb. 1952 and 30 June 1954. The residual intensities of the sun's radio emission amount to $< 4\%$ and 0.98% respectively.

Card 1/1

MODIN, Nikolay Alekseyevich; YEROSHKIN, Aleksandr Nikolayevich; MEL'NIKOV, Aleksandr Vasil'yevich; GUDTSEV, Richard Ivanovich; GOLUBEVA, T.M., red.; FREGER, D.P., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Equipment of small briquet plants for the briquetting of chipped wood waste] Oborudovanie malogabaritnykh briketnykh stantsii dlia briketirovaniia izmel'chennykh otkhodov drevesiny. Leningrad, 1961. 29 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Derevoobrabatyvaiushchaia promyshlennosti', no.10) (MIRA 15:5)
(Wood-using industries--Equipment and supplies)

STESIN, Ye.L., kand.tekhn.nauk; MYSHINSKIY, L.N., inzh.; MEL'NIKOV, A.V., inzh.

Designing cutter-loaders with an auger boring machine. Mekh.i avtom.proizv. 14 no.9:32-34 S '60. (MIRA 13:9)
(Coal mining machinery)

RYSS, M.A.; DMITRIYEVA, G.V.; SMIRNOVA, A.S.; Prinimali uchastiye: RUKAVISHNIKOVA, V.V.; KOTEL'NIKOVA, I.A.; ZHIVYKH, T.I.; BAZHENOV, A.N.; MEL'NIKOV, A.V.

Ways of improving the performance characteristics of electrodes for steel smelting furnaces. Stal' 25 no.5:423-425 My '65. (MIRA 18:6)

MEL'NIKOV, Aleksandr Vasil'yevich DECEASED (1889-1958) 1964

Surgery

CHERTETSOV, V.N.; MEL'NIKOV, B.A.

Semiautomatic apparatus for painting in an electric field and for drying painted articles with thermal radiation. Lakokras. mat. i ikh prim. no.6:71-72 '61. (MIRA 15:3)
(Painting, Industrial--Equipment and supplies)

MEL'NIKOV, B.A.

Controlling the corrosion of condensers in petroleum-refining equipment. Nefteper. i neftekhim. no.10:18-19 '63. (MIRA 17:2)

1. Groznenskiy neftepererabatyvayushchiy zavod.

MEL'NIKOV, B.F., inzh.

Grapple and scarifier. Transp. stroi. 13 no.7:66 Jl '63.
(MIRA 16:9)

(Earthmoving machinery)

MEL'NIKOV, B.G.

Concentration equation of a stage countercurrent interfacial exchange. Khim. i tekh.topl.i masel 6 no.7:16-21 Jl '61.
(MIRA 14:6)
(Distillation, Fractional) (Mass transfer)

MEL'NIKOV, B.G.

Analysis of the equation for concentrations of stepwise countercurrent interfacial exchange. Zhur. prikl. khim. 37 no.2:317-325 F '64. (MIRA 17:9)

MEL'NIKOV, B.G.

Concentration equation for a rectification column. Zhur. prikl. khim. 37 no.9:1966-1971 S '64.

BURLUTSKIY, B.D., gornyy inzh.; MEL'NIKOV, B.G., gornyy inzh.

Use of combined and dispersed charges in the breaking of mica-containing rocks. Gor. zhur. no.10:57-58 O '65. (MIRA 18:11)

1. Irkutskiy nauchno-issledovatel'skiy institut redkikh metallov, Irkutsk.

MEL'NIKOV, B.I., inzhener.

Minimum slopes for ditches. Transp. stroi. 6 no.3:29-30 Mr '56.
(Ditches) (MLRA 9:7)

SHURA-BURA, B.L.; TARARIN, R.A.; MEL'NIKOV, B.K.

Radioactive tagging of the brown rat as a method of studying migration problems. Zool. zhur. 39 no.11:1700-1706 N '60. (MIRA 14:1)

1. S.M.Kirov Military-Medical Academy, Leningrad and Leningrad Municipal Disinfection Station.
(Animals, Marking up) (Radioactive tracers)

MEL'NIKOV, B. K. (Veterinary Doctor, Belozersk Inter-District Veterinary Bacteriological Laboratory, Vologda Oblast'). (Abstracted by V. A. ALIKAYEV)

"Use of Florinskii's apparatus..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 83

L 8450-65 EWT(d)/EPA/EWT(l)/EPA(b)/EWT(m)/FA/T-2 Pd-4/Paa-4 AEDC(b)/ASD(f)/ASD(a)-5/AFWL/AFETR/AEDC(a)/APTC(a)/ESD(ga)

ACCESSION NR: AP4044616 S/0046/64/010/003/0327/0329

AUTHOR: Mel'nikov, B. N.

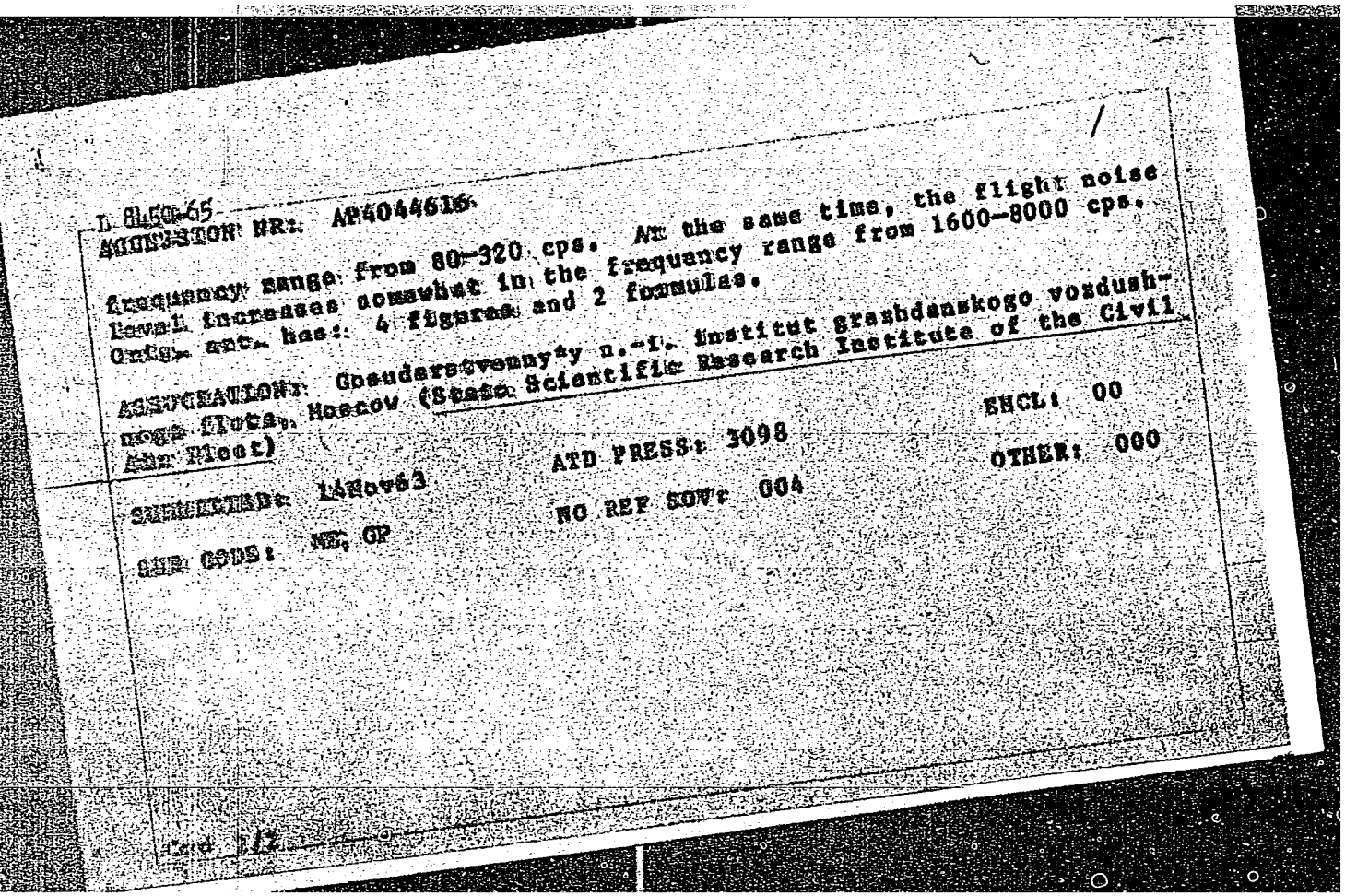
TITLE: Effect of the flight velocity of the TU-124 aircraft on the noise radiated by its engines

SOURCE: Akusticheskiy zhurnal, v. 10, no. 3, 1964, 327-329

TOPIC TAGS: aerodynamics, acoustics, jet noise, aircraft motion, TU-124 aircraft, jet engine noise reduction, flight velocity change

ABSTRACT: The principal features of noise generated aerodynamically by the TU-124 aircraft during changes in flight velocity were studied experimentally. The direct measurements of acoustic power output of the TU-124 were then compared with theoretical data obtained earlier by M. J. Lighthill and J. E. Williams for a moving jet stream. Analysis of the experimental data revealed that, for the TU-124 flying at an altitude of the order of 100 m, maximum radiation is reached at $\theta \approx 40°$, whereas under static conditions, the maximum noise level for distances of 60 m or greater is at an angle of 60° to the jet axis. As the flight velocity increases, the sound pressure drops in the

Card 1/2



L 8450-65
ACCESSION NR: AP4044616

frequency range from 80-320 cps. At the same time, the flight noise level increases somewhat in the frequency range from 1600-8000 cps. Orig. art. has: 4 figures and 2 formulas.

ASSOCIATION: Gosudarstvennyy n.-i. institut grazhdanskogo vozdushnogo flota, Moscow (State Scientific Research Institute of the Civil Air Fleet)

SUBMITTED: 14Nov63 ATD PRESS: 3098 ENCL: 00

SUB CODE: ME, GP NO REF SOV: 004 OTHER: 000

Card 1/2

MEL'NIKOV, B.N.

BARANOV, V.S.; MEL'NIKOV, B.N., retsenzent; BOBROV, I.I., redaktor.

[Technical preliminaries to production in shipbuilding plants] Tekhnologicheskaia podgotovka proizvodstva na sudostroitel'nom zavode. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 166 p. (MLRA 7:7)
(Shipbuilding)

MEL'NIKOV, B.N

AID P - 5004

Subject : USSR/Engineering

Card 1/2 Pub. 110-a - 6/17

Authors : Davydov, N. I., Kand. Tech. Sci., I. P. Dudnikova, S. G. Dudnikov, B. N. Mel'nikov, Engineers

Title : Methods of determining the frequency characteristics of industrial control objects.

Periodical : Teploenergetika, 9, 35-42, S 1956

Abstract : Frequency characteristics are often considered in the investigations of the industrial installation performance and in the solutions of complicated problems of automatic control. The methods described here for determining the frequency characteristics are based on the excitation of oscillations in a closed system of automatic control. The oscillations start by a harmonic signal at the control input. An example of the use of this method is presented for testing the dynamics of an once-through boiler. 10 diagrams. 8 references.