KHOKHLOV, M.A.

Profile of the cones of the scutcher pedal regulators. Izv. vys.-ucheb.zav.; tekh.tekst.prom. no.6:53-61 '61. (MIRA 15:1)

1. Tashkentskiy tekstil'nyy institut.
(Textile machinery--Design and construction)

KHOKHLOV, M A.

Changed system of the pedal regulator for scutchers. Izv. vys. ucheb. zav.; tekh. teks. prom. no.3:62-69 '64.

(MIRA 17:10)

1. Tashkentskiy tekstil'nyy institut.

KORZININ, V.; KHOKHLOV, N.

Mechanization of river regulating operations. Mech. transp. 19 no.7:51 Jl '60. (MIRA 13:8)
(Rivers—Regulation)

USSR/Electricity - High-Frequency Discharge   Apr 52

"Single-Electrode High-Frequency Discharge at Pressures From Several Millimeters/Mercury to Atmospheric Pressure at 31.7 Mc," G. S. Solnesev, M. Z. Khokhlov, Ye. A. Rodina, Moscow State U

"Zhur Eksper i Teoret Fiz" Vol XXII, No 4, pp 406-413

Single-electrode high-frequency discharge was studied in air, tech nitrogen and tech argon in a pressure range from 1 atm (flash discharge) down

215T23

to 5 mm/mercury (high-frequency discharge at low pressure) at a frequency of 31.7 mc. Indebted to Prof N. A. Kaptsov and P. A. Petrov. Received 28 Jun 51.

215T23

KHOKHLOV, M.Z.

KHOKHLOV, M. Z.

Khokhlov, M. Z.--"Investigation of High-Frequency Jet Discharge by Optical Means." Cand Phys-Math Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 27 Jan 54. (Vechernyaya Moskva 14 Jan 54)

SO: SUM 168, 22 July 1954

Khokhlov, M. Z.

USSR/Physics - Electricity, Flare Discharge FD-3340

Card 1/1 Pub. 146 - 12/28

Author : Khokhlov, M. Z.

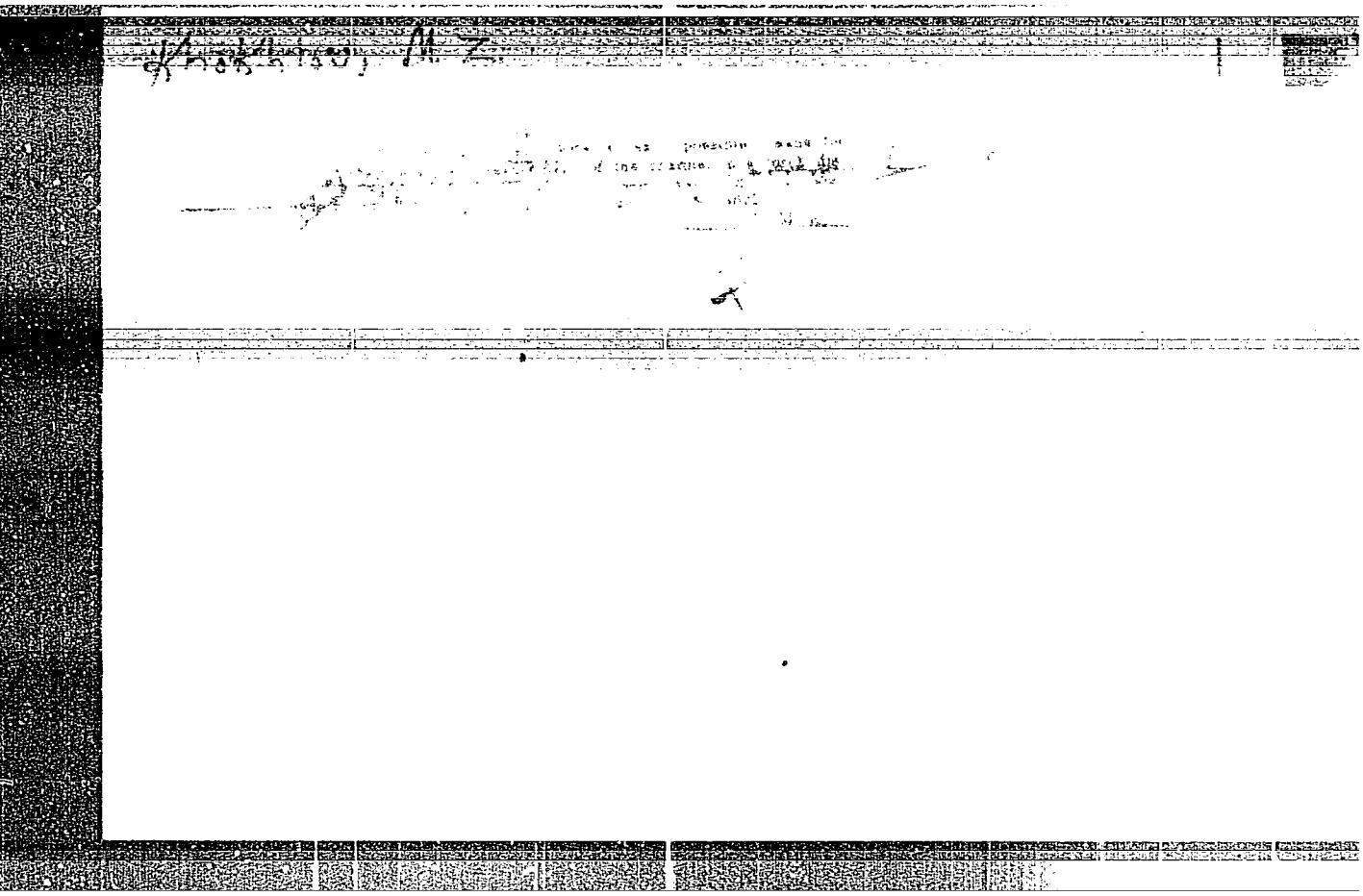
Title : Study of possibility of temperature measurement of flare discharge channel by using the hydroxyl band 3064 A

Periodical : Zhur. Eksp. i Teor. Fiz., 29, No 5, 645-650, 1955

Abstract : Temperature measurement of the flare discharge channel in hydroxyl (3064 A) at pressures over 100 mm Hg yielded a temperature of a neutral gas. It is a result of the predominant role of the thermal dissociation of water at the specified pressures in comparison with dissociation under effect of fast electrons at simultaneous excitation of the formed hydroxyl. Indebted for help to Prof. N. A. Kaptsov. Twelve references, including 7 foreign.

Institution : Moscow State University

Submitted : July 13, 1954



Khokhlov, M.Z.

109-3-5-12/17

AUTHORS: Mitsuk, V.Ye., Solntsev, G.S., Khokhlov, M.Z., Bulkin, P.S. and Zastenker, G.N.

TITLE: Electrical Discharge in Air at the Wavelength of 3.2 cm (Elektricheskiy razryad v vozdukhe na dline volny 3.2 cm)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol III, Nr 5, pp 698 - 703 (USSR)

ABSTRACT: The paper describes a method of measurement of the breakdown electric fields and the time lags in the electrical discharges in air and gives some experimental results. The block schematic of the experimental equipment is shown in Fig.1. This employed a pulsed magnetron operating at a wavelength of λ = 3.19 cm and having a repetition frequency of 300 c/s; the pulses were rectangular and had a duration of 2 μsec. The output of the magnetron was applied to a waveguide system which permitted the variation of the transmitted power and made it possible to measure the standing wave ratio and to observe the form of the pulse. The discharge was formed at the "neck" of a horn, which was situated under an evacuated glass jar. The seal between the input of the horn and the output of the waveguide was in the form of a polyethylene plate. An external radio-active source containing Co^{60}, having an activity of 10 millicurie was used as the ioniser for the

Card1/3

gas particles in the horn; the quanta of the γ-rays from the source had energies up to 1.2 MeV. The energy and the directivity of the γ-rays could be controlled by means of a special gun made of lead and fitted with a number of lead filters. The humidity of the air under the vacuum jar could be controlled by means of a special vessel filled with water whose temperature was kept constant by means of a thermostat. First, the statistical time lags of the discharge were measured and the results are shown in Fig.3; curves I, II and III were taken for three different intensities of the ionising source. Fig.4 shows the statistical time lags as a function of the applied electrical field for the maximum intensity of the ionising source; Curve I was taken at a pressure of $p = 32.4$ mmHg and curve II at $p = 45.5$ mmHg. Since the field intensities at the input of the horn (in the area of its neck) could not be measured directly, it was of interest to determine the relationship between the power transmitted through the waveguide and the field at the input of the horn. The problem is analysed in some detail and it is shown that for the investigated horn (see Fig.5) it could be assumed that the field in the horn was approximately equal to that in the waveguide. By using

Electrical Discharge in Air at the Wavelength of 3.2 cm

this result, it was possible to plot the values of the breakdown fields as a function of the pressure in the horn; the resulting curve is given in Fig.7; from this, it is seen that the lowest field is required at a pressure of about 5 mmHg. The results obtained agree with those reported by Posin (Ref.1), except that the intensity of the ionising source appeared to have no significant effect on the value of the breakdown field.
The authors express their gratitude to Professor N.A. Kaptsov for directing this work.
There are 7 figures, 6 references, 3 of which are Soviet and 3 English.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova (Physics Department of Moscow State University imeni M.V. Lomonosov)

SUBMITTED: January 22, 1957

AVAILABLE: Library of Congress

Card 3/3

1. Electric fields-Measurement-Methods 2. Magnetrons-Applications
3. Waveguides-Applications

109-3-5-13/17

AUTHORS: Khokhlov, M.Z., Bulkin, P.S., Mitsuk, V.Ye. and Taskayeva, T.F.

TITLE: Influence of the Radio-active Irradiation on the Formation of Ultra high-frequency Pulse Discharges (Vliyaniye radioaktivnogo oblucheniya na vozniknoveniye impul'snogo sverkhvysokochastotnogo razryada)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol III, Nr 5, pp 704 - 709 (USSR)

ABSTRACT: The measurements reported were carried out by means of the equipment described in the present issue of the journal, pp 689 - 703. The measurements were made at a wavelength of 3.2 cm and the ionising source was either Co^{60} emitting γ-rays or Po^{210} producing α-particles. It was found that the statistical time lags obeyed the formula:

$$n = N_o e^{-\frac{t}{\bar{t}}} \qquad (4)$$

where n is the number of the tests in which the delay is greater than t, N_o is the overall number of tests and $\bar{t}$ is the average statistical delay time; the experimental curve

Card 1/3

Influence of the Radio-active Irradiation on the Formation of Ultra-high-frequency Pulse Discharges

showing the above relationship for a pressure of 45.3 mmHg for the γ-source is plotted in Fig.1. Fig. 2 shows the value of τ_3 as a function of 1/A (where A is the intensity of the radiating source) for various values of the pulse power fed to the discharge space; W_0 in Fig. 2 denotes the value of the breakdown power. From Fig.2, it is concluded that τ_3 is linearly dependent on 1/A and that τ_3 decreases with increasing power fed to the breakdown region. On the other hand, it was found that for a very wide range of variation of the activity of the γ-rays, the breakdown power was practically constant. Similar results were observed if Po^{210} was used as the ionising source in spite of the fact that an α-particle produces about 500 times more electrons than a γ-ray from Co^{60}. It was also observed that in the presence of Po^{210}, the delays were also governed by the same statistical law. A curve of the breakdown power W_{pr} as a function of pressure was determined for both the ionising sources and

Influence of the Radio-active Irradiation on the Formation of Ultra-high-frequency Pulse Discharges

this is shown in Fig.3. It is seen that the value of W_{pr} is independent of the nature of the ionising source. There are 3 figures and 5 references, 4 of which are Soviet and 1 English.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennyy universiteta im. M.V. Lomonosova (Physics Department of Mgscow State University im. M.V. Lomonosov)

SUBMITTED: January 22, 1957

AVAILABLE: Library of Congress

Card 3/3

1. Irradation effects-Theory

AUTHORS: Bulkin, P. S. and Khokhlov, M. Z.

TITLE: Statistical Ignition Delays in Pulsed Ultra High Frequency Discharges (Statisticheskiye zapazdyvaniya zazhiganiya impul'snogo sverkhvysokochastotnogo razryada)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 6, pp 806-810 (USSR)

ABSTRACT: The distribution of the ignition delays in the case of a constant electrical field can be determined from:

$$N = N_0 e^{-\int_0^t \omega J dt} , \qquad (1)$$

where N is the number of experiments in which the delay exceeds a time t, N_0 is the overall number of experiments, J is the number of free charges appearing in the effective discharge space (per sec) and ω is the probability that the discharge initiated by a group of electrons

Statistical Ignition Delays in Pulsed Ultra High Frequency Discharges

will be completed during the experiment. If ω and J are constant, Eq.(1) can be written as:

$$N = N_0 e^{-\frac{t}{\bar{\tau}_{зн}}} \qquad (2)$$

where $\bar{\tau}_{зн} = \frac{1}{\omega J}$. If the experiments are carried out by means of rectangular pulses having a duration τ and a repetition frequency f, the probability that the discharge will occur after τ sec is given by :

$$\frac{N}{N_0} = e^{-\frac{\tau}{\bar{\tau}_{зн}}} \qquad (3)$$

while the probability that the discharge will occur during a pulse is given by:

Card 2/5

Statistical Ignition Delays in Pulsed Ultra High Frequency Discharges

$$p = 1 - e^{-\frac{t}{\bar{\tau}_s}} \qquad (4)$$

The probability of a discharge occurri after a time t, is given by Eq.(6), where A is a normalising factor. From this it follows that the average statistical delay time is given by:

$$\bar{\tau}_s = \frac{1}{f \ln(1 - p)} \qquad (7)$$

or if p is $<$ unity, $\bar{\tau}_s$ is expressed by Eq.(8). The above formulae were verified by employing an ultra high frequency pulse generator, operating at a wavelength of 3.19 cm. The discharges were produced in a hermetically sealed waveguide section, situated in a vacuum chamber. The pulses had a duration of about 1 μs and a quantity of

Statistical Ignition Delays in Pulsed Ultra High Frequency Discharges

Co^{60} was used as the ionisation source. The experimental results are shown in Figs.1, 2, 3 and 4. Fig.1 shows the function $\ln N/No = \varphi(t)$ for a pressure of 45.5 mm Hg and for $\tau = 2$ μs , $f = 300$ c/s , $N_o = 270$ and $\bar{\tau}_3 = 21.4$ sec. Fig.2 illustrates the dependence of $\bar{\tau}_3$ on the pulse repetition frequency for pressures of 45 and 33 mm Hg. The dependence of $\bar{\tau}_3$ on the intensity of the ionising source, for pressures of 45.5 and 32.4 mm Hg is illustrated in Fig.3; the curves were taken at $f = 300$ c/s and $\tau = 2$ μs . The dependence of $\bar{\tau}_3$ on the duration of the pulses for three different pressures is shown in Fig.4. From the above experimental data it is concluded that the formulae 3, 5 and 7 are in good agreement with the measured results. The authors express their gratitude to Prof. N. A. Kaptsov for

Statistical Ignition Delays in Pulsed Ultra High Frequency Discharges

directing this work. There are 4 figures and 5 references, 2 of which are English, 2 German and 1 Soviet.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Physics of the Moscow State University, im. M. V. Lomonosov)

SUBMITTED: January 22, 1957.

1. Pulse generators -- Analysis 2. Waveguides -- Applications
3. Functions -- Theory 4. Electric discharges -- Analysis

Card 5/5

AUTHOR: Khokhlov, M.Z. Sov/51-4-4-3/24

TITLE: Rotational Temperature of Hydroxyl and Nitrogen and Conditions for Their Excitation in High-frequency Discharges in a Wide Range of Pressures (Rotatsionnaya temperatura gidroksila i azota i usloviya ikh vozbuzhdeniya v vysokochastotnykh razryadakh v shirokom diapazone davleniya)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol IV, Nr 4, pp 438 - 447 (USSR).

ABSTRACT: The author reports results of determination of rotational temperatures of hydroxyl and nitrogen in a two-electrode high-frequency discharge. He also extends the results obtained earlier for the jet ("wick") discharge (Ref 6) to a wider range of pressures. The discharges were produced in air at pressures from 5-760 mm Hg, using brass electrodes cooled with oil (Figure 1). For the two-electrode discharge, the lower electrode was connected to a high-frequency generator (32-33 Mc/s); the upper electrode was grounded. In the jet discharge, there was no upper electrode. In the majority of measurements, a spectrograph ISP-22 was used, as well as a KS-55 spectrograph for separate cases. To make the results comparable, all measurements were made at the base of the discharge channel (points A in Figure 1). Rotational

Card1/4

Rotational Temperature of Hydroxyl and Nitrogen and Conditions for their Excitation in High-frequency Discharges in a Wide Range of Pressures

temperature of hydroxyl was determined for the branch P_1 of the 3064 Å band and that of nitrogen - from the R branch of the 3371 Å band. Details of the technique are given in Ref 6. Additional experiments show that the error due to taking the average temperature in the discharge as being equal to the true temperature at the discharge axis does not exceed 100 - 200 °C, which lies within the experimental error of the method used. For pressure higher than 200 mmHg, temperature of the jet discharge was found to be independent of pressure and of power of the discharge and was equal to 3450 ± 200 °K. This value agrees well with the values given by a number of authors for discharges at atmospheric pressure, provided the frequency dependence of the jet-discharge temperature (Figure 2) is taken into account. Figure 3 gives the dependence of the jet-discharge temperature on pressure at the smallest powers at which stable jet discharges are still possible. Curve 1 in Figure 3 gives the hydroxyl temperature and Curve 2 the nitrogen temperature. Curve 3 in

Rotational Temperature of Hydroxyl and Nitrogen and Conditions for Their Excitation in High-frequency Discharges in a Wide Range of Pressures

Figure 3 gives the nitrogen temperature for a diffusion discharge. The hydroxyl and nitrogen temperatures for two-electrode discharges are compared for various pressures P in Table 1. Figure 4 gives dependence of the rotational temperature on the two-electrode discharge pressure. Curve 1 gives the hydroxyl temperature and Curve 2 the nitrogen temperature. From the results obtained, it was found that plasma in the discharges studied is non-isothermal. Coincidence of the rotational temperature of hydroxyl with the temperature of neutral gas, which is taken to be equal to the rotational temperature of nitrogen is due to the thermal dissociation of water in the process of formation of hydroxyl at higher pressures. At lower pressures (i.e. 100 and 66 mmHg for the jet and two-electrode discharges respectively) where the effectiveness of the thermal dissociation of water is negligible, the rotational temperature of hydroxyl exceeds considerably that of the neutral gas. The author thanks

Rotational Temperature of Hydroxyl and Nitrogen and Conditions for their Excitation in High-frequency Discharges in a Wide Range of Pressures

N.A. Kaptsov for his interest in this work and G.I.Trifonova and G.N. Zinov'yeva for help in this work.
There are 6 figures, 1 table and 27 references, 10 of which are Soviet, 11 in English and 3 Rumanian, 2 German, 1 Dutch.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 17, 1957

Card 4/4 1. Electric arcs--Chemical effects

KHOKHLOV, M.Z.

Experimental determination of oscillator strengths of the Pb 1 lines 4057 and 3683 Å, and the lead content of the solar atmosphere. Part 1. Determination of the f values by emission lines in a hollow cathode. Izv.Krym.astrofiz.obser. 21:84-102 '59.
(MIRA 13:6)

(Lead--Spectra)

80276
S/170/60/003/02/09/026
B008/B005

24.2120

AUTHORS: Pirogova, N. V., Khokhlov, M. Z.

TITLE: Emission Spectrum and Temperature of the Arc Core of an Arc Valve

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 2, pp. 51-56

TEXT: The d.c. arc of E. Mark's (Ref. 1) valve was investigated. The discharge spectra were recorded by means of a spectrograph of type "KS-55" in the wave band of 2500 - 9000 A. Within the current range mentioned, the general character of the spectrum is conserved, and contains only the spectra of the air components since the metal vapors are blown out of the discharge zone. Fig. 2 shows two small sections of the spectrograms recorded (the arc axis is perpendicular to the spectrograph opening). One shows some multiplets of the nitrogen spectrum in the infrared range, the other one the edge of the band of N_2^+ at 3914 A. The atomic arc spectrum consists of lines of neutral nitrogen, of oxygen, and of hydrogen. Table 1 shows the transitions which

Card 1/3

correspond to the multiplets observed in the nitrogen- and oxygen spectrum. The results obtained in the measurement of the arc temperature show the following facts: 1) No noticeable change in discharge temperature can be observed in the range of current variations between 17 and 65 a. It is 9,000-10,000°K constantly. This shows that the current density remains unchanged when the current increases. The principal changes are obviously connected with a variation of the canal cross section. To reduce the temperature of the discharge canal it is therefore necessary to introduce an easily ionizable element (e.g. alkali metal) to attain a noticeable reduction of the effective ionization potential. 2) Near the combustion chamber, the temperature of the discharge canal is about 500° higher than near the screening electrode. 3) The simultaneous existence of the atomic and molecular spectra gives the possibility of determining the probability of transitions of some nitrogen- and oxygen lines. This may be important for the determination of the arc temperature at much stronger currents if a considerable temperature increase is to be expected due to a compression of the arc by its own magnetic field. There are 3 figures, 1 table, and 8 references, 6 of which are Soviet.

Card 2/3

Emission Spectrum and Temperature of th[redacted] Arc Core of an Arc Valve

80276
S/170/60/003/02/09/026
B008/B005

ASSOCIATION: Energeticheskiy institut AN SSSR im. G. M. Krzhizhanovskogo, g. Moskva (Institute of Power Engineering of the AS USSR imeni G. M. Krzhizhanovskiy, City of Moscow)

Card 3/3

22102

3,1540 (1018, 1178)

S/035/61/000/003/029/048
A001/A101

AUTHOR: Khokhlov, M.Z.

TITLE: An experimental determination of strength of lead line oscillators by the absorption method

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 3, 1961, 52, abstract 3A445 ("Izv. Krymsk. astrofiz. observ.", 1960, v. 22, 118-127, Engl. summary)

TEXT: The ratio of oscillator strength of lead lines λλ3685 and 3639 was determined by the absorption method in a laboratory absorption tube: (f(3683)/f(3639) = 1.98 ± 0.1; by the method of emission it was found from relative intensities of lines in discharge in a hollow cathode that (f(3683)/f(3639) = 1.77 ± 0.1. The good agreement of the results obtained by both methods shows that deviations from equilibrium population of levels ps^3P_0 and ps^3P_1 in the hollow cathods are insignificant. Based on the value of oscillator strength of resonance lead line λ 2833, f = 0.6 ± 0.1, absolute values of oscillator strength were determined for the lines considered: f(3639) = 0.24 and f(3683) = 0.48. There are 7 references. Author's summary
[Abstracter's note: Complete translation]

Card 1/1

22103

S/035/61/000/003/030/048
A001/A101

3,1540 (1068, 1178)

AUTHOR: Khokhlov, M.Z.

TITLE: Estimate of the upper content limit of lead in the Sun's atmosphere from the infrared line of lead

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no.3, 1961, 52, abstract 3A446 ("Izv. Krymsk. astrofiz. observ.", 1960, v. 22, 128-133, Engl. summary)

TEXT: Spectrum of lead with dispersion of 0.413 A/mm was obtained in the III order of the diffraction spectrograph of the tower solar telescope at the Crimean Astrophysical Observatory. The wavelength of the infrared lead line λ 7229 was measured from this spectrum. The wavelengths of four atmospheric lines in the solar spectrum were used as reference ones. The value found, λ 7229.0085 $\pm$ 0.004, agrees well with the value obtained by H. Geiseler and W. Grotrian, λ 7228.974, but noticeably differs from the value cited by G.R. Harrison, λ 7229.11, near the wavelength of the unidentified solar line λ 7229.133. The value of oscillator strength for the line considered was experimentally found to be f(7229)

Card 1/2

22103

S/035/61/000/003/030/048
A001/A101

Estimate of the upper content limit ...

≈0.3, and the upper content of lead in the Sun's atmosphere was estimated to amount to $N(Pb) < 14 \times 10^{12}$ atom/g, which agrees well with the lead value determined from ultraviolet lines, $N(Pb) = 7 \times 10^{12}$ atom/g. There are 11 references.

Author's summary

[Abstracter's note: Complete translation]

Card 2/2

S/058/62/000/006/025/136
A061/A101

AUTHOR: Khokhlov, M. Z.

TITLE: Oscillator strengths of the set of p^2-ps transitions in lead, tin, germanium, silicon, and carbon spectra. I. Lead, tin

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 16, abstract 6V95 ("Izv. Krymsk. astrofiz. observ.", 1961, v. 25, 249 - 267, English summary)

TEXT: The relative oscillator strengths of the set of p^2-ps transitions in PbI and SnI have been measured. The resulting experimental values greatly exceed those obtained by Bates (Bates, D. R., Damgaard, A., "Trans. Roy. Soc. London", 1949, v. A242, 101) by 10 to 200 times. There is the tendency for this difference to increase as the excitation energy of the upper level grows.

[Abstracter's note: Complete translation]

Card 1/1

45122

S/712/62/027/000/002/015
A001/A101

3,1940

AUTHORS: Kachalov, V. P., Khokhlov, M. Z., Khokhlova, V. L., Yakovleva, A.V.

TITLE: Ultraviolet Be I lines in the solar spectrum

SOURCE: Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya. v. 27, 1962, 44 - 51

TEXT: The problem of beryllium abundance is of importance in connection with the problem of origin of elements and intermixing of substance in stellar interiors. Two multiplets of Be I, λ 2651 and λ 2494 were identified in the solar ultraviolet spectrum obtained by rockets at heights of about 100 km. These multiplets, as well as multiplet λ 3321, have a common lower level $2s2p\,^3P_{0,1,2}$ with excitation potential 2.71 ev. The problem of oscillator strengths of these multiplets is considered. The relative values of $\sum gf_{exp}$ for these multiplets are determined from absorption spectra in a King furnace by comparing equivalent widths of these lines in the region of rectilinear portion of the curve of growth. Absorption spectra were obtained for various temperatures from 2,300 to 3,000°K and the pressure in the King furnace of the order of

Card 1/2

Ultraviolet Be I lines in the solar spectrum

S/712/62/027/000/002/015
A001/A101

100 mm Hg. The comparison of experimental $\sum gf$ with theoretical ones shows a considerable difference. Calculations by the Bates-Damgaard tables for Ca I leads also to results diverging from experimental values. Therefore the use of these tables for calculating absolute f of the Be I multiplets considered is not justified. The introduction of a corresponding correction will lead to reduction of beryllium abundance in the solar atmosphere and to increasing difference between its abundance there and in the Earth and meteorites. Analyzing the relative variation of the observed equivalent widths of Be I lines in the solar spectrum, the authors conclude that the coefficient of continuous absorption decreases from λ 3321 towards shorter wavelengths. However this problem calls for a further study from both experimental and theoretical viewpoints. There are 4 figures and 3 tables.

SUBMITTED: May 1961

Card 2/2

S/712/62/028/000/015/020
E010/E401

AUTHOR: Khokhlov, M.Z.

TITLE: An installation with a King's furnace for measuring oscillator strengths by the absorption method of some lines of BeI, SnI and GeI

SOURCE: Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya. v.28. 1962. 277-287

TEXT: The article describes a King's furnace installed in the Krymskaya astrofizicheskaya observatoriya (Crimean Astrophysical Observatory) for measuring oscillator strengths of spectral lines by the absorption method. The installation consists of the furnace proper, a vacuum device and a supply source, i.e. power transformer. The substance being investigated is placed within a graphite tube which serves as a heating element connected to the transformer secondary winding calculated for passing a current up to 1700 A. The optical schematic diagram of the installation is shown in Fig.2. A КСА-1 (KSA-1) spectrograph is used for both photographing and photoelectric recording of spectra, the latter with the aid of a photoelectric attachment. Equivalent widths and relative oscillator strengths of some lines of BeI, SnI

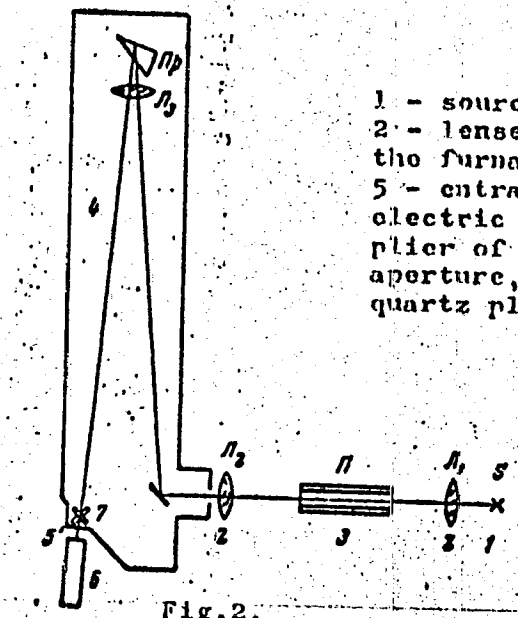
Card 1/5

GeI were measured with the installation described. For BeI were investigated multiplets λλ 3321, 2651 and 2494 and the results are shown in Table 1 which contains, in addition to experimental data for BeI, the values calculated by D.R.Bates's tables (Phil. Trans. Roy. Soc., London, A 242, 1949, 101) and experimental data for analogous multiplets of other elements. For tin were studied four lines: λλ 3034, 3009, 2706, 2661 and the results are presented in Table 2. For germanium were measured the following lines: λλ 2709, 2691 and 2592 and the results are shown in Table 3 which gives also theoretical values calculated on assumption of the intermediate coupling type. Equivalent widths of all the lines investigated are presented graphically. In conclusion, the author describes the use of the photoelectric attachment for recording the spectra by the photoelectric method and establishes the conditions under which the ratios of oscillator strengths of two spectral lines with a common lower level can be determined from the ratios of their equivalent widths. There are 9 figures and 3 tables.

SUBMITTED: December 20, 1961
Card 2/5

An installation with a King's ....

S/712/62/028/000/015/020
E010/E401



1 - source of continuous spectrum, 2 - lenses, 3 - heating element of the furnace, 4 - spectrograph, 5 - entrance slit of the photoelectric attachment, 6 - photomultiplier of the EMI type with a quartz aperture, 7 - rocking plane-parallel quartz plate.

Card 3/5

Fig.2.

S/712/62/028/000/015/020
E010/E401

Table 1

Multiplet	Relative Σgf					
	BeI experi-	BeI calculated	CaI	BaI	CdI	ZnI
$^3P - {}^3S$	1	1	1	1	1	1
$^3P - {}^3P$	3.85	1.95	3.63	1.89	-	-
$^3P - {}^3D$	1.93	5.08	0.95	0.53	0.92	0.83

Card 4/5

S/712/62/028/000/015/020
E010/E401

Table 2

λ	(1) Относительные f; (2) Спектрограф КСА-1	(3) Спектрограф с эшелле [1]
3034	1,12	0,98
3009	1	1
2706	1,42	1,22
2681	(0,3)	0,19

1 - Relative f
2 - KSA-1 spectrograph
3 - spectrograph with echelette grating

Card 5/5

Table 3

λ	(1) Относительные f; (2) Спектрограф КСА-1	(3) Теория [1]
2709	1	1
2691	0,68	0,65
2592	1,12	1,31

1 - Relative f
2 - KSA-1 spectrograph
3 - theoretical

KHOKHLOV, M.Z.

Oscillator forces of a set of p^2 - ps-transitions in the spectra of lead, tin, germanium, silicon, and carbon. Part 3. Izv. Krym. astrofiz. obser. 29:131-140 '63. (MIRA 16:10)

L 5277-66 FSS-2/EWT(1)/FS(s)/EWT(m)/FS(v)-3/FCC/EWA(d)/EWA(h) TT/GS/GW

ACCESSION NR: AT5023624 UR/0000/65/000/000/0467/0482

81
79
Q71

AUTHORS: Gringauz, K. I.; Khokhlov, M. Z.

TITLE: The outermost Van Allen belt of charged particles

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 467-482

TOPIC TAGS: radiation belt, electron flux, proton, electron energy, radiation intensity, proton counter, geomagnetic field, rocket, satellite, space probe, radiation detector 14

ABSTRACT: The results of a study of the zone of particles with energies from ~100 ev to 40 keV beyond the outer Van Allen belt are examined. The work was done in an attempt to find a key to solving some of the most important problems of space research. Data on the fluxes of soft electrons and protons recorded by the following satellites and rockets were used: Luna-1, Luna-2, Explorer-12, Mars-1, Explorer-18, Elektron-2, and Zond-2. Examples of recordings of integral-trap collector currents for Luna-2 (observations at low geomagnetic latitudes) are given in Fig. 1 on the Enclosure, which also gives the hard-radiation count rate. Similar

Card 1/5

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L 5277-66
ACCESSION NR: AT5023624

recordings for Mars-1 (high geomagnetic latitudes) are given in Fig. 2 on the Enclosure. It is found that the relationship between the day and night regions of the radiation belt is probably a function of the structure of the geomagnetic field. The data from Elektron-2 indicate the presence of a relationship between the intensity of the soft-electron fluxes, the orientation of the axis of the geomagnetic dipole, and the geomagnetic activity. Orig. art. has: 7 graphs, 3 diagrams, and 1 table.

ASSOCIATION: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva, Moscow (All-Union Conference on Space Physics)

SUBMITTED: 02Sep65 ENCL: 03 SUB CODE: ES, NP

NO REF SOV: 016 OTHER: 038

Card 2/5

L 5277-66
ACCESSION NR: AT5023624 ENCLOSURE: 01

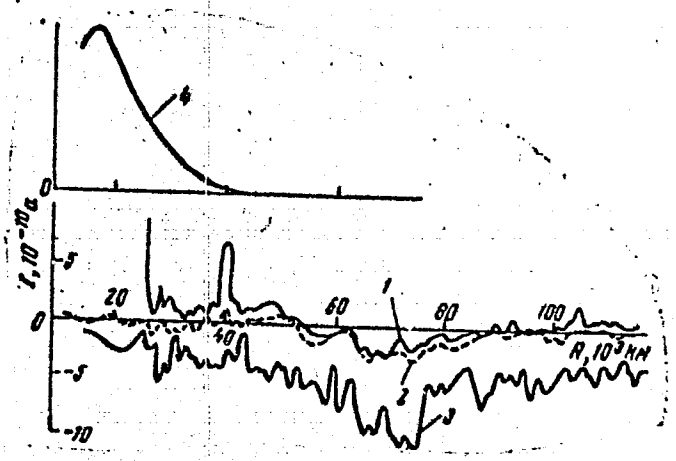


Fig. 1. Collector currents of integral traps and hard-radiation count rate. 1- upper boundary of collector currents with suppressor grid potential φ = -10, -5, and 0 V; 2- lower boundary of same currents; 3- upper boundary with φ = 15 V; 4- count rate in relative units

Card 3/5

L 5277-66

ACCESSION NR: AT5023624

ENCLOSURE: 02

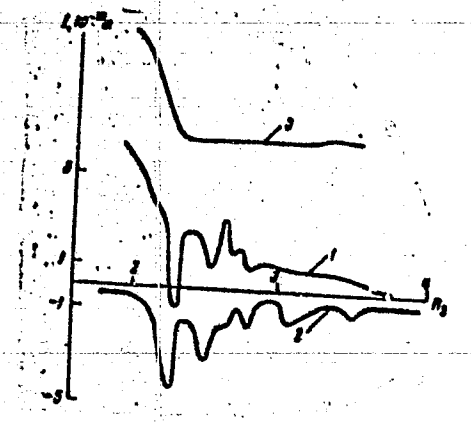


Fig. 2. Collector currents of integral traps and hard-radiation count rate (Mars-1). 1- suppressor grid potential φ = 0; 2- φ = 50 V; 3- count rate in relative units

Card 4/5

L 5277-66
ACCESSION NR: AT5023624 ENCLOSURE: 05

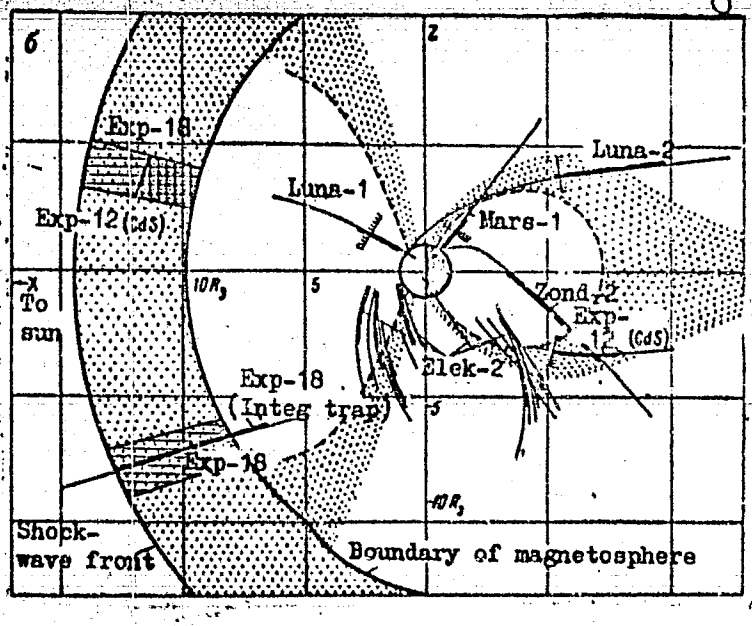


Fig. 3. Charged-particle distribution in projection on meridian plane in solar-elliptical coordinate system

Card 5/5

L 01805-66 EWT(d)/FSS-2/EWT(1)/EEC(k)-2/FCC/EEC-4/EWA(h) TT/AST/GM

ACCESSION NR: AP5020829 UR/0020/65/163/004/0873/0876

AUTHOR: Bezrukikh, V. V.; Gringauz, K. I.; Musatov, L. S.; Rybchinskiy, R. Ye.; Khokhlov, Z. 55 55 55 55

TITLE: Study of solar plasma flow by the Zond-2 interplanetary station 91 49 B

SOURCE: AN SSSR. Doklady, v. 163, no. 4, 1965, 873-876

TOPIC TAGS: solar radiation, plasma measurement, plasma flow, ion trap, particle detector, Zond 2 12,55 12,55 9M

ABSTRACT: An investigation of solar plasma flow was made to confirm the hypothesis that a correlation exists between the rate of solar plasma flow and the Kp index characterizing geomagnetic disturbances. Solar plasma flow was measured by Zond-2, equipped with modulation and integral particle traps. The latter were modified to measure electron and positive ion flux with energies in excess of 70 ev and 50 ev, respectively. The modulation trap, similar to the one used on Explorer-10, had a modulating grid supplied by two voltages: a d-c voltage assuming consecutively 8 values between 230 and 3200 v,

Card 1/3

L 01805-66

ACCESSION NR: AP5020829

and a rectangular a-c voltage of 450 v with a modulating frequency of 1000 cps. Electron emission from the collector was supressed by a grid with a 70-v potential with respect to the body of the satellite. An alternating component of the collector current, proportional to the magnitude of the positive-ion flow, was recorded by a resonance amplifier adjusted to the modulation frequency. The instrument was capable of sensing positive ion flow within the range of 10^7 to 2.5×10^9 $cm^{-2}sec^{-1}$. Recording of positive-ion flow of $E > 70$ ev was aided by a d-c amplifier in the trap circuit. During the flight of Zond-2, the modulation trap was directed toward the Sun. When a deviation occurred, a correction was automatically made in the readings based on a study of the angular characteristics of the trap in the laboratory. On 7 Dec 1964, solar plasma flow was recorded at 1.5×10^9 $cm^{-2}sec^{-1}$, coinciding with the geomagnetic storm which occurred on the same date. This value was reached only during strong magnetic storms and tended to confirm the correlation between the Kp index and solar plasma flow. The use of particle traps capable

Card 2/3

L 01805-66

ACCESSION NR: AP5020829

of direct determination of positive-ion flow gave better results than the electrostatic analyzer on Mariner-2. Orig. art. has: 2 figures.

[TS]

ASSOCIATION: Radiotekhnicheskiy institut Akademii nauk SSSR (Radio Engineering Institute, Academy of Sciences, SSSR)

SUBMITTED: 29Apr65 ENCL: 00 SUB CODE: AA, SV

NO REF SOV: 002 OTHER: 006 ATD PRESS: 4085

Card 3/3

L 02977-67 FSS-2/EWT(1)/FCC TT/GW

ACC NR: AP6032856 SOURCE CODE: UR/0020/66/170/003/0570/0573

AUTHOR: Gringauz, K. I.; Bezrukikh, V. V.; Khokhlov, M. Z.; Musatov, L. S.; Remizov, A. P.

ORG: none

65
B

TITLE: Indications that the moon traverses the Earth's magnetosphere tail, according to data from charged-particle traps placed on the first artificial lunar satellite

SOURCE: AN SSSR. Doklady, v. 170, no. 3, 1966, 570-573

TOPIC TAGS: magnetosphere, lunar orbit, lunar satellite, EARTH MAGNETIC FIELD

ABSTRACT: Luna-10 carried two flat four-electrode charged-particle traps which monitored the flux intensity of electrons with energies exceeding 70 ev and positive ions with energies greater than a quantity determined by the second grid voltage, which was varied from 0 to +50 v once every two minutes. During the measurement sessions, the trajectory of the moon and its artificial satellite was such that it crossed the boundaries (as proposed by N. F. Ness) of the Earth's magnetosphere. During this time the measured difference of electron ($E < e > 70$ ev) and positive ion ($Ep > 50$ ev) flux was negative inside and positive outside the assumed boundary of the magnetosphere. Solar activity was normal during these measurements. If the

Card 1/2 UDC: 537.591

ACC NR: AP6034570 SOURCE CODE: UR/0020/66/170/006/1306/1309

AUTHOR: Gringauz, K. I.; Bezrukikh, V. V.; Khokhlov, M. Z.; Zastenker, G. N.; Remizov, A. P.; Musatov, L. S.

ORG: none

TITLE: Experimental results from observations of the lunar ionosphere performed by the first artificial lunar satellite

SOURCE: AN SSSR. Doklady, v. 170, no. 6, 1966, 1306-1309

TOPIC TAGS: lunar atmosphere, ionosphere, ion trap, electron trapping, electron flux, lunar satellite / Luna-10 lunar satellite

ABSTRACT:

In an accompanying review article on the Luna-10*, a brief description is given of the two low-energy ion and electron traps that were carried by the satellite. K. I. Gringauz et al have subsequently published a preliminary analysis of the data from these traps, and have made some tentative deductions concerning the nature of the lunar ionosphere.

One difficulty in the trap measurements has been the generally low concentration of charged particles in the lunar ionosphere. Another is the uncertainty as to what effect the unknown surface charge status of the satellite might have on the registered particle levels. It was to counter the latter effect that traps for both thermal ions and thermal electrons were installed, each with a form of square-

Card 1/7

UDC: 537.591

wave gating. The ion trap had twin orthogonal elements and a common collector, as seen in Fig. 1(a); input flux was grid-modulated by a square biasing wave, -3 to +7 v. Output was detected by an amplifier tuned to this modulation frequency [unspecified]. To further overcome spurious local charge effects, the outermost grid was also modulated at 2-minute intervals by a square wave between 0 and -50 v. The electron trap outer grid was similarly modulated, but between 0 and +50 v. Interrogation of the traps was performed at 2-minute intervals. It was pointed out that rotation or tumbling of the satellite, with a period of about 40 seconds, caused "irregularity" in the measurements; this point was not elaborated on.

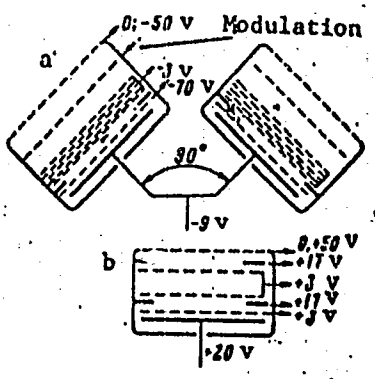
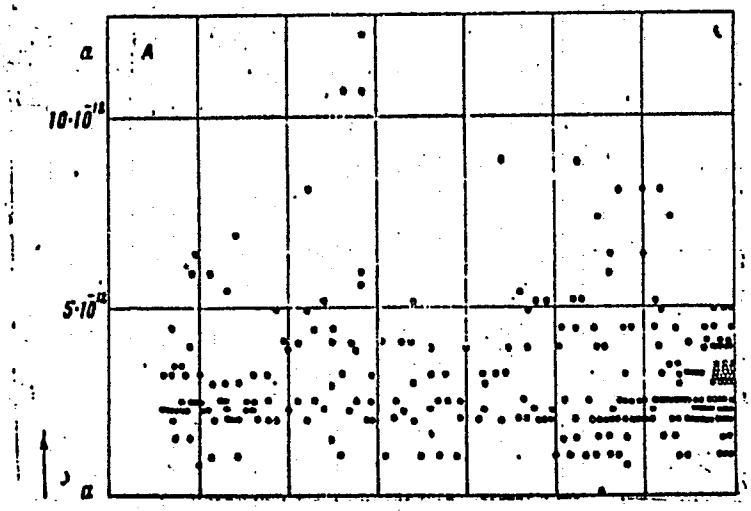


Fig. 1. Ion trap (a) and electron trap (b)

Data from the ion trap have provided some idea of ion distribution in the vicinity of the Moon, but do not yield a breakdown between thermal and possibly higher energy ions. Calculated ion currents from some 450 readings are shown as a function of altitude in Fig. 2, for the general cases where the Moon was 1) within and 2) outside of the Earth's magnetosphere. A perceptible drop in ion current is seen when the Moon and its satellite entered the magnetosphere — on the average, from 3.1×10^{-12} amp to 2.3×10^{-12} amp. It also appears that there is no strong correlation of ion density with lunar altitude, nor with change in bias of the trap's external grid. If it is assumed that the ions encountered were thermal, i.e., that the satellite's orbital velocity greatly exceeded ion thermal velocities, then the calculations show a maximum ion density near the Moon of about $100/cm^3$. However, a varying component of ion flux was noted which could be correlated with solar wind flux; this fact, plus the nondependence of measured flux on altitude or grid biasing, suggest that at least part of the recorded ions were at energies well above thermal, in which case the ion density estimate would have to be revised downward.

The satellite's electron count, both in free space and in the magnetosphere, showed discrete high and low levels (Fig. 3). The

ACC NR: AP6034570



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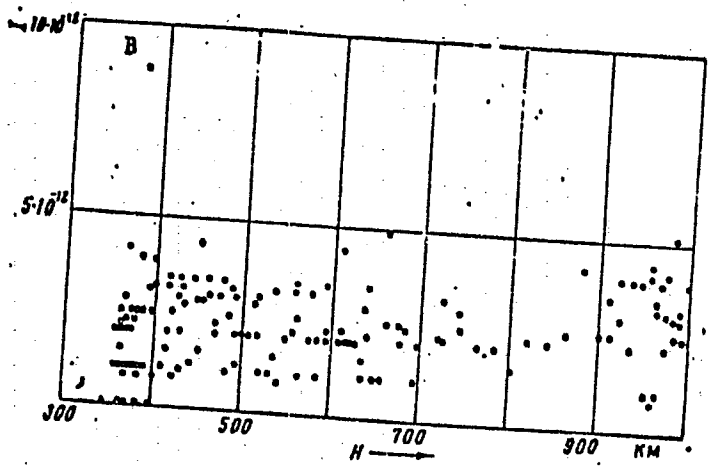


Fig. 2. Ion current

A - Moon outside magnetosphere;
B - Moon within magnetosphere.

high current levels were evidently caused by photoelectrons from the satellite surface elements, since the levels dropped sharply when the satellite entered lunar night. As with the ion readings, the average electron flux was greater in free space (7.2×10^{-10} amp) than in the magnetosphere (4.8×10^{-10} amp). The corresponding densities, assuming energies on the order of 1 ev, were calculated at $80/cm^3$ and $60/cm^3$ respectively, and $15—20/cm^3$ on the lunar night side. Whereas the electron trap readings may have been erroneously increased by photoelectrons, they may also have been decreased due to interception of low-energy electrons by trap elements; laboratory tests have shown that diversion of the latter type at the 1-ev level can reduce true readings by a factor of 3 or 4. The

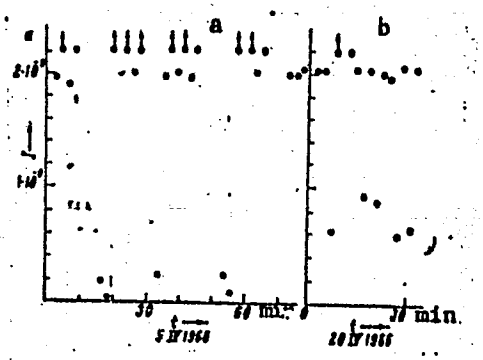


Fig. 3. Electron current

A - Within the magnetosphere;
B - outside the magnetosphere.

ACC NR: AP6034570

authors intend to obtain a more accurate evaluation of these side effects and of their influence on the validity of trap readings. Presented by Academician A. L. Mints on 23 June 1966. Orig. art. has: 3 figures. [FSB: v.2, no.12]

SUB CODE: 03,20,22 / SUBM DATE: 14Jul66 / ORIG REF: 003 / OTH REF: 006

Card 7/7

KHOKHLOV, N., mashinist

In Gusinoye Ozero. Mast. ugl. 7 no.8:7 Ag '58. (MIRA 11:9)

1.Kombayn shakhty No.5 Gusinoozerskogo rudoupravleniya Buryat-Mongol'skoy ASSR.

(Buryat Mongolia--Coal mines and mining)

KHOKHLOV, N.

The Congo and the Congolese. Sov.foto. 23 no.2:23-24 F '63. (MIRA 16:4)

1. Spetsial'nyy korrespondent gazety "Izvestiya".
(Congo—Views)

ISHCHENKO, M.P.; KHOKHLOV, N.A.; KABANOVSKIY, N.D.

Electric furnace for caking in chemical processes. Patent U.S.S.R. 78,955, Dec. 31, 1949.
(CA 47 no.19:9830 '53)

KHOKHLOV, N.A.

Laboratory research on the effect of air leakage on the pressure differences in ventilation ducts. Zap. LGI 38 no.1:109-117 1959. (MIRA 14:3)

(Mine ventilation)

KHOKHLOV, N.F., kandidat ekonomicheskikh nauk.

[Planning freight shipments on railroads] Planirovanie perevozok gruzov na zheleznykh dorogakh. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 70 p. (MLRA 6:5)
(Railroads--Freight)

KHOKHLOV, N.F.

BARANOV, A.F., redaktor; RUDOY, E.F., redaktor; SOLOGUBOV, V.N., kandidat tekhnicheskikh nauk, otvetstvennyy redaktor toma; ALBEGOV, N.A., kandidat tekhnicheskikh nauk; VASIL'YEV, B.K., inzhener; VERSHINSKIY, S.V., kandidat tekhnicheskikh nauk; VINOGRADOV, G.P., kandidat tekhnicheskikh nauk; VINOKUROV, M.V., professor, doktor tekhnicheskikh nauk; GOLOVANOV, V.G., kandidat tekhnicheskikh nauk; GORDEYEV, A.S., dotsent, kandidat tekhnicheskikh nauk; GURSKIY, P.A., dotsent, kandidat tekhnicheskikh nauk; GUREVICH, A.N., kandidat tekhnicheskikh nauk; DOMBROVSKIY, A.B., dotsent; YEGORCHENKO, V.F., professor, doktor tekhnicheskikh nauk; IVANOV, V.N., professor, doktor tekhnicheskikh nauk; KARVATSKIY, B.L., professor, doktor tekhnicheskikh nauk; KOROLEV, K.P. professor, doktor tekhnicheskikh nauk; MUCHKIN, I.N., kandidat tekhnicheskikh nauk; POPOV, G.V., inzhener; PROSKURNEV, P.G. inzhener; SAFON-TSEV, K.A., izhener; SEMICHASTNOV, I.F. dotsent, kandidat tekhnicheskikh nauk; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk; STEPANOV, A.D., dotsent, kandidat tekhnicheskikh nauk; SYROMYATNIKOV, S.P., akademik[deceased]; TERNOVSKIY, V.A., dotsent; kandidat tekhnicheskikh nauk; TRUBETSKOY, V.A., kandidat tekhnicheskikh nauk, KHOKHLOV, N.F., kandidat tekhnicheskikh nauk; SHARONIN, V.S., kandidat tekhnicheskikh nauk; SHLYKOV, Yu.P., dotsent, kandidat tekhnicheskikh nauk; YEVTUSHENKO, A.M. kandidat tekhnicheskikh nauk, retsenzent; IVANOV, V.N., professor, doktor tekhnicheskikh nauk, retsenzent; PANOV, N.I., dotsent, kandidat tekhnicheskikh nauk, retsenzent; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk, retsenzent; UTYANSKIY, L.I., inzhener, retsenzent; NEFTKSA, V.M., professor, doktor tekhnicheskikh nauk, retsenzent;

(Continued on next card)

BARANOV, A.F., -- (Continued) Card 2.

TOPORNIN, G.S., inzhener, retsenzent; DOMBROVSKIY, A.B., dotsent; retsenzent; POYDO, A.A., kandidat tekhnicheskikh nauk, retsenzent; YAKOBSON, P.Ye., laureat Stalinskoy premii; dotsent; kandidat tekhnicheskikh nauk, retsenzent; POPOV. A.A., professor, doktor tekhnicheskikh nauk, retsenzent; PROSKURNEV, P.G., inzhener, retsenzent; SAFONTSEV, K.A , inzhener, retsenzent; SERAFIMOVICH, V.S., kandidat tekhnicheskikh nauk; retsenzent; TRAVIN, P.I., inzhener, retsenzent; FOKIN, K.F., kandidat t ekhnicheskikh nauk, retsenzent; SHCHERBAKOV, V.P., inzhener, retsenzent; SHADUR, L.A., dotsent; kandidat tekhnicheskikh nauk,retsenzent; TIKHONOV, P.S., inzhener retsenzent; TKACHENKO, F.D., inzhener; retsenzent; BABICHKOV, A.M. professor, doktor tekhnicheskikh nauk, retsenzent; KOROSTYLEV, A.I. inzhener, retsenzent; LEVITSKIY, V.S., dotsent; kandidat tekhnicheskikh nauk, retsenzent; KLYKOV, A.F., inzhener, retsenzent; SOLOGUBOV, V.N. redaktor; SHISHKIN, K.A., redaktor; SLOMYANSKIY, A.V. redaktor; SALENKO, S.V., redaktor; YUDZON, D.M. tekhnicheskiy redaktor.

[Technical reference book for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Redaktsionnaia kollegiia: A. F. Baranov, i dr. Glav.redaktor. E. F. Rudoi. Moskva, Gos.transp.zhel-dor.izd-vo. Vol. 6 [Rolling stock] Podvizhnoi sostav. 1952. 955 p. (MLRA 8:9)
(Railroads--Rolling-stock)

Khokhlov, Nikolay Fedorovich

KHOKHLOV, Nikolay Fedorovich; PUZANKOVA, Valentina Dmitriyevna; CHERNYSHEV, V.I., red.; KHITROV, P.A., tekhn.red.

[Railroad rates in the U.S.S.R.] Zheleznodorozhnye tarify SSSR. Moskva, Gos.transp.zhel-dor. izd-vo, 1957. 55 p. (MIRA 11:2)
(Railroads--Rates)

KHOKHLOV, N.F., kand.ekon.nauk

Determining reasonable distances for peat transportation.
Trudy MIIT no.115:199-232 '59. (MIRA 13:1)
(Peat--Transportation)

BELYUNOV, S.A., inzh.; DMITRIYEV, V.I., dots., kand. ekon. nauk; KUCHURIN, S.F.; LIN'KOV, M.V.; MULYUKIN, F.P.; NEDOPEKIN, G.K., inzh.; PUZYNYA, I.Ye., inzh.; RAYKHER, G.M., inzh.; TRUBACHEV, T.Ye., inzh.; TYVANCHUK, D.P., inzh.; UMBLIYA, V.E., kand. ekon. nauk; KHOKHLOV, N.F., dots. kand. ekon. nauk; CHUDOV, A.S., prof., doktor ekon. nauk; ERLIKH, V.S., inzh.; IVLIYEV, Ivan Vasil'yevich, red.; KRISHTAL', L.I., red.; KHITROV, P.A., tekhn. red.

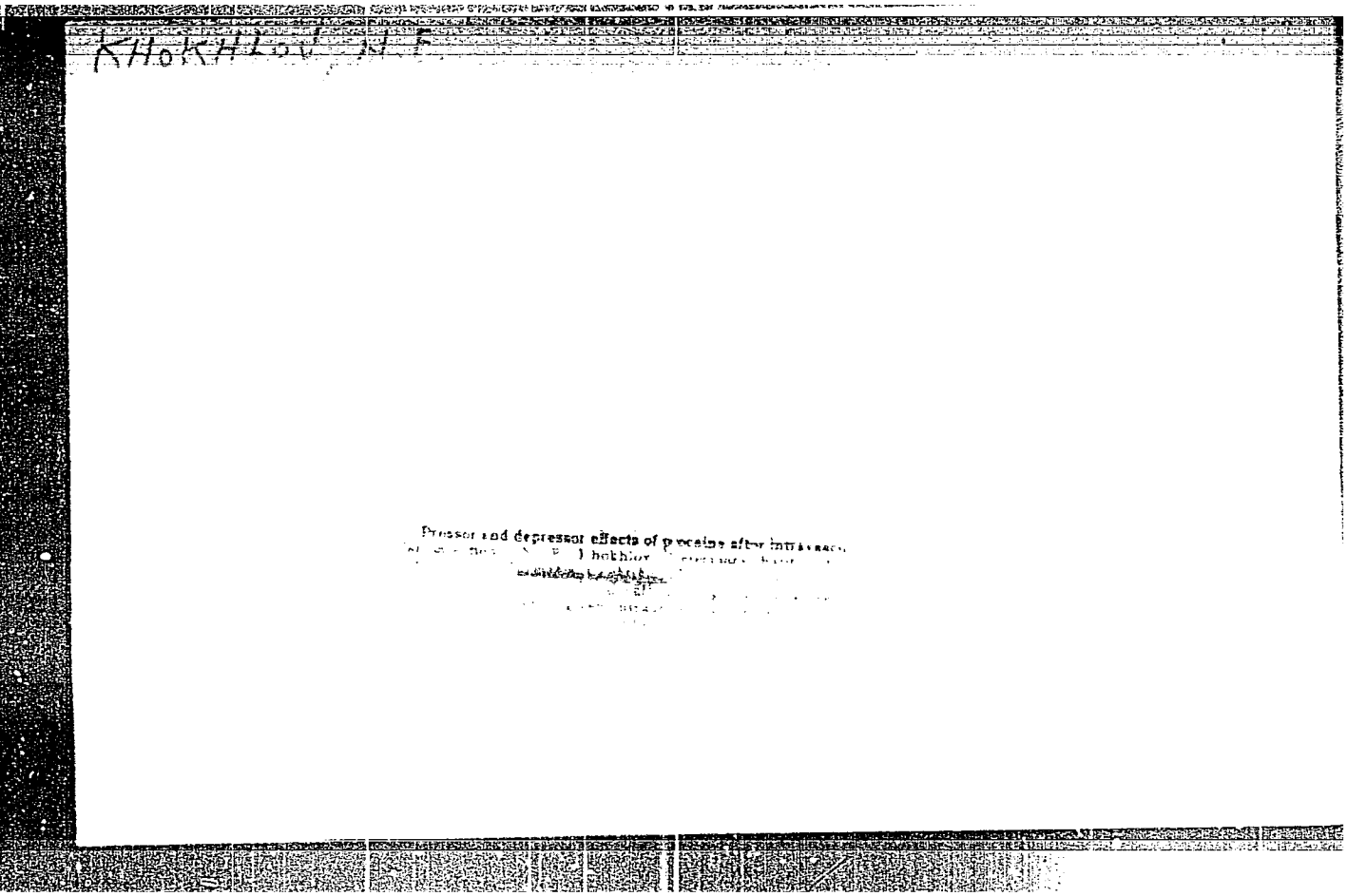
[Planning in railroad transportation] Planirovanie na zheleznodorozhnom transporte; spravochnik. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei sobshcheniia, 1961. 470 p. (MIRA 14:11)
(Railroads--Management)

KHOKHLOV, N. F.

KHOKHLOV, N. F.--"Effect of Intravascular Injection of Novocain on the Organism and Influence of Intravascularly-Injected Novocain on the Duration of the Hetero-Transfusion Shock." *(Dissertation for Degree in Science and Engineering Defended at USSR Higher Educational Institutions.) Kazakhstan State Medical Inst imeni V. M. Molotov, Alma-Ata, 1954

So: Knizhnaya Letopis', No. 25, 18 Jun 1955

* For Degree of Candidate in Medical Sciences



KHOKHLOV, N.F., kandidat meditsinskikh nauk (Chimkent)

Case of thyroid calculus. Probl.endok. i gorm. 2 no.4:122-123 Jl-Ag '56. (MLRA 9:11)

1. Iz khirurgicheskogo otdeleniya (zav. - N.F.Khokhlov) oblastnoy bol'nitsy Chimkenta (glavnyy vrach V.M.Aliyev)
(THYROID GLAND, calculi,
case reports (Rus))

KORSHEV, B.S.; KHOKHLOV, N.F., kandidat meditsinskikh nauk

Three cases of cardiorhaphy in wounds of the heart. Zdrav. Kazakh. 16 no.8:40-41 '56. (MLRA 10:1)

1. Iz khirurgicheskogo otdeleniya (zav. otdeleniyem - kandidat meditsinskikh nauk N.F.Khokhlov) oblastnoy bol'nitsy g.Chimkenta (glavnyy vrach - V.M.Aliyev)
(HEART--SURGERY)

KHOKHLOV, N.A.

FILIN, N.P.; KISHLEV, I.I.; MASLOV, N.M.; SKRDYUKOV, N.I.; NIKITIN, V.I.; KHOKHLOV, N.A.

Unit for breaking up frozen ground. Rats. i izobr. predl. v stroi. no.3:31-35 '57. (MIRA 11:1)

(Frozen ground) (Excavating machinery)

Khokhlov, N.F.

KHOKHLOV, N.F.

Lethal dose of novocaine. Sov.med. 21 Suppelemt:6 '57. (MIRA 11:2)

1. Iz Yuzhno-Kazakhstanskoy nauchno-issledovatel'skoy veterinarno-opytnoy stantsii.
(NOVOCAINE--TOXICOLOGY)

KHOKHLOV, N.F., kand.med.nauk.

A case of electrical burns of the abdominal wall and abdominal cavity with injury of the internal organs [with summary in English] Khirurgiia 34 no.7:68-70 Jl '58 (MIRA 11:9)

1. Iz khirurgicheskogo otdeleniya (zav. M.V. Yenikeyev) Lengerskoy gorodskoy bol'nitsy (glavnyy vrach N.I. Khil'tov).

(ELECTRICITY, injurious effects
burns of abdom. wall & cavity & internal organs (Rus))
(BURNS, case reports
electric burns of abdom. wall & cavity & internal organs (Rus))

BELOV, I.V., dotsent, kand.ekon.nauk; BOROVOY, N.Ye., dotsent, kand.tekhn. nauk; VINNICHENKO, N.G., dotsent, kand.ekon.nauk; RAYKHER, G.S., insh.; KHANUKOV, Yevgeniy Davydovich, prof., doktor ekon.nauk; KHOKHLOV, N.F., dotsent, kand.ekon.nauk; PESKOVA, L.N., red.; KHITROV, P.A., tekhn.red.

[Economics of railroad transportation] Ekonomika zheleznodorozhnogo transporta. Pod obshchei red. E.D.Khanukova. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 298 p. (MIRA 14:3)
(Railroads--Finance)

KHOKHLOV, N.F., kand.med.nauk

Treatment of liver abcesses. Zdrav. Kazakh. 21 no.2:6-11 '61.
(MIRA 14:3)

1. Iz khirurgicheskogo otdeleniya (zav. - N.F.Khokhlov) Yuzhno-Kazakhstanskoy oblastnoy bol'nitsy.
(LIVER—ABCESS)

KHOKHLOV, N.F., kand.med.nauk

Case of echinococcosis of the gall bladder. Zdrav. Kazakh. 22 no.2: 72-73 '62. (MIRA 15:4)

1. Iz khirurgicheskogo otdeleniya Yuzhno-Kazakhstanskoy oblastnoy bol'nitsy.

(GALL BLADDER—HYDATIDS)

KHOKHLOV, N.F.

Parathyroadenomectomy in hyperparathyroidism of Recklinghausen.
Zdrav. Kazakh. 21 no.10:62-64 '61. (MIRA 15:2)

1. Iz khirurgicheskogo otdeleniya Yuzhno-Kazakhstanskoy oblastnoy bol'nitsy.
(OSTEITIS FIBROSA) (PARATHYROID GLANDS--TUMORS)

KHOKHLOV, N.F., kand.med.nauk

Case of liver abscess complicated by a calculus of the common bile duct. Zdrav.Kazakh. 22 no.3:59-60 '62. (MIRA 15:12)

1. Iz khirurgicheskogo otdeleniya Chimkentskoy oblastnoy bol'nitsy (glavnyy vrach - V.M.Aliyev).
(LIVER--ABSCESS) (CALCULI, BILIARY)

KHOKHLOV, N.F.

Changes in the urinary system in brucellosis. Zdrav.Kazakh. 22 no.11:29-32 '62. (MIRA 16:2)

1. Iz Chimkentskoy oblastnoy bol'nitsy.
(URINARY ORGANS—DISEASES) (BRUCELLOSIS)

KHOKHLOV, N.F., kand.med.nauk (Chimkent, Kommunisticheskiy pr., d.78, kv.17)

Acute traumatic rupture of the lefft diaphragmatic cupola in a five-year-old child. Klin.khir. no.6:69 Je '62. (MIRA 16:5)

1. Chimkentskaya oblastnaya bol'nitsa.
(DIAPHRAGM—HERNIA)

BELOV, Ivan Vasil'yevich, kand. ekon. nauk dots.; BOROVOY, Natan Yefimovich, kand. tekhn. nauk, dots.; VINNICHENKO, Nikolay Gavrilovich, kand. ekon. nauk, dots.; RAYKHER, Grigoriy Solomonovich, inzh.; KHANUKOV, Yevgeniy Davidovich, doktor ekon. nauk, prof.; KHOKHLOV, Nikolay Fedorovich, kand. ekon. nauk, dots.; PESKOVA, L.N., red.

[Economics of railroad transportation] Ekonomika zheleznodorozhnogo transporta. Moskva, Transport, 1965. 359 p. (MIRA 18:10)

KHOKHLOV, N.I.

Estimating plywood raw material in blocks. Der. prom. 14 no.1:28-29 Ja '65. (MIRA 18:4)

KHOKHLOV, N.N.; KONOVALOV, F.Ya.

Remote control of gate valves of tank batteries and petroleum-refinery pumps. Mash. i neft. obor. no.9:37-39 '63.
(MIRA 17:2)

1. Omskiy sektor Spetsial'nogo konstruktorskogo byuro po avtomatike v neftepererabotke i neftekhimii.

KHOKHLOV, Nikolay Petrovich; KISELEV, Ya., redaktor; TKHYUSHIN, M., tekhnicheskiy redaktor.

[Korea in our day; sketches and travel notes of a Soviet journalist] Koreia nashikh dnei; ocherki i putevye zametki sovetskogo zhurnalista. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia", 1956. 223 p.(MLRA 9:5)
(Korea--Description and travel)

PYATKIN, A.M., kand. tekhn. nauk; POLYAKOV, P.I., inzh.; DUDNIK, T.M., dotsent, kand. tekhn. nauk; KHOKHLOV, N.P., inzh.; ASTAKHOV, A.S.

Readers' response to the article by A.S. Astakhov "Economic efficiency of mining machinery."; "Ugol'", 1962, No.12.
Ugol' 39 no.3:65-68 My'64. (MIRA 17:5)

KHOKHLOV, N.P., inzh.

Determining efficient ways of developing capital assets in coal mines by linear programming. Izv. vys. ucheb. zav.; gor. zhur. 8 no.7:69-73 '65. (MIRA 18:9)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut. Rekomendovana kafedroy ekonomiki i organizatsii gornogo proizvodstva.

KHOKHLOV, NIKOLAY YEVGEN'YEVICH

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ICH SOLLTE MORDEN; EIN TATSACHENBERICHT NACH AMTLICHEN PROTOKOLLEN UND SCHILDERUNGEN DES MWD-STABSOFFIZIERS NIKOLAJ EWGENJEWITSCH CHOCHLOW. FRANKFURT/MAIN, RUDL, 1954.

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KHOKHLOV, O.

Safeguard with electric light for circular-saw mills.
Mashinostroitel' no.3:28 Mr '65. (MIRA 18:4)

KHOKHLOV, O.N.

Shielding for circular saws. Der. prom. 14 no.1:28 Ja '65.
(MIRA 18:4)

KHOKHLOV, P.

Take care of and strengthen the property of cooperative societies. Prom.koop. 13 no.11:3-4 N '59. (MIRA 13:3)

1. Zamestitel' nachal'nika organizatsionno-revizionnogo upravleniya Rospromsoveta.
(Cooperative societies)

KHOKHLOV, P., Geroy Sovetskogo Soyuza, general-leytenant aviatsii

Rocket airplanes. Kryl.rod. 14 no.1:27-29 Ja '63. (MIRA 16:1)
(Airplanes, Military--Armament)

KHOKHLOV, P.

Pomoshchniki agronoma Filatova (Helpers of agriculturist Filatov) Moskva, "Molodaia gvardiia", 1954. 46 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

KHOKHLOV, P.

Simplified gas distributing center. Zhil.-kom. khoz. 12 no.10:28-29 O '62. (MIRA 16:2)

1. Nachal'nik otdela kapital'nogo stroitel'stva Upravleniya gazovogo khozyaystva Krasnodarskogo ispolnitel'nogo komiteta krayevogo Soveta deputatov trudyashchikhsya.
(Krasnodar Territory--Liquefied petroleum gas)

KHOKHLOV, P.

25

PHASE I BOOK EXPLOITATION SOV/6261

Kernenergie und Flotte; Artikelsammlung (Nuclear Energy and the Navy; Collection of Articles) [Berlin] Deutscher Militärverlag [1961]. 232 p. Errata slip inserted. 2000 copies printed.

Translation from the Russian of: Atomnaya energiya i flot.

Translator: Erika Steuk, Lieutenant Commander. Responsibility for German edition: Claus Gruszka, Engineer; Ed.: Klaus Krumsiog.

PURPOSE: This collection of articles is intended for officers of the army, coast guard, and merchant marine.

COVERAGE: The book, a translation from the Russian, contains 25 articles dealing with the application of nuclear weapons to naval combat operations. Chapters 19 and 25 have been supplemented with additional data for this edition. The devastating features of nuclear explosions are discussed. Attention is also given to the protection of personnel, ships, and coastal facilities against nuclear weapons, and to the present and future applications of nuclear power plants to shipping. No personalities are mentioned. There are 16 references: 10 Russian (including 3 translations from English-language sources), 1 French, 1 German, 1 English, 1 American, and 2 either English or American.

Nuclear Energy and the Navy (Cont.) SOV/6261

Card 3/6

2/3

Card 4/6

3/3

KHOKHLOV, P., kand.tekhn.nauk

Determining the center of gravity of a vessel during an inclining experiment with trim differences. Mor. flot 22 no.11:31-33 N '62. (MIRA 15:12)
(Stability of ships)

DVOSKIN, S.M.; KHOKHLOV, P.A.

Preparing and conveying sand-tar mixes for cores. Biul. tekh.-ekon. inform. Gos. nauch. issl. inst. nauch. i tekh. inform 18 no. 12:18-19 D '65 (MIRA 19:1)

KHOKHLOV, P.I.; BAKANOV, M.I., kand.tekhn.nauk

Review of the book by S.M.Shorokhov "Working placer deposits and principles of its planning." Gor.zhur. no.10:78-79 O '64.
(MIRA 18:1)

1. Gosudarstvennyy trest Lenskoy zolotodobyvayushchey promyshlennosti (for Khokhlov). 2. Irkutskiy finansovo-ekonomicheskiy institut (for Bakanov).

DIDYK, B.S.; KOZENKO, A.V.; TSIN', M.R.; ZATULOVSKIY, S.S.; KOLESOVA, V.V.; Prinimali uchastiye: SHIYAN, V.G.; KHOKHLOV, P.L.; OLEYNIK, L.S.; SHEMYAKOVA, L.V.

Hot crack in tubes of nodular cast iron and ways to avoid them. Nauch. trudy Inst. lit. proizv. AN URSR 11:70-79 '62. (MIRA 15:9)

(Pipe, Cast iron--Defects)
(Centrifugal casting)

SKUL'SKIY, Yu.V.; MAKAROV, M.D.; POPOV, A.N.; KHOKHLOV, P.L.; SOBOLEV, N.T.

Cast and welded flanged cast-iron pipe. Avtom.svar. 18 no.11:57-59 N '65. (MIRA 18:12)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR (for Skul'skiy, Makarov, Popov). 2. Makeyevskiy trubolitoynyy zavod im. Kuybysheva (for Khokhlov, Sobolev). Submitted March 24, 1965.

KHAKHALIN, B.D., kand. tekhn. nauk; KHOKHLOV, P.L., inzh.; SHIYAN, V.G., inzh.

Developing the technology of pipe production from high-strength cast iron by the centrifugal method. Proizv. trub no.10:71-75 '63. (MIRA 17:10)