

KUPEROV, L.P.

Expedition for the study of radio wave propagation. Probl.Arkt.
no.6:138 '59. (MIRA 13:6)
(Arctic regions--Ionospheric radio wave propagation)

KUPEROV, L.P.

Observation of signals of the third Soviet artificial earth
satellite on Cape Cheliuskin. Isk.sput.Zem. no.5:66-70
'60. (MIRA 13:5)

(Artificial satellites--Tracking)

S/561/61/000/009/002/003
D207/D308

9.9/00

AUTHOR: Kuperov, L.P.

TITLE: On the problem of nonlinearity of electrical characteristics of the ionosphere

SOURCE: Problemy arktiki i antarktiki, no. 9, 1961, 59 - 61

TEXT: An analysis was made of transmissions of dashes by telegraph between the Moscow Radio Center, Dikson Island, and Shmidt Cape in September and November, 1951. The transmission were received with an ondulator working at 8-13 Mc/s. The results indicated that the ionosphere can be regarded as a partly nonlinear dielectric medium in agreement with the suggestion of M.A. Bonch-Bruyevich (Ref. 2: Zhurnal tekhnicheskoy fiziki, vol. 2, no. 5, 1932) Bonch-Bruyevich defined a nonlinear medium as that in which the permittivity and the conductivity depend on the amplitude of the electric field in the e.m. wave. A nonlinear region of the ionosphere was found in the path of the transmitted signals close to Dikson Island.

SUBMITTED: December 10, 1960
Card 1/1

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KUPEROV, L.P., starshiy nauchnyy sotrudnik

Absorption of long radio waves by the ice massif in Antarctica. Inform.
biul. Sov.antark.eksp no.43:49-52 '63. (MIRA 17:1)

1. Shestaya kontinental'naya ekspeditsiya.

SOURCE: Ref. zh. Fizika, Abs. 2Zh150

AUTHOR: Kuperov, L. P.

TITLE: Propagation of radio waves in the 14--600 kcs band as observed at the Byrd station in the Antarctic

ABSTRACT: Inform. brief. Sov. antarct. expeditions, no. 47

station (80° southern latitude and 120° western longitude). In the 15--23 kcs band, signals from powerful stations of the northern hem-

KUPEROV, L.P., zina. Fiziko-mat. nauk

Some results of listening to shortwave radio stations in the Antarctic.
Inform. biul. Sev. antark. eksp. no. 52:48-50 '65.

(MIRA 18110)

1. Arkticheskiy i antarklicheskiy nauchno-issledovatel'skiy institut.

15/21-56 ENT(d)/ENT(1)/REC(k)-2/FCC/EMA(h) -CW/NS-2
ACC NR: AT5028700

SOURCE CODE: UR/3174/64/000/047/0045/0049

AUTHOR: Kuperov, L. P. (Senior Research Associate)

ORG: Arctic and Antarctic Scientific-Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut)

TITLE: Radio wave propagation in the 14 to 600 kc band based on observations at the Byrd Station in Antarctica

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955- Informatsionnyy byulleten'. no. 47, 1964. 45-49

TOPIC TAGS: radio wave propagation, Antarctic climate, ionospheric absorption, ionospheric electron density

ABSTRACT: Radio waves in the 14 to 600 kc frequency band were studied at the Byrd Station (80° lat S, 120° long W) in the interior of Antarctica during March 1961. Equipment for measuring field intensities included a radio receiver (14 to 600 kc), a signal-generator, an electronic oscillograph, and a 10 m aluminum antenna. Findings show that the distribution of the frequency band spectrum received at the station is rather peculiar. Radio signals from 14 to 20 kc were received under night conditions, and signals from 20 to 23 kc were received under

Card 1/2

UDC: None

L 15724-66

ACC NR: AT5028700

twilight and day conditions. Radio signals from 23 to 43 kc were received under night conditions, and signals from 43 to 60 kc were received under twilight conditions. It is interesting to note that 23 kc radio signals were not even once received under day conditions. Radio signals from 43 to 143 kc under night conditions and radio signals from 60 to 177 kc under twilight conditions were received only March 15, 17, and 18, which coincided with the time of aurora australis at the Byrd Station. No other frequencies were recorded. This distribution of radio frequency bands is explained by ionospheric reflection conditions when electron collisions with neutral particles at a given altitude may play a more important role than electron density. Absorption of radio signals with different electron densities is discussed. Radio signals in the 15 to 23 kc band were received from the northern hemisphere (New York, London, Moscow, Pearl Harbor, San Francisco) and radio signals from 43 to 177 kc (March 15, 17, 18) were received from the southern part of South America and the Falkland Islands. Further studies of radio signals in the interior of Antarctica may also yield new data on the D and E layers of the ionosphere. Orig. art. has: 2 tables.

SUB CODE: 17/ SUBM DATE: 29Jun63/ ORIG REF: 004/ OTH REF: 000

JS
Card 2/2

L 21925-66 EWT(1) RB/GW

ACC NR: AT6014620

(N)

SOURCE CODE: UR/3174/65/000/052/0048/0050

AUTHOR: Kuperov, L. P. (Candidate of physicomathematical sciences)

29

ORG: Arctic and Antarctic Scientific Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut)

8+1

TITLE: Some results of audibility of short-wave radio stations in Antarctica

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955-. Informatsionnyy byulleten' no. 52, 1965, 48-50

TOPIC TAGS: radiowave propagation, ionosphere, radio signal, radio reception

ABSTRACT: The following is representative of the results of studies of the audibility of short-wave radio stations at Byrd station in Antarctica. Radio signals in the short-wave range were not propagated by a reflected ray directly through the region of total darkening of the ionosphere (where the sun is at the nadir). Such stations as San Francisco, Vancouver and Clearwater, situated almost on the same meridian as Byrd, in some cases could not be heard at midnight, but could be when the position of the solar nadir was situated far from the radio link. Radio signals were propagated by a reflected ray directly through the region of the zenith position of the sun at high frequencies at midday and in evening. At midday the radio signals from the illuminated hemisphere were absent. In the evening the signals reach the reception point only from the afternoon direction. Many similar cases are considered. It is pointed out that Antarctic stations have many advantages in the study of the paths of radio propagation on a global scale.

Card 1/2

L 21925-66

ACC NR: AT6014620

At Arctic stations and points in the northern hemisphere there is no reception of radio information through the region of the tropics, since almost all the space beyond the Tropic of Capricorn is covered by the world ocean. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 17, 04 / SUM DATE: 26Jun64 / ORIG REF: 003

Card 2/2 nst

ZnCl₂, which are capable of forming enolate derivatives with

June 26, 1962. Mn and Bi are melted together in open
furnaces in the presence of substances such as NH_4Cl or
 ZnCl_2 , which are capable of forming volatile chlorides with
Mn and Bi oxides to provide a protective atm. for the melt.

45205

KUPERSHLYAK, M. G.

KUPERSHLYAK, M. G. "Clinic and Treatment of Gunshot Wounds of the Bladder." Dr Med Sci, Central Inst for the Advanced Training of Physicians, 26 Jan 54. (Vechnayaya Moskva, 7 Jan 54)

SO: SUM 168, 22 July 1954

KUPERSHLYAK, H.G., dots. SAVINKOV, B.F.

Treatment of tumors of the bladder. Urologia 23 no.4:24-29 J1-Ag '58
(MIRA 11:8)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. I.D. Korabel'nikov) Chelyabinskogo meditsinskogo instituta.

(BLADDER, neoplasms
diag. & ther. (Rus)

KUPERSHLYAK, M. G., dotsent

Renal colic in pscitis. Urologia no.3:54-56 '61. (MIRA 14:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. I. D. Korabel'nikov) Chelyabinskogo meditsinskogo instituta.

(RETROPERITONEAL SPACE--DISEASES)
(KIDNEYS--DISEASES) (MUSCLES--DISEASES)

KUPERSHLYAK, M.G., doktor med.nauk

Errors and hazards in the surgical treatment of nephro-and
ureterolithiasis. Urologia no.1:23-27'63. (MIRA 16:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. I.D.
Korabel'nikov) Chelyabinskogo meditsinskogo instituta.
(CALCULI, URINARY)

KUPERSHLYAK, M.G., doktor med. nauk

Diagnostic significance of vasovesiculography. Vest. rent. 1
rad. 39 no.3:41-45 My-Je '64.

(MIRA 18:11)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - prof. I.D.
Korabel'nikov) Chelyabinskogo meditsinskogo instituta.

BEREZIN, I.Ya.; KUT'IN, K.K.; KUPERSHLYAK-YUZEFOVICH, G.M.

Device for measuring the displacement of working parts on
forging machinery. Kuz.-shtam. proizv. 4 no.7:42-43 JI '62.
(MIRA 15:7)

(Forging machinery) (Automatic control)

BAKSHI, G.G., kand. tekhn. nauk; KUPERSHLYAK-YUZEFOVICH, G.M., inzh.

Elastic properties of deposited austenitic metal and their anisotropy.
Svar. proizvod. 12:5-7 D '63. (MIRA 18:9)

1. Chelyabinskiy politekhnicheskii institut (for Bakshi).
2. Nauchno-issledovatel'skiy i proyektno-tekhnologicheskii institut avtomatizatsii i mekhanizatsii mashino-troyeniya Yuzhno-Ural'skogo soveta narodnogo khozyaystva (for Kupershlyak-Yuzefovich).

KUPERSHLYAK-YUZEFOVICH, G.M.

Measurement of deformations on the bases of less than 3mm. Zav.lab.
29 no.8:993 '63. (MIRA 16:9)

1. Nauchno-issledovatel'skiy i proyektno-tekhnologicheskii insti-
tut avtomatizatsii i mekhanizatsii mashinostroyeniya.
(Deformations(Mechanics))

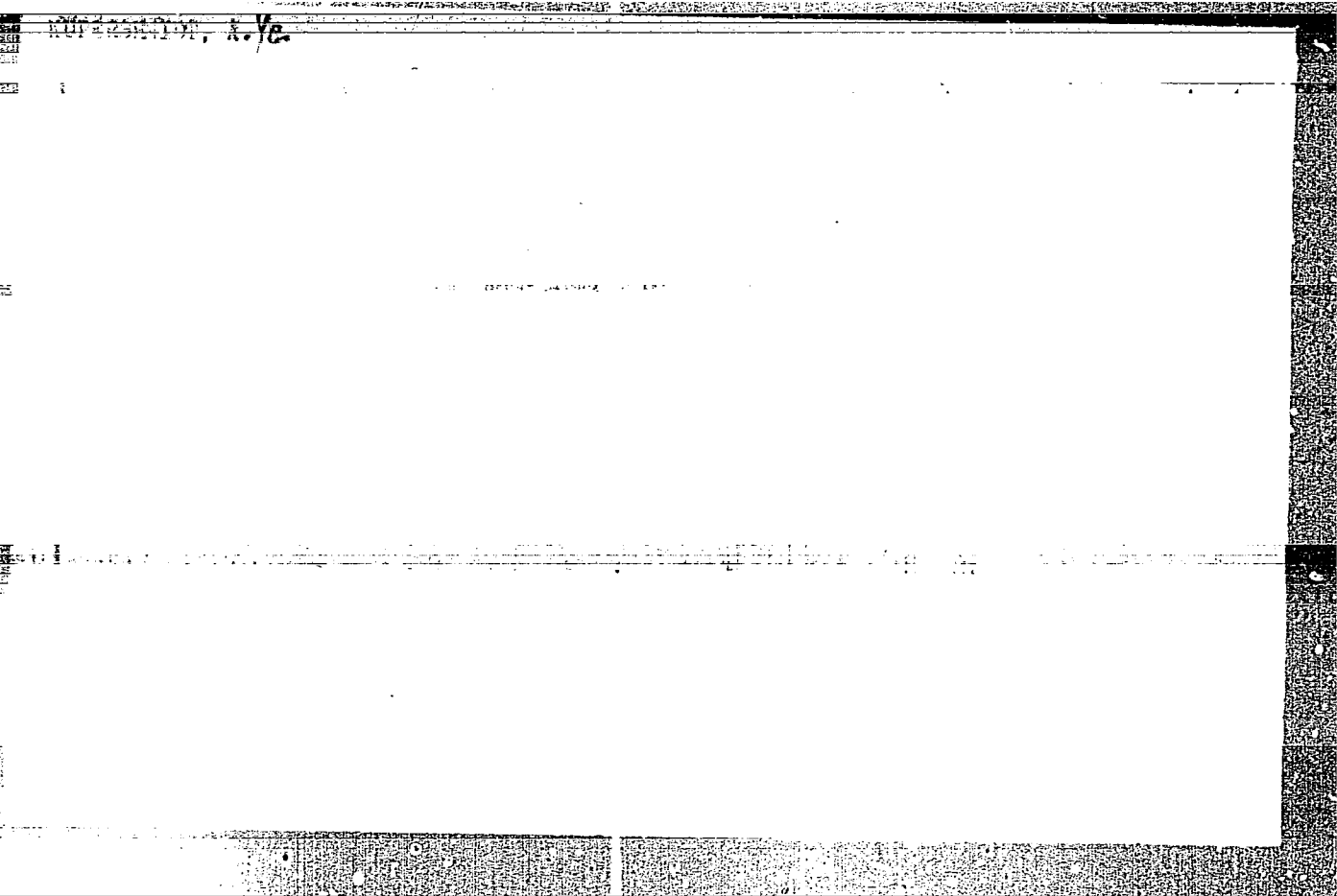
BAKSHI, G.A., kand. tekhn. nauk; KUPCHENKO-YUREVICH, G.M., Inzh.

Deformation of butt welds under pulsation stress application.
Svar. proizvod. no.1:10-13 Ja '65. (MIRA 18:3)

1. Chelyabinskiy politekhnicheskiy institut.

SHESTOPALYUK, A., inzh.-podpolkovnik; KUPERSHILD, I., inzh.

Movable electric power station. Av.1 kosm. 46 no.1:84 Ja '64.
(MIRA 17:3)



BRODYANSKIY, V.M., kand.tekhn.nauk; KUPERSHMIDT, A.Ye, inzh.

Graphic method for calculating temperatures in heat ex-
changers at variable heat capacities. Kislod 12 no.4;
23-27 '59. (MIRA 12:12)
(Heat exchangers) (Heat--Transmission)

EFROS, V.V.; KUPERSHMIT, B.L.; PETROV, G.S.; TARASOV, Yu.N.

Investigation of the D-24 engine provided with an electric starter.
Avt. i trakt. prom. no.2:7-10 F '57. (MLRA 10:3)

1. Vladimirskiy traktorny zavod.
(Automobiles--Engines)

MALAFEEV, F.V., inch.; KUPERSHMIDT, I.N., inch.

Installation of a short-circuiting device outside the effective zone of the differential protection system of transformers. Energetik 13 no.6: 20-21 Ja '65. (MIRA 18:7)

SIZOV, Vasilii Nilolayevich, prof., doktor tekhn.nauk;
RUDENKO-MOKCIN, Ivan Yakovlevich, dots., kard. tekhn.
nauk; TSHILADZE, Georgiy Rodionovich, inzh.; USHENKO,
Vasilii Mitrofanovich, kard. tekhn. nauk; SHVIDENKO,
V.N., prof., retsenzent; DANILEVSKIY, A.S., inzh.,
retsenzent; KUPERSHVIDT, L., red.

[Technology of construction] Tekhnologiya stroitel'nogo
proizvodstva. [By V.I.Sizov i dr. Moskva, Vysshaya shkola,
1964. 613 p. (MIRA 19-1)]

RESHETOV, Dmitriy Nikolayevich, doktor tekhn. nauk, prof.; GUDOLIN, Viktor Leonardovich, kand. tekhn. nauk, dots.; DROZDOV, Nikolay Aleksandrovich, kand. tekhn. nauk, dots.; NIKIFOROV, Vladimir Vasil'yevich, kand. tekhn. nauk; SHUVALOV, Sergey Arsen'yevich, kand. tekhn. nauk; KUPERSHMIT, L.S., red.

[Laboratory manual on the course "Machine parts"] Laboratornye raboty po kursu "Detali mashin. Moskva, Izd-vo "Vysshaya shkola," 1964. 106 p. (MIRA 17:7)

1. Kafedra "Detali mashin" Moskovskogo vyshego tekhnicheskogo uchilishcha imeni M.Ye.Baumana (for all except Kupershmidt).

OSTROV, Iev Georgiyevich, kand. tekhn. nauk; SERBINOVICH, Iuva Petrovich; KRASENSKIY, Viktor Yevgen'yevich; Prinsipal uchastiyu SHUBIN, I.F.; KUFEROV I.D., I.S., red.

[Public and industrial buildings; architectural and construction designs and building elements] Grazhdanskoe i promyshlennye zdaniia; arkhitekturno-konstruktivnye skhemy i elementy zdanii. Izd.3., perer. Moskva, Vysshaya shkola, 1964. 482 p. (MIRA 17-8)

LUKAYEV, Lazar' Panayotovich GALKIN, I.G., prof., retsenzent;
KUPERSHMIDT, L.S., red.

[Cranes for construction assembly and loading and un-
loading operations] Krany dlia stroitel'no-montazhnykh i
pogruzochno-razgruzochnykh robot. Moskva, Vysshaya
shkola, 1965. 231 p. (MIRA 18:7)

1. Moskovskiy inzhenerno-ekonomicheskiy institut imeni
S.Ordzhonikidze (for Galkin).

GOKHMAN, Vladimir Akinovich; CHVANOV, V.G., nauchn. red.;
KUPERSEIDT, L.S., red.

[Principles of road building] Osnovy dorozhnogo stroitel'-
stva. Moskva, Vysshaia shkola, 1965. 270 p.
(MIRA 18:9)

ZALICHENOK, Gavriil Grigor'yevich, kand. tekhn. nauk, laureat
Gos. premii; SHCHEDROVITSKIY, S.S., kand. tekhn. nauk,
nauchn. red.; KUPERSHMIDT, L.S., red.

[Automating enterprises of the construction industry]
Avtomatizatsiia predpriatii stroitel'noi industrii.
Moskva, Vysshaya shkola, 1965. 419 p. diagr.
(MIRA 18:12)

EDWARDS M.J.

Kinetics of the shrinkage of the various types of polyvinyl
chloride linoleum. Plast. massy no. 11160-63 1/2 (MIRA 18:1)

KUPERSHMIDT, M.L., inzh.; SURKOV, V.I., inzh.; BYKOV, A.S., inzh.;
DANTSIN, M.I., inzh.; NOVIKOVA, E.T., inzh.

Preparation of highly filled linoleum using improved techniques.
Stroi. mat. 7 no.4:26-29 Ap '61. (MIRA 14:5)
(Linoleum)

KUPERSHMIT, M.L.; SURKOV, V.I.

Setting of poly(vinyl chloride) linoleum. Plast.massy no.10:33-36
'61. (MIRA 15:1)

(Linoleum)

S/121/62/000/004/007
D040/D113

Kupershmidt, Sh. N., and Yegorov, Yu. V.
Automatic reader for co-ordinate jig boring machines

AUTHORS:
TITLE:

PERIODICAL: Stanki i instrument, no. 4, 1962, 33-36

TEXT: The described new reader developed and tested at the Moskovskiy zavod koordinatno-rastochnykh stankov (Moscow Co-Ordinate Jig Boring Machine Plant) for program-controlled jig borers is an improvement on existing optical readers used by this plant, the Leningradskiy stankozavod im. Sverdlova (Leningrad Machine Tool Plant im. Sverdlov) and other plants. The existing device with a 65- or 125-fold amplification has 0.001-0.002 mm scale divisions and produces inadequate line shadow on the screen because the illuminance of the latter is too weak (0.5-2 lx). The new system has an improved photoelectric transducer with light modulation produced by a diagram oscillating at 50 cps, so that the appearance of a dark line in the field of view of the photocell causes a pulse signal on the amplifier output. The diagram is oscillated by an electromagnet connected to

ducer,

Card 1/2

KUPERSHMIT, Sh.N.

Establishing a program for machine tools with position program
control. Stan.1 Instr. 35 no.8:8-10 pg 164.

(MIRA 17:10)

KUFERSHMIDT, Sh.N.; SARKISOV, E.F.

Effect of d.c. magnetic fields on the performance of polarized
relays. Stan. i instr. 36 no.9:20 S '65. (MIRA 18:10)

KUPERSHMIDT, V.L.; EFROS, V.V.

Using liquefied oils in tractor diesel engines. Trakt. i
sel'khoz mash. 8:13-16 Ag '58. (MIRA 11:8)

L.OGK Vladimirovskogo traktornogo zavoda,
(Tractors--Engines) (Diesel fuels)

YEROKHIN, Nikolay Georgiyevich; KUPERSHMIDT, V.L.; EFROS, V.V.;
PESTRYAKOV, A.I., red.; ZUBRILINA, Z.P., tekhn.red.

[Handbook for "Universal" DT-24, T-28, T-28M tractors]
Spravochnik po traktoram "Universal" DT-24, T-28, T-28M.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 215 p.

(IRA 13:12)

(Tractors)

KUPERSHMIDT, V.L., inzh.

Effect of the closing angle of an intake valve on the starting qualities of diesel engines. Trakt. i sel'khoz mash. no.9:12-14 S '64. (MIRA 17:11)

1. Nauchno-issledovatel'skiy i eksperimental'nyy institut avtomobil'nogo elektrooborudovaniya, karbyuratorov i priborov.

KUPFERCHMIDT, V.L.

Effect of the escape of the air charge on the process of compression during the starting of a diesel engine. Trakt. i sel'khozmasb. no.8:12-14 Ag '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy i eksperimental'noy inatitut avtomobil'nogo elektrooborudovaniya, karbyuratorov i priborov.

AUTHOR: Kupershmidt, Ya. A. (Moscow) 1958-09-01/1958

TITLE: Coders and Decoders in Pulse-Code Telemetering Systems
(Kodiruyusnchiye i dekodiruyushchiye ustroystva kodo-impul'snykh sistem telemekhaniki)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol. 19, No. 9, pp 879-897 (USSR)

ABSTRACT: Here a systematic survey on the methods for transforming voltage and current into a binary pulse-code and on the methods for transforming the code back into voltage and current is given. The coder and decoder methods mainly applied in computing and telecommunication engineering are described. A comparing estimation of these methods from the point of view of their applicability for code-pulse telemetering systems is given. The application fields of the three variations of the binary code - the normal code, that with sign change and the reflex code - are shown. For coders the method of "weighing" (coding like weighing) is carried out on scales by means of weighted and the pulse computing method are recommended; for decoders the method of summing up currents is recommended. In a number of cases the circuit can be simplified by using a special binary code; that is the binary code with sign change - in the method of "weighing".

Orders and Decoders in Pulse-Code Modulating Systems

and the method of accumulator discharge, and the binary reflex code - in the table method. It is of great importance that orders and decoders in a telemetering system operate in accordance with one another. Otherwise the system would become unnecessarily complicated. There are 11 figures, 1 table, and 15 references, 4 of which are cited.

SUBMITTED: July 31, 1967

KUTERSHIMDT, Ya...A. , MALOV, V. S., PSHENICHNIKOV, A. M.

"Industrial Telemetry Systems and Digital Techniques."

report presented at the International Federation of Automatic Control Congress,
Moscow, 25 Jun - 5 Jul 60

S/115/60/000/010/020/028
B021/B058

AUTHORS: Malov, V. S., Pshenichnikov, A. M., Kupershmidt, Ya. A.

TITLE: "Industrial Telemetric Systems and Digital Technology"

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 10, p. 61

TEXT: The classification of telemetric systems is listed according to the following distinguishing characteristics: 1) transmission distance and type of transmission channel; 2) structure of the telemetering system; 3) type of the telemetric parameters; 4) service life. The possibility and expediency of standardizing telemetric systems and applying blocks for their construction is shown. The use of the digital technique in telemetric systems is pointed out as being promising. Examples of systems with digital reproduction are mentioned: with transmission of coded and analogy signals.

Card 1/1

KUPERSHMIDT, Yakov Abramovich; MALOV, Vladimir Sergeevich;
PSHENICHNIKOV, Aleksandr Malveyevich; ZHUKHOVITSKIY, B.Ya.,
red.; SHIROKOVA, M.M., tekhn. red.

[Present-day telemetering systems] Sovremennye teleizmeritel'-
nye sistemy. Moskva, Gos. energ. izd-vo, 1961. 86 p. (Biblio-
teka po avtomatike, no.44) (MIRA 15:3)
(Telemetering)

KUPERSHMIDT, Ya.A. (Moskva); MALOV, V.S. (Moskva); SHENBROT, I.M. (Moskva)

Present-day trends in the development of dispatcher control systems
using digital computers. Avtom. i telem. 22 no.7:954-959 J1 '61.
(MIRA 14:6)

(Electronic digital computers) (Information theory)

24841
S/103/61/022/008/010/015
D274/D302

9.7300
9.7300

AUTHOR: Kupershmidt Ya. A. (Moscow)
TITLE: On the digital reproduction of signals in analog
telemetering systems
PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 8, 1961,
1080-1087

TEXT: An attempt is made [Abstracter's note: Apparently the first
of its kind] to derive formulae for the choice of the basic para-
meters of digital converters in pulse-duration-, frequency-, and
pulse-frequency systems and to delimit the range of application of
existing frequency systems with digital reproduction. For the pur-
pose of a more specialized study of the digital converters, the
errors in the analog system itself are ignored. The absolute coding-
error is equal to $(Nt - t)$ where N is the number of pulses corres-
ponding to the time t , and T_c is the period of the counting pulses,
 T_c being equal to $1/f_c$, where f_c is the frequency of the pulses,
whose choice is important. The reduced coding error is

Card 1/4

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On the digital reproduction...

$$\delta = \frac{(N - N_0) T_c - (t - t_0)}{t_N - t_0}$$

where N_0 corresponds to t_0 which is the duration of the pulse corresponding to the zero value of the parameter; t_N corresponds to the nominal value of the parameter. If δ is given, the minimum permissible frequency f_c can be found for various counting schemes. Two examples are given in which f_c is found as a function of . The choice of δ cannot be considered as arbitrary; first of all, it is not necessary that δ should be much smaller than the error of the analog part of the system; δ should be chosen in such a way that, at a maximum rate of change $a = \left| \frac{dA}{dt} \right|_{\max}$ under normal operating conditions, the parameter A should not change by more than $A_N \delta$, (A_N is the nominal value of the scale). T is proportional to the number of telemetering channels which share one digital converter at the control point; $\delta > \frac{aT}{A}$. If the δ thus obtained turns out to be very large, one has to forego digital reproduction. Frequency

Card 2/4

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D274/D302

On the digital reproduction...

and pulse-frequency systems are then examined. The main difference between this system and the foregoing consists in an averaging process inherent in this system. Two types of errors have to be accounted for: the dynamical error due to the averaging, and the error in quantization. The frequency f is assumed to be a linear function of the parameter $\Lambda(t)$; The mean frequency f_m (in the interval $t_1, t_1 + T_c$) is set equal to $\frac{N}{T_c}$. The maximum absolute error (with in-

creasing signal) is

$$f_{\max}^{(+)} = f_m - f(t_1 + 2T_c + T') = -\frac{3}{2} kaT_c - kaT' - \frac{\Delta N}{T_c}$$

where $T' = (n-1)T_c$ (n being the number of channels), and ΔN is the quantization error due to the fact that the interval T_c does not contain an integral number of signal-periods. The reduced relative error is

$$\delta f = \pm \frac{aT_c (\frac{1}{2} + n)}{A_H} \pm \frac{3}{2} \frac{1}{(f_N - f_0) T_c}$$

Card 3/4

24041

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D274/D302



On the digital reproduction...

(ΔN was considered equal to $\pm 3/2$). It is unnecessary to require higher accuracy of the digital conversion than that of the analog part of the system. Another formula is derived

$$a = \frac{2 \delta^2 A_H (f_H - f_0)}{3 (\frac{1}{2} + n)}$$

This formula permits determining the maximum permissible rate of change of the parameter for centralized digital reception in an n-channel telemetering system with known values of the minimum and maximum frequencies. It is noted that the relationship between a and δ is quadratic. An example is given in which a is calculated, for the same telemetering system (with $n = 1$), once with analog reproduction and then with digital. The a obtained with digital reproduction was by a factor of 4.4 smaller than that with analog reproduction. There are 2 figures.

Card 4/4

DMITRIYEV, V.F.; KUPERSHMIDT, Ya.A.

Selecting optimum parameters of filters at the output of pickups.
Izm.tekh. no.5:37-40 My '62. (MIRA 15:6)
(Electric filters)

[#]KUFERSZMIDT, J.A.; MALOW, W.S.; ^{Szenbrot}SZENBROT, I.M.

Contemporary development trends of dispatcher control based
on digital techniques. Pomlary 8 no.8:368-371 Ag '62.

KUPERSHMIDT, Ya.A.

Reproduction of absolute scales in multichannel digital
measuring devices. Izv.tekh. no.2:4-8 F '63. (MIRA 16:2)
(Electronic digital computers)

MALOV, V. S.; PSHENICHNIKOV, A. M.; KUPERSHMIDT, Ya. A.

"Multi-channel devices for transmission of measurement information by communication lines and for its reproduction in digital form."

report submitted for the 3rd Intl Measurement Conf & 6th Intl Instruments & Measurements Conf, Stockholm, 14-19 Sep 64.

MALOV, V. S.; KUPERSHMIT, Ya. A.; POHENICHNIKOV, A. M.

"Multi-channel devices for transmission of measurement information by communication lines and for its reproduction in digital form."

report submitted for Intl Fed of Automatic Control & of Information Processing Conf, Stockholm, 21-23 Sep 64.

11120: Connection between speed and accuracy in telemetering systems with digital

upravleniya v promyshlennosti (Automatic control and electrical measuring techniques;

11120: 1A00: digital telemetering device, telemetering accuracy, telemetering rate,
remote control system

error of the digital data reproduction is minimal. The article discusses the dependence of

ASSOCIATION: none

DATE RECEIVED: 11 Nov 64

ENCL: 00

SUB CODE: SC IE

NO REF SOV: 003

OTHER: 000

ACCESSION NR: AP4043472

S/0103/64/025/008/1198/1202

AUTHOR: Kupershmidt, Ya. A. (Moscow)

TITLE: Determining criteria for noise immunity and accuracy of telemetering

SOURCE: Avtomatika i telemekhanika, v. 25, no. 8, 1964, 1198-1202

TOPIC TAGS: telemetering, telemetry system, telemetry

ABSTRACT: An attempt is made to establish a single mathematical method for the determination of averaged criteria of noise immunity and accuracy of a telemetering system; the case is treated when the mean and mean-square errors have different values at various points of the measurement range. These formulas are developed for the case of a noise in the link and an instability in the apparatus:

the total mean square error: $\overline{\delta_E^2} = \left(\sum_{i=1}^n \delta_i \right)^2 + \sum_{i=1}^n (\delta_i^2 - \delta_i^2)$

Card 1/2

ACCESSION NR: AP4043472

the total maximum error: $\delta_{mE} = \left| \sum_{i=1}^k \delta_i \right| + r \sqrt{\sum_{i=1}^k (\delta_i^2 - \delta_i^4)}$

Orig. art. has: 1 figure and 20 formulas.

ASSOCIATION: none

SUBMITTED: 09May63

ENCL: 00

SUB CODE: EC, IE

NO REF SOV: 003

OTHER: 000

Card 2/2

scientific and technical conference in "Cybernetics" (1961)

cybernetics, electric measurement, electric energy, instrument,
digital computer, electronic equipment, electric engineering, physics,

AP5004677

Devices: G. M. MANDEL'SHTAM (Leningrad)--report on a new criterion of accuracy of

Converter with Automatic Error Correction"; B. N. MALINOVSKIY, V. S. KALENCHUK and
I. A. YANOVICH (Kiev)--"Automatic Monitoring of the Parameters of the Electrical
Signals of Complex Radio and Electronic Equipment"; V. P. PEROV (Moscow)--"Operational

Card 2/4

Method for Calculating the Holding Time of Communications in a Central
Switching System of a Telephone System

1. 41102-65

4. 41102-65: AP5004677

KUPERSHMIIT, Yu.A. (Moskva)

Determination of noise stability criteria and telemetering
accuracy. Avtom. 1 telem. 25 no.8:1198-1202 Ag '64.

(MIRA 17:10)

ACC NR: AT6012345

SOURCE CODE: UR/0000/0000/0000/0026/0049

AUTHOR: Kuperahmidt, Ya. A.; Formin, A. F.; Shastova, A. I.

1/1
1/1

ORG: none

TITLE: Optimal methods of information transmission in tele- systems

SOURCE: Nauchno-tekhnicheskaya konferentsiya po teorii i promyshlennoy telemekhaniki. Moscow, 1963. Promyshlennaya telemekhanika (Industrial telemechanics); materialy konferentsii. Moscow, Izd-vo Energiya, 1966, 26-49

TOPIC TAGS: remote control system, telemetry system, supervisory control system

ABSTRACT: A purely theoretical examination is presented of the following points: noise rejection and efficiency of transmission of discrete and continuous information; "trading" frequency band for signal power; comparison of various codes and modulation methods; selection of the optimal clock interrogation frequency in multi-channel time-division telemetry systems. It is found that: (1) Error-correcting codes and high-energy-per-element codes permit enhancing the noise rejection by making the signal band wider; the band-for-energy "trading" conditions are more

Card 1/2

L 37661-66

ACC NR: AT6012345

favorable: (a) for error-correcting codes when used on PCM and FM and high traffic are used and (b) for high-energy codes when a secondary code is used; (2) The above codes and a wider frequency band ensure better noise rejection than that obtainable with PCM-AM and PCM-FM systems; (3) The FM, FM-FM, PCM, and PCM-FM systems have better noise rejection than binary-code digital systems (such as PCM-AM and PCM-FM); the noise rejection of analog methods with optimal band is roughly equivalent to the noise rejection of discrete methods with orthogonal signals; (4) An optimal period of interrogation exists in multichannel time-division telemetry systems; this period ensures minimum error due to time and level quantization of noise and to other factors. FM-pulse-amplitude modulation; PCM-pulse-code modulation; FM-pulse-phase modulation. Orig. art. has: 7 figures, 35 formulas, and 3 tables.

SUB COLE: 09 / SUBM DATE: 08Jan66 / ORIG REF: 010

2/2

n3

KUPERSHTEYN, A. P.

Diagnostic, prognostic and epidemiological importance of determining the activity of transaminase and aldolase in Botkin's disease in children. *Pediatrics* no.6:47-51 '62.

(MIRA 15:6)

1. Iz infektsionnoy klinicheskoy bol'nitsy Karagandy (glavnyy vrach N. P. Akulov) Nauchnyy rukovoditel' - prof. M. Ye. Sukhareva.

(HEPATITIS, INFECTIOUS) (TRANSAMINASES)
(ALDOLASE)

KUPERSHTEYN, A.P.; MOSYAKOVA, P.F.; ROOMERI, P.A.

Recurrences and exacerbations of Botkin's disease in children.
Zdrav. Kazakh. 22 no.8:43-47 '62 (MIRA 17-4)

1. Iz infektsionnoy klinicheskoy bol'nitsy Karagandy; nauchnyy rukovoditel' temy - prof. M.Ye.Luchareva.

KULERSHTEYN, L.N.

Quartz filter with an amplifier. Izm. tekhn. no.1:48 Ja '65.
(MIRA 18:4)

KUPERSHTEYN, R.I.

Ocular lesions in the temporal arteritis syndrome. Vest.oft.
71 no.3:11-17 My-Je '58 (MIRA 11:9)

1. Glaznoye otdeleniye polikliniki Leningradskogo meditsinskogo
instituta imeni akad. I.P. Pavlova (nauchnyy rukovoditel' - prof.
L.A. Dymshits).

(ARTERITIS, compl.
temporal, with eye dis. (Rus))
(EYE DISEASES, etiol. & pathogen.
temporal arteritis (Rus))

OSTRENKO, V.Y., kand.tekhn.nauk; BOBRAKOV, L.D., inzh.; Primalni uchastiye:
ROZENFEL'D, N.B.; OSLAMENKO, L.S.; TSERETELI, P.A.; KINELLI, I.D.;
KUPERSHTEYN, Ye.A., TOPAL, V.A.

Organizing the rolling of large-diameter thin-walled pipes on the
heavy-duty automatic unit at the Zakavkazskiy Metallurgical Plant.
Biul.nauch.-tekh.inform.VNITI no.4/5:17-23 '88. (MIRA 15:1)
(Tiflis--Pipe mills)

KUPERSHTOK, K.I.; PERKAS, Kh.D.; VITKO, N.D.

Determination of fluorine in a nitric hydrofluoric pickling
solution. Zav.lab. 28 no.4:416-417 '62. (MIRA 15:5)

1. Nikopol'skiy Yuzhnotrubnyy metallurgicheskiy zavod.
(Fluorine Analysis)

KUPERSHTOK, K.I.; PERKAS, Kh.D.; BRIEVA, L.G.

Determination of the acidity of pickle baths in the presence of iron.
Zav. lab. 31 no.8:947 '65. (MIRA 18:9)

1. Nikopol'skiy yuzhnotrubnyy zavod.

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel, and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

Card-1/12

Certain Problems (Cont.)

SOV/5460

57

COVERAGE: The experience of the LNZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LNZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

Foreword

3

I. NEW PROCESSING METHODS IN MACHINING AND ASSEMBLY

Gamze, Z. M. [Engineer]. The Organization, Methods, and Trends in Efforts for Improving the Easy Manufacturability of Designs for Large Hydraulic Turbines

5

Card 2/12

Certain Problema (Cont.)

SOV/5460

Gurskiy, A. N. [Engineer], S. N. Kuperstok [Engineer], V. N. Yegorov [Engineer], and A. M. Filippov. The Improvement of Assembly Process of Steam Turbines	85
Dolgov, V. A. [Engineer], and S. D. Kuzinets [Engineer]. The Manufacture of Rims and Blades for Radial-Flow Turbines	98
Gal'perin, M. I. [Engineer], and Ya. F. Piterman [Engineer]. Characteristic Features in the Restoration of Hydraulic Turbines at the Supung GES [Hydroelectric Station]	108
Aristov, A. V. [Engineer]. The Manufacture of High-Pressure Screw Pumps	117
Shklovskiy, M. M. [Engineer], and M. L. Vakhter [Engineer]. The [Ball-] Burnishing of Stainless- and Austenitic-Steel Wire	125

II. THE MECHANIZATION AND AUTOMATION
OF LABOR-CONSUMING OPERATIONS

Card4/12

KUPERSHTOKH, I. TS.

Monocytic cupping test as an auxiliary method in diagnosis of typhus. Klin.med., Moskva 18 no.11:95 Nov 50. (CLML 20:5)

1. Vitebsk.

KUPERSHTOKH, I.TS.; POLISHCHUK, M.F.

Syntomycin therapy in typhoid fever. Sov.med.18 no.3:39 Mr '54.
(MLRA 7:2)

1. Iz kliniki infektsionnykh bolezney Vitabskogo meditsinskogo
instituta. (Typhoid fever) (Antibiotics)

KUPERVASSER, M.M. inzhn., LESNICHINSKIY, A.A., kand. tekhn. nauk,
POLYAK, M.U. kand. tekhn. nauk

Standard individual equipment for multichannel high-
frequency telephone systems. Vest. svyazi 25 no.1:3-6
Ja '65.

(MIRA 184)

KUPERVASSER, S.L.

New machinery for the processing of jute and hemp fibers. Tekst.
prom. 15 no.12:12-14 D '55. (MLRA 9:3)

1. Starshiy nauchnyy sotrudnik Tsentral'nogo nauchno-issledovatel'skogo instituta l'nogo volokna.
(Carding machines) (Jute)

KUPERVASSER, S.L., inzh.

Method of calculating the degree of emulsion retting of jute-
hemp fibers. Tekst.prom. 19 no.4:86-87 Ap '59.

(MIRA 12:6)

(Jute) (Textile chemistry) (Retting)

ACC NR: AP6028548

SOURCE CODE: UR/0280/66/000/003/0172/0179

AUTHOR: Koziorov, L. M. (Moscow); Kupervasser, Yu. I. (Moscow)

ORG: none

TITLE: Optimal control synthesis for second order system with phase coordinate and control constraints

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 3, 1966, 172-179

TOPIC TAGS: automatic control parameter, optimal control, automatic control circuit, approximation calculation

ABSTRACT: Optimal control is determined for a second-order plant (or system) described by two integrating networks in series. Optimality of the control is expressed in the minimization of the quadratic functional of the plant. Constraints of the inequality type are imposed on the phase coordinates and on the control function. A simulation method is used to derive a field of optimal controls, and an expression approximating optimum control (nonsporadic and stepless for a broad problem range) in a prescribed area of phase coordinates is developed. Boundary and trajectory conditions are also discussed. Orig. art. has: 46 formulas and 5 figures.

SUB CODE: 14/ SUBM DATE: 17Jun65/ ORIG REF: 002

Card 1/1

L 3602-66 EWT(d)/EPF(n)-2/EWP(v)/EWP(k)/EWP(h)/EWP(l) IJP(c) WH/BC
ACCESSION NR: AP5021858 UR/0280/65/000/004/0154/0162

63
B

AUTHOR: Koziorov, L. M. (Moscow); Kupervasser, Yu. I. (Moscow)

TITLE: The synthesis of ⁴⁴optimum controls for second order systems ⁴⁴

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1965, 154-162

TOPIC TAGS: optimal control, integrated circuit, automatic control theory 14

ABSTRACT: The optimum control minimizing the quadratic functional of an object described by two consecutive integrating circuits is determined using the Pontryagin maximum principle. The control object is described by the equation

$$\dot{x}_1 = x_2, \dot{x}_2 = u. \tag{1.1}$$

and the control u is bounded by the condition

$$|u| \leq u_g. \tag{1.2}$$

Results show that within a certain phase coordinate domain the optimum control differs from the linear bounded control. The authors derive an expression approximating the optimum control within the entire phase plane and confirm some of the modeling results by analytical expressions. Results of the present study are in full agreement with the conclusions of C. D. Johnson and W. M. Wonham

Card 1/2

L 3602-66

ACCESSION NR: AP5021858

who studied the optimum control problem minimizing the quadratic functional by means of the Bellman equation. Orig. art. has: 59 formulas and 5 figures.

ASSOCIATION: none

SUBMITTED: 28Apr65

ENCL: 00

SUB CODE: IE, MA

NO REF SOV: 002

OTHER: 002

Card

mlw
2/2

VISA, V.S.; KUPETIS, G.K.

Addition of dichlorocarbene to some Δ^3 -cyclohexenes. Zhur.org.khim.
1 no.2:256-259 F 165. (MIRA 18:4)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

ACC NR: AT6021751

SOURCE CODE: UR/0000/66/000/000/0229/0235

AUTHOR: Plotnikov, V. M.; Kupetskiy, I. V.

ORG: none

TITLE: Problems in the design and construction of throttle-controlled gas flow sensors using a branched noncirculating flow

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Pnevmoavtomatika (Pneumatic automation). Moscow, Izd-vo Nauka, 1966., 229-235

TOPIC TAGS: pressure transducer, flow meter, flow measurement, gas flow

ABSTRACT: A gas flow sensor based on the detection of differential pressure across a fixed throttle in a gas line is discussed. The authors describe the device, calculate its parameters, and report construction details and performance of a sensor constructed using the configuration shown in Fig. 1. The servo system of the sensor is contained in enclosure 8, and consists of two chambers (+) and (-), separated by diaphragm 6. Nozzle 7 provides an outlet from the (+) chamber, which, through turbulent flow throttle DP_1 is connected with the upstream portion of the gas line at pressure P_1 . The lower chamber is connected directly to the downstream portion of the gas line at pressure P_2 . The upper (+) chamber is vented through nozzle 7 and the linear adjustable throttle DP_2 into the exhaust pipe. The device operates as follows: A pressure $P_1 - P_2$ is generated by gasflow (G') through the sensor. The same pressure

Card 1/3

ACC NR: AT6021751

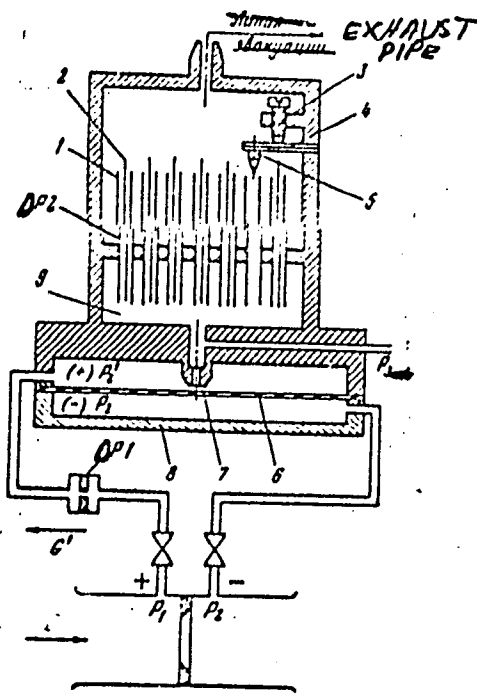


Fig. 1.

Caré 2/3

ACC NR: AT6021751

differential also exists across the throttle DP_1 , since the servo system maintains in the upper chamber the same pressure as that in the lower chamber. Gas flow (G') through throttle DP_1 due to this difference in pressure is proportional to the flow (G) through the main throttle in the gas line because of the similarity of the flow characteristics through both devices. The branched gas flow creates an excess pressure P_3 in chamber 9 due to the gas passage through linear throttle DP_2 . This excess pressure is measured by the sensor output, indicating the total gas flow in the line. Temperature compensation is accomplished through the bimetal element 4 and needle valve 5 equipped with an adjusting screw. The output is in the range of 0 to 1.0 or 0 to 0.8 kg/sq.cm. Orig. art. has: 6 figures, 15 formulas.

SUB CODE: 13,²⁰~~14~~ / SUBM DATE: 03Feb66/ ORIG REF: 006/ OTH REF: 001

Card 3/3

KUPLETSKIY, V.N.

Stationary glades in freezing seas, their causes and development
[with summary in English]. Vest.LGU 13 no.12:172-183 '58.

(MIRA 11:12)

(Ice on rivers, lakes, etc.)

KUPETSKIY, V.N.

Did the Sannikov Island ever exist? [with summary in English]
Vost.LGU 13 no.18:152-158 '58. (MIRA 12:1)
(Sannikov Island) (Geographical myths)

AUTHOR: Kupetskiy, V.N. SOV-12-90-4-2/22

TITLE: Hydrobiological Peculiarities of Polynias (Gidrobiologicheskiye osobennosti statsionarnykh polyney)

PERIODICAL: Izvestiya Vsesoyuznogo geograficheskogo obshchestva, 1958, Vol 90, Nr 4, pp 315-323 (USSR)

ABSTRACT: Unfrozen patches of water in the midst of ice (polynia) covering the polar seas are formed by the action of wind removing drifting ice from the land floes and are found in all polar seas. Hydrobiological peculiarities of such free patches are determined by the increased intensity of the vertical water circulation. The oxygen penetrating the water creates especially favorable conditions for the breathing of the organisms and the deep water is rich in biogenous salts, needed for feeding. Favorable conditions are thus created for all animal and plant organisms living in the water and on the bottom of the sea, and this in turn attracts sea animals and birds. The author reviews

Card 1/2

Hydrobiological Peculiarities of Polynia

SOV-17-90-4-2/22

all such open sea patches, explored by many scientists, and stresses their importance for the fishing and hunting industries. There are 84 references, 72 of which are Soviet and 12 are English.

1. Polynias--Hydrobiological studies 2. Polynias--Economic aspects

Card 2/2

KUPCHENKO, V.N., Cand Geog Sci → "Stationary coniferous forest in freezing
season." Leningrad, 1959. 12 pp (Inst of Higher Education. Len Cr-
der of Lenin State U in L.A. Zhdanov), 150 copies (SI, 27-59, 118)

- 11 -

19(3)
3(5)

SOV/12-31-3-8/14

AUTHOR: Kupetskiy, V.N.
TITLE: The Bell Sand on the Saarema Island
PERIODICAL: Izvestiya VGO, 1959, Nr 3, pp 271-272 (USSR)
ABSTRACT: The author reports that he found the so-called singing or bell sand on the Saarema island in the Baltic Sea, more precisely on the Kipsarenukk cape of the North-West promontory of the Tagamyys peninsula. He also found bell sand in the semi-desert area, east of the Volgo-Akhtubinskaya poyma (flood-lands) in the area of the Sasykoli village. There are 3 Soviet references.

Card 1/1

KUPITSKIY, V.N.

The deep waters of the Atlantic Ocean as a cause of certain
specific features of the polar climate. Probl.Arkt. no.6:
13-21 '59. (MIRA 13:6)

(Arctic regions--Atmospheric temperature)

(Arctic regions--Ocean currents)