"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M., Col.

AID P - 960

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 4/21

Author : Romanov, M., Col.

Title : Guiding fighters to air targets by the circular scanning indicator

Periodical : Vest. vozd. flota, 12, 18-25, D 1954

Abstract : The author describes the general method of guiding modern fighter aircraft to air targets. This method consists of the calculation of compass bearing with the help of an especially organized complex system of technical means. This guiding may be divided into two parts: preliminary and direct. The author gives a detailed description of the second period, direct guiding with the help of circular scanning. Diagrams, graphs, formulae, tables.

Institution : None

Submitted : No date

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M. K.

MARUSOV, A.Ya., inzhener-podpolkovnik, glavnyy red.; KUDRYAVTSEV, M.K., general-leytenant tekhnicheskikh voysk, otvetstvennyy red.; DEMIN, L.A., inzhener-kontr-admiral, red.; SHCHERBAKOV, A.N., general-mayor, red.; NIKOLAYEV, A.S., polkovnik, red.; KOLOMIYETS, A.D., polkovnik, red.; NAZAROV, P.V., polkovnik, red.; PAROT'KIN, I.V., polkovnik, red.; PUDIKOV, M.P., polkovnik, red.; SISKLIN, S.V., polkovnik, red.; BARANOV, M.Kh., inzhener-polkovnik, red.; KOMKOV, A.M., inzhener-polkovnik, red.; SHATUNOV, S.G., inzhener-polkovnik, red.; KOROLEV, V.G., polkovnik, tekhn. red.; LUK'YANOV, B.I., polkovnik, tekhn.red.; ROMANOV, M.K., podpolkovnik, tekhn.red.; IVANOV, V.V., inzhener-podpolkovnik, tekhn.red.; LYUBKOV, A.N., inzhener-podpolkovnik, tekhn.red.; KNYSH, P.N., podpolkovnik tekhnicheskoy sluzhby, tekhn.red.; VASMUT, A.S., kapitan, tekhn. red.; KOSTIN, A.G., tekhn.red.; MAKUKHINA, G.P., tekhn.red.

[World atlas] Atlas mira. Moskva, Voen.izd-vo M-va obor. SSSR, 1958. 459 p. (MIRA 11:5)

1. Russia (1923- U.S.S.R.) Armiya. General'nyy shtab. Voyenno-topograficheskoye upravleniye. 2. Tekhnicheskaya redaktsiya Voyenno-topograficheskogo upravleniya General'nogo Shtaba (for Korolev, Luk'yanov, Romanov, Ivanov, Lyubkov, Knysh, Vasmut) (Atlases)

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ROMANOV, M. N.

Khatchaturov, A. B. and Romanov, M. N. (Scientific Research Institute of the Refrigerating Industry of the USSR, Moscow); "Conveyour Apparatus with High Speed Air Circulation for the Quick Freezing of Fish" /French - 6 pages/

report presented attthe International Inst. of Refrigeration (IIR), Annual Meeting of Commissions 3, 4, and 5, Moscow, 3-6 Sep 1958.

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Romanov, M. N.

PHASE I BOOK EXPLOITATION SOV/3747

International Congress of Refrigeration. Moscow, 1953

Sbornik dokladov ot SSSR (Collected Soviet Reports) Moscow, Gostorgizdat, 1959. 214 p. Errata slip inserted. 2,000 copies printed.

Ed. (Title page): Sh. N. Kobulashvili; Ed. (Inside book): N. V. Chichkov; Tech. Ed.: V. V. Babicheva.

PURPOSE: This collection of articles is intended for those interested in the problems of food refrigeration.

COVERAGE: The collection contains 26 reports which were submitted at the meeting of the 3rd, 4th, and 5th Committees of the International Institute of Refrigeration. The meeting was held in Moscow, September 3-6, 1958, and was attended by 265 Soviet specialists and 115 representatives from other countries. The 73 reports discussed at this meeting cover such broad areas as the automation of the cooling of refrigerating installations, the use of finned-tube type refrigerating devices, fast-freezing food freezers, the theory and technique of rapid cooling and freezing of meat and fish, the use of antibiotics in the cold storage of food, and the operation of refrigerators and cooling systems. A complete account of the proceedings of this meeting was published by the International Institute of Refrigeration in 1959. No personalities are mentioned. References follow several of the articles.

TABLE OF CONTENTS:

Badyl'kes, I. [All-Union Scientific Research Institute of the Refrigeration Industry imeni A. I. Mikoyan]. Ammonium System With Two-Stage Compression With Steam Ejectors 169

Maksimov, P. [State Institute for the Design and Planning of Refrigerators, Dry and Water-Ice Plants, and Ice Cream Plants]. Pumpless Ammonium System With Ammonium Supply From Bottom 176

Nitochkin, A., and S. Mekenitskiy. [Ministerstvo stroitel'stva RSFSR (Ministry of Building, RSFSR)]. Rotary [Drum-Type] Semiautomatic Freezer for Food Products in Block and Plate Form 179

Khachaturov, A. B., and M. N. Romanov. [All-Union Scientific Research Institute of the Refrigeration Industry imeni A. I. Mikoyan]. Fast-Freezing Conveyor-Type Apparatus With Intensive Air Flow for Fish Freezing 185

Kobulashvili, Sh., and A. Rotenberg [All-Union Scientific Research Institute of the Refrigeration Industry imeni A. I. Mikoyan]. Gravitation Conveyor-Type Fast-Freezing Apparatus for Freezing Food Products 193

Filinov, M. A. [Gosudarstvennyy institut po proyektirovaniyu predpriyatiy myasnoy promyshlennosti (State Institute for the Design and Planning of the Meat Industry Establishments)]. Pump-Equipped Small-Capacity System With Overhead Ammonium Supply 204

Sheffer, A. P. [All-Union Scientific Research Institute of the Meat Industry]. Diaphragm Apparatus for Freezing and Defrosting Food Products in Blocks 209

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Hydrometallurgical treatment of Ural nickel ores. G. G. Urazov and M. M. Romanov.—*Tsvetnaie Metallui* 5, 1130–44(1930); *Chimie & industrie* 25, 610–20(1931).—Extn. of Ni from its oxide ores is generally effected by treatment with acid; but with low-grade ores the acid consumption is high on account of the large proportions of easily sol. Fe, Mg and Al oxides. Neutral or alk. solvents are not used on account of their low solvent power. V. and R. studied the attack of washed ores contg. 0.9–5.68% Ni by means of a soln. of SO_2 or by SO_2 gas; extn. of Ni is possible in both cases. The yield increases with the concn. of SO_2 in soln. and with the time of treatment. In treatment with SO_2 gas, the yield increases with the amt. of wash water, but is independent of the time of treatment. SO_2 gas acts by being oxidized to SO_3, the oxidation being accelerated by the presence of certain substances such as $FeSO_4$. A. Papinkau-Couture

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Action of phosphoric acid on alloys. Preliminary report. O. I. Ver and M. M. Romanov. *Soobshcheniya Vsesoyuznogo Inst. Metal.* No. 8, 65-73(1931).—The best materials for constructing an app. that is to come into contact with H_3PO_4, in concns. up to 60% and up to temps. of 75°, are Cr-Ni alloys (Cr at least 15%, Ni at least 10%); Al bronzes, with or without Mn, and steel V4A. At the b. p. of 60% acid, the best material is Al bronze, alone or alloyed with Mn or Fe. For an app. that is to come into contact with H_3PO_4 in the form of a vapor, the best materials are some types of Monel metal and some Al bronzes; for gaseous H_3PO_4, some types of Monel metal and Cr-Ni alloys. An app. that is to employ exts. from phosphorites can be constructed of Pb, Pb-Sb alloy, steel V4A, and Cr-Ni alloys. H. Cohen

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***Alloys Stable in Phosphoric Acid.** O. I. Vehr and M. M. Romanov (*Doklady Akademii Nauk* (*Compt. rend. Acad. Sci. U.R.S.S.*), **1953**, [N.S.], (3), 111-117).—[In Russian.] The following alloys were found to be resistant to hot and cold phosphoric acid (up to 60%): chromium steel (carbon 0·63, silicon 2·27, chromium 32·02%), chromium-manganese steel (carbon 0·23, chromium 16·45, manganese 11·54%), aluminium-bronze with 0·4% chromium. Aluminium-bronzes containing 0·02-0·67% chromium as well as plain "aluminium-bronze" and "aluminium-bronze" with 3% iron were tested in 80% phosphoric acid at the boiling point and at 135° C., and in technical phosphoric acid at 15° C. All the alloys had previously been heat-treated by quenching from 900° C. and normalizing at 700° C. The influence of chromium is manifested in two ways: by the formation of a protective film by the action of the acid and by a refining of the grain-size. All the "aluminium bronzes" are resistant at room temperature to pure and commercial phosphoric acid. In 80% acid at 135°-140° C. the bronze containing 0·5% chromium was the most resistant. A bronze containing aluminium 9·46, chromium 0·37, and iron 0·26%, prepared by the addition of ferro-chromium to "aluminium bronze" was highly resistant to boiling 87% acid. The mechanical properties of "aluminium-bronzes" containing chromium are good; after heat treatment the tensile strength is 70 kg./mm.² and the elongation 25%.—N. A.

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Stability of stainless steels and aluminum bronzes in phosphoric acid. O. I. Ver and M. M. Romanov. *Metallurg.* **9**, No. 1, 48-57(1934); cf. C. A. **28**, 2557.—Steels contg. Cr 18 and Ni 8% as well as Cr 18 and Mn 8% are stable in 60% H_3PO_4 at the b. p. but not in higher concns. High-Cr steel (Cr 37, Si 2.5%) is completely stable in 60% acid and fairly stable in 80% acid at the b. p. The presence of H_2SO_4 does not greatly decrease their stability. Al bronze (Al 10, Cr 0.06, Fe 0.04%) is very stable in H_3PO_4 even in concns. above 80% at the b. p., but its stability is greatly reduced if H_2SO_4 is present.

H. W. Rathmann

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Heat-resisting steel 18-8 containing silicon and aluminum. M. M. Romanov and O. I. Ver. *Metallurg.* 9, No. 4, 43-52(1934).—The properties at high temp. of 18-8 steel contg. 0.69-2.45% Si and 0.33-1% Al were investigated. The mech. properties of such steels at high temp. were found to be approx. equal to those of a steel contg. 25% Cr and 20% Ni, while their resistance to corrosion is somewhat less. The addn. of Si and Al favors the formation of a ferrite-austenite microstructure which hinders the formation of carbides at a high temp. The C content does not greatly affect the properties of these steels. A steel contg. C 0.49, Si 2.12, Mn 0.48, Cr 17.87, Ni 7.97 and Al 1.00% at a temp. of 800° had a tensile strength of 26.3 kg. per sq. mm., elongation 19.6%, and reduction of area 68.2%. H. W. Rathmann

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

M

Romanov, M. M., and O. I. Ver. *Heat-Resistant Alloys.* [In Russian.] Pp. 267. 1935. Leningrad and Moscow: ONTI, Glav. red. lit-ry po tsvetnyo metallurgii. (Rbl. 4.25.)

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

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*Corrosion of Alloys under Conditions of Fibre Manufacture. M. M. Romanov and O. I. Vehr (*Khimicheskoe Mashinostroenie* (*Chem. Machine Building*), 1936, (3), 36–42).—[In Russian.] The resistance of aluminium, iron, cadmium, copper, zinc, and various steels and cast irons to corrosion in zinc chloride solutions at 20° and at 100° C. depends on the p_H; acid solutions being highly corrosive. Most of the materials tested lost less than 0·1 grm./m.²/hr. at room temperature. In boiling concentrated zinc chloride solution the most resistant non-ferrous materials are: electrolytic copper, lead bronze, and manganese-bronze. Since copper in solution is less objectionable in fibre manufacture than iron, copper alloys are recommended for the necessary apparatus.—N. A.

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COMMON VARIABLES INDEX

OPEN

MATERIALS INDEX

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

[illegible], M. I., Eng. Cand. Tech. Sci.

Dissertation: "Studying the Character of Films Formed on the Surface of Gold Particles in the Process of Burning Arsenic Concentrates." Moscow Inst of Nonferrous Metals and Gold imeni M. I. Kalinin, 28 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

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H-5

ROMANOV, M. N.

USSR /Chemical Technology. Chemical Products and Their Application
Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1711

Author : Meleshko V.P., Chervinskaya O.V., Romanov M.N.

Title : The Use of Anionite Resins EDE-10 and AN-2F for Thorough Desalination of Water.

Orig Pub: Teploenergetika, 1956, No 12, 20-23

Abstract: An experimental comparison has been made, under laboratory conditions, of the anionites TM, AN-2F, PE-9 and EDE-10 to determine their suitability for producing desalinated water required for the technological needs of the radio plant. The experiments revealed the superiority of EDE-10 anionite. On 2-stage, separate H-OH ionation (with Espatit KU-1 as cathionite and EDE-10

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GIL'ZIN, K.A., kand.tekhn.nauk; ROMANOV, M.M., red.; CHAPAYEVA, R.I., tekhn. red. [redacted]

[Rockets and radio] Raketa i radio. Moskva, Voenizdat, 1963. 82 p. (MIRA 16:9)
(Rockets (Ordnance))--Radio control)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, Mikhail Mikhaylovich; CHEREPANOV, B.I., red.; ISUPOVA, NA.A., tekhn. red.

[Marvellous highway; an essay on the Crimean mountain trolley-bus line]Chudesnaia magistral'; ocherk o krymskoi gornoi trolleibusnoi linii. Simferopol', Krymizdat, 1962. 110 p. (MIRA 15:12)

(Crimea--Road construction) (Crimea--Trolley buses)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M.M.

PHASE I BOOK EXPLOITATION SOV/5410

[illegible]aya konferentsiya po mirnomu isp l'zovaniyu atomnoy [illegible] Tashkent, 1959.

[illegible] (Transactions of the Tashkent Conference on the Peaceful [illegible] of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. [illegible] Errata slip inserted. 1,500 copies printed.

[illegible] Agency: Akademiya nauk Uzbekskoy SSR.

[illegible] Ed.: S. V. Starodubtsev, Academician, Academy of [illegible] Uzbek SSR. Editorial Board: A. A. Abdullayev, Can[illegible] of Physics and Mathematics; D. K. Abdurazulov, Doctor [illegible] Sciences; U. A. [illegible]rov, Academician, Academy of [illegible] Uzbek SSR; A. A. Borodulina, Candidate of Biological [illegible], V. N. Ivashev; G. S. Ikramova; A. Ye. Kiv; [illegible] Candidate of Physics and Mathematics; A. I. Nikolayev, [illegible] of Medical Sciences; [illegible], Candidate of Chemical [illegible] A. S. Sadykov, Corresponding Member, Academy of Sciences [illegible] Academician, Academy of Sciences Uzbek SSR; Yu. N. [illegible]lanin,

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Transactions of the Tashkent (Cont.) SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE: The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

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instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

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RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan 7

Taknar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes 9

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Abdullayev, A. A., A. P. Novikov, Ye. M. Lobanov, M. M. Romanov, and A. A. Khaydarov [Institute of Nuclear Physics AN UzSSR]. Determination of Indium Content in Sphalerites by the Method of Radioactive Analysis 203

Lobanov, Ye. M., O. M. Romanov, M. M. Romanov, and A. A. Khaydarov. Determination of Copper and Manganese Content in Almalyk Ore Deposits by the Method of Neutron Radioactive Analysis 208

Akkerman, A. F., P. L. Gusika, and D. K. Kaipov [Institute of Nuclear Physics KazSSR]. Application of Monte Carlo Method for the Investigation of Gamma-Quanta Passage Through a Substance 212

Grumbkov, A. P., and G. S. Semenov [Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR - Institute of Geology and Production of Mineral Fuels AS USSR]. Radiometric Apparatus Used in Prospecting for Oil and Gas 220

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ABDULLAYEV, A.A.; LOBANOV, Ye.M.; NOVIKOV, A.P.; KHAYDAROV, A.A.; ROMANOV, M.M.

Analyzing activated rock samples by scintillation gamma spectrometers. Izv. AN Uz. SSR. Ser. fiz.mat. nauk no.5:48-56 '60. (MIRA 14:1)

1. Institut yadernoy fiziki AN UzSSR.
(Rocks--Analysis) (Gamma-ray spectrometry)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

LOBANOV, Ye.M.; ROMANOV, O.M.; ROMANOV, M.M.; KHAYDAROV, A.A.

Determination of copper and manganese in ores by neutron activation analysis. Zhur. anal. khim. 16 no. 1:25-28 Ja-F '61. (MIRA 14:2)

1. Institut of Nuclear Physics, Academy of Sciences, Uzbek S.S.R., Tashkent.
(Copper--Analysis) (Manganese--Analysis)

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S/075/61/016/001/004/019
B013/B055

AUTHORS: Lobanov, Ye. M., Romanov, O. M., Romanov, M. M., and Khaydarov, A. A.

TITLE: Determination of Copper and Manganese in Ores by Neutron Activation Analysis of Induced Radioactivity

PERIODICAL: Zhurnal analiticheskoy khimii, 1961, Vol. 16, No. 1, pp. 25-28

TEXT: In the present work the authors studied the applicability of γ-spectrometry in the activation analysis for copper and manganese in rock samples by using a low-intensity neutron flux (10^7-10^8 neutrons·cm^{-2}·sec^{-1}) for activation. Rock samples containing 0.03 - 0.9% copper and 0.01 - 0.3% manganese were analyzed. The chemical composition of the investigated syenite-diorite and the nuclear characteristics of the elements contained in this rock appear in Table 1. Basing on these data, the conditions for the quantitative determination of copper and manganese were worked out. For calibration, standard samples of known copper- and manganese content were prepared and irradiated with slow Po-Be neutrons from a neutron

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source of activity approximately 20 c. A paraffin block was used as a moderator. The duration of irradiation was chosen with consideration for the expected activity calculated for the particular isotopes contained in the sample from the known expression (Ref. 8) $A = n \cdot v \cdot \sigma_{act} \cdot N [1 - \exp(-\lambda)]$, where $n \cdot v$ = thermal neutron flux, σ_{act} = effective activation cross section, N = total number of nuclei of the isotope in the sample, λ = disintegration constant = $0.693t/T^{1/2}$, and t = duration of irradiation. The γ-activity of the activated samples was measured with a γ-scintillation spectrometer (Ref. 9). Fig. 1 shows the γ-spectrum of Cu^{64}, Fig. 2 that of Mn^{56} and Fig. 3 the superposed γ-spectra of Cu and Mn. For the quantitative determination of Cu and Mn in the test pieces, the γ-spectra measurements of the standard samples were plotted in the diagram shown in Fig. 4. This method makes the direct determination of 0.03 - 0.9% Cu and 0.028 - 0.3% Mn possible. The percentages of Cu and Mn in various rock samples as determined by the suggested method and the results of the chemical analyses appear in Table 2. The statistical measuring error did

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Determination of Copper and Manganese in Ores by Neutron Activation Analysis of Induced Radioactivity

S/075/61/016/001/004/019
B013/B055

not exceed 5%. Repeated measurements were in satisfactory agreement, the deviations being around 3%. The use of higher neutron fluxes by increasing the activity of the source or by applying a (skvazhinnyy) neutron generator (Ref. 10) shortens periods of irradiation and increases the sensitivity of the activation analysis. There are 4 figures, 2 tables, and 10 references: 4 Soviet, 3 French, and 3 US.

ASSOCIATION: Institut yadernoy fiziki AN UzSSR, Tashkent (Institute of Nuclear Physics of the Academy of Sciences Uzbekskaya SSR, Tashkent)

SUBMITTED: October 1, 1959

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

POLIKARPOV, V. I., ROMANOV, M. N.

Physics - Study and Teaching

Demonstrating electric measuring devices by shadow projection., Fiz. v shkole, 12, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M.N.

5380. USE OF ANION EXCHANGE RESINS EDE-10 AND AN-2F FOR INTENSIVE DESALTING OF WATER. Meleshko, V.P., Cherynskaya, O.V. and Romanov, M.N. (Teploenergetika (Heat Pwr Engng, Moscow), Dec. 1956, vol. 3, 20-23). Results of experimental investigation of the effectiveness of application of highly basic anion exchange resins EDE-10 and AN-2F in effecting the desalting of water are set out. It is shown that by using the ion exchange media EDE-10 and KU-1 in a two stage system intensive desalting of water can be achieved with a resistivity of 5 x 10^6-6 x 10^6. C.E.A.

Voronezhsky zavod Radiodetaley

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ROMANOV, M.N.

V. Powdering of ion-exchange resins. V. P. Meleshko, O. V. Chervinskaya, M. N. Romanov, and D. P. Izmailova (Plant Radio Parts, Voronezh). *Zhur. Prikład. Khim.* 30, 808-11(1957).—The mechanism of size reduction of easily swelling ion-exchange resins was studied. Practically all of the powdering occurred during the first cycle. It was traced to the process of swelling rather than to friction and wt. of the resin. The effect of swelling was correlated with osmotic forces (cf. Gregor, *C.A.* 42, 6201*a*). Swelling in concd. (30%) solns. of NaCl decreased powdering and increased the period of serviceability of the resin. I. B.

Voronezhskiy Zavod Radiodetaley

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

21 06380

AUTHORS: Khaydarov, A.A., Romanov, M.N., and Novikov, A.P. SOV/166-59-5-7/9

TITLE: Single-Channel Differential Analyzer for Amplitudes

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1959, Nr 5, pp 64-70 (USSR)

ABSTRACT: The authors describe a γ-spectrometer developed by them, the block scheme of which consists of the following principal terms: 1. Source of the γ-radiation; 2. Crystal scintillator; 3. Photoelectronic multiplier; 4. High-voltage rectifier; 5. Amplifier with a limiter; 6. Analyzer with sampling of anticoincidences; 7. Scaler with an electromechanic counter; 8. Supply unit. As a proof for the usefulness of the device the authors give the γ-spectra of the radio isotopes Cr^{61}, Co^{60}, Cs^{137}, Zn^{65} obtained with it. There are 4 figures, and 2 Soviet references.

ASSOCIATION: Institut yadernoy fiziki AN Uz SSR (Institute of Nuclear Physics AS Uz SSR)

SUBMITTED: February 1, 1959

Card 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

KHAYDAROV, A.A.; ROMANOV, M.N.; NOVIKOV, A.P.

Single-channel differential amplitude analyzer. Izv.AN Uz. SSR.Ser.fiz.-mat.nauk no.5:64-70 '59. (MIRA 13:5)

1. Institut yadernoy fiziki AN UzSSR.
(Scintillation counters)
(Pulse height analyzers)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

MELESHKO, V.P.; ANPILOVA, N.S.; ROMANOV, M.N.; CHERVINSKAYA, O.V.

Operation of filters with a mixed-bed ion exchangers. Zhur.prikl. khim. 35 no.1:60-66 Ja '62. (MIRA 15:1)
(Filters and filtration) (Ion exchange resins)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

MELESHKO, V.P.; ANPILOVA, N.S.; ROMANOV, M.N.; CHERVINSKAYA, O.V

Economic method of regenerating cation-exchanging filters in thorough desalting of water. Zhur. prikl. khim. 33 no.11:2481-2486 N '60. (MIRA 14:4)

(Base-exchanging substances)
(Filters and filtration)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

2

S/166/60/000/005/004/008
C111/C222

AUTHORS: Abdullayev, A.A., Lobanov, Ye.M., Nevikov, A.P., Khaydarov, A.A., and Romanov, M.M.

TITLE: Analysis of Activated Samples of Ore With the Aid of Scintillation Gamma-Spectrometers

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1960, No.5, pp.48-56

TEXT: The authors propose a method permitting an analysis of multiple-component materials without a radiochemical separation of the isotopes. The analysis of the samples radiated with neutrons is carried out with the aid of a multi-channel scintillation gamma-spectrometer which records the total spectrum of gamma radiations of the mixture of radioactive isotopes. In order to separate the radiations of the single isotopes the timely change of the intensity of the different spectral lines being characteristic for the isotope in question, is considered. By such a modification of the usual method it becomes possible to identify the elements according to the half-life as well as to the energies of the gamma lines of corresponding radioactive isotopes. Thereby it becomes possible, for complicatedly composed ores to prove the single elements

Card 1/5

qualitatively as well as quantitatively. The quantitative proof is carried out by a comparison with known standard samples. The authors report especially on the application of the method for the analysis of the In-content in sfalerite ores and of the Cu and Mn-content in granitic ores. A diagram is given for the decrease of the activity of the elements appearing in sfalerites

S/166/60/000/005/004/008
C111/C222

Analysis of Activated Samples of Ore With the Aid of Scintillation Gamma-Spectrometers

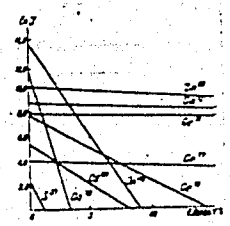

Рис. 3. Расчетные кривые связи активности элементов.

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C111/C222

Analysis of Activated Samples of Ore With the Aid of Scintillation Gamma-Spectrometers

Fig.5. Nomogram for the determination of the % content of In in ores with a different % content of ZnS.
There are 4 tables, 5 figures and 5 references: 4 Soviet and 1 American.

ASSOCIATION: Institut yadernoy fiziki AN Uz SSR (Institute of Nuclear Physics of the Academy of Sciences Uzbekskaya SSR)

SUBMITTED: March 6, 1960

Card 5/5

Fig. 3. Calculated curves for the decrease of the activity.
The diagram fig.5. serves for the determination of the % content of In in ores with a different content of ZnS.

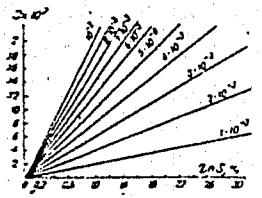

Рис. 5. Номограмма для определения процентного содержания In в руде с различным процентным содержанием ZnS.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

S/075/60/015/006/010/018
B020/B066

AUTHORS: Abdullayev, A. A., Lobanov, Ye. M., Novikov, A. P., Romanov, M. M., and Khaydarov, A. A.

TITLE: Determination of Indium Content in Sphalerites by Radioactivation Analysis

PERIODICAL: Zhurnal analiticheskoy khimii, 1960, Vol. 15, No. 6, pp. 701-705

TEXT: The authors made an attempt of developing a method for the indium determination in sphalerites by means of direct measurement of the energy spectra of the test sample by a γ-scintillation spectrometer. The production of radioisotopes of indium according to the reaction (n,γ) was used as a basis for the method. The nuclear characteristics of the elements occurring in sphalerites are given in Table 1. The device applied consists of a special lead casing (with the spectrometric monocrystal NaI(Tl)) 40 mm in diameter and 38 mm high, which is connected with a photoelectronic multiplier of the ФЭУ-1С (FEU-1S) type; a single-channel amplitude analyzer with amplifier, a computer, and a stabilized high-voltage rectifier. The energy scale of the analyzer in the energy range of 0.3-1.5 Mev

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

proved to be linear (Fig. 2). The activity of elements contained in the sphalerite was calculated from data given in Table 1, on the basis of which the curves for the activity decrease were plotted (Fig. 3), according to the equation $I = n\nu\sigma N\left[1 - \exp(-0.693t/T)\right]$, where $n\nu$ denotes the neutron flux, σ the cross section of neutrons of the elements, N the number of nuclei of the activated element, t the time of irradiation, and T the half-life period. The analysis of the curves given in Fig. 3 suggests a period of 5 minutes to be an adequate interval between the termination of irradiation and the beginning of measurements. The sphalerite standard samples were bombarded with slow neutrons from a polonium-beryllium source with an activity of 35 curies for 3 hours and 35 minutes. The authors investigated the change of intensity of the photopeaks of the energy spectrum with time, and identified the isotope both with respect to the characteristic bands of the spectrum and the half-life period. The activity of the indium isotope was measured within two half-life periods, and then the degradation curves were plotted (Fig. 4). Table 2 gives the results obtained for the activity of standard samples of different indium contents. Fig. 5 shows the activity as a function of the percentage indium content at an interval

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Determination of Indium Content in Sphalerites by Radioactivation Analysis S/075/60/015/006/010/018 B020/B066

of measurement of 5 minutes and with a 5 g sample. On the basis of Fig. 5, a nomograph was plotted to determine the percentage indium content in samples of different weights (Fig. 6). After calibrating the device and plotting the nomograph, the indium concentration was determined in sphalerites from some deposits of the Uzbekskaya SSR (Table 3). The difference between the results is, on an average, not more than 7%, and the statistic error not more than ±3%, whereas the characteristic error of the method (due to unequal conditions on bombarding and measurement) is ± 2 - 3%, at an In-content in the order of magnitude of 0.1%. Finally, the authors thank S. T. Baladov for providing an analytical sample. There are 6 figures, 3 tables, and 6 references: 3 Soviet, 1 Austrian, and 2 US.

ASSOCIATION: Institut yadernoy fiziki AN UzSSR, Tashkent (Institute of Nuclear Physics of the AS Uzbekskaya SSR, Tashkent)

SUBMITTED: August 25, 1959

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M.P., aspirant

Protein requirements of laying hens. Izv. TSKHA no.3:104-111 '62. (MIRA 15:9)

1. Nauchnyy rukovoditel' akademik. Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni Lenina.
(Poultry—Feeding and feeds)
(Proteins)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ALEKSEYEV, V.N.; VINOGRADOV, A.N.; kand.ekon.nauk; VLADIMIROV, V.A.; inzh.; KOCHETOV, I.V., prof.; doktor ekon.nauk; MINAKOV, P.F.; POTAPOV, I.A.; ROMANOV, M.P., dotsent, kand.ekon.nauk; SPENGLER, Ye.N., kand.ekon.nauk; SHITOV, A.V.; SHUKHATOVICH, I.M.; YAKUBOV, L.S.; IVLIYEV, I.V., red.; KRISHTAL', L.I., red.; KOCHETOV, I.V., prof., doktor ekon.nauk, nauchnyy red.; IVANOV, A.P., nauchnyy red.; BOBROVA, Ye.N., tekhn.red.

[Statistics and bookkeeping in railroad transportation; manual] Statistika i bukhgalterskii uchet na zheleznodorozhnom transporte; spravochnik. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 485 p. (MIRA 14:3)

(Railroads--Accounts, bookkeeping, etc.)
(Railroads--Statistics)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M. S.

USSR (600)

Refrigeration and Refrigerating Machinery

Providing wineries with refrigeration. Vin SSSR, 12, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

1. ROMANOV, M.S.

2. USSR (600)

4. Champagne (Wine)

7. Arrangement for chiling champagne before mixing , Vin.SSSR 13 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

KULIKOVA, K.S.; ROMANOVA, M.T.

Resistance of transplanted cell lines to the action of low temperature. Trudy Mosk. nauch.-issl. inst. virus. prep. 2: 212-224 '61. (MIRA 17:1)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

YAKUNENKOV, I.I.; ROMANOV, M.V.

Work under new conditions. Veterinariia 39 no.1:10-12 Ja '63. (MIRA 16:6)

1. Zamestitel' nachal'nika Uvarovskogo proizvodstvennogo upravleniya Tambovskoy oblasti (for Yakunenkov). 2. Glavnyy veterinarnyy vrach Uvarovskogo proizvodstvennogo upravleniya Tambovskoy oblasti (for Romanov).

(Uvarovo region--Veterinary medicine)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M.V.

Automation of the five-column beer rectification unit at the Michurinsk Alcohol Plant. Spirt.prom. 27 no.3:26-28 '61. (MIRA 14:4)

(Michurinsk--Alcohol) (Automatic control)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, K.V. JT.AUTH

The theory of flushing oil wells Leningrad, Glavnaia redaktsiia geologo-razvedochnoi literatury, 1936. 140 p.

1. Boring.
2. Hydraulic engineering. I. Romanov, K.V., jt.au

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ZYBIN, V.P., dots.; ROMANOV, M.Ya., inzh.

Investigating auromatic drive switches in semiautomatic sewing machines of 18th, 25th, and 29th grades. Izv.vys.ucheb.zav.; tekh.leg.prom. no.5:119-129 '58. (MIRA 12:2)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. (Sewing machines) (Automatic control)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, M. YA.

7687. Romanov, M. Ya.-Programma Kursa Oborudovaniye obuvnykh Fabrik Dlya spetsial'nostitekhnikumov Oborudovaniye Obuvnykh Fabrik Utv; 19IV11 1954 g. M., (1954). 20s.22sm. (M-vo prom. tovarov shirokogo potrebleniya SSSR. Upr. uchsb. zavedeniyami). 3000 ekz. Bespl.- V Kontse teksta avt: Romanov M.YA.---(55-4010) 685.31.05 (071.2)

SO: Knizhmaya Letopis', Vol. 7, 1955

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.

Work experience of the glider flying group. Kryl.rod. 2 no.6:17 Je '51. (MLRA 8:8)

(Gliders (Aeronautics))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

SAPOZHNIKOV, Ye.; ROMANOV, N.; MAKAROV, V., redaktor; MUNTYAN, T., tekhnicheskiy redaktor.

[Learn to fly a glider] Uchis' letat' na planere. Moskva, Izd-vo Dosaaf, 1954. 94 p. [Microfilm] (MLRA 8:2)

(Gliders (Aeronautics)--Piloting)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

[illegible], [illegible].

5818. Uchis' letat' na planere. M., Izd.,-vo DOSAAF, 1954. 96S. s ill. 20sm 17,000. ekz. ir. 65k. (55-1030) p 629.135.1

SO: Knizhnaya, Letopis, Vol. 1, 1955

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

29 SOV/84-59-10-22/53

AUTHOR: Romanov, N., Engineer

TITLE: Into the Cosmos In Rocket Planes

PERIODICAL: Grazhdanskaya aviatsiya, 1959, Nr 10, pp 13-15 (USSR)

ABSTRACT: This article is based on material published in the Soviet and (unidentified) foreign press. The author considers the basic theoretical prerequisites for travel into Space, to give an idea of the complexity of the various factors involved in such travel. The take off of a future passenger rocket plane is envisaged as taking place from a special multi-stage rocket-powered speed-up truck on rails, the last section of which is bent upwards, making a huge parabola. The powered flight may end at an altitude of over 100 km, where the rocket plane should have developed a speed of about 8,000 m/sec, enabling it to get out of the sphere of the earth's gravity. On this flying apparatus, destined for very great altitudes, no engine can be installed which uses oxygen to maintain combustion. It is therefore expected that the rocket

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planes will be powered by engines using a special fuel consisting of a fuel proper and an oxidizer, held in separate tanks and fed into the combustion chamber by pumps, or by a compressed gas. Current fuels of this type, such as combinations of kerosene and liquid oxygen, ethyl spirit and liquid oxygen, kerosene and nitric acid, can give a specific thrust of 220 kg sec/kg and more. If the specific thrust were raised to 600 kg sec/kg, the ratio of the rocket plane's initial mass to its final mass would be only 4.5 for coming into the orbit of an earth satellite, 8 for a flight to the moon and 11 for a flight to and landing on the moon. Higher specific thrust values can be reached with the use of groups of atoms, called in chemistry, "true radicals". Yet, such fuel is unstable. The best power unit, capable of providing specific thrust of hundreds of kg/sec/kg, seems to be a nuclear power unit using hydrogen as work medium. The most suitable trajectory of flight seems to be that shown in Fig 1. On such a trajectory, the power spent during the active stage of flight

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simultaneously increases the kinetic energy. The passive stage of flight, in the form of an ellipsis arc, ends in a smooth downward glide with gradual loss of speed and altitude. The absence of overload, the moderate temperature of the rocket plane's surface, and the equibalancing of centrifugal forces by the gravity force (when passengers will be in a state of weightlessness) make this trajectory most promising. To reduce the heating of the rocket plane, it is expedient to use hypersonic rocket planes of obtuse, or rounded-up forms, with high head resistance. However, such forms have poor aerodynamic qualities. Therefore, the best shape of a future rocket plane appears to be dart-shape (Fig 2). A hypersonic rocket plane of this shape may have a surface temperature, at the end of a steady gliding flight, of around 1,000-1,100°C, which can be withstood by known construction materials made on a nickel or molybdenum base. The nose section and the leading edges of the wings will experience higher temperatures, and must be made of ceramic materials.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Into the Cosmos In Rocket Planes

SOV/84-59-10-22/53

Flights in hypersonic rocket planes, which the author holds feasible, will be the first stage of penetration of human beings into space. The problem of supplying the astronauts with oxygen and of regenerating oxygen is expected to be solved as follows: by using regenerators of vegetable origin like the "chlorella" sea weeds, or the air for breathing may be a combination of oxygen and helium. Carbon dioxide can be removed with the use of pressed lithium oxide. It is necessary to find methods of escaping the so called zones of intensive radiation discovered by already launched satellites and rockets. In the closing section, the author talks of American plans to launch a manned satellite between 1962-1967, and to undertake expeditions to the moon and to Mars in the 1970's. He thinks, the Soviets will be the first to build and fly hypersonic planes. There are 2 drawings.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N., inzh.

Vertical take-off. Grazhd.av. 17 no.7:22-23 Jl '60. (MIRA 13:8)

(Vertically rising airplanes)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

L 44404-66 EWT(1)

ACC NR: AP6022410 (A) SOURCE CODE: UR/0317/66/000/002/0063/0065

AUTHOR: Romanov, N.; Varakosin, N.

ORG: none

19

TITLE: Continuous operation [cable laying] 25

B

SOURCE: Tekhnika i vooruzheniye, no. 2, 1966, 63-65

TOPIC TAGS: communication line, cable

ABSTRACT: Formulas are derived for calculating the required number of crews and cable-laying machines at a given rate of laying, the displacement of crews and operations. Fig. 1 shows the operational layout for the laying of a field-cable communication line of 100 km divided into work sectors of 5 km. The graph was plotted as follows: time, calculated from the inception of the operations, is plotted along the horizontal axis, while distance, calculated from the beginning of cable-line run, is calculated along the vertical axis. The speed of operation and displacement of each crew are represented by broken lines consisting of segments of different

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L 44404-66

ACC NR: AP6022410

incline and length. The speed of operation of each crew per sector is shown by a segment showing that 5 km of the run correspond to 2 hr, while the displacement of the crew between the work sectors is represented by the segment showing that 25 km correspond to 1 hr. Orig. art. has: 1 figure. [DW]

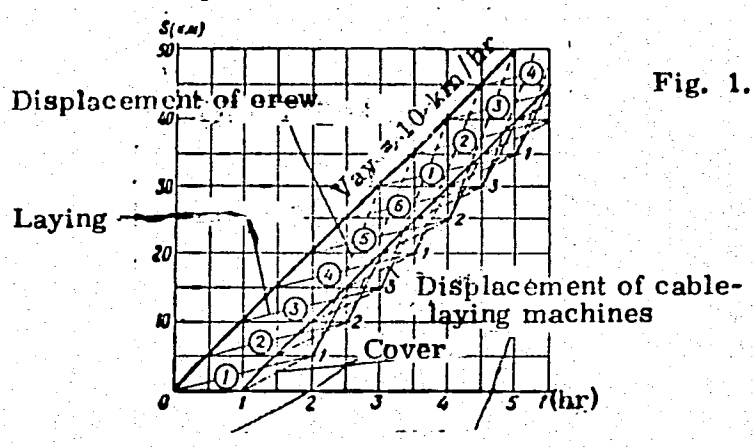

Fig. 1. Graph showing the organization of operations for laying a cable communication line.

SUB CODE: 17/ SUBM DATE: none/

Card 2/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.

Induction Coils - Testing

Device for detecting short-circuited turns. Radio No. 3, 1953.

Describes a unit consisting of an audio oscillator, an ac measuring bridge, a 2 stage af amplifier, an indicator (moving-coil instrument with a selenium rectifier), and a full-wave rectifier. The unit is used to find shorted turns in choke coils and transformers.

255T83

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Y. [illegible]

"The utilization of lumber of small dimension in buildings. Tr. from the Russian." Page 70 (ANALELE ROMANO-SOVIETICE. SERIA SILVICULTURA-INDUSTRIA LEMNULUI SI A HARTIEI, Series a II-a, v. 7, no. 3, May/June 1953, Bucuresti.)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, Oct. 1953, Uncl.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N., [illegible].

Tractors - Repairing

Workshop of the Chaglinskaya Machine-Tractor Station. MTS 13, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.

Let's make a model of our health resort. Okhr. truda i sots. strakh. 4 no.5:26-27 My '61. (MIRA 14:5)

1. Nachal'nik Sochinskogo kurortnogo upravleniya profsoyuzov.
(Sochi--Health resorts, watering places, etc.)

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ROMANOV, N., polkovnik, kand.voyennykh nauk, dotsent; BURLACHENKO, N., inzhener-kapitan.

Firing for adjustment from a coaxial machine gun. Voen.vest 43 no.8: 106-108 Ag '63. (MIRA 17:2)

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ROMANOV, N.

More attention to the improvement of automotive transportation. (MIRA 11:6)
Avt. transp. 36 no.5:30 My '58.
(Transportation, Automotive)

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ROMANOV, N.

ROMANOV, N., inzhener-polkovnik; ZAKHAROVA, G., inzhener.

Improving the BMK-90 cutter. Voen-inzh.zhur. 101 no.9:32-34 S '57. (MIRA 10:9)

(Launches)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

BALABIN, N.; ROMANOV, N.

Men with a searching mind. Metallurg 8 no.8:34-36 Ag '63. (MIRA 16:10)

1. Vyksunskiy metallurgicheskiy zavod.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

SEMENOV, Yu., polkovnik, kand. voyennykh nauk, dotsent; ROMANOV, N., polkovnik, kand. voyennykh nauk, dotsent

Sighting from a tank with a reference mark for the burst. (MIRA 16:10)
Voen. vest. 43 no.9:100-103 S '63.

(Range finding) (Tanks (Military science))

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ROMANOV, N.

Concern for human welfare. Zhil.-kom. khoz. 13 no.4:1-2 Ap '63. (MIRA 16:5)

1. Sekretar' Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov.

(Municipal services)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N., inzh. (Moskva)

Sonic booms. Grazhd. av. 19 no.3:25 Mr '62. (MIRA 15:5)
(Jet plane sounds)

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

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Investigation of the work of the Swedish lime-burning kiln at the Kirovskan carbide plant. S. N. Golubkov and K. D. Romanov. *Stroitel. Material.* No. 4, 20-9(1936).

P. F. Stefanowsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Romanov, N. A.

3-1-10/32

AUTHOR: Romanov, N.A.

TITLE: Dean's Duties (Ob obyazannostyakh dekana)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, # 1, p 37 (USSR)

ABSTRACT: In the short article the author calls attention to the fact that in many vuzes the deans, and sometimes also their substitutes, are appointed from among the instructors of the given vuz. However, the varied duties of a dean make it impossible to attend fully to all of them when he holds two or more offices. The leadership of the faculty should be their principle task.

ASSOCIATION: Leningrad Mechanical Institute (Leningradskiy mekhanicheskiy institut)

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

3(6), 14(6) SOV/91-59-7-4/21

AUTHOR: Romanov, N.A., Engineer

TITLE: The Operation of Boilers Converted from Coal to Mazut Fuel

PERIODICAL: Energetik, 1959, Nr 7, pp 10-11 (USSR)

ABSTRACT: At the power plant of an industrial installation, the boilers were converted for using mazut as fuel instead of coal from the Moscow Oblast'. The conversion was performed in summer 1957. The boilers were manufactured by the plant Tischbein , producing 9 tons of steam per hour at a pressure of 15 atmospheres. The boilers were equipped with air nozzles of Orgenergoneft'. The conversion plans provided one underground storage tank holding 500 tons of mazut. The author states that using only one tank requires a constant heating of the entire mazut supply to 70°C, resulting in superfluous heat losses. Cleaning the storage tank requires a long interruption of the boiler operation. Originally, the pumps feeding the mazut had a capacity of 16 and 22 m^3/h, which was too high for continuous fuel

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SOV/91-59-7-4/21

The Operation of Boilers Converted from Coal to Mazut Fuel

feed from the main storage tank to the boiler tanks. These pumps were replaced by pumps having a lower output (3.5 m^3/h, powered by 7 kw motors. The mazut is atomized in the nozzles of Orgenegoneft' by means of an air current which is fed to the nozzles under a pressure of 400 mm mercury column. According to the reconstruction plans, the fan must produce and air pressure of 300 mm mercury column, bur such a pressure proved to be inadquate. The air pressure was raised to 500 mm mercury column by increasing the fan motor speed to 1,460 - 1,930 rpm. The fuel atomization is inadequate and large fuel particles enter the high temperatures zone where they form a coke layer in the stoker. The author further states that the refractory brick lining had to be replaced by chromomagnesite bricks. Ther are 2 tables

Card 2/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

21(9) SOV/89-7-2-8/24

AUTHORS: Alekseyev, A. G., Gashev, M. A., Dondyan, D. L., Malyshev, I. P., Matora, I. M., Mironov, Ye. S., Monosion, N. A., Nazarov, L. M., Pirogovskiy, V. V., Romanov, N. A., Strel'tsov, N. S., Fedorov, N. D.

TITLE: A 1.20-Meter Cyclotron With a Magnetic Pole Diameter (Tsiklotron s diametrom polyusov magnita 120 cm)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 2, pp 148 - 158 (USSR)

ABSTRACT: The device was developed in the Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury (Scientific Research Institute for Electro-physical Apparatus) in collaboration with the Institut atomnoy energii AN SSSR (Institute for Atomic Energy of the AS USSR). The electro-magnet was designed by N. N. Indyukov, Ye. A. Bezgachev, A. V. Klimov under the guidance of B. V. Rozhdestvenskiy and B. Ye. Gritskov (Figs 1 and 2 are cross sections of the electro-magnet). The radial field force was measured in such a way that the error in the center of the field was less than 0.01% of the force of the field. The error at the measurement of the azimuthal inhomogeneity of the field was less than 0.007% of the field force

Card 1/4

KOMANOV, N.A.

in the center of the field. The position of the magnetic plane was determined by the magnetic scale developed by V. V. Pirogovskiy. For the correction of the magnetic field inside rings and discs were used, which are installed between the poles of the magnet and the lids of the vacuum chambers (sectional views are given). The measurements, the construction method and the assembly of the resonance conductor and of the duants are described in detail (there are sectional views). The acceleration chamber and the resonance conductor (there is a detailed sketch) were constructed by A. I. Alyab'yev, I. P. Zhukov, N. N. Runyantsev under the supervision of B. I. Produvnov. The whole high-frequency installation is shown in a block diagram and there is a short description of part of it. The high-frequency section was developed by G. M. Drabkin, B. V. Vanatovskiy and R. Yu. Protasovskiy under the supervision of A. S. Temkin. The vacuum systems were computed by Ya. L. Mikhelis and N. M. Karpenko. The movement of ions in the ion source and in the central part of the cyclotron is of special importance at the acceleration. This movement was thoroughly studied by I. M. Matora. He developed a special deflector system. The focusing system was computed by Yu. G.

Card 2/4

A 1.20-Meter Cyclotron With a Magnetic Pole Diameter SOV/89-7-2-8/24

Basargin. The magnetic quadrupole lenses of N. A. Ostrovskiy and N. I. Konovalova were used in this system. The cyclotron produces 15.7 mev of deuterons while the extreme route of the particle flux can be up to 1 ma. There is a guided beam of 100-200 μa at disposal for normal work and the beam is focussed to a plane of 15.20 mm^2. The control desk, signal equipment and the special electrical installations were designed by V. S. Lyublin, N. B. Nevrov, P. S. Gornikel'working under the guidance of G. S. Gordeychik. Similar cyclotrons, constructed in the USSR, are in operation in Romania, China, Poland and GDR. In the near future a cyclotron of a similar type will be completed in the CSR. The first cyclotron of this type was tested in 1956 by L. N. Saulin, N. N. Letunovskiy, Yu. G. Basargin, A. V. Stepanov, G. A. Nelivayko, M. D. Veselov, V. A. Susiov and A. I. Antonov from the Scientific Research Institute for Electrophysical Apparatus and I. I. Afanas'yev, A. A. Arzumanov and N. A. Meshcherov from the Institute for Atomic Energy of the AS USSR. The magnetic quadrupole lenses were tested at the cyclotron of the AN USSR (AS UkrSSR) with the participation of V. A. Kovtun. The fabrication of the cyclotron was supervised by A. V. Kozelevskiy.

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A 1.20-Meter Cyclotron With a Magnetic Pole Diameter SOV/89-7-2-8/24

L. N. Pedulov, V. V. Romanov and K. A. Asriyev, Ye. G. Kuzar gave valuable advice. P. K. Arkhangel'skiy aided the testing of the first cyclotron. Problems concerning the planning of the cyclotron were discussed with D. G. Alkhazov. There are 10 figures and 5 Soviet references.

SUBMITTED: March 12, 1959

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ROMANOV, N.A.

New automatic control system for fermentors. Priborostroenie no.3:24-25 Mr '60. (MIRA 13:6)
(Fermentation tube) (Automatic control)

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ROMANOV, N.A., inzh.

New packing. Mashinostroitel' no.5:26-27 My '60. (MIRA 14:5)
(Packing (Mechanical engineering))

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ROMANOV, I.A.

Auxiliary device for the OADP-610 controller for program control. Priborostroenie no. 2:32 F '61. (MIRA 14:2)
(Electric controllers)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.A.

Method for the automatic switching off of an electric motor. Prom. energ. 16 no.5:25-26 My '61. (MIRA 14:7)
(Electric motors)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.A.

Devices used in automatic control of antibiotics production processes. Priborostroenie no.1:24-25 Ja '62. (MIRA 15:1)
(Antibiotics) (Automatic control)

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ROMANOV, N.A.

The PV-100 miniature recording thermostat. Priborostroenie no.3:25 Mr '62. (MIRA 15:4)

(Thermostat)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N. A.

Programmed temperature regulator for a pickling solution depending on the concentration of sulfuric acid. Priborostroenie no. 4:31 Ap '64. (MIRA 17:5)

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L 21946-66

ACC NR: AP6014629 SOURCE CODE: UR/0091/65/000/003/0031/0032

AUTHOR: Romanov, N. A. (Engineer)

ORG: none

TITLE: Method of raising metal high-voltage towers without unmounting wires

SOURCE: Energetik, no. 3, 1965, 31-32

TOPIC TAGS: electric power engineering, high voltage line

ABSTRACT: The article describes a method developed to raise the physical height of metal high-voltage line towers when the voltage of the lines is substantially increased by alternate jacking and blocking of the individual feet of the towers. Permissible "leans" of the tower are described on the example of the elevation of a particular tower by 1 m in four steps. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Card 1/1 UDC: 621.315.1

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

Romanov, N. G

ROMANOV, N. G.

Kratkii tekhnicheskii spravochnik po kleiam. Moskva, Oborongiz, NKAP, 1946.

Title tr.: Brief technical manual of glues.

NCF

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

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ROMANOV, N.G., inzhener.

Subtropics on Sakhalin; sketch. IUn.tekh.no.1:31-32 S '56. (MIRA 10:3)

(Sakhalin--Climate)

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PHASE I BOOK EXPLOITATION SOV/5494

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

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

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

PURPOSE : This book is intended for the general reader.

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

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

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

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89418

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B116/B202

3,4000

AUTHOR: Romanov, N. G.

TITLE: Compensation of linear triangulation by the areal method

PERIODICAL: Geodeziya i kartografiya, no. 1, 1961, 9-16

TEXT: The author first points out that at present all sides of a triangle can be measured exactly and rapidly without measuring the angles. In this case, however, the triangulation net in which only the sides were measured must be exactly compensated. This problem is discussed. The author demonstrates a simple solution by using the formulas connecting the area of the triangle with its sides. First, the compensation of the triangle ABC is dealt with. The author assumes that the sides were measured from which in turn the angles were determined. With P = hc/2 and

$$\left.\begin{aligned} b^2+c^2-a^2&=2bc\cos\alpha \\ a^2+c^2-b^2&=2ac\cos\beta \\ a^2+b^2-c^2&=2ab\cos\gamma \\ P=\frac{ab\sin\gamma}{2}&=\frac{bc\sin\alpha}{2}=\frac{ac\sin\beta}{2} \end{aligned}\right\} \quad (7)$$

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the definite formula $dP = \operatorname{ctg} \alpha \frac{a}{2} da + \operatorname{ctg} \beta \frac{b}{2} db + \operatorname{ctg} \gamma \frac{c}{2} dc$ (8)

is then obtained. The author studies the compensation of a geodetic quadrangle with measured sides. In this case it must be considered that when constructing this quadrangle one of its vertices may have three positions. To obtain unambiguous coordinates of the vertices, the sides must be compensated on the condition $\left[p_i \zeta_i^2\right] = \min.$ ζ_i and p_i are the correction and the weight, respectively, of the line. For lines measured by means of measuring instruments it can be assumed that $p = 1/l_i$. The author derives the equation of condition

$$(\operatorname{ctg}\delta_1 - \operatorname{ctg}\gamma_1)\frac{l_1}{2}\zeta_1 + (\operatorname{ctg}\delta_2 - \operatorname{ctg}\alpha_1)\frac{l_2}{2}\zeta_2 + (\operatorname{ctg}\beta_1 - \operatorname{ctg}\gamma_2)\frac{l_3}{2}\zeta_3 +$$
$$+ (\operatorname{ctg}\beta_2 - \operatorname{ctg}\alpha_2)\frac{l_4}{2}\zeta_4 + [\operatorname{ctg}(\alpha_1 + \alpha_2) + \operatorname{ctg}(\gamma_1 + \gamma_2)]\frac{l_5}{2}\zeta_5 - \qquad (10)$$
$$- [\operatorname{ctg}(\beta_1 + \beta_2) + \operatorname{ctg}(\delta_1 + \delta_2)]\frac{l_6}{2}\zeta_6 + w = 0. \qquad (10)$$

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for the area of the quadrangle (Fig. 2). By solving (10) on the condition that the squares of the corrections are a minimum, the most probable corrections are obtained for the lengths of the sides. The author then studies the compensation of a central net (Fig. 3). In this case an additional side has been measured from which the equation of condition is obtained. The figure ABCO shown in Fig. 4 is considered first. The length of the line AC = l_x is calculated from the triangles ABO and BCO. Using (7) formula (11) is obtained for ABCO:

$$B_1 \xi_1 + B_2 \xi_2 + B_3 \xi_3 + B_4 \xi_4 + B_5 \xi_5 + B_x \xi_x = 0.$$

B_1, B_2, B_3, B_4, B_5, and B_x are the coefficients of the corrections. The length of line CE = l_y is calculated analogously and the equation for the quadrangle OCDE is obtained. The length of line EA = l_z and the equation of the quadrangle OEFA are determined in the same manner. Thus, the quadrangle ACE (Fig. 3) drawn by dashed lines is obtained. The equation of condition (14) is obtained

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Compensation of linear... S/006/61/000/001/001/002
B116/B202

$A'_3 \xi_3 + A'_5 \xi_5 + A'_9 \xi_9 + A'_x \xi_x + A'_y \xi_y + A'_z \xi_z + w = 0$, from which in turn the author obtains:

$$A_1 \xi_1 + A_2 \xi_2 + \dots A_{11} \xi_{11} + A_{12} \xi_{12} + w = 0 \quad (15),$$

where A_1, A_2 are the coefficients transformed, and w the areal deviation. This equation is solved on the condition $[p \xi^2] = \min$ and the corrections ξ_i are determined. If one of the sides is constant (a side of higher-order triangulation) the equation of condition will be the same only without A_1 and ξ_i. To illustrate this method the author gives the compensation of a central network. There are 5 figures and 2 tables.

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89418

Compensation of linear...

S/006/61/000/001/001/002
B116/B202

Fig. 2

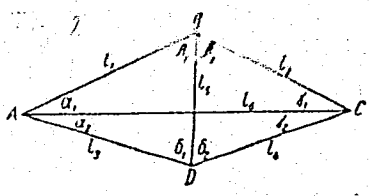


Fig. 3

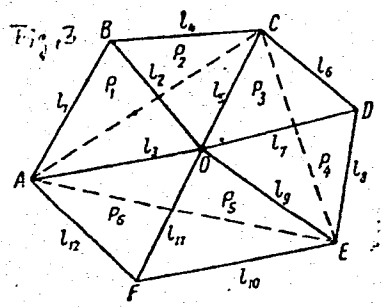
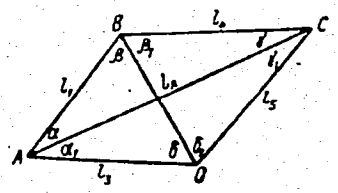


Fig. 4



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67365

SOV/6-59-12-12/22

~~3(4)~~ 3.4000

AUTHOR: Romanov, N. G.

TITLE: Projecting of Geodetical Main Nets in Towns

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 12, pp 43 - 49 (USSR)

ABSTRACT: The specifications for surveys in towns provide for triangulation nets and polygon nets of three orders for projecting the geodetical main net in towns. In those cases where it is advantageous from an economic point of view, it is recommended to replace the triangulation nets by polygon nets of higher accuracy. At present, the Soviet industry produces base measuring apparatus and accurately working theodolites in sufficient quantity. Therefore, such a manifoldness is not necessary. The expenditure for the preparation of triangulation nets in towns is very high. A considerable saving can be obtained by replacing these nets by polygon nets of increased accuracy. In most towns of the USSR (except for the very large ones) it is not necessary to develop triangulation nets for building up the polygon nets. The polygon net of increased accuracy is based on the points of the State geodetical net which is also provided for in the specification of the GUGK

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Projecting of Geodetical Main Nets in Towns SOV/6-59-12-12/22

(Main Administration of Geodesy and Cartography) for topographical surveys 1 : 2000 and 1 : 5000. Practice has shown that in this way the costs of work are only half. In this case the accuracy of traversing must correspond to the accuracy of surveys on the largest scale (1 : 500) used in town surveying. Therefore, the error of position of any point in the polygon net of increased accuracy must not exceed ± 5.0 cm (which is also obtained by the triangulation of 3rd order). The length of traverses must be calculated in such a way that also the point position error in the middle of the traverse does not exceed ± 5 cm. During the preparation of a town polygon net based on the points of the State net, additional triangulation points of 3rd order were determined experimentally. The polygon net was adjusted twice: in the 1st balancing, these points were assigned to the triangulation net, and in the 2nd one, they were balanced as points of the polygon net. The differences are shown in table 1. The largest difference in the nodal point position was 0.06 m. To judge the accuracy of the nodal point position , the method of successive approximation according to formulas (1), (2), (3) and (4)

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(Ref, Footnote on p 44) is used here. The calculation put forward shows that the position errors of all nodal points do not exceed the graphic accuracy in the 1 : 500 survey, and that such a polygon net is not inferior to a triangulation with respect to accuracy. The reference mentioned in the footnote is an instruction for calculations in town traversing: "Gorodskaya poligonometriya", compiled by D. S. Shein. There are 1 figure, 7 tables, and 1 Soviet reference.

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ROMANOV, N.G.

Adjustment of linear triangulation by the area method. Geod. i kart. no.1:9-16 Ja '61. (MIRA 14:9)
(Triangulation)

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ROMANOV, N.G.

Measurement of polygonometric lines by the fixation method. Geod. i kart. no.11:33-34 N '61. (MIRA 15:1)
(Traverses (Surveying))

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KOS'KOV, Boris Ivanovich. Prinimal uchastiye ROMANOV, N.G., inzh.; SHURYGINA, A.I., red. izd-va; ROMANOVA, V.V., tekhn. red.

[Field work in traverse surveying of cities] Gorodskaia poligonometriia; polevye raboty. Izd.2. ispr. i dop. Moskva, Geodezizdat, 1962. 238 p. (MIRA 16:4)
(Traverses (Surveying))

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ROMANOV, N.G.

Measurement of lines using a constant small base. Geod.i kart. no.10:15-21 O '62. (MIRA 15:12)

(Traverses (Surveying))

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ROMANOV, N.G.

Rods for measuring lines with a range finder with wires.
Geod. i kart. no.11:36-37 N '62. (MIRA 15:12)
(Range finders--Equipment and supplies)

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ANTONOV, M.F., inzh.; ROMANOV, N.G., inzh.

New method for surface treatment. Avt.dor. 25 no.4:17 Ap '62. (MIRA 15:5)

(Road construction)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445220013-9

ROMANOV, N.G.

[redacted]

Using a photographic means of preparing a scale base for highly accurate rods. Geod. i kart. no.4:22-27 Ap '63. (MIRA 16:6)

(Surveying—Instruments)

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