MARCHENKO, A.I.

Restoration of the operation of the wet air pump of the Gramm VI steam engine. Energetik 11 no.10:23-24 O '63. (MIRA 16:11)

MARCHENKO, A.K.

Mineral waters of Soviet Bukovina and their use outside of resorts. Vop.kur.fizioter. i lech.fiz. kul't. 23 no.5:463-464 S-O '58 (MIRA 11:11)

1. Gosudarstvennyy sanitarnyy inspektor po okhrane lechebnykh faktorov Chernovitskoy oblasti.
(CHERNOVTSY PROVINCE--MINERAL WATERS)

KHRISTENKO, I.S.; MARCHENKO, A.K. (Chernovtsy).

Bukovina, the land of future health resorts and sanatoriums. Vop. kur., fizioter. i lech. fiz. kul't. 29 no.4:363-364 Jl-Ag '64. (MIRA 18:9)

RABINOVICH, V.I.; MARCHENKO, A.L.

Advisability of forge rolling of joints between thin-walled tubes and thick sheets. Avtom. svar. 15 no.3:64-67 Mr '62. (MIRA 15:2)

1. Barnaul'skiy kotel'nyy zavod.
(Tubes--Welding)
(Boilers, Water-tube--Welding)

ORLOV, B.D., kand. tekhn. nauk; DMITRIYEV, Yu.V., kand. tekhn. nauk; MARCHENKO, A.L.

Controlling the quality of spot and seam resistance welding. Svar. proizv. no.7:11-12 Jl '65. (MIRA 18:8)

1. Moskovskiy aviatsionnyy tekhnologicheskiy institut.

L 43925-66 EWT(d)/EWT(m)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(l) IJP(c) JD/HM/JH

ACC NR: AP6027440 SOURCE CODE: UR/135/66/000/008/0004/0007

AUTHOR: Orlov, B. D. (Candidate of technical sciences); Marchenko, A. L. (Engineer); Lipovskiy, P. I. (Engineer); Zaytsev, M. P. (Candidate of technical sciences)

ORG: MATI

TITLE: Selection of parameter for automatic control of spot welding of aluminum alloys

SOURCE: Svarochnoye proizvodstvo, no. 8, 1966, 4-7

TOPIC TAGS: aluminum base alloy, copper containing alloy, amgnesium containing alloy, metal welding, weld evaluation, automatic control/ D16AT aluminum alloy, AMg6 aluminum alloy, AMtsAM aluminum alloy

ABSTRACT: Results are presented of a theoretical and experimental investigation of spot welding D16AT, AMg6 and AMtsAM aluminum alloys to determine a reliable parameter on which an automatic quality control of spot welds can be based. Effects of welding time, welding current, spot spacing, electrode radius, and electrode pressure on nugget diameter and thickness, magnitude of electrode "push back" (under effect of thermal expansion of welded metal), voltage drop on electrodes, and power were studied. Alloy specimens 30x200x1—2.5 mm in size were

Card 1/2 UDC: 621.791.763.1.08:669.715

L 43925-66

ACC NR: AP6027440

welded in an MTPT-400 spot welder. It was found that the electrode push-back is the most sensitive indicator of the nugget diameter and thickness; it reflects quantitatively the process of nugget formation. A decrease in nugget diameter by 0.3—0.5 mm reduced the push-back by about 0.01 mm. With welds of satisfactory quality, the average magnitude of push-back is 4—5% of the total thickness of welded sheets, with deviations of ±3.5—5%. With a lack of fusion, the magnitude of push-back is only one half the above value. On the basis of these results, the MTPT-400 welders are being equipped with the automatic quality control system. In AMg and AMtsAM alloy (3x3 mm), a minimum nugget diameter is ensured with a push-back of 0.30 mm. Orig. art. has: 8 figures and 2 tables. [AZ]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 003/ ATD PRESS: 5060

Card 2/2 egk

L 46114-66 EWT(1)/EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k) LJP(c) JD/HM/HW/JH

ACC NR: AP6031408 SOURCE CODE: UR/0135/66/000/009/0001/0004

AUTHOR: Orlov, B. D. (Candidate of technical sciences); Marchenko, A. L. (Engineer)

ORG: Moscow Institute of Aviation Technology (Moskovskiy aviatsionnyy tekhnologicheskiy institut)

39

B

TITLE: Statistical evaluation of the endurance characteristics of spot welds

SOURCE: Svarochnoye proizvodstvo, no. 9, 1966, 1-4

TOPIC TAGS: spot weld endurance, spot weld endurance evaluation

ABSTRACT: Six series of spot-welded (single-spot) specimens of AMg6 alloy sheets 2 mm thick were subjected to fatigue tests under loads of 70, 80, 90, 140, 155 and 195 kg,

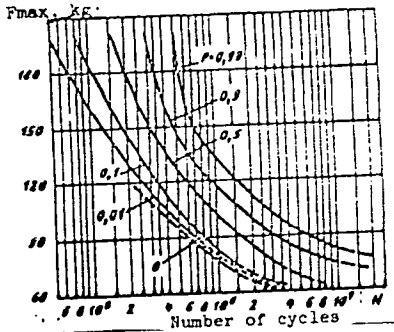

Fig. 1. Fatigue curves for spot welds in AMG6 aluminum alloy specimens 2 + 2 mm with various failure probabilities.

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L 46114-66

ACC NR: AP6031408

all exceeding the fatigue limit, which was found to be 60 kg for 10,000,000 cycles. On the basis of obtained results, a complete fatigue diagram for failure probabilities from 0 to 99% was plotted (see Fig. 1). Comparison of obtained characteristics with those for riveted joints showed that they were almost identical. Orig. art. has: 7 figures and 3 tables. [TD]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 005/ ATD PRESS: 5087

Card 2/2 LC

TOTSKIY, L.V., marksheyder; MARCHENKO, A.M., marksheyder

Mine surveying in workings with a weak roof and heaving bottom.
Ugol' Ukr. no.6:27-28 Je '61. (MIRA 14:7)

1. Donetsko-Sevast'yanovskoye Komsomol'skoye shakhtoupravleniye.
(Mine surveying)

TERZIYAN, P.G.; MARCHENKO, A.M.; ABRAMOV, A.N., mashinist gidroochistki; SHABALIN, A.

In the country's steel smelting plants. Metallurg 7 no.5:20-21 My '62. (MIRA 15:5)

1. Kommunarskiy metallurgicheskiy zavod (for Terziyan, Marchenko). 2. Cherepovetskiy metallurgicheskiy zavod (for Abramov). 3. Verkhne-Ufaleyskiy metallurgicheskiy zavod (for Shabalin).
(Open-hearth furnaces--Equipment and supplies)
(Steel ingots)

MARCHENKO, A. N.

5777. Uplotnennaya pogruzka sel'khozmashin po st. Bezhetsk severnoy zheleznoy dorogi. Yaroslavl', 1954. 16S. s ill; il skhem. 20sm. (M-Vo putey soobshcheniya SSSR. sev. zh. d. dommerch. sluzhba, DorNITO i tekhn.otd. dorogi. obmen opytom. inform. Pis'mo No. 22 (27). 250 ekz. B. ts.-sost. ukazany na oborote tit. l. (54-1565lzh)
656.225.2st /656.225.435

SO: Knizhnaya, Letopis, Vol. 1, 1955

MARCHENKO, A. N.

Use of novurit in circulatory insufficiency. Vrach. delo no.7: 132-133 Jl '62. (MIRA 15:7)

1. Vinnitskaya oblastnaya klinicheskaya bol'nitsa; nauchnyy rukovoditel' - prof. B. S. Shklyar [deceased].

(NOVURIT) (BLOOD—CIRCULATION, DISORDERS OF)

MARCHENKO, A.P. and TESLENKO, A.D.

"Mobile and Stationary Oxygen Producing Stations," Voyenizdat, 1949

L 46010-66 EWT(1) GW

ACC NR: AR6029454 SOURCE CODE: UR/0169/66/000/005/D017/D017

AUTHOR: Andreyeva, R. I.; Gdalevskaya, Ts. M.; Lositskaya, Ye. P.; Klitochenko, T. I.; Marchenko, A. P.; Razumenko, G. F.; Sokolova, N. T.; Chayka, V. G.

TITLE: Compilation of composite seismic maps of the southeastern part of the Dnepr-Donets basin

SOURCE: Ref. zh. Geofizika, Abs. 5D115

REF SOURCE: Tr. Ukr. n.-i. geologorazved. in-t, vyp. 14, 1965, 132-139

TOPIC TAGS: Dnepr basin seismic map, Donets basin seismic map

ABSTRACT: A second interpretation is made of seismic data obtained for the southeastern part of the Dnepr-Donets basin, using supplementary data obtained in drillings. Structural maps to the scale of 1:50,000 and 1:100,000 are plotted for four horizons, from the Cenomanian to the Lower Permian. Iso-pachous line maps, plotted on the basis of data obtained in seismic exploration, are also discussed. A detailed analysis is made of the tectonic structure of the Upper Paleozoic, Mesozoic, and Cenozoic stages on the basis of the above-mentioned

Card 1/2 UDC: 550.834

L 46010-66

ACC NR: AR6029454

maps. A regional subdivision is made of the territory from the point of view of natural gas and petroleum deposits. A. Titkov. [Translation of abstract] [SP]

SUB CODE: 08/

Card 2/2 MJ

MARCHENKO, A. R.

Marchenko, A. R. - "On the rise of coefficients of an odd single-leaf function," Uchen. zapiski (Leningr. gos. un-t im. Zhdanova), Seriya matem. nauk, Issue 16, 1949, p. 135-41.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949.

MARCHENKO, A.R.

The growth of the coefficients of an odd univalent function. Uch. zap. LGU no.111:135-141 '49. (MLRA 10:8)
(Functions of complex variables)

MARCHENKO, A.R.

Some extremum problems in the theory of univalent functions.
Uch.zap.Len.un.no.144:257-269 '52. (MLRA 9:6)
(Functions)

MARCHENKO, A.S.:

MARCHENKO, A.S.: "The theoretical principles of designing corrugated stands for hydraulic laboratories". Moscow, 1955. Min Higher Education USSR. Moscow Order of Labor Red Banner Structural Engineering Inst. imeni V.V. Kuybyshev. (Dissertations for the Degree of Candidate of Technical Sciences).

SO: Knizhnaya letopis' No 44, 29 October 1955. Moscow.

MARCHENKO, A.S., inzhener; SMIRNOV, G.N., inzhener.

Device for determining the height of a wave descending a bank.
Sbor.trud.MISI no.9:56-61 '55. (MLRA 10:3)
(Waves) (Hydraulics)

Marchenko, A.S.

DOLGACHEV, F.M., inzhener; MARCHENKO, A.S., inzhener; SMIRNOV, G.N., inzhener.

Device for measuring the height of waves in laboratory conditions. Sbor.trud.MISI no.9:62-64 '55. (MLRA 10:3)
(Waves) (Hydraulics)

8(2) SOV/32-25-2-25/78

AUTHORS: Pavlov, I. S., Karchenko, A. S.

TITLE: Elimination of Errors in Measurements With Q-meters (Ustraneniye pogreshnostey pri izmereniyakh na kumetrakh)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, pp 175 - 179 (USSR)

ABSTRACT: The following sources of errors are possible: 1) wrong calculation formulas, 2) errors due to imperfections in the design, and 3) errors due to individual parts of the design. In order to determine the effect of design imperfections, the Q-meters KV-1 and UK-1 were examined. It is assumed that the quality of measurements improves with the duration of operation, since the data obtained on the Q-meter change greatly in due course (Fig 1). Voltage fluctuations do not discernibly affect the measurement accuracy. The article goes on to quote observations made by Lapshin and Fradkin (Ref 4), as well as Shelyubskiy and Indenbom (Ref 5), and describes an examination method for the operation of Q-meters based on a model-method, i.e. the measurement of real substitution patterns used as references for the examination samples.

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The diagrams obtained with the Q-meters KV-1 (Fig 3) and UK-1 (Fig 4) for an air condenser are not in agreement with the theoretical diagrams. For the purpose of comparison with the samples investigated a substitution pattern of the air condenser and reaction-free, highly stable resistor of the VS, LMT etc. types was compiled. The change of the measurement accuracy of the two-Q-meters examined is represented graphically (Figs 5,6). By the examination method described most of the complicated calculations, the exchange of parametric lamps, the errors due to irregularly graduated scales etc. can be eliminated. There are 7 figures and 5 Soviet references.

MARCHENKO, A.S.

Determination of maximum wind velocities in tornadoes and tropical cyclones. Meteor.i gidrol. no.5:11-16 My '61. (MIRA 14:4)
(Cyclones) (Tornadoes)

MARCHENKO, A.S.

Determining some climatic characteristics of winds by way of calculation. Meteor. i gidrol. no.4:34-39 Ap '62. (MIRA 15:5)
(Winds)

MARCHENKO, A.S.

Connection between climatic characteristics of wind. Trudy NIIAK no.16:57-75 '62. (MIRA 15:11)

(Winds)

MARCHENKO, A.S.

Distribution of the modulus of the wind vector. Meteor. i gidrol. no.2:15-20 F '63. (MIRA 16:2)

1. Nauchno-issledovatel'skiy institut aeroklimatologii.
(Winds) (Vector analysis)

MARCHENKO, A.S.

Accuracy of mean climatic characteristics of wind. Trudy NIIAK no.9:77-85 '63. (MIRA 16:11)

ACCESSION NR: AT4028301 S/2667/63/000/024/0066/0091

AUTHOR: Guterman, I. G.; Dunayeva, S. I.; Zvereva, Ye. P.; Marchenko, A. S.

TITLE: Climatic characteristics of the wind in a model of the standard atmosphere

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy*, no. 24, 1963, 66-91

TOPIC TAGS: standard atmosphere, meteorology, climatology, wind, wind velocity, wind direction, troposphere, stratosphere

ABSTRACT: A method has been developed for processing aerological observations for a 10-year period (1950-1959) to the 30-mb isobaric surface for the determination of wind characteristics, averaged over large regions and the hemisphere. The determined characteristics are recommended as the first variant of a model of a standard atmosphere for the northern hemisphere. Wind parameters were determined for January, for July and for the year to a height of 25 km. The principal parameters used for this model were the mean scalar velocity of the wind for the month and the year and the resultant wind vector (value and direction). Both characteristics were determined using data for 200 stations, a total of 470,000 observations, processed by electronic computer. Principles and methods employed in this study are described fully. The many difficulties in handling this complex problem

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ACCESSION NR: AT4028301

are discussed. Wind parameters are summarized and analyzed for six geographic regions within which the character of wind distribution can be considered homogeneous in the first approximation. Nonuniformity of station distribution and decreasing number of observations at greater heights are taken into account. In this process data were averaged for 206 equal-area squares in the northern hemisphere. The six regions for which data are generalized are: polar regions; Europe and part of Asia; North America and the North Atlantic; North Africa and Central Asia; North Pacific Ocean and the Far East; and the equatorial and tropical regions. The following section headings indicate the nature of the development of the paper: Introduction; characteristics of the data used; principal geographic regions defined for the purpose of description of wind over the northern hemisphere; the wind vector as a random value; determination of the climatic characteristics of the wind; general principles for determining mean parameters for regions and the hemisphere; averaging data for stations; averaging data for regions and the hemisphere; determination of wind characteristics for standard heights; practical computation of derivatives of wind parameters at standard heights. Orig. art. has: 29 formulas, 11 figures and 3 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut aeroklimatologii, Moscow (Scientific Research Institute of Aeroclimatology)

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ACCESSION NR: AT4028301

SUBMITTED: 00 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: AS NO REF SOV: 014 OTHER: 007

Card 3/3

MARCHENKO, A.S.

Floating unit for engineering-geology studies on the sea.
Razved. i okh. nedr 29 no.11:51-53 N '63.
(MIRA 17:12)

1. Chernomorniiproyekt.

L 62994-65 EWT(1)/FCC GW

ACCESSION NR: AT5019688 UR/2667/64/000/025/0020/0027

AUTHOR: Marchenko, A. S.; Anisimova, T. N. 55 55

TITLE: Climatological processing of observational data

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 25, 1964. Voprosy aviatsionnoy klimatologii (Problems in aviation climatology), 20-27

TOPIC TAGS: climatological data processing, statistical meteorology, rectification network, climate 12,55

ABSTRACT: The paper discusses certain fundamental questions of the climatological processing of observational data such as the applicability of various probability theorems, the standardization of observation curves, the study of geographically dependent parameters which cause regional variations in the shape of otherwise universal climatologic relationships, and methods for the extraction of such "common denominator" laws from the available data (use of rectification networks). The authors present certain methodological recommendations and apply them to the processing of persistent wind velocity probabilities and to the probability of continuous (unchanged) duration of a particular weather condition. The method is

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L 62994-65

ACCESSION NR: AT5019688

2

already widely applied by the Nauchno-issledovatel'skiy institut aeroklimatologii (Scientific-Research Institute of Aeroclimatology) (see, e.g., A. S. Marchenko, Meteorologiya i gidrologiya, no. 2, 1963; V. I. Titov, Tr. NIIAK, no. 25, 1964, 3-19). Orig. art. has: 8 formulas, 3 figures, and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut aeroklimatologii, Moscow (Scientific-Research Institute of Aeroclimatology)

55

SUBMITTED: 00 NR REF SOV: 019 OTHER: 000

SUB CODE: ES, DP ENCL: 00

Card 2/2

L 62966-65 EWT(1)/FCC GW

ACCESSION NR: AT5019692 UR/2667/64/000/025/0072/0080

18
16
B+1

AUTHOR: Marchenko, A. S.

TITLE: The influence of the ellipticity of wind vector scattering on the climatic characteristics of equivalent wind

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 25, 1964. Voprosy aviatsionnoy klimatologii (Problems in aviation climatology), 72-80

TOPIC TAGS: equivalent wind, wind velocity scattering, flight route wind calculation

12,55

ABSTRACT: The article outlines the procedure for the calculation of the average value and variability (dispersion) of the equivalent wind taking into account the ellipticity of wind vector scattering, an effect which has up to now been neglected. The results of the present investigation show that this scattering ellipticity substantially affects the dispersion of the equivalent wind. The necessary indexes of ellipticity of wind vector scattering in free atmosphere can be found in papers by H. L. Crutcher (Techn. Paper US Weather Bureau, Washington, Dep. Com., No. 34, 1958; Upper wind statistic charts of the Northern Hemisphere, 850, 700, 500, 300, 200, 100 mb, vol. 1, 2, Washington Weather Bureau, 1959). The equivalent wind of individual points of flight routes is calculated numerically considering the

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L 62966-65

ACCESSION NR: AT5019692

2

free atmosphere velocity vector a two-dimensional random quantity. All geographic points for which the calculations are done are outside the Soviet Union. Orig. art. has: 19 formulas, 3 figures, and 4 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut aeroklimatologii, Moscow (Scientific-Research Institut of Aeroclimatology)

55

SUBMITTED: 00 NR REF SOV: 002 SUB CODE: ES

OTHER: 004 ENCL: 00

Card 2/2

L 55006-65 EWT(1)/FCC GW
ACCESSION NR: AR5014447 UR/0169/65/000/005/B109/B109
551.587(018):551.55

16
B

SOURCE: Ref. zh. Geofizika, Abs. 5B615

AUTHOR: Marchenko, A. S.; Gaierkina, K. A.; Sinofeyeva, L. N.

TITLE: Some problems of wind statistics

CITED SOURCE: Tr. N.-i. in-ta aeroklimatol., vyp. 25, 1964, 104-123

TOPIC TAGS: climatology, aeroclimatology, wind component, wind velocity, wind vector

TRANSLATION: The authors analyze the accuracy of determinations of the numerical climatic characteristics of the wind by the approximate method of 8-direction grouping of observational data. The simplification is introduced because of the necessity for limiting the mass of information introduced into the computer. Two methods, precise and approximate, are used for computation of the climatic characteristics of the wind for January, April, July and October of 1950-1959 for three stations to a height of 16 km. It is demonstrated that the 8-direction grouping ensures a high accuracy of the absolute value and direction of the mean

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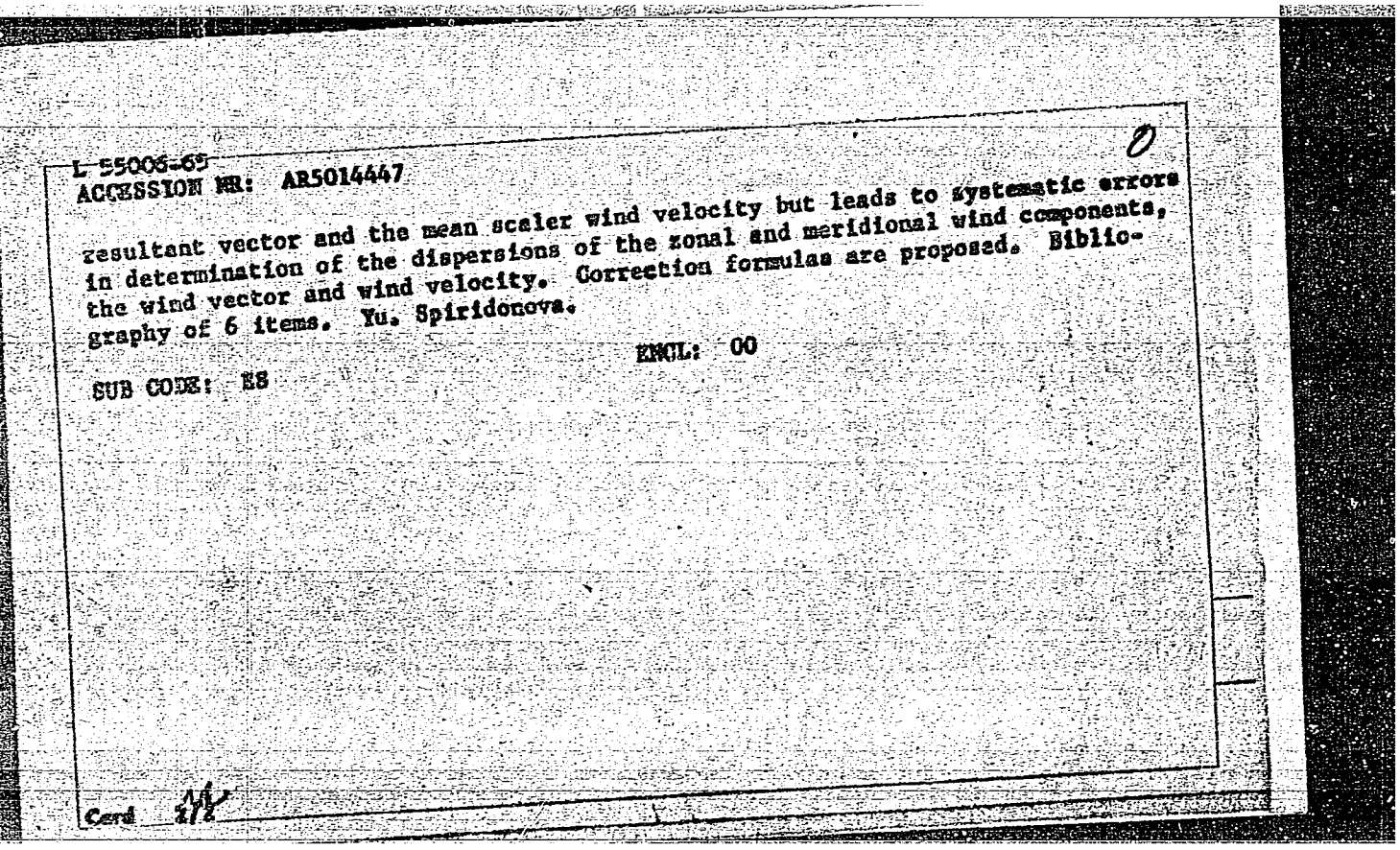

L 55006-65
ACCESSION NR: AR5014447

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resultant vector and the mean scaler wind velocity but leads to systematic errors in determination of the dispersions of the zonal and meridional wind components, the wind vector and wind velocity. Correction formulas are proposed. Bibliography of 6 items. Yu. Spiridonova.

SUB CODE: ES ENCL: 00

Card 1/2

L 62968-65 EWT(1)/FCC GW

ACCESSION NR: AT5019696 UR/2667/64/000/025/0131/0196

AUTHOR: Marchenko, A. S.

TITLE: Circular and elliptical form of the two-dimensional law in wind aeroclimatology

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 25, 1964. Voprosy aviatsionnoy klimatologii (Problems in aviation climatology), 131-196

TOPIC TAGS: wind velocity distribution, circular distribution law, elliptical distribution law, climatologic distribution law, wind aeroclimatology, free atmospheric wind

ABSTRACT: On the basis of data from 43 Soviet and Western references, the author carried out a comprehensive verification of the applicability of the circular normal law for the study of climatologic conditions of free atmospheric winds. An estimate of the influence of wind vector scattering ellipticity on the numerically determined probabilistic characteristics of the wind is also given. A general theoretical introduction and the presentation of the transformations of the normal two-dimensional law as applied to the wind climatology problems are followed by the verification (by data processing) of the circular scattering of the wind

Card 1/2

vector, and the estimate of corrections due to the actual elliptical form of scattering. The author emphasizes that this does not close the problem of maximum wind velocity estimates since the complete answer of the problem cannot be found without a preliminary registration of more extensive data. Also, even the introduction of elliptical scattering does not completely remove all observed errors, and the author outlines a secondary approach for handling these residual discrepancies. Orig. art. has: 100 formulas, 22 figures, and 21 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut aeroklimatologii, Moscow (Scientific-Research Institute of Aeroclimatology)

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SUBMITTED: 00 NR REF SOV: 018 OTHER: 025

SUB CODE: ES ENCL: 00

Card 2/2

L 00590-66 EWT(1)/FCC GW

ACCESSION NR: AR5019367 UR/0124/65/000/007/B108/B109

SOURCE: Ref. zh. Mekhanika, Abs. 7B764

AUTHOR: Marchenko, A. S.

TITLE: The circular and elliptical form of the duodimensional normal law in the aeroclimatology of the wind

CITED SOURCE: Tr. N.-i. in-ta aeroklimatol., vyp. 25, 1964, 131-208

TOPIC TAGS: wind pattern, vector dispersion, circular normal law, probability method, wind forecasting

TRANSLATION: The use of the theory of probability in attempts to obtain more accurate mean values and dispersions from a brief sequence of years and to derive from such data the probable wind characteristics is closely dependent on successful selection of the equalizing theoretical law governing wind vector distribution. The author discusses the applicability of the circular normal law in studies of climatic wind conditions in the free atmosphere, evaluates the significance of ellipticity of wind vector dispersion to calculation methods employed in aeroclimatology, and presents approximate procedures which consider its effects. The report contains a survey of principal Soviet and foreign literature on

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L 00590-66
ACCESSION NR: AR5019367

statistical and probability methods relating to wind aeroclimatology. The author demonstrates that significant ellipticity of dispersion can occur in areas of unstable air streams, where various wind directions are almost equally probable. Conversely, ellipticity is insignificant in jet stream areas. Furthermore, ellipticity of wind vector dispersion cannot be ignored in studies of periods encompassing sharp changes of circulation environments, i. e. from winter to summer. The author simplifies the use of the normal law in its general form by seasonal and semiannual grouping of data. Bibl. with 43 titles. Yu. Spiridonova.

SUB CODE: ES, MA ENCL: 00

Card 2/2

ACCESSION NR: AP4041783 S/0191/64/000/007/0043/0046

AUTHOR: Marchenko, A. S., Mazurenko, L. V.

TITLE: Mechanical properties of epoxy resins used for model investigations of constructions

SOURCE: Plasticheskiye massy*, no. 7, 1964, 43-46

TOPIC TAGS: epoxy resin, engineering construction model, elasticity modulus, filler, hardener, plasticizer, expoxy resin mechanical property, modeling, plastic model

ABSTRACT: The successful use of plastic models in the study of engineering constructions requires accurate information concerning the physico-mechanical properties of the model material, so that the results obtained may be applied to the actual construction materials. The authors therefore investigated the effect of hardening agents, fillers, plasticizers, time and load on the fatigue strength and elasticity of epoxy resin 1200. The plotted results show that the elastic and plastic properties of epoxy resins can be varied over wide ranges by the appropriate selection of components. The strength of such materials increases with an increase in the amount of hardener to 10%, but a further increase leads to strength loss; the modulus of elasticity, however, increases steadily with increasing amounts of hardeners. By adding a filler to epoxy resins, the elasticity modulus and

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ACCESSION NR: AP4041783

ultimate strength can be decreased. Epoxy resins containing fillers become more brittle. Plasticizers cause the brittleness to decrease and the elasticity of the composition to increase, but the strength decreases. Epoxy resins with plasticizers are characterized by residual deformation, which has no significant effect on the elasticity modulus. The material recommended for models of reinforced concrete constructions ensures the observance of the modeling conditions in the elastic state, but its rheological properties in the elastic-plastic state must be taken into consideration. Orig. art. has: 9 figures, 1 table and 2 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL:00

SUB CODE: MT,IE NO REF SOV: 007 OTHER: 000

2/2

Card

MARCHENKO, A.S.

Stability of estimates of mathematical expectation and dispersion for connected meteorological time series. Izv. AN SSSR. Fiz. atm. i okeana 1 no.9:906-913 S '65. (MIRA 18:9)

1. Vychislitel'nyy tsentr Sibirskogo otdeleniya AN SSSR.

MARCHENKO, A.S., inzh.; MAZURENKO, L.V.; VASIL'YEVSKIY, Yu.I.

Full-scale testing of embankment horizontal loading. Transp. stroi. 15 no.4:45-47 Ap '65. (MIRA 18:6)

MARCHENKO, A.S., kand. tekhn. nauk; DUDIK, E.F., inzh.

Using clayey soil for the formation of harbor areas.
Transp. stroi. 15 no.11:21-22 N '65. (MIRA 18:11)

ACC NR: AR6030037 SOURCE CODE: UR/0362/66/002/008/0891/0892

AUTHOR: Marchenko, A. S.

ORG: Academy of Sciences SSSR, Siberian Department, Computation Center (Akademiya nauk SSSR, Sibirskoye otdeleniye, Vychislitel'nyy tsentr)

TITLE: On the optimality of an objective analysis from the point of view of prediction accuracy

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 8, 1966, 891-892

TOPIC TAGS: mathematic prediction, weather forecasting, interpolation, error minimization

ABSTRACT: The author calls attention to the fact that optimal interplation, customarily used in various models of objective analysis of initial meteorological information for hydrodynamic forecasting, and consisting of linear statistical interpolation in a stochastic discrete field with Gaussian compatible distribution of the components, is not optimal from the point of view of the minimum forecasting errors. The analysis is confined to the case when the system of forecasting differential equations is exact, and the errors of the finite-difference approximation of the differential apparatus is negligibly small, and refutes the prevailing opinion that the best method of reducing the mean square forecasting errors in the presence of exact forecasting equations but inexact boundary and initial information is to minimize the mean square errors in the initial and boundary data. It is shown in particular that optimal interpolation in

Card 1/2 UDC: 551.509.3

L 10247-67
ACC NR: AP6030087

the initial field will be optimal from the point of view of minimum error only when the forecasting operator is linear with respect to the discrete field, but the proper operator of forecasting is by its very nature nonlinear. The same conclusion holds for the case of inexact forecasting equations. Orig. art. has: 9 formulas.

SUB CODE: 04, 12/ SUBM DATE: 12Jan66/ ORIG REF: 003

Card 2/2

ACC NR: AR7004086 (N) SOURCE CODE: UR/0169/66/000/012/B056/B056

AUTHOR: Krylov, Ye. V.; Marchenko, A. S.

TITLE: Evaluation of accuracy of probability characteristics for connected meteorological time series

SOURCE: Ref. zh. Geofizika, Abs. 12B408

REF SOURCE: Sb. 3-ya Nauchno-tekhn konferentsiya Novosib. fil. N.-i. in-ta aeroklimatol. Tezisy dokl. Novosibirsk, 1966, 19

TOPIC TAGS: meteorology, mean square error, random process, probability, correlation function, practical meteorology

ABSTRACT: Formulas were obtained to calculate the mean square errors of probability characteristics, taking the correlative connection of the elements of the time series into consideration. The theoretical relationship between the time correlative functions of meteorological elements and the correlative functions of the respective indicator processes was tabulated. The latter are used to evaluate the accuracy of climatic probability characteristics. Examples of such calculations are given. The theoretical results are compared with factual data obtained

Card 1/2 UDC: 551.501.45:551.580(018)

ACC NR: AR7004086

by processing archival material covering a 25-yr period obtained from several stations in Western Siberia. A good correlation of theoretical and factual connections between correlative functions was found. Utilization of these connections eliminates the need for highly complicated statistical processing of indicated random processes. [Translation of abstract] [GC]

SUB CODE: 04, 12/

Card 2/2

ACC NR: AR7004087 (N) SOURCE CODE: UR/0169/66/000/012/B056/B056

AUTHOR: Marchenko, A. S.; Pomozova, P. M., Chubenko, M. A.

TITLE: Characteristics of time structure and utilization of some meteorological elements in the territory of Western Siberia

SOURCE: Ref. zh. Geofizika, Abs. 12B409

REF SOURCE: Sb. 3-ya Nauchno-tekhn. konferentsiya Novosib. fil. N.-i. in-ta aeroklimatol. Tezisy dokl. Novosibirsk, 1966, 20

TOPIC TAGS: meteorology, electronic computer, meteorologic observation, correlation function, climatology, eigenfunction / Western Siberia

ABSTRACT: Computer methods are described which are used to calculate the time correlating functions of various meteorological elements according to data covering a 25-year period, and obtained from several meteorological stations in the southern part of Western Siberia. The results are interpreted in the light of differences in the physical and geographic locations of the stations. A period long enough to insure stability of the enumerable correlation functions is determined by a gradual lengthen-

Card 1/2

UDC: 551.501.45:551.582.1(571.1)

ACC NR: AR7004087

ing of the sample periods over a number of years. Examples are given of the utilization of time correlative functions to calculate the estimates of accuracy of climatic characteristics (temperatures, wind pressure, relative humidity), and of the statistical time extrapolation of these meteorological elements. These elements were expanded according to eigenfunctions of the time correlative matrix, and the oscillations carrying the basic information load were separated. [Translation of abstract]

SUB CODE: 04, 12/ [GC]

Card 2/2

MARCHENKO, A.T.; ZLOTNIKOV, M.L.

Observance of "Health Day" in a rural district. Zdravookhranenie 2 no.1:51-52 Ja-F '59. (MIRA 12:7)

1. Glavnyy vrach Strashenskogo rayona (for Marchenko). 2. Zamestitel' glavnogo vracha Strashenkogo rayona po sanitarno-epidemiologicheskoy sluzhbe (for Zlotnikov).
(STRASHENY DISTRICT--PUBLIC HEALTH)

GHENDON, I.Z.; MARCHENKO, A.T.

A method for the rapid determination of immunogenic potency of poliomyelitis vaccines by single vaccination of white rats. Acta virol.Engl.Ed. 3:250-252 0 '59.

1. Scientific Research Institute of Anti-poliomyelitis Preparations, Moscow.

(POLIOMYELITIS immunol)
(VACCINATION exper)

GHENDON, I.Z.; MARCHENKO, A.T.

Use of white rats for testing immunogenic properties of poliomyelitis antigens. Acta virol. Engl. Ed., Praha 3 no.2:89-95 Apr 59.

1. The Tarasevich State Control Institute of Medical Biological Preparations and the Moscow Anti-poliomyelitis Preparations Research Institute, Moscow.

(POLIOMYELITIS, immunology
immunogenic properties of polio. antigens, testing in white rats)

GENDON, Yu.Z.; KHESIN, Ya.Ye.; MARCHENKO, A.T.

Reversion of the genetic characteristics of the vaccine strains of Sabin's poliomyelitis virus by means of in vitro and in vivo passage. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:84-101 '61. (MIRA 17:1)

GENDON, Yu.Z.; ZASLAVSKIY, V.G.; MARCHENKO, A.T.

Some problems of expediency in the preparation of poliomyelitis vaccine. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:107-110 '61. (MIRA 17:1)

MARCHENKO, A.T.

Further study of the evaluation of the immunogenic properties of a poliomyelitis antigen on small laboratory animals. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:122-131 '61. (MIRA 17:1)

LEVENBUK, I.S.; ZASLAVSKIY, V.G.; MARCHENKO, A.T.

Criterion of the proper introduction of test vaccines into the spinal cord of monkeys. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:364-369 '61. (MIRA 17:1)

GHENDON, I.Z.; MARCHENKO, A.T.

Comparative investigation on the pathogenicity for monkeys and the ability to multiply at 40° C of different poliomyelitis virus strains. Acta virol.Engl.Ed.Praha 5 no.2:91-92 Mr '61.

1. The Moscow Scientific-Research Institute of Virus Preparations, Moscow, U.S.S.R.
(POLIOMYELITIS VIRUSES immunol)

MARCHENKO, A.T.

GHENDON, I. Z.; MARSCHENKO, A. T.

Evaluation of the immunogenic properties of inactivated poliomyelitis vaccine by single vaccination of small laboratory animals.(Guinea pigs, chickens and white rats). J. hyg. epidem., Praha 5 no.3:320-329 '61.

1. Research Institute for Anti-viral Preparations, Moscow.

(POLIOMYELITIS immunol)

GENDON, Yu. Z.; KHESIN, Ya. E.; ROZINA, E. E.; MARCHENKO, A. T.

Investigations into the viraemia caused by Sabin's attenuated poliovirus strains. Acta virol.Engl.Ed.Praha 5 no.4:201-209 Jl '61.

1. The Moscow Scientific Research Institute of Virus Preparations, Moscow.

(POLIOMYELITIS immunol)

GENDON, Yu.Z.; DISKINA, L.S.; MARCHENKO, A.T.

Infection of a tissue culture with viral ribonucleic acid as a method for isolating clones of poliomyelitis virus with stable genetic characteristics. Vop. virus. 6 no.6:651-656 N-D '61. (MIRA 15:2)

1. Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov.
(POLIOMYELITIS) (NUCLEIC ACIDS)

SOLOV'YEV, V.D.; BEKTEMIROV, T.A.; MARCHENKO, A.T.; NIKOLAYEVSKIY, G.P.

Study of cross immunity to vaccinia and variola viruses in monkeys. Vop.virus. 7 no.6:701-705 N-D '62. (MIRA 16:4)

1. Kafedra virusologii TSentral'nogo instituta usovershenstvovaniya vrachey Moskovskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya i Nauchno-issledovatel'skiy institut virusnykh preparatov, Moskva.
(SMALLPOX--PREVENTIVE INOCULATION)

MARCHENKO, A. T.; GENDON, Yu. Z.

"Izucheniye mekhanizmov nasledstvennoy izmenchivosti virusa poliomielita v protsesse passazhey v kul'ture tkani pri ponizhennoy temperature."

report presented at Symp on Virus Diseases, Moscow, 6-9 Oct 64.

Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov.

MARCHENKO, A.T.

Oncolytic effect of viruses in vivo. Vop. onk. 10 no.7:99-104 '64.
(MIRA 18:4)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta virusnykh preparatov (dir. - S.S.Unanov). Adres avtora: Moskva, Zh-88, 1-ya Dubrovskaya ulitsa, dom 15, Moskovskiy nauchno-issledovatel'skiy institut virusny preparatov.

MARCHENKO, A.Ye.

Expulsion of 274 ascarids (28 through the mouth) in a 2 1/2 year old child. Pediatriia no.3:86-87 My-Je '54. (MLRA 8:1)

1. Iz detskogo otdeleniya Omskoy zheleznodorozhnoy bol'nitsy (nauchnyy rukovoditel' - professor T.L.Mariupol'skaya)
(ASCARIDS AND ASCARIASIS)

POKHODNYA, I.K.; MARCHENKO, A.Ye.; BEYNISH, A.M.

High performance electrodes with iron powder in the coating.
Avtom. svar. 14 no.10:52-68 O '61. (MIRA 14:9)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki imeni Ye.O. Patona AN USSR.
(Electrodes) (Metal powders)

MARCHENKO, A.Ye.

E-50A-type electrodes of the 9467-60 state standard, good for welding with an alternating current. Avtom. svar. 14 no.12:88 D '61. (MIRA 14:11)
(Electrodes)

POKHODNYA, I.K.; REYNISH, A.M.; MARCHENKO, A.Ye.

Highly productive low-toxicity ANO-1 electrodes. Avtom. svar. 15 no.3:19-26 Mr '62. (MIRA 15:2)

1. Ordena Trudovogo Krasnogo Znameni institut elektrosvarki imeni Ye.O. Patona AN USSR.
(Electrodes--Testing)

POKHODNYA, I.K.; MARCHENKO, A.Ye.

Hydrogen in welded joints made by electrodes with a rutile coating. Avtom. svar. 17 no.5:40-46 My '64. (MIRA 17:11)

1. Institut elektrosvarki imeni Patona AN UkrSSR.

MARCHENKO, A.Ye.; POKHODNYA, I.K.; ASNIS, A.Ye.; BEYNISH, A.M.

Strength of welded joints in 09G2 steel. Avtom. svar. 17 no.7:20-24 Jl '64. (MIRA 17:8)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR.

POKHODNYA, I.K.; MARCHENKO, A.Ye.; YAVDOSHCHIN, I.R.

Standard, low-toxicity, ANO-3 and ANO-4 electrodes. Avtom. svar. 17 no.8:11-18 Ag '64.

(MIRA 17:11)

1. Institut elektrosvarki imeni Patona AN UkrSSR.

POKHCLNYA I.K.; MARCHENKO, A.Ye.; KOSTENKO, B.A.

Duration of the interaction of the liquid electrode metal with slag and gases during welding. Avtom. svar. 18 no.5:8-10 My '65. (MIRA 18:6)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR.

L 5458C-65 EWT(1) Peb

ACCESSION NR: AP5012124 UR/0378/65/000/001/0071/0073
519:621.385.15

AUTHOR: Marchenko, B. G.

TITLE: Correlation function of multichannel electron multiplier response to random interaction

SOURCE: Kibernetika, no. 1, 1965, 71-73

TOPIC TAGS: multichannel electron multiplier, electron multiplier response, random interaction response, electron multiplier correlation function, Gaussian perturbation, continuous control system, coincidence circuit

ABSTRACT: The multichannel electron multiplier is analyzed as a continuously operating computer link, and the correlation function of the response to input Gaussian perturbation is established. Similar devices represent an inherent part of correlation-type measuring units for the continuous control of production processes by means of computers. Similar devices may be used for servo-operated radar instrumentation. From another viewpoint, electron multipliers represent coincident schemes for electrical pulsed sequences. Consequently, the results presented in the paper may be used for the study of coincidence circuits in continuously operating computers. Outside the computer field, these results may

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L 54580-65
ACCESSION NR: AP5012124

be used, e.g., for the analysis of exponential detectors. Orig. art. has: 23 formulas.

ASSOCIATION: None

SUBMITTED: 30Sep64 ENCL: 00 SUB CODE: DP, EC

NO REF SOV: 001 OTHER: 001

Card 2/2

27538
S/123/61/000/014/036/045
A004/A101

13.2530

AUTHORS: Roginskiy, I.Yu., Marchenko, B.M.

TITLE: Selecting the sensitive element circuit for an accelerograph

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 14, 1961, 4, abstract 14Zh30 ("Sb. nauchn. tr. Leningr. int tochnoy mekhan. i optiki", 1960, no. 41, 36 - 44)

TEXT: It is pointed out that the basic condition which determines the selection of the sensitive element circuit is the measuring range and the magnitude of the given total error. The authors investigate the effect exerted by each component of the total error (inertial errors, errors caused by the effect of parasitic vibrations, errors from lateral acceleration components, errors caused by the method of converting displacements of the inertial mass of the sensitive element, errors from the decoding of the recordings, errors caused by temperature variations, and friction errors) on the selection of the sensitive element circuit. The maximum effect on the measuring errors is exerted by vibrations. All investigated types of sensitive elements permit to measure acceleration in the range of ± 0.5 - ± 100 g at natural frequencies of the sensitive ele-

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Card 1/2

Selecting the sensitive element circuit ...

ment from 5 - 100 cps. In this case the measuring errors fluctuate in the range of 0.5 - 3% of the maximum value of the accelerations being measured. It is shown that for the recording of accelerations which cause small displacements of the inertial mass, various types of electromechanical pickups are used, with the aid of which it is possible to record the displacement of masses from a few microns and more. Pickups with varying resistance (of the rheostat, tensometer and carbon type) have simple circuits and make it possible to measure accelerations in the range of 0.02 - 50 g with up to 2% errors at natural frequencies of the sensitive element up to 500 cps. The most simple pickup circuits are of the induction and tube type. Maximum accelerations are measured with piezoelectric pickups. Acceleration recordings with these pickups are effected with the aid of vibrator oscillographs. There are 13 diagrams and 3 references.

R. Skulkova

[Abstracter's note: Complete translation]

Card 2/2

DANILOV, V.I.; YENCHEVICH, I.B.; ZAMOLODCHIKOV, B.I.; MARCHENKO, B.N.; NOVIKOV, D.L.; POLFEROV, E.A.; ROZANOV, Ye.I.; SAVENYOV, A.L.; SAFONOV, A.N.

Increase in intensity of a proton beam in a six-meter synchro-cyclotron of the United Institute of Nuclear Research. Atom. energ. 16 no.1:9-11 Ja '64. (MIRA 17:2)

L 58861-65 EPA(w)-2/EWT(m)/EWA(m)-2 Pt-7 IJP(c) GS
ACCESSION NR: AT5007940 S/0000/64/000/000/0591/0594

AUTHOR: Danilov, V. I.; Yenchevich, I. B.; Zamolodchikov, B. I.; Marchenko, B. N.; Novikov, D. L.; Polferov, E. A.; Rozanov, Ye. I.; Savenkov, A. L.; Safonov, A. N.; Shestov, A. V.

TITLE: Increasing the internal beam current of the OIYaI synchrocyclotron to 680-Mev

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 591-594

TOPIC TAGS: synchrocyclotron, high energy accelerator

ABSTRACT: The Laboratory of Nuclear Problems of OIYaI modified the synchrocyclotron to increase the intensity of the internal beam, with the work being conducted in two directions: (a) obtaining a high-frequency program in the synchrocyclotron such that the current at the terminal radius of the accelerator would be a maximum; and (b) creating a focusing system that compensates for the defocusing action of the spatial charge at the center of the accelerator and thus increases the mean current of accelerated protons. The phase motion in the synchrocyclotron is analyzed in

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two principal stages: first, the capture of the particles at the center of the synchrocyclotron during the accelerating regime; and second, their phase motion during the acceleration process up to the terminal radius. The equations of D. Bohm and L. Foldy (*Phys. rev.*, 72, 649 (1947)) are insufficient for the solution of the problem of the optimum capture of charged particles in the accelerating regime in synchrocyclotrons of several hundred Mev. This is explained by the fact that the growth in energy per revolution in the first stage for a constant accelerating potential (U_0=const.) depends upon the radius of the orbit. The curve describing the relative growth of proton energy per revolution as a function of radius was calculated by means of pictures of the dee potential field which were obtained from a model of the central region of the OIYal synchrocyclotron in an electrolytic tank. Experimental measurements of the current at the radius R=30 cm determined the magnitude of $\dot{\omega}_{s\ init}$ (growth of the circular frequency in units of radians per second^2) that ensures optimum capture conditions. Choice of this radius necessitates excluding the influence of variations in the phase conditions during proton acceleration in the region of the middle and terminal radii. The magnitude of $\dot{\omega}_{s\ init}$ varied over a wide range with variation of the magnetic field strength at the center of the accelerator. For voltage at the dee of U_0=12 kilovolts and for existing geom-

L 58861-65
ACCESSION NR: AT5007940

etry of the accelerating gap, the dependence of the intensity (capture effectiveness) upon $\dot{\omega}_{s\ init}$ for the OIYaI synchrocyclotron showed the optimum value to be 2.25x 10^{10} rad/sec^2 (B.I. Zamolodchikov, et al. Preprint OIYaI P-720, Dubna, 1961). Correction of the parameters of the accelerator's resonance system in January 1961 led to a frequency program with the indicated value of $\dot{\omega}_{s\ init}$ at the beginning of acceleration, which led in turn to increasing the internal beam from 0.3 to 0.8 microamperes at the terminal radius R=274.5 cm. The proton current was measured by means of the induced activity of an aluminum target, according to the reaction $Al^{27}(p,3pn)Na^{24}$, obtained at radii R=270 to 280 cm. A target with a lead backing was calibrated against a beam of protons, extracted from the synchrocyclotron chamber, by means of a Faraday cylinder. The second stage of the work consisted in creating high-frequency characteristics of the synchrocyclotron $\omega_g=\omega_g(t)$ and $U_0=U_0(\omega_g)$ such that they ensure simultaneously the optimum conditions for the capture of the ions and their subsequent acceleration up to the terminal radius without phase loss. During selection of the frequency program of the synchrocyclotron consideration was taken of the damping of phase oscillations during the process of proton acceleration up to the terminal radius of the accelerator. Use was made of the invariance of the integral of action J during the adiabatic variations of the system's parameters.

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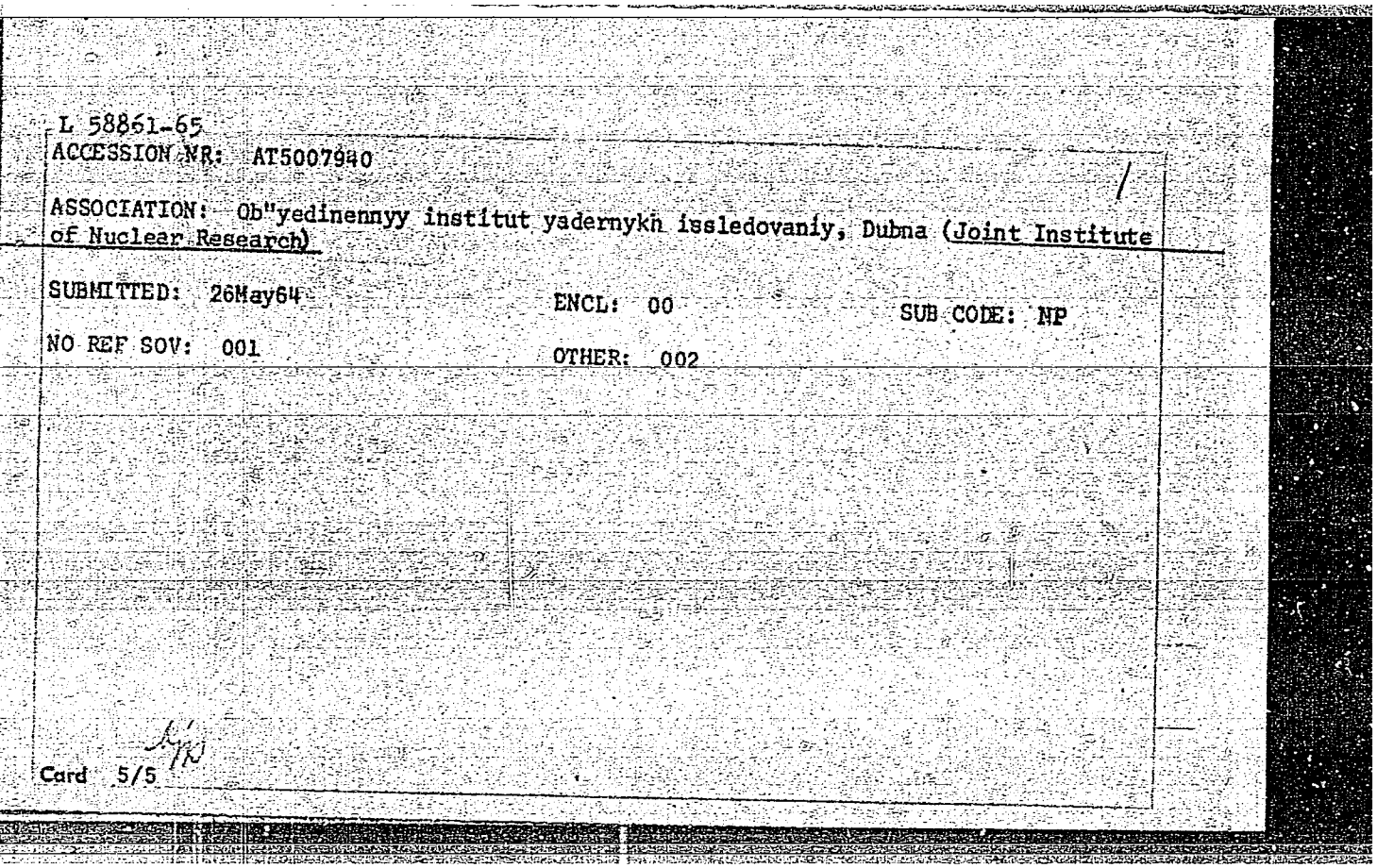
L 58861-65
ACCESSION NR: AT5007940

Further increase in the intensity of the synchrocyclotron was reached by introduction of additional vertical (axial) focusing of the accelerated ion beam in the central region of the accelerator. Investigations of the focusing systems demonstrated the advantage of electrostatic focusing over magnetic focusing at the center of the accelerator. The system of focusing electrodes used in the OIYaI synchrocyclotron was constructed with the possibility of regulating the gap between the dee and supplementary electrodes. Moreover, the configuration of the electric field can be varied by regulation of the arrangement of the grounded screen placed between the dee and the potential electrodes. The Hill equation can describe the motion of the ions in the accelerator's magnetic field and in the electrostatic field created by the supplementary electrodes. The optimum arrangement of the electrodes of the focusing installation was found by experimental study of the properties of the system according to the dependence of the beam current upon U_f (focusing voltage in kilovolts) for various distances of the electrodes from the center of the accelerator. The internal beam current for the indicated conditions was approximately doubled, amounting at the present time to 2.2-2.3 microamperes. Orig. art. has: 7 figures.

Card 4/5



L 58861-65
ACCESSION NR: AT5007940

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy, Dubna (Joint Institute of Nuclear Research)

SUBMITTED: 26May64 ENCL: 00 SUB CODE: NP

NO REF SOV: 001 OTHER: 002

Card 5/5

L 05392-67 IJP(c)

ACC NR: AT6031503 SOURCE CODE: BU/2503/66/014/000/0005/0019

AUTHOR: Danilov, V. I.; Enchevich, I. B.; Marchenko, B. N.; Polferov, E. A.; Safonov, A. N.; Shestov, A. V.

ORG: none

TITLE: Increasing the internal beam current of the synchrocyclotron of the Joint Institute for Nuclear Research by additional electrostatic focusing

SOURCE: Bulgarska akademiya na naukite. . Fizicheski institut. Izvestiya na Fizicheskiya institut s ANEB, v. 14, 1966, 5-19

TOPIC TAGS: synchrocyclotron, electrostatic field, electrode, duant, accelerator, rectifier, proton current

ABSTRACT: A description is given of the effects of an electrostatic field in the central region in the synchrocyclotron of the Joint Institute of Nuclear Research upon the accelerated proton current. As a result of theoretical and experimental research, the chosen aperture of the focusing electrode is equal to the aperture of the dee. In view of the need for a stable installation for long periods of work, 30-mm gaps were established between the screens and the electrodes and a 170-mm

Card 1/2

distance was established between the dee and the electrodes. In such conditions the maximum current magnitude attained is U_{Φ} = 13 kilovolts. As a result of the increase of focusing forces in the central region of the accelerator, the beam current on the finite radius increased from 1.1—1.2 to 2.1—2.3 μA . In conclusion, the authors thank senior technicians V. I. Ivanov and Yu. V. Maksimov for the production of the 30-kv rectifier; designer I. Kh. Nozdrin and K. A. Baycher, director of the machine shops of the Laboratory of Nuclear Problems, for their efforts in the development and production of the focusing installation, and G. I. Selivanov, chief engineer of the Laboratory of Nuclear Problems. Orig. art. has: 16 figures.

SUB CODE: 20, 09/ SUBM DATE: none/ ORIG REF: 003/

ARTAMONOV, K.I.; LEBEDEV, N.I.; YERGALIYEV, E.Ye.; LESECHKO, A.K.; YAKUSHIN, M.V.; KAZAKOV, V.N.; BRYUKHANOV, N.G.; NIKITINA, L.I.; KHVESYUK, F.I.; Prinimali uchastiye: MATVEYEV, A.T.; KOVALEV, S.I.; ROMANOV, V.S.; MARCHENKO, B.P.; ZUDOVA, T.I.; OMAROV, M.N.; PECHENKIN, S.N.; LUKIN, Ye.G; KHLUDKOV, V.I.

Shaft-furnace copper smelting with an oxygen-enriched blow. TSvet. met. 34 no.3:32-39 Mr '61. (MIRA 14:3)

1. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev, Yergaliyev, Lesechko, Matveyev, Kovalev, Romanov, Marchenko, Zudova, Omarov). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut tsvetnykh metallov (for Yakushin, Kazakov, Bryukhanov, Nikitina, Khvesyuk, Pechenkin, Lukin, Khludkov).
(Copper--Metallurgy) (Oxygen--Industrial applications)

MARCHENKO, D.

Maintaining formal rules. Grazhd.av. 18 no.8:8-9 Ag '61.
(MIRA 14:8)

1. Komandir korablya Il-18 Kazakhskogo upravleniya Grazhdanskogo vozdushnogo flota.

(Airplanes--Piloting)

MARCHENKO, D.A.

Determining specific capital investments in oil production; a topic for discussion. Neft. khoz. 39 no.4:1-6 Ap '61.
(MIRA 14:6)

(Oil fields—Production methods)
(Capital investments)

KACHAN, I.K.; MARCHENKO, D.A.; ROZENBERG, D.A.; ANISIMOV, A.P.; BERESTETSKIY, M.M.

Use of poles made from centrifuged reinforced concrete in building electric transmission and communication lines. Energ.biul. no.6:6-13 Je '53.
(MLRA 6:6)
(Electric lines--Poles)

MARCHENKO, D. A.

AID P - 787

Subject : USSR/Electricity

Card 1/1 Pub. 28 - 2/5

Authors : Kachan, I. K., Marchenko, D. A., Anisimov, A. P., Shishkin, O. P. and Guterman, D. I.

Title : Experience in use of a movable electric substation for electric power supply in oil fields

Periodical : Energ. byul. #2, 9-15, F 1954

Abstract : Brief description of electric substations, movable by railroad or motor transport to a center of oil prospecting. The substations have lower costs of construction and operation than the stationary units. 4 photographs, 1 table and 2 Russian references in the text (1953).

Institution : Inter-Departmental Experimental and Technical Council of the State Inspection of Electric Power and Power Inspection (MES i EP)

Submitted : No date

KACHAN, I.K.; MARCHENKO, D.A.; ROZENBERG, D.A.; ANISIMOV, A.P.; BERESTETSKIY, M.M.

Experience in planning and building high-voltage electric transmission lines on supports made from centrifugal reinforced concrete. Energ.biul. no.3:19-25 Mr '54. (MLRA 7:3)

1. Trest Energomontazhneft'. (Electric lines--Poles)

MARCHENKO, D.A.

AID P - 519

Subject : USSR/Engineering

Card 1/1 Pub. 93 - 6/12

Authors : Kachan, I. K., Marchenko, D. A., Rosenberg, D. A., Anisimov, A. P., Berestetskiy, M. M., Engineers

Title : Supports for electrical transmission lines made from centrifugal reinforced concrete (Tested by the Trust Energomontazhneft')

Periodical : Sbor. mat. o nov. tekh. v stroi., 6, 15-20, 1954

Abstract : The Tbilisi Scientific Research Institute of Construction and Water Power Engineering (TNISGEI) with the assistance of Prof. Mikhaylov, V. V. and Mikhel'son, Ye. E. has designed a new type of support for 6-10-35 kv transmission lines. The supports are assembled from prefabricated tube-shaped members made of reinforced concrete, which is poured into forms by a centrifugal method. 3 photos, 3 tables.

Institution : None

Submitted : No date

MARCHENKO D.A.

KACHAN, I.K.; MARCHENKO, D.A.; ANISIMOV, A.P.

Use of posts made of centrifugal reinforced concrete in building overhead communication lines. Vest.sviazi 14 no.10: 5-6 O '54. (MLRA 7:11)

1. Upravlyayushchiy trestom "Energomontazhneft'" (for Kachan)
2. Glavnyy inzhener tresta "Energomontazhneft'" (for Marchenko)
3. Glavnyy energetik proyektnonaladochnoy kontory tresta "Energomontazhneft'" (for Anisimov)

(Telegraph lines--Construction) (Telephone lines--Construction)

MARCHENKO, D.A.

AID P - 1921

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 1/31

Authors : Kachan, I. K., Anisimov, A. P., Marchenko, D. A., and Levit, Ye. S., Engineers

Title : Use of reinforced concrete supporting structures in building 35-kv transmission lines

Periodical : Energetik, 3, 1-4, Mr 1955

Abstract : The authors give an account of the experience obtained by the technical personnel of the Trust "ENERGOMONTAZHNEFT'" in producing concrete poles and in building transmission lines with them. They give technical details of production and construction. Two photographs, 1 drawing, and 2 tables.

Institution: "ENERGOMONTAZHNEFT'"

Submitted : No date

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