

SOV-115-59-7-12 33

A Device for Remote Control of Dial Balances

"Gipromez" require a coke weighing accuracy of  $\pm 20$ kg of the specified weight. The long-time operation of two recorders at one of the blast furnaces of the plant "Azovstal'" showed that the instrument data meet this requirement. The selsyn transducers functioned during one year without any maintenance or replacements. The servo system described in this article may find application not only for recording and remote control of given weights on dial balances, but also for measuring and recording other magnitudes whose changes may be converted into angular shifts. There are 1 photograph, 1 circuit diagram, 1 diagram and 3 Soviet references.

Card 2/2

ONISHCHENKO, N.P., master

Pedal-operated paint sprayer. Rats. i izobr. predl. v str. 1.  
no. 12:46-47 '59. (MIRA 13:6)

1. Trast Magnitostroy, Magnitogorsk, Chelyabinskoy oblasti.  
(Spray painting--Equipment and supplies)

KOZHUKH, V.Ya.; ONISHCHENKO, N.P.

Measuring and regulating the weight of coke feed. Metallurg 5 no.11:  
10-11 II '60. (MIRA 13:10)

1. Zavod "Azovstal".  
(Blast furnaces--Equipment and supplies)  
(Governors (Machinery))

KOZHUKH, V.Ya.; ONISHCHENKO, N.P.

Instrument for automatic measurement and regulation of the  
relation of two values. Izv.tekh. no.9:19-21 S '62.  
(MIRA 15:11)

(Electronic instruments)

ONISHCHENKO, Nikolay Pavlovich, BELIK VICH, A.V., red.; VOLKOVA,  
V.G., tekhn. red.

[Safety measures in ammonia system refrigeration plants]  
Tekhnika bezopasnosti na ammiachnykh kholodil'nykh ustanov-  
kakh; prakticheskoe rukovodstvo dlia mashinistov. Moskva,  
Gostorgizdat, 1963. 101 p. (MIRA 16:11)  
(Refrigeration and refrigerating machinery--Safety measures)

DNISHCHENKO, Nikolay

(Safety measures in the apartment building in apartment houses and communal facilities. Opasnost' pri razmeshchivani i razmeshchivani zhenichno-kommunal'nykh apartamentov. Moscow, 1966. 200 p.)



*ONISHCHENKO, O.I.*

USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10797

Author : Krivolapova, C.P., Onishchenko, O.I.

Inst : -

Title : Potato Seed Production in the Trans-Carpathian Region.

Orig Pub : Kolgospnik Ukraini, 1957, No 4, 31-32

Abstract : No abstract.

Card 1/1



KLYUSHNIKOV, M.M.; ONISHCHENKO, O.M. [Onyshchenko, O.M.]

New data on the stratigraphy of Tertiary sediments in the western  
-argins of the Donets Basin. Visnyk Kyiv.un.Ser.geol.ta geog.  
no.1: 5-12 '58. (MIRA 12:10)  
(Donets Basin--Geology, Stratigraphic)

15-1957-3-2572

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,  
p 2 (USSR)

AUTHORS: Kulichenko, V. G., Bazilevich, I. B., Onishchenko, O. M.

TITLE: Mikhail Nikolayevich Klyushnikov (On His Fiftieth Birth-  
day and the Thirtieth Anniversary of His Scientific and  
Pedagogical Activity) [Mikhail Nikolayevich Klyushnikov  
(K 50-letiyu so dnya rozhdeniya i 30-letiyu nauchnoy i  
pedagogicheskoy deyatel'nosti)]

PERIODICAL: Nauk. zap. Kyyivs'k. un-t, 1956, Vol 15, Nr 2, pp 181-  
182

ABSTRACT: M. N. Kryushnikov [Klyushnikov i], professor at Kiyev  
University, studied the geology and mineral resources of  
Ukraine (Ukraine) and the Urals. His most important  
works have to do with the stratigraphy of Tertiary de-  
posits of refractories, brown coal, kaolin, and other  
materials.

Card 1/1

MINAKOV, Ivan Fedorovich; ONIKIYENKO, Vladimir Vasil'yevich [Onykienko, V.V.]; ONISHCHENKO, P.D., otv. za vypusk; MIRONOVA, Ye.V. [Myronova, E.V.], red.; MUZICHKO, G.I. [Muzychko, H.I.], tekhnred.

[Chernovtsy Province; economic and geographical outline] Chernivets'ka oblast'; ekonomiko-geografichnyi narys'. [Manual for geography teachers] Posibnyk dlia vchyteliv geografii. Chernivtsi, obl.vyd-vo, 1958. 101 p. (MIRA 12:9)  
(Chernovtsy Province--Economic conditions)

Sov/133/53-1-27/3

AUTHORS: Shikho, I. Ya., Orshenko, P.I. and Storozhenko, S. A.  
(Engineer)

TITLE: Experience of Operation of a Tower Type Wagon Tippler (Opyt  
raboty bashennogo vagonnogo pod'yematelya)

PERIODICAL: Stal', 1974, No. 4, p. 59-60 (USSR)

ABSTRACT: A report on the work of the wagon tippler of Soviet design  
which operated for a number of years at the Zaporozhstal  
Works is outlined and illustrated. Modifications made dur-  
ing the trial period as well as some proposed modifications  
are described. There are 2 figures and 1 table.

ASSOCIATION: Institut zhel'nykh metallurgii i zavod "Zaporozh-  
stal'" (Institut for Ferrous Metallurgy, AS USSR, and the  
"Zaporozhstal'" Plant)

Card 1/1

ONISHCHENKO, P.I., inzh.

New conveyers with ribbed conveyer belts. Stroi. i dor. mashinost. (MIRA 14:4)  
5 no.5:17-18 My '60.

(Conveying machinery)

~~ONISHCHENKO, Pavel Nikiforovich; KOVAL', P.V.,~~ otvetstvennyy redaktor;  
~~SAVIN, M.M.,~~ redaktor izdatel'stva; PROZOROVSKAYA, V.L., tekhnicheskiiy redaktor

[Mining machinery] Gornoproduktsionnyye mashiny i mekhanizmy.  
Moskva, Ugletekhizdat, 1956. 222 p. (MLRA 10:?)  
(Coal mining machinery)

ONISHCHENKO, Pavel Nikiforovich; KOVAL', P.V., stv. red.; KOSTOMAROVA,  
A.Ya., red.; MAKSIMOVA, V.V., tekhn. red.

[Mining machinery] Gornoprokhodcheskie mashiny i mekhanizmy.  
Moskva, Gosgortekhnizdat, 1961. 270 p. (: IKA 19:8)  
(Mining machinery)

AUTHORS:

Deikant, P. E., Korik, P. L., Zayants, Ye. L.,  
Orishchenko, P. V.

TITLE:

The Production and the Test of the Metallurgical Dolomite of  
the Raw Material of the Shchekino Plant During Operation.  
(Izgotovleniye i ispytaniye v suzhennoy metallurgicheskogo  
dolomita iz syr'ya shchekinskogo mestorozhdeniya)

PERIODICAL:

Ogneupory, 1978, No. 7, pp. 202-206 (USSR)

ABSTRACT:

The Moscow Metallurgical Works "Serp i molot", "Elektrostal", New  
Tula Plant, and others use dolomite of the Shchekino deposit  
after it had been fired in cupola kilns. The Council of  
National Economy of the Moscowvskaya Oblast approved the project  
for the construction of a department for the firing of dolo-  
mite at the Shchekino deposit with an annual output of  
30 000 tons. In connection with this problem, a test charge  
of metallurgical dolomite according to the technological  
scheme was prepared. The firing was realized by the Nikitovskiy dolomite  
plant. The following specialists took part in this  
work: P. D. Grekhov, Ye. S. Zilberg, S. Ye. Berinskaya and  
M. F. Trujakov. Ref. 1. The chemical composition of the raw

Card 1/4



1957-07-26 7 202  
The Production and the Test of the Metallurgical Dolomite of the Raw  
Material of the Stone (Serpukhov) During Operation

dolomite used in the steel (Table 3). Three samples of raw dolomite are shown (Fig. 2); these samples were used by P. G. Syatikov for the grain investigation and were then described in detail. The granulation of the raw dolomite can be seen in Table 4. The dolomite was fired in a rotating kiln according to the industrial process. The chemical composition and granulation of the pilot test dolomite are given (Figs 3 and 4). The comparison of the data of Tables 3 and 4 is shown in Table 5. Fig. 1 shows the broken pieces that had been welded together of fine dolomites. The experimental dolomite produced this way according to ChMTU 0018-54 for fired metallurgical dolomite is to be classified as class 1 and sort 1. This investigation was carried out at the "Serpukhov" works with P. Ya. Rakhmanov, A. A. Lebedkov, P. I. Melnikov, O. I. Yatsurekaya, G. V. Sviridov, A. A. Yegorov and A. I. Alekseyev (Ref. 3) taking part in this investigation. The experimental dolomites were tested in Martin furnaces with a capacity of 70 tons. The chemical composition of the dolomite fired in the cupola kiln is shown (Table 6). The chemical composition and granulation of the metallurgical experimental dolomite

Card 2/4

1977, 131 59 7 2, 14  
The Production and the Test of the Metallurgical Dolomite of the Raw Material of the Shchelkovskoye Deposit During Operation

are mentioned (Table 7) and the experimental dolomite fired in the rotating kilns is shown (Fig 4). The same dolomite fired in cupola kilns is shown as well (Fig 5).  
Conclusions: 1) The dolomite of the Shchelkovskoye deposit can be fired in the dry process in rotating kilns without additional technical demands. 2) It is recommended to fire the dolomite separately according to fractions. 3) Tests in the "Serp i molot" works carried out with it proved its usefulness. 4) The construction of a firing plant at the Shchelkovskoye deposit must be accelerated in order to replace the magnesite powder used until now. This way also the demands of the Cherepovets metallurgical works could be met. 5) The production costs at the Shchelkovskoye deposit were estimated to be much lower than is the case at the Nikitovkiy and Yamskiy dolomite Kombinats. There are 5 figures and 7 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov  
Card 3/4 (All-Union Scientific Research Institute of Refractories)

307.131.48.7.2/14

The Production and the Test of the Metallurgical Dolomite of the Raw  
Material of the Strashnaya Deposit During Operation

Nikolovskiy dolomitnyy kombinat  
(Nikolovskiy Dolomite Kombinat)

Dolomite Metallurgy of the Strashnaya Deposit, Mineralogical Institute, Moscow

Card 4/4

3(7)

AUTHOR: Onishchenko, S. M.

SOV 1959-7-11/20

TITLE: On the observations of the <sup>visibility</sup> (O nablyudeniyakh nad vidimost'yu)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 7, pp 30 - 41 (USSR)

ABSTRACT: The observations of the <sup>visibility</sup> by the method of the Geophysical Main Observatory (Ref 2) were started at the Agrometeorological Station of Glukhov in May 1957. The observers have complained, not without reason, that the new method of determining the horizontal <sup>visibility</sup> is much more complicated than the former. These drawbacks are pointed out here. The instructions (Ref 3) on the methods to be applied are also insufficient, and do not say anything about some points indicated here. The problem of measuring the horizontal <sup>visibility</sup> has still not been solved properly. A great achievement is the new recorder "GGC" of transparency which, however, is not yet much in use. Also the connection between <sup>visibility</sup> and atmospheric conditions is not properly considered in the instructions (Ref 3). This gap could be closed by the publication of the "Sbornik" (Ref 4) which could give proper instructions to hydrometeorological stations

Card 1/2

On the Observations of the Visibility

807/2-55-011/2

concerning the methods to be applied. There are 1 table and  
4 Soviet references.

Card 2/2

TEMKIN, O.N.; FLID, R.M.; GERMAN, E.D.; ONISHCHENKO, T.A.

Soluble complexes of unsaturated hydrocarbons with metal salts,  
and their role in catalytic reactions. Part. 1: Soluble compounds  
of acetylene with copper salts. Kin. i kat. 2 no.2:205-213 Mr-Ap  
'61. (MIRA 14:6)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
M.V. Lomonosova.

(Copper compounds)  
(Acetylene compounds)

412LF

S/134/62/000/107/130/107  
D413/D308

AUTHORS: Vershkov, M.V., and Orishchenko, T.A.

TITLE: Aerial systems for coastal UHF radiotelephone stations

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-7-151 s (Inform. sb. Tsentr. n.-i. in-t morsk. flota, no. 66, 1961, 38 - 45)

TEXT: When the frequency separation between stations is 250 kc/s, the distance between them can be reduced by using directional aerial. Simple directional aerials are investigated, using asymmetric roughly half-wave dipoles fed by coaxial cable, with the body of the metal mast serving as a reflector. To obtain non-directional aerials the recommended distance from the body of the mast is  $0.75 \lambda$ , while for unidirectional aerials it is about  $0.25 \lambda$ . 4 references. [Abstracter's note: Complete translation.]

Card 1/1

VERSHOV, M.V., kand.tekhn.nauk: ONISHCHENKO, T.A.

Antennas with flat reflectors for coastal ultrashort wave radio-  
telephone stations. Inform. spor. TSNIIME no.77 Sudovozn.i svyaz'  
no.20:84-91 '62. (MIRA k:7)  
(Radio, Shortwave—antennas) (Radio telephone)



L 19210-63

ACCESSION NR: AR3004397

S/0274/63/000/005/B036/B036

SOURCE: RZh. Radiotekhnika i elektrosvyaz', Abs. 5B258 /

AUTHOR: Vershkov, M.V., Onishchenko, T.A.

TITLE: Basic requirements for call selector device for use in marine shortwave radiotelephone communications

CITED SOURCE: Inform. sb. Tsentr. n.-i. in-t morsk. flota, vy\*p. 79, 1962, 76-81

TOPIC TAGS: marine radiotelephony, call selector, code selector, shortwave communication, radiotelephone, radiotelephony

TRANSLATION: The authors consider the basic requirements for a call selector device for use in international marine shortwave radiotelephone communications. Recommendations on the use of call selectors are given. The authors give technical data on call selector devices employing the pulse or frequency methods of signal coding. They recommend a 24-channel code selector for seagoing vessels; these would have up to 10,000 total code combinations. One illustration. Ye.M.

DATE ACQ: 25Jun63

SUB CODE: CO

ENCL: 00

Card 1/1

ACCESSION NO: AT4051510

SR 2014/12/000/070/00-1/00

AUTHOR: Vershinin, M. V. (Candidate of technical sciences); Omshenkov, A. I.

TITLE: Antennas with planar reflectors for shore and radio-telephone stations

INSTITUTION: Tsentrallyy naukoisledovatel'skiy institut radiofiziki i radioelektroniki, m. Tula, ul. Lenina, 46, 370010, Tula, (Naval Radio Engineering Institute, ul. Lenina, 46, Tula)

TOPIC TERMS: antennas; planar reflectors; radio-telephone stations; radio frequency; antenna design; antenna design; antenna design; antenna design; antenna design; antenna design; antenna design

Abstract: The characteristics of antennas with planar reflectors are analyzed. It is shown that this type of antenna are extremely complicated but may be accomplished in practice if the effect of the reflector is regarded as a mirror image of the exciter. In this case the expressions for the field and the directive gain are

$$E = 2E_0 \sin(mS \cos \gamma) \frac{\cos(\sqrt{2} \cos \theta)}{\sin \theta}$$

117

(Continued on Card 2)

Card 1/6

ACCESSION NR: AT4031813

$$D = \frac{4\pi^2}{R_{\Sigma}} (1 - \cos^2 \theta)^2 \sin^2 (mS \cos \psi), \quad \theta = 90^\circ \quad (1)$$

where

- $E_0$  = field intensity of a symmetrical dipole in free space.
- $R_{\Sigma}$  = radiation resistance of a system consisting of 2 symmetrical half-wave dipoles, excited in opposite phases and spaced  $2S$  apart. Figure 1 of the Enclosure shows the variation of radiation resistance with  $S$ .
- $\psi$  = azimuth angle reckoned from point of maximum field
- $\theta$  = elevation angle reckoned from vertical
- $m = \frac{2L}{\lambda}$
- $S$  = distance from dipole axis to reflector surface
- $L$  = half length of dipole

Figure 2 of the Enclosure gives variation of directive gain with  $S$ . Figure 3 gives an example of pattern calculations for various values of  $S$ . The reflector dimensions should be selected in practice so that the projection of the exciter lies from 0.1-0.15  $\lambda$  from the edge of the reflector. Dimensions are identical in both planes. The reverse radiation

Coro 2/6

ACCESSION NR. AT4001619

will then be drawn down from the main wire. Recommended structure is 1/16" dia. vertical copper wires. Two examples of antenna design suitable for the above method and dimensions are given. It is hoped that the above method will be of assistance to designers of nuclear air systems. Orig. art. has 2 figures and 1 formula.

ASSOCIATED WITH: "Izvestiya Akademii Nauk SSSR" Institut Mor'skogo Radio, 1970, 1971 (Central Naval Radio Research Institute)

SUBMITTED BY	DATE REC'D	CLASSIFICATION
SUB CODE: 10	NO REL. SOURCE	OTHER: 00

Card 3/6

ACCESSION NR: AT4031813

ENCLOSURE: 01

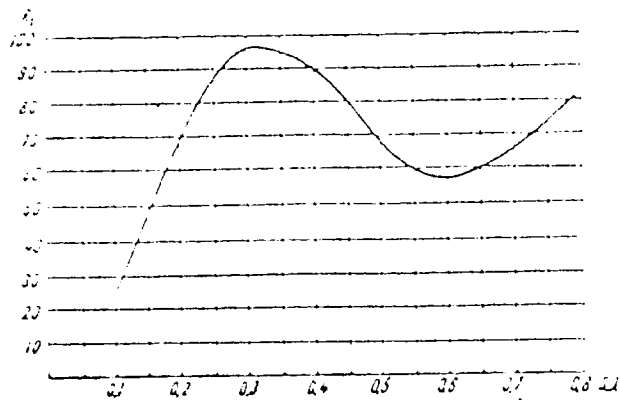


Fig. 1 - Variation of radiation resistance with distance from the reflector.

Card 4/6

ACCESSION NR: AT4031570

ENCLOSURE: 2

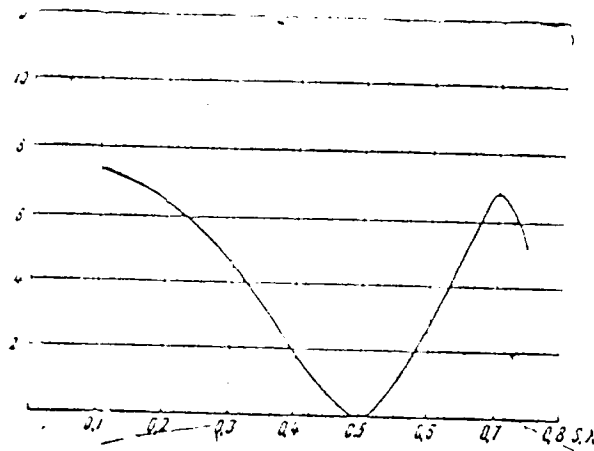


Fig. 2 - Variation of directional gain with distance from the reflector.

Card 5/6

ACCESSION NR: AT4031813

ENCLOSURE: 03

Fig. 3 - Directive patterns of an antenna consisting of a dipole with a planar dipole in horizontal plane.

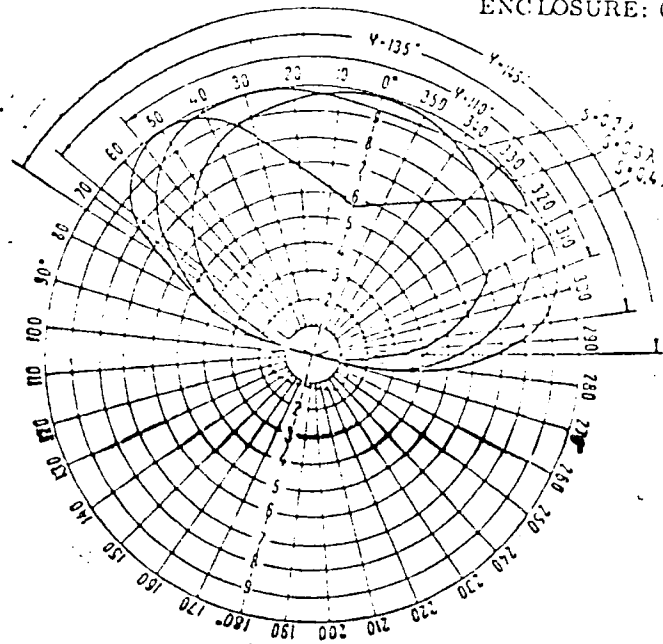
- S = 0.3  $\lambda$
- $\varphi = 135^\circ$
- D = 4.4 db
- S = 0.2  $\lambda$
- $\varphi = 110^\circ$
- D = 6 db
- S = 0.4  $\lambda$
- $\varphi = 145^\circ$
- D $\varphi = 0.5$  db
- D $\varphi \pm 50^\circ = 5$  db

(relative to full wave dipole)

R $\Sigma = 96$  ohms    R $\Sigma = 70$  ohms

R $\Sigma = 90$  ohms

Card 6/6



1 6446-65 ENT(d)/FSS-2  
ACCESSION NR: AR5006553

3/0274/64/000/012/V026/V026  
621.397-7

35  
B

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Sv. 1., Abs. 12V157

AUTHOR: Vershkov, N. Y.; Kosarsv, I. A.; Morozov, A. P.; Onishchenko, T. A.

TITLE: Prospects for using facsimile transmission in the navy

CITED SOURCE: Informats. sb. Tsentr. n.-i. in-t morsk. flota, vyp. 109, 1964, 56-71

TOPIC TAGS: facsimile transmission, navy facsimile service

TRANSLATION: The principles of facsimile transmission and reception are reported as well as the parameters of Soviet-made facsimile equipment<sup>44,55</sup> (FTA-K,<sup>44,55</sup> "Ladoga", FTA-P, FTA-P2, "Rekord", "Prizma", "Arfa", and "Neva"). Steps for increasing noise immunity in the radio transmission are considered. The FTA-K transmitter and "Ladoga" receiver are recommended for transmission of meteo maps and other large-frame graphic material in the navy. A special attachment connected between the transmitter output and the VChD-10<sup>44,55</sup> exciter was developed for radio and wire channels. The attachment isolates the picture frequency up to 1400 cps from FM facsimile signals having a central frequency of 1900 cps and a deviation of

Card 1/2



L 64466-65

ACCESSION NR: AR5006553

± 400 cps for radio transmission, or having a central frequency of 2000 cps and a deviation of ± 300 cps for wire transmission. A block diagram of the attachment is presented. It is noted that in foreign countries dozens of radio stations are in operation which transmit the facsimile weather maps with the basin specific features intended for ships. It is held expedient to organize such facsimile transmissions in the USSR and to equip all navy ships with facsimile receivers. Some information is supplied on the technical and economic efficiency of using facsimile equipment in the navy. Three illustrations.

DIG CODE: EC, MS

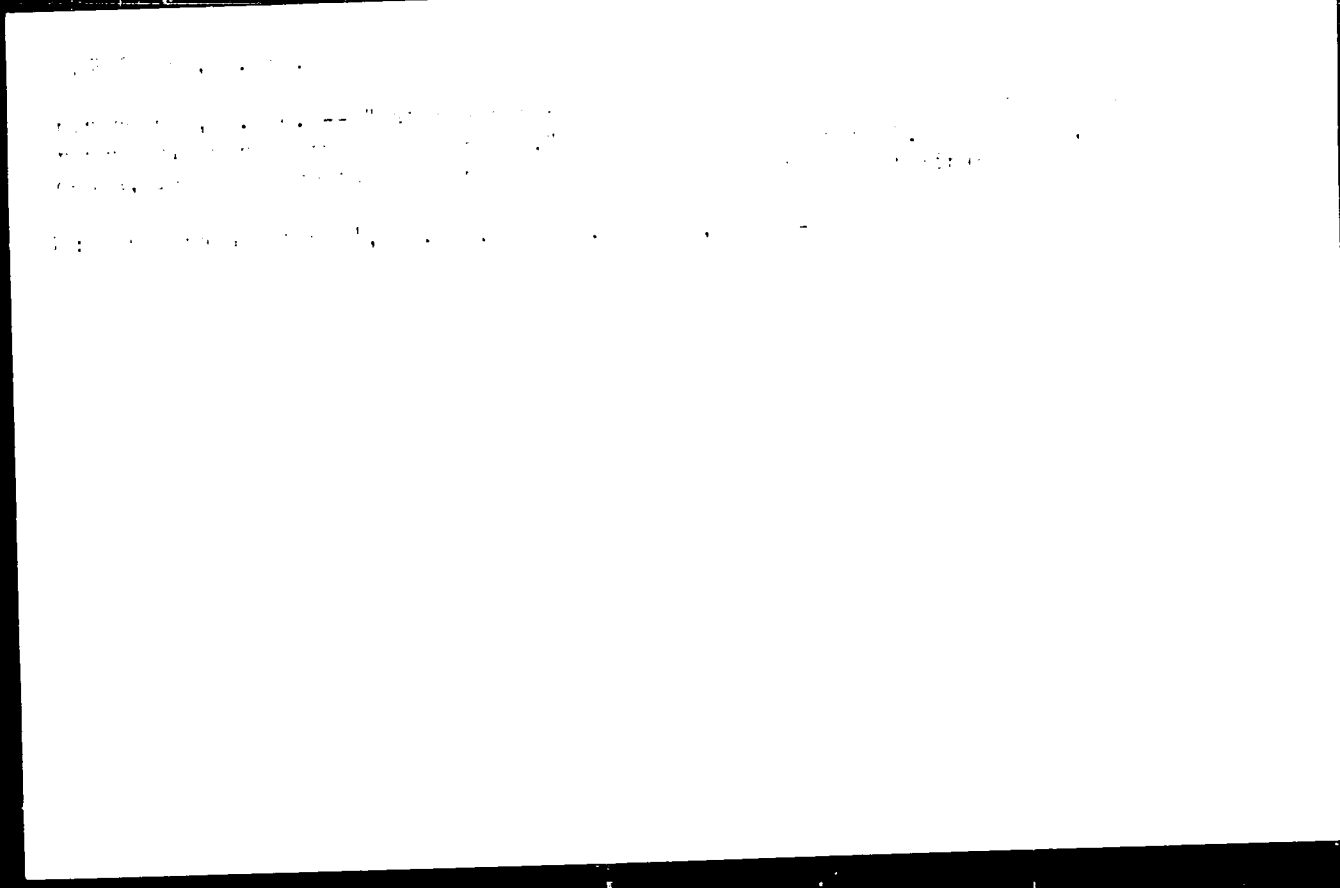
ENCL: 00

*llr*  
Card 2/2

ONISHCHENKO. T.Ye.

Clinical characteristics of recurrence in scarlet fever. Zhur.  
mikrobiol.epid.i immun. no.3:26-29 Mr '54. (MLRA 7:4)

1. Iz kafedry infektsionnykh bolezney (zaveduyushchiy - professor  
M.Ya.Latsinik) Odesskogo instituta usovershenstvovaniya vrachey  
(direktor - dotsent A.P.Kiyashov). (Scarlet fever)



ONISHCHENKO, T.Ye.

Clinical aspects of Sonne dysentery in adults. Zhur. mikrobiol. epid.  
i immun 28 no.2:142-143 F '57 (MLRA 10:4)

1. Iz Odesskogo instituta usovershenstvovaniya vrachey i  
Gorodskoy infektsionnoy bol'nitsy.  
(SHIGELLA SONNEI)

GRISHCHENKO, T Ye [Grishchenko, T Ye] kand med nauk; 1931 [1932] Dzh.  
[Bachynatskiy D.K.]

Comparative evaluation of the effectiveness of some methods of  
treating whooping cough. Ped. akush. i ginekol. 22 no.5:9-30  
1960. N.B. 150

1. Kafedra psichiatryki i rob dityachogo viku i v dotsest  
M.G. Stetsina [Stetsina, M.G.], Odes'kogo meditsinogo institutu  
(direktor kafedri psichiatryki nauki URSR prof. I Ya. Dapneko) i Mas'ka  
vinnits'kogo onkolohicheskogo i kirurno-golevnyy likar I.I. Zh. evluzko  
(Zhytce 1931)

WHOOPING COUGH

ONISHCHENKO, T.Ye.; YOBZEVA, M.G.

Effectiveness of vaccine therapy in whooping cough with a study  
of the phagocyte index. *Pediatrics* no.2:39-43 '62.

(MIR 15:3)

1. Iz kafedry infektsionnykh bolezney detskogo vozrasta (zav. -  
dotsent N.G. Stepina) Odesskogo meditsinskogo instituta N.I.  
Pirogova (dir. - zasluzhennyy deyatel' nauki prof. I.Ya. Deyneka).  
(WHOOPIG COUGH—PREVENTIVE INNOCULATION) (PHAGOCYTOSIS)

MEZHEUMOV, F., inzh.; ZEL'DIS, M., inzh.; ONISHCHENKO, V., inzh.

Automation of the washing and drying of passenger cars. Avt. transp. 39  
no.1:16-20 Ja '61. (MIRA 14:3)  
(Automobiles—Maintenance and repair)

1. The first part of the document is a list of names and titles of the members of the committee.

2. The second part of the document is a list of the names and titles of the members of the committee who were present at the meeting.

3. The third part of the document is a list of the names and titles of the members of the committee who were absent from the meeting.



ACCESSION NR: AT4037695

S/2865/64/003/000/0245/0249

AUTHOR: Kuz'minov, A. P.; Onishchenko, V. F.; Sil'vestrov, M. M.

TITLE: Retention of habits for transmitting information under conditions of prolonged isolation

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 3, 1964, 245-249

TOPIC TAGS: isolation, emotional stress, manned space flight

ABSTRACT: Experiments have been conducted to study the effects of prolonged isolation on the ability of man to perform habitual tasks involving the transmission of information. Data from five experiments on prolonged isolation indicate that during the first day, performance in the habitual transmission of information decreases both qualitatively and quantitatively. Adaptation to conditions of isolation usually takes place on the second or third day; performance improves, but does not reach the initial level. The average number of errors for a well-trained operator is higher under isolation conditions than under normal circumstances. The character and degree of emotional strain has been shown to vary with the individual peculiarities of each subject studied.

Co. d 1/2

ACCESSION NR: AT4037695

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PR, LS

NO REF SOV: 006

OTHER: 005

Card 2/2

VOLYNKIN, Yu.M.; ARTYEMOV, G.A.; ANTIFOV, V.V.; ALTUKHOV, G.V.;  
BAYEVSKIY, R.M.; BELAY, V.Ye.; BELYAHOV, P.V.; BIRALOV, S.I.;  
VASIL'YEV, P.V.; VOLOVICH, V.G.; GAGARIN, Yu.A.; GELIN, A.N.;  
GORBOV, F.D.; GORSHKOV, A.I.; GUROVSKIY, N.N.; YESHAGOV, N.Kh.;  
YEGOROV, A.D.; KAKPOV, Ye.A.; KORALEV, V.V.; KOLOSOV, I.A.;  
KORESEKOV, A.A.; KAS'YAN, I.I.; KOTOVSKAYA, A.A.; PALIBELIN,  
G.V.; KOPANEV, V.I.; KUZ'MIHOV, A.I.; KAKURIN, L.I.; KUMKOVA,  
R.V.; LEBEDEV, V.I.; LEBEDEV, A.A.; LOBZIN, F.I.; MAKSIPOV,  
D.G.; MYASNIKOV, V.I.; PALYSHEIN, Ye.G.; NEUMYVAKIN, I.I.;  
ONISECHENKO, V.F.; POLOV, I.G.; PORUCHIKOV, Ye.I.; SIL'VESTROV,  
M.N.; SERAFIN, A.D.; SAKSONOV, F.I.; TEREHT'YEV, V.G.; TEBAKOV,  
A.S.; UDALOV, Yu.F.; FOMIN, V.S.; FOMIN, A.G.; KHLEBNIKOVA, G.F.;  
YUGANOV, Ye.M.; YAZDOVSKIY, V.I.; KRICHAGIN, V.I.; AKULICHIEV,  
I.T.; SAVINICH, F.K.; SIMPURA, S.F.; VOSKRESENSKIY, C.G.;  
GAZENKO, C.G., SISAKYAN, N.M., akademik, red.

[Second group space flight and some results of the Soviet  
astronauts' flights on "Vostok" ships; scientific results of  
medical and biological research conducted during the second  
group space flight] Vtoroi gruppovoi kosmicheskii polet i neko-  
torye itogi poletov sovetskikh kosmonavtov na korabliakh  
"Vostok"; nauchnye rezul'taty medikobiologicheskikh issledovaniy,  
provedennykh vo vremia vtorogo gruppovogo kosmicheskogo poleta.  
Moskva, Nauka, 1965. 277 p. (MIRA 18:6)

L 29436-07

ACC NR: AF6012890

SOURCE CODE: UR/0000/65/000/000/0112/0118

AUTHOR: Bulat, A. A.; Denisov, V. G.; Kuz'minov, A. P.; Onishchenko, V. F.; Rozanov, Yu. A.; Sil'vestrov, M. M.

ORG: None

TITLE: An integral method for evaluating the effective training level of operators in control systems

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 112-118

TOPIC TAGS: man machine communication, electrophysiology, specialized training, training procedure, human engineering

ABSTRACT: The authors consider the dynamics of the process by which an operator acquires skill in control and the degree to which training is effective in an attempt to solve the problem of adaptation of an operator to the system which he controls. Factors affecting the speed at which working habits are formed are discussed. It is pointed out that the purely psychological method for evaluating the level of training effectiveness is not sufficiently complete and objective. Electrophysiological methods are used for a fuller evaluation of the habit formation process using electroencephalograms, electromyograms, electrocardiograms, cutaneogalvanic reactions, and pneumograms to study changes in the neuropsychic makeup of the operator. The results of tests show a reduction in the bioelectric activity of the muscles and high-frequency

Card 1/2

L 29436-66

ACC NR: AT6012890

rhythms of the cerebral cortex as well as in the amplitude of electrocutaneous potentials and the number of cardiac contractions to a frequency close to the normal pulse rate. A diagram is given showing the equipment for comprehensive registration of the electrophysiological indices of the operator during training. An analysis of the dynamic process of coordination between the various systems in the organism of the operator during training is used for determining the instant when the operator reaches optimum capacity for dealing with control problems. It is found that the circulation of a definite quantity of information is required for maintaining a given control process. This quantity of information is evaluated for a closed control system with a single human link. An integral expression is given for evaluating the level of effectiveness of operator training in man-machine systems. A curve is given showing the degree of training effectiveness for an operator in a complex control system as a function of the number of training exercises. Seven parameters were used for evaluating training effectiveness. It was found that working habits were formed after 12-13 training periods. Orig. art. has: 2 figures and 3 formulas. [08]

SUB CODE: 05 / SUBM DATE: 02Aug65 / ORIG REF: 008 / ATD PRESS: 5010

Card 2/2 *fy*

L 31990-66 EWT(1) SCTB DD/GD

ACC NR: AT6012899

SOURCE CODE: UR/0000/65/000/000/0215/0228

AUTHOR: Volkov, A.A.; Denisov, V.G.; Kirilenko, Yu. I.; Mankevich, V.I.; Mel'nik, S.G.;  
Mikhaylovskiy, G.P.; Onishchenko, V.F.

ORG: none

TITLE: The structure of the command signal and the psychophysiological capabilities of an operator in control while subjected to G force

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 215-228

TOPIC TAGS: man machine communication, automatic control theory, human engineering, biologic gravity effect, flight physiology, psychologic stress

ABSTRACT: Circuits containing a man-operator as one of their elements are extensively used in modern control systems. The case studied involves the control of the pitch of an aircraft in descent prior to landing. An experimental investigation is made of the psychophysiological characteristics of an operator during control under conditions of G force acting in the chest-back direction. It is found that with a G force below a certain limit, the operator is capable of controlling angular and trajectory movements if he receives a single control command. The structure of the control command should be identical with the principle of control of an automatic system; furthermore, a correction should be made in the

Card 1/2

I 31990-66

ACC NR. AT6012899

command system, i.e., the dynamic properties of the operator should be corrected. Optimal structure of the control command may be selected by methods employed for automatic control systems. The quality of the control is considerably affected by its dynamic characteristics, by the preparation and the training of the operator, by perturbation factors, and by the organization of the working place of the man-operator. According to data obtained with the polyeffector method of recording physiological functions, an increase in G force acting on the man-operator leads to the execution of control functions which are unchanged in capacity at a high neuropsychic stress and at a lowered performance. The polyeffector method makes it possible to determine the neuropsychic activity of the operator under G force more fully. An objective evaluation of the processes employing the man-operator in the control circuit may be obtained as a result of analysis of the parameters of the motion dynamics of the controlled plant, the actions of the operator, and the degree of the operator's psychophysiological stress. Orig. art. has: 12 figures and 18 formulas. [08]

SUB CODE: 05 / SUBM DATE: 02Aug65 / AID PRESS: 5021

Card 2/2 IC

ACC NR: AT6036561

SOURCE CODE: UR/0000/66/000/000/0169/0170 /

AUTHOR: Zharov, S. G.; Kuzminov, A. P.; Kas'yan, I. I.; Maksimov, D. G.;  
Onishchenko, V. F.; Popov, M. A.

ORG: none

TITLE: The problem of investigating pilot work capacity during long sojourn in  
spaceship mockups. [Paper presented at the Conference on Problems of Space Medicine  
held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy  
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii,  
Moscow, 1966, 169-170

TOPIC TAGS: isolation test, human physiology, hypodynamia, respiratory system,  
space physiology

ABSTRACT: On prolonged spaceflights, cosmonaut work activity will take place  
during the exposure of the organism to a whole group of unusual factors  
(weightlessness, prolonged isolation, hypodynamia, altered gas medium,  
and so forth). Study of the effect on man of these factors is of great  
practical importance.

The purpose of the present investigation is to study the condition and  
work capacity of man during a prolonged sojourn in a spaceship mockup.

Card 1/3



ACC NR: AT6036561

For this purpose, four 3-day experiments and one 12-day experiment were conducted (the latter was a control experiment without special counter-measures against hypodynamia). The volunteer subjects wore ventilated suits. They remained seated in a space cabin couch throughout the whole time of the experiment. The couch was fully isolated from the external environment. The work activity of the subjects was carried out according to a schedule approximating spaceflight conditions. At scheduled times they performed test tasks in the operation of a manual attitude control system, information transmission, correction tests, and so forth. During the experiment complex recordings were made of physiological functions (EEG, EKG, PG, EMG, and galvanic skin response).

Analysis of the experimental data showed that during a three-day stay in a spaceship mockup, the general condition of the subjects was practically unchanged. The investigated physiological indices remained within normal limits. The work activity of the subjects dropped off a bit in the first day, but returned to initial levels on the second and third days of the experiment.

In the 12-day experiment, the tendency toward lowered work capacity

Card 2/3

ACC NR: AT6036561

was more pronounced. Thus, on the first, fifth, seventh, and eleventh days, a one and one-half to two-fold decrease in the accuracy of ship attitude control from angular coordinates was recorded. The time required for information transmission increased toward the end of the experiment by an average of 10%. In the correction tests, the information capacity of the visual analyzer dropped from 1.7 to 1.3—1.5 bits/sec. The red and blue light contrast sensitivity of the eyes decreased 35% and 40%, respectively, from L. N. Meyer's data.

Numerous changes in physiological indices were also noted toward the end of the experiment. Thus, for example the EEG's showed a stagnant exaltation of alpha rhythms. Tests with sudden random signals requiring a response reaction from the subject showed a decrease in electromyogram amplitude from 300—200 $\mu$ v and a galvanic skin response amplitude decrease from 650—480 $\mu$ v.

The observed functional shifts in the state of the subject during a 12-day stay in a spaceship mockup indicate that further study of pilot work capacity under analogous conditions is necessary, as is an effort to find optimal work-rest schedules for cosmonauts on prolonged spaceflights. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

ONISHCHENKO, V.G. [Onyshchenko, V.H.], inzh.

Repair of the frames of the DT-54 tractors. Mekh. sil'. nosy. 13  
no.8 22-25 Ag '67. (MIRA 15:7)  
(Tractors - Maintenance and repair)

ONISHCHENKO, V.G. [Onyshchenko, V.H.], inzh.

Preparing cylinder blocks before assembling engines. Mekh. sil'.  
hosp. 13 no. 12410-11 D 62. (MIRA 1642)  
(Tractors-- Engines-- Cylinders)

ONISHCHENKO, V.G. [Onyshchenko, V.H.], inzh.

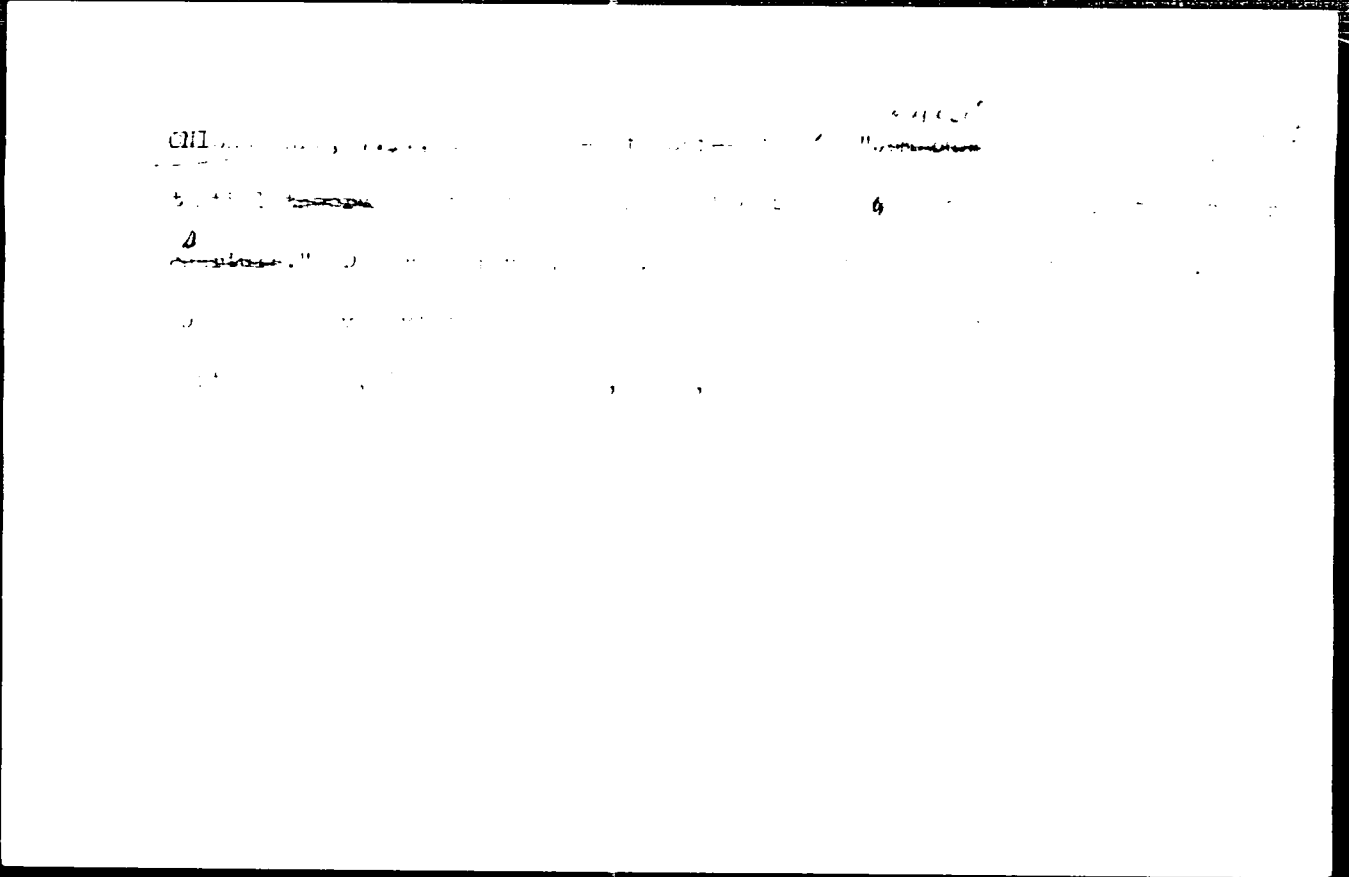
Wholesale prices are not necessary. Makh. sil'. hosp. 14 no. 10:  
13-20 Ap '67. (MIRA 16:10)

ONISHCHENKO, V.G. [Onyshchenko, V.H.], inzh.-mekhanik

Serviceability potential of the B7 engine. Mekh. sil'. nosp. 1-  
no.11:11-12 N'63. (MIRA 17:2)

BRAUDE, V.I., kand.techn.nauk; LEYEN, B.S., inzh.; ONISHCHENKO, V.I., inzh.

Actual trajectory of load movement during the charge of switch jib  
overhanging in gantry cranes. Vest.mashinostr. 43 no.9:26-28  
S '63. (MIRA 16:10)





AUTHOR: Onishchenko, V.I. (Onyshchenko, V. I.) 21-1-5/26

TITLE: The Mixed Axisymmetrical Problem of the Theory of Potential in a Space With a Flat Circular Slit (Smeshannaya zadacha teorii potentsiala dlya prostranstva s ploskoy krugloy shchel'yu)

PERIODICAL: Dopovidi Akademii Nauk Ukrain's'koi RSR, 1958, # 1, pp 21-26 (USSR)

ABSTRACT: The author analyzes the mixed axisymmetrical problem of the theory of potential for two harmonic functions in a space with a flat circular slit. The mixed problem of the theory of elasticity for a space weakened by a flat circular slit can be reduced to this type of problem if the components of the external strain on one side of the slit and displacements on the other side are given. The problem is solved in quadratures. The article contains 2 Russian references and 1 translated from English.

ASSOCIATION: Dnepropetrovsk State University (Dnipropetrovs'kyy derzhavnyy universytet)  
Card ~~1/2~~

S/044/62/000/007/039/100  
C111/C222

AUTHOR: Onishchenko, V.I.

TITLE: The solution of a mixed problem of potential theory and of elasticity theory for a space with a plane round aperture

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 66,  
abstract 7B321. ("Nauchn. zap. Dnepropetr. un-t", 1961, 55,  
25-37)

TEXT: The following problem is considered : Determine four harmonic functions, two of which are defined in the lower and two in the upper half space, and which satisfy certain linear conjugation conditions on the plane  $z = 0$ , where these conditions are different inside and outside of a prescribed circle. The author represents the sought solution as a Fourier-Bessel integral and reduces the problem to conjugate integral equations which are solved by quadratures. Also an analogous boundary value problem of function theory is considered. The results obtained are used for solving an elasticity problem for a space weakened by a round aperture.

Abstracter's note : Complete translation.  
Card 1/1

MOJAVE, V.I. ...  
...EVAS...

Applying Great ...  
for a separate ...  
... (MCA)

1. Inappropriate ...  
...  
...tehniki.

CHISHCHENKO, V.M., inzh.

Semiautomatic production line for rigid mineral-wool slabs.  
Stroi. mat. 6 no.6:27-29 Je '60. (MIRA 13:6)  
(Mineral wool)

FILE A, A.P., ON 1978-10-10

Autop to the editor. ... ez, 00 no.12 49 27 ...  
1. ...  
skh ...

NOVOZHILOV, M.G., doktor tekhn. nauk, prof.; DRUKOVANYI, M.F., kand.  
tekhn. nauk; KRASNOPOL'SKIY, A.A., inzh.; ONISHCHENKO, V.Ya. inzh.

Effect of rotary drilling on the quality of blasting operations.  
Vzryv. delo no. 51/6:223-231 '63. (MIRA 16:6)

1. Otdel gornorudnykh problem AN UkrSSR (for Novozhilov,  
Drukovanyy). 2. Dokuchayevskiy flyuso-dolomitnyy kombinat  
(for Krasnopel'skiy, Onishchenko).  
(Boring) (Blasting)

TURUTA, N.U., kand. tekhn. nauk; GALLIMULIN, A.T., kand. tekhn. nauk;  
KRASNOPOL'SKIY, A.A., kand. tekhn. nauk; ONISHCHENKO, V.I.,  
inzh.; DANILOV, N.M., inzh.; KAKHIN, A.V., inzh.; PAVLOV,  
D.F., inzh.

Effectiveness of blasting systems in flux lines of pipelines.  
Vzryv. delo no.57/L4:181-185 '65. (UkrSSR) 1971

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy  
institut ugel'noy, rudnoy, neflyanoy i gazovoy promyshlennosti  
UkrSSR i Lokuchayevskiy flyuso-dolomitnyy kombinat.

L 21655-66 EWT(m)/EWP(t) JD

SOURCE CODE: UR/0137/65/000/012/B019/B019

ACC NR: AR6011593

AUTHOR: Gavranek, B.; Gladkiy, D.; Leybenzon, S.; Onishchenko, Ye.; Shakhmeyer, B.; Chalyy, V.

68  
B

ORG: none

TITLE: Automatic non-contact regulator for controlling the electric cycle of furnaces for flux remelting 4

SOURCE: Ref. zh. Metallurgiya, Abs. 12B131

REF SOURCE: Elektrotermiya. Nauchn.-tekhn. sb., vyp. 44, 1965, 17-19

TOPIC TAGS: automatic regulation, metal melting, metallurgic furnace, electric relay, power amplifier, electrode, electric transformer, electronic circuit

TRANSLATION: The Zaporozh'ye Affiliate of the Institute of Automation and the Dneprospetsstal' Plant have developed a non-contact regulator for controlling the electric cycle for flux remelting in consumable-electrode furnaces. The regulator maintains working current of electrode with an accuracy of 1.5% of nominal. An input signal proportional to electrode current is received by current transformer and fed to a comparison circuit where it is compared with a voltage which is proportional to the setting of the electrode working current. The difference between these voltages is fed to a semiconductor relay which operates a magnetic power amplifier. This amplifier controls the motor which moves the electrode. A

2

Card 1/2

UDC: 669:621.365:681.1/.2



I 21655-66

ACC NR: AR6011593

schematic diagram of the regulator is given together with an explanation of its operation. The regulator has been in continuous operation at the Dneprospetsstal' plant for a year and a half. During that time, the unit has been used in making more than 1,000 melts which have shown that the regulator is reliable in operation, simple to use, and eliminates metal rejects due to excessive deviations in electrode current during melting. V. Sidorov. [JPRS]

SUB CODE: 09, 13

Card 2/2 SAC

ONISHCHENKO, Ye.G., dotsent, kandidat tekhnicheskikh nauk.

Effect of heat on the proteins of wheat. Trudy MTIPP 2:315-340

'52.

(MIRA 9:2)

(Wheat) (Proteins) (Heat--Physiological effect)

ONISHCHENKO, Ye.G.

Effect during drying of gases from coal on the quality of  
grain gluten. Izv.vys.ncheb.zav.; pishch.tekh. no.2:15-21  
'59. (MIRA 12:8)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlen-  
nosti.

(Gluten--Drying)

CHUPRIKOV, Mikhail Konstantinovich, kapitan pervogo ranga; KRYLOV, Pavel Sergeyevich, kapitan pervogo ranga; ONISHCHENKO, Yevgeniy Yakovlevich, kapitan pervogo ranga; POPOV, Georgiy Ivanovich, inzh., kapitan vtorogo ranga; PRONICHKIN, A.P., red.; TARSKIY, Yu.S., kapitan vtorogo ranga, red.; SRIBNIS, N.V., tekhn. red.

[Reference book for a watch officer] Spravochnik vakhten-nogo ofitsera. [By] M.K.Chuprikov i dr. Moskva, Voenizdat, 1963. 384 p. (MIRA 17:2)

SOV/124-58-5-5872

Translation from Referativnyi zhurnal. Mekhanika, 1958, Nr 5, p 133 (USSR)

AUTHOR Onishchenko, Yu.A.

TITLE Causes of Cave-ins ("Bumps") During the Construction of Vertical Mine Shafts (Prichiny obrusheniya pri prokhodke vertikal'nykh stvolov shakht)

PERIODICAL Ugol' Ukrainy, 1957, Nr 10, pp 16-19

ABSTRACT Bibliographic entry  
... underground structures--Construction

Card 1/1

ONISHCHENKO, Yu.A., inzh.

Relief of vertical shaft wall surfaces. Shakht. stroi. no.12:  
19-21 D '52. (MIRA 11:1)  
(Shaft sinking)

CHROMOSOMES, Yu.A., 3rd Perm'el' -- (dis.) "Concerning ground  
pressure, ~~the~~ <sup>the</sup> projection of section height, temperature and  
surrounding supports for vertical mine shafts ~~in~~ under, geological,  
mining conditions in the Donbass." Bulletin, No. 1, 1969, Vol. 1  
of Higher Education "K.S. Karlov Mining Institute, Donetsk  
(KL, 2-59, 1.)

- 7 -

ONISHCHENKO, Yu.A.

Rock pressure in vertical workings. Ugol' 34 no.9:36-40 S '59.  
(MIRA 12:12)

1. Institut gornogo dela AN USSR.  
(Subsidence (Earth movements)) (Shaft sinking)



ONISHCHENKO, Yu.A.

Adhesive forces between cement and the surface of sedimentary rocks.  
Sbor.trud.Inst.gor.dela AN URSS no.2:66-74 '61. (MIRA 15:2)  
(Grouting)(Mining engineering)

ONISWCHENKO, Yu.A.

Effect of a shifting rock mass on a retaining wall. Sbor.trud.Inst.  
gor.dela AN URSR no.8:75-82 '61. (MIRA 15:2)  
(Rock pressure)(Mine timbering)

ONISHCHENKO, Yu.A.

Establishing the relationship between the size of pieces of  
broken rock and the pressure on the supporting wall. Trudy  
Inst.gor.dela AN URSS no.11:41-46 '62. (MIRA 16:2)  
(Rock pressure)

OMISHCHENKO, Yu. A., kand. tekhn. nauk

Re-examine laboratory methods of studying the physicom~~echanical~~  
parameters of rocks. Ugol' Ukr. 7 no.4:15-19 Ap '63.  
(MIRA 16:4)

1. Institut gornogo dela AN UkrSSR.

(Rocks—Testing)

... ..

... .. of the psychometric ...  
... .. the lonely ... ..  
... .. (MIR ...

... ..

DNISHORINA, G. A., kand. tekhn. nauk. 1918-1999, 1988.

Days of epizootic disease in the laboratory and field conditions were made during the years 1954-1955, 1956-1957, 1958-1959, 1960-1961, 1962-1963, 1964-1965, 1966-1967, 1968-1969, 1970-1971, 1972-1973, 1974-1975, 1976-1977, 1978-1979, 1980-1981, 1982-1983, 1984-1985, 1986-1987, 1988-1989, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999.

1. Doneskoye imeni Neftyanov naftovatel'skogo gornorudnogo instituta (naftobazhenki) J. Makeyevskiy nauchno-fakul'tet vuzel'nyy institut pol'noy part'siya relet v gornoy i avtomobil'noy promyshlennosti, 1954-1999.

RYSAKOV, N.G.; ONISHCHENKO, Y.I.A.

Results of testing the strength properties of Donetsk Basin rock samples  
in models of irregular shape. Ugol' no. 2:1-15. P. 106. MIRA 1966.

1. Institut gornog. dela AN UkrSSR.

ONISHCHENKO, Yu.I.

Testing results and prospects of the development of a gas-turbine plant with a free-piston gas producer. Trudy KHIT no.46:100-108 '61. (MIRA 15:12)

1. Nachal'nik byuro gazoturbinnoy ustanovki Luganskogo teplovozostroitel'nogo zavoda.  
(Gas-turbine locomotives--Design and construction)



KISH, P.P.; ONISHCHENKO, Ya.E.

Photometric determination of gallium in nitric acid solution  
and zinc oxide by glycocyanol red. Zhur. Khim. 1965, no.4:477-478.

1. Uzhgorodskiy gosudarstvennyy universitet.

L 07928-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP603338% (A) SOURCE CODE: UR/0075/66/021/008/0944/0949

34  
B

AUTHOR: Kish, P. P.; Onishchenko, Yu. K.

ORG: Uzhgorod State University (Uzhgorodskiy gosudarstvennyy universitet)

TITLE: Glycinecresol red as a reagent for photometric analysis of gallium

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 8, 1966, 944-949

TOPIC TAGS: glycine, photometric analysis, spectrophotometric analysis, gallium, glycinecresol, gallium containing mineral, gallium determination

ABSTRACT: Glycinecresol red has been suggested as a sensitive and selective reagent for the photometric analysis of gallium. It has been found spectrophotometrically that a Ga:GCR = 1:2 complex is formed at pH 4 with maximum absorption at 510 m $\mu$  (the absorption maximum of the reagent is at 435 m $\mu$ ). The molar extinction coefficient of the complex is  $\epsilon = 25,000$ . A photometric method has been suggested for determining gallium in zinc metal, zinc oxide, and gallium-containing minerals. Large amounts of Zn, Cd, Pb, Mn, Co, Ni, Hg, Ag, Th, Tl, As(III), Bi(III), Sb(III), V(V), Mo(VI), and W(VI) do not interfere. The

Card 1/2

UDC: 543.70

L 07928-67

ACC NR: AP6033382

sensitivity of the method is 0.05 v/ml Ga at  $1:2 \times 10^7$  maximum dilution. Orig. art. has: 2 formulas, 7 figures, and 1 table. [Authors' abstract]

SUB CODE: 07/ SUBM DATE: 30Nov64/ ORIG REF: 007/ OTH REF: 007/

Card 2/2 : ymb

ONISHCHENKO, Yu.N.

Condition of vertical shaft walls of Donets Basin mines. Ukr.  
Ukr. no.6:11-13 Ja '60. (MIRA 13:7)

1. Institut gornogo tela AN USSR.  
(Rock pressure)  
(Donets Basin--Coal mines and mining)

KANASHKIN, I.A., inzh.; ONISHCHENKO, I.A., inzh.

Placing materials with an extra-thin veneer base. Der. from.  
IS no. 8-13-81 Ag '61. (MIRA 14:d)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy  
obrabotki drevesiny.  
(Veneers and veneering)

ONISHCHENKO, E. A.; YARMCHENKO, G. P.

Production of veneer of 0.2-0.6 mm thickness. Der. prom. 13  
no. 11-20. Apr. 1962. (MIRA 1962)

ONISHCHIK, A. L.

4

Karpey dit. F. I. and Onishchik, A. L. Algebra of homology of a space of paths. Dokl. Akad. Nauk SSSR (N.S.) 102 (1984) 267-269. (Russian)

Let  $X$  be a simply connected space, and let  $\Omega$  be its space of loops, based at some point of  $X$ . Theorem: If the cohomology ring  $H^*(X)$  (with coefficients in a field of characteristic 0) is an exterior algebra with generators  $x_1, \dots, x_n$ , then  $H^*(\Omega)$  is a polynomial ring with generators  $\xi_1, \dots, \xi_n$ ,  $\deg \xi_i = \deg x_i - 1$ . The proof consists of computations with the spectral sequence of the usual space of paths in  $X$ , utilizing the fact that  $H^*(\Omega)$  is tensor product of a polynomial ring and an exterior algebra, since  $\Omega$  is an  $H$ -space. H. Samelson.

jm  
MT

ONISHCHIK, A.L.

Orientability of analytic homogenous manifolds. Usp.mat.nauk 8 no.5:121-130  
S-0 '53. (MLA 5:10)  
(Aggregates)



ONISHCHIK, A. L.

✓ Dynkin, E. B.; and Oniščik, A. L. Compact global Lie groups. Uspehi Mat. Nauk (N.S.) 10 (1955), no. 4(66), 3-74. (Russian)

*Math*  
The first purpose of the paper is to develop the theory of the diagram of a compact Lie group [in the sense of Stiefel, Comment. Math. Helv. 14 (1942), 350-380, pp. 375-379; MR 4, 134], but using now exclusively the Cartan-Weyl theory of root forms as the basic tool. Using the diagram the centres of the simply connected compact simple Lie groups are determined. Further, the kernels of these groups under a unitary representation are determined. The result is stated in terms of the dominant weights of the irreducible components. Among the other results we mention a criterion for an irreducible linear representation of a compact Lie group to be equivalent to a symplectic or orthogonal representation.

W. T. van Est (Utrecht).

ONISCIK A.L.

SUBJECT USSR/MATHEMATICS/Topology CARD 1/1 PG - 88  
AUTHOR KARPELEVIC F.I., ONISCIK A.L.  
TITLE Homology algebra of loops space.  
PERIODICAL Doklady Akad. Nauk 106, 967-969 (1956)  
reviewed 6/1956

Let  $X$  be a simply connected topological space,  $\Omega$  the space of the closed paths in  $X$  with fixed initial- and endpoint,  $H(X)$  and  $H(\Omega)$  their cohomology rings (coefficient field of the characteristic 0). Theorem: If  $H(X)$  is an outer algebra with free generating elements  $x_1, x_2, \dots$  and if every part of dimension of  $H(X)$  possesses a finite basis, then  $H(\Omega)$  is the polynomial algebra with free generating elements  $\xi_1, \xi_2, \dots$ , where  $\dim \xi_i = \dim x_i = 1$ . - An application to Hopf's manifolds and homogeneous spaces is given.

~~Onishchik, A. I.~~  
ONISHCHIK, A. I.

~~Onishchik, A. I.~~ Spaces of paths and fiber spaces. Dokl. Akad. Nauk SSSR (N.S.) 110 (1956), 932-935. (Russian)

1-111

To every fiber space  $E$ , in the sense of Serre, with base  $B$ , fiber  $F$ , projection  $p$ , the author associates a new fiber space, whose total space is  $F$ , whose base is  $E$ , and whose fiber is  $\Omega(B)$ , the space of loops in  $B$ , based at some point  $b_0$ . Actually the total space is not  $F$  itself, but a space homotopically equivalent to it, namely the fiber space induced from the fiber space of all paths in  $B$  starting at  $b_0$  (the Serre-space of  $B$ ), by the projection  $p$  of  $E$  into  $B$ . Similarly the fiber is not actually  $\Omega(B)$ , but the equivalent space of all paths in  $E$ , starting at a point  $x_0$  and ending in a fixed fiber  $F$ . (Reviewer's note: another construction for this associated space consists in taking for total space the space of all paths in  $E$ , starting in  $F$ , and projecting into  $E$  by sending the path into its endpoint.) The construction can be iterated, giving rise to  $(\Omega(B), F, \Omega(E))$ , then to  $(\Omega(E), \Omega(B), \Omega(F))$ , etc.; certain assumptions about connectedness have to be made. The spectral sequences of the first three associated spaces and of the

2

1/2

*Oniščik, A. L.*

Serre-spaces of  $B, E, F$  are connected by a sequence of homomorphisms; the maps are the obvious ones, in case the  $E_2$ -terms are tensor products. The construction is used to prove several theorems about fiber spaces, e.g.: If  $H(E), H(B)$  and  $H(F)$  are exterior algebras, then  $H(E) = H(B) \otimes H(F)$  (the proof uses the fact that in the third associated fiber space all degrees are even). For a homogeneous space  $G/U$  of a Lie group there is equivalence between:  $U \neq 0$  in  $G$ ;  $H^*(M)$  is an exterior algebra;  $H^*(\Omega(M))$  is a polynomial algebra [rational coefficients].  
H. Samelson (Ann Arbor, Mich.)

1-FW

*J*

2/2

*smw*

ONISHCHIK, A.L. (Moskva)

Cohomology of path spaces. Mat.sbor. 44 no.1:3-52 Ja '58.  
(MIRA 11:2)

(Topology)

16(1)

PHASE I BOOK EXPLOITATION

SOV. 26-0

Vsesoyuzny matematicheskiy s'ezd. 3rd, Moscow, 1956  
Trudy i otchetnye soobsheniya sektsionnykh doklady. Doklady  
i soobsheniya uchemykh (Transactions of the 3rd All-Union Mathema-  
tical Conference in Moscow. vol. 3: Summary of Sectional Reports-  
Reports of Physicist Scientists) Moscow, Izd-vo AN SSSR, 1959.  
247 p. 2,22KJ copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.E.F. Shevchenko; Editorial Board: A.A. Abramov, V.G.  
Boitynskiy, A.M. Vasil'yev, B.V. Medvedev, A.D. Myshkis, S.M.  
Rimol'skiy (Chesp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, K.A.  
Shtul'man, P.F. L. Ulyanov, V.A. Uspenskiy, M.G. Chetaev, O. Ye.  
Shilov, and I.A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-  
Union Mathematical Conference, held in June and July 1956. The  
book is divided into two main parts. The first part contains sum-  
maries of the papers presented by scientists at the Con-  
ference that were not included in the first volume. The  
second part contains the text of reports submitted to the  
by non-Soviet scientists. In those cases when the non-Soviet sci-  
entist did not submit a copy of his paper to the editor, the title  
of the paper is cited and, if the paper was printed in a previous  
volume, reference is made to the appropriate volume. The papers  
also contain original and integral equations, function theory,  
problems of analytical probability theory, topology, mathematical  
functions of mechanics and physics, computational mathematics,  
mathematical logic and the foundations of mathematics, and the  
history of mathematics.

Seyast'yennaya f.a. (Moscow). Erlang formulas in telephony  
with an arbitrary distribution law of the duration of con-  
versation 68

Slavy, Ya.G. (Moscow). Distribution of the first positive  
sum in a sequence of independent random values 70

Chernikov, A.Y. (Moscow). On the asymptotically best statisti-  
cal values of a parameter 71

Section on Topology

Yegorov, Y.L. (Moscow) and Yu. M. Salmov (Moscow). On the  
metric dimension of sets 72

Yefremovich, Y.A. (Irnovo) and Ye. S. Yichomirova (Irnovo).  
On the homologies 72

Dal'skiy, A.L. (Moscow). Cohomologies of the space of paths  
of homogeneous spaces 72

Card 18/34

16(1)  
AUTHOR: Onishchik, A.E. SSV/20-124 3 1959  
TITLE: On Transitive Transformation Groups of Compact Homogeneous Spaces (O tranzitivnykh gruppakh preobrazovaniy kompaktnykh odnorodnykh prostranstv)  
PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 3, pp 520-523 (USSR)  
ABSTRACT: The author treats the following problem set up by Ye.P. Dynkin. Let  $G$  be a compact Lie group which is transitive and effective on the manifold  $X$ ; all the subgroups  $H \subset G$  transitive on  $X$  are to be determined. The problem is solved for a class of homogeneous manifolds which, among other things, contains the simply connected manifolds with Eulerian characteristic. The main results are summarized in a larger table. The results obtained are used in order to calculate the maximum connected groups of analytic automorphisms of the compact complex homogeneous manifolds. Altogether the author gives 10 theorems, lemmata and conclusions.

Card 1/2

On Transitive Transformation Groups of Compact Homogeneous  $SO(n)/SO(k)$  Spaces

There are 8 references, 2 of which are Soviet, 4 American, 1 Swiss, and 1 Japanese.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosov.  
(Moscow State University imeni M.V. Lomonosov)

PRESENTED: September 12, 1958, by P.S. Aleksandrov, Academician

SUBMITTED: September 12, 1958

Card 2/2



46(1) / 2000, 162200

66722

AUTHOR: Onishchik, A.L.

SOV/20-129-1-1-1-1

TITLE: Insertions Between Transitive Compact Groups of Transformations

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 2, pp261-264

ABSTRACT: Let  $G$  be a group ( $\mathfrak{G}$  a Lie algebra of  $G$ ),  $G'$  and  $G''$  subgroups of  $G$  ( $\mathfrak{G}'$  and  $\mathfrak{G}''$  subalgebras of  $\mathfrak{G}$ ). The triplet  $(G, G', G'')$  (the triplet  $(\mathfrak{G}, \mathfrak{G}', \mathfrak{G}'')$ ) is called a decomposition, if every element  $g \in G$  is representable as  $g = g' \cdot g''$ ,  $g' \in G'$ ,  $g'' \in G''$  (if  $\mathfrak{G} = \mathfrak{G}' + \mathfrak{G}''$ ). Lemma: Let  $G$  be a connected compact Lie group,  $G'$  and  $G''$  analytic subgroups;  $\mathfrak{G}, \mathfrak{G}', \mathfrak{G}''$  the corresponding Lie algebras and subalgebras. Then  $(G, G', G'')$  is a decomposition if and only if  $(\mathfrak{G}, \mathfrak{G}', \mathfrak{G}'')$  is a decomposition. In theorem 1 the author gives all the decompositions  $(G, G', G'')$  of a simple compact Lie group  $G$  (table 1). After the introduction of some auxiliary definitions the author formulates necessary and sufficient conditions that  $(G, G', G'')$  or  $(\mathfrak{G}, \mathfrak{G}', \mathfrak{G}'')$  be a decomposition. Altogether there are 5 theorems. The author thanks Ye.B.Dynkin for the guidance of the paper. ✓

Card 1/2

66722

SOV/23-129-2-7, 66

Insertions Between Transitive Compact Groups of Transformations

There are 4 references, 3 of which are Soviet, and 1 French.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova  
(Moscow State University imeni M.V.Lomonosov)

PRESENTED: July 3, 1959, by P.S.Aleksandrov, Academician

SUBMITTED: July 3, 1959

Card 2/2

...  
groups". Moscow, 19... Moscow State... M. V. Komonov, ...  
Faculty', ... 19...

ONISHCHIK, A.L. (Moskva)

Rotation of singular Lie groups. Mat.sbor. 51 no.5:273-276  
J1 '60. (MIRA 13:8)

(Groups, Theory of)