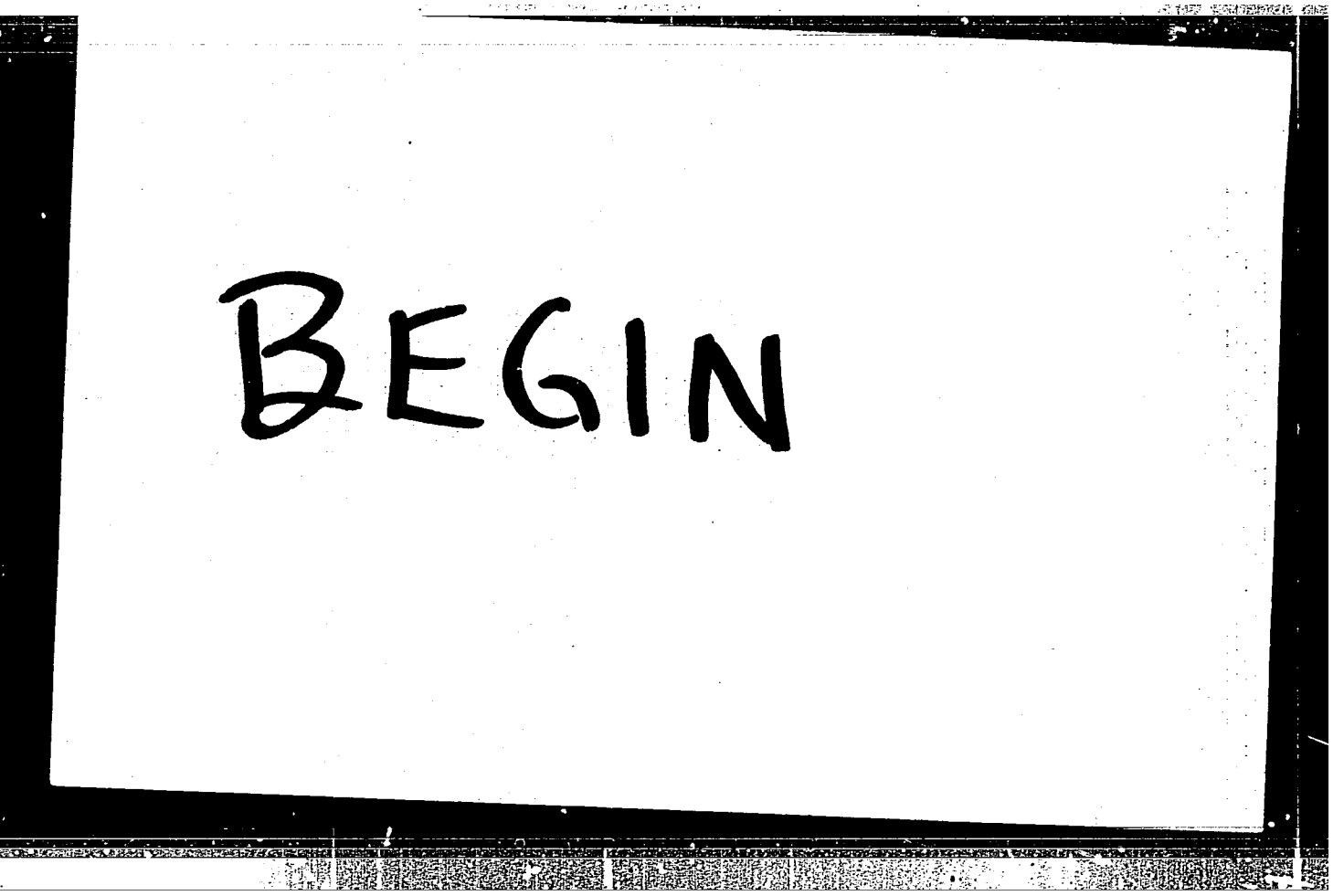

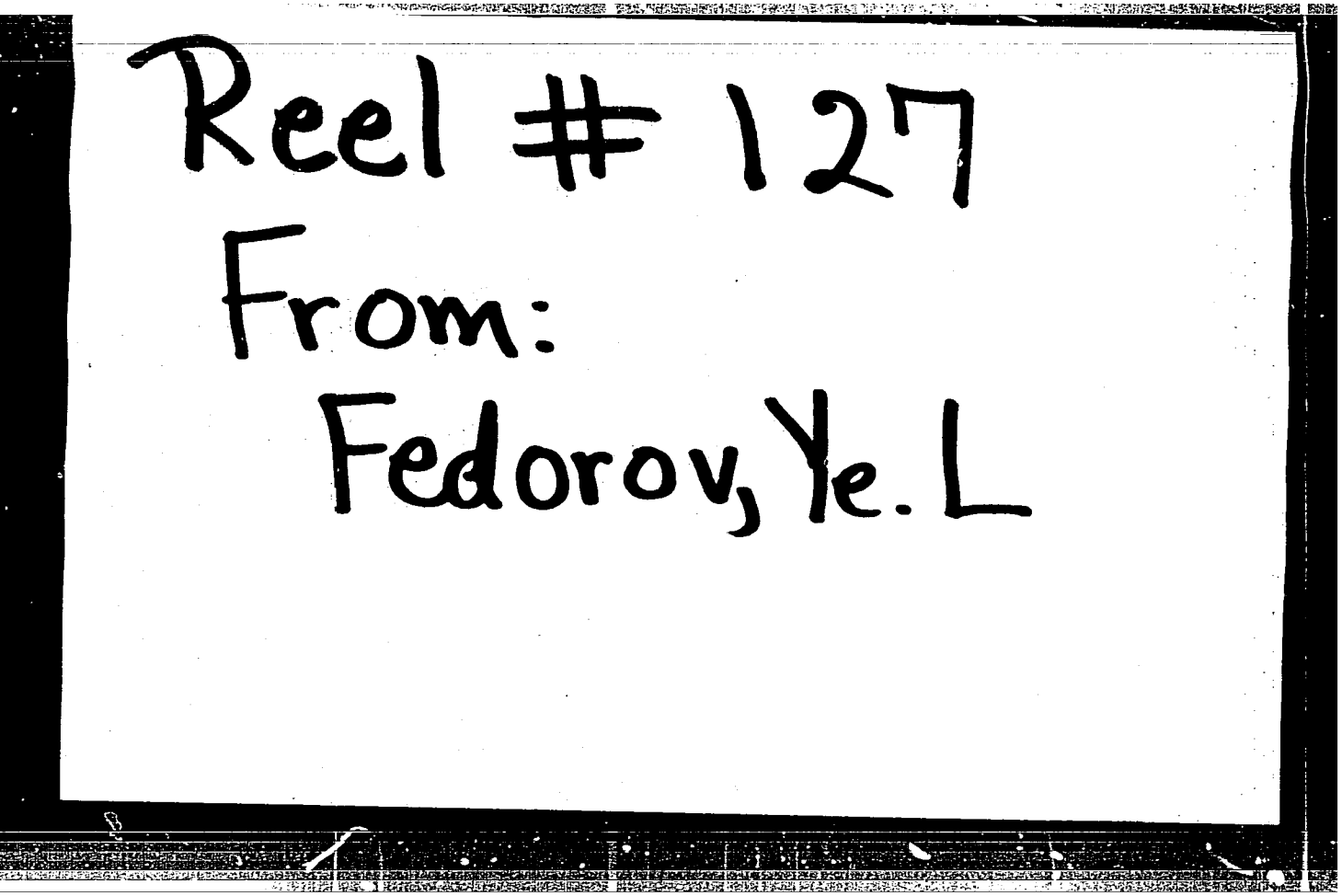

YAKERSON, Matvey Semenovich; TSYBUL'SKIY, Vladimir Abramovich. Prinimali uchastiye: LABUDIN, I.A.; FEDOROV, Ye.L.; KELLO, I.O.; CHIZHEVSKIY, A.L.; POLENOV, A.N.; NIKITIN, M.N.; IVANOV, I.I.; GEYET, N.V.; FEDOROV, Ye.V.; FEDOSOV, M.G. YEG.ROVA, K.I., red.; ONOSHKO, N.G., tekhn.red.

[The "Znamia Truda" Factory; a brief account of the "Znamia Truda" Armature Factory in Leningrad] Znamia truda; kratkii ocherk istorii leningradskogo armaturnogo zavoda "Znamia truda." 1960. 207 p. (MIRA 14:4)

(Leningrad--Factories)

FEDOROV, Ye.M., inzhener; MILEYKOVSKIY, E.Z., inzhener.

Production computer on excavators. Mekh.stroi. 10 no.6:14-15 Je '53.
(MLRA 6:6)
(Excavating machinery)

ANDON'YEV, V.L.; BAUM, V.A.; BAUMGARTEN, N.K.; BEREZIN, V.D.; BIRYUKOV, I.K.; BIRYUKOV, S.M.; BLOKHIN, S.I.; BOROVOY, G.A.; BULEV, M.Z.; BURAKOV, N.A.; VERTSAYZER, B.A.; VOVK, G.M.; VORMAN, B.A.; VOSHCHININ, A.P.; GALAKTIONOV, V.D., kand. tekhn. nauk; GENKIN, Ye.M.; GIL'DENBLAT, Ya.D., kand. tekhn. nauk; GINZBURG, M.M.; GLEBOV, P.S.; GODES, E.G.; GORBACHEV, V.N.; GRZHIB, B.V.; GREKULOV, L.F., kand. s.-kh. nauk; GRODZENSKAYA, I.Ya.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO, Yu.D.; DOBROKHOTOV, D.D.; DUBININ, L.G.; DUNDUKOV, M.D.; ZHOLIK, A.P.; ZENKEVICH, D.K.; ZIMAREV, Ye.V.; ZIMASKOV S.V.; ZUBRIK, K.M.; KARANOV, I.F.; KNYAZEV, S.N.; KOLEGAYEV, N.M.; KOMAREVSKIY, V.T.; KOSENKO, V.P.; KORENISTOV, D.V.; KOSTROV, [illegible]; KOTLYARSKIY, D.M.; KRIVSKIY, M.N.; KUZNETSOV, A.Ya.; LAGAR'KOV, N.I.; LOALOV, V.G.; LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSKEVICH, K.F.; MEL'NICHENKO, K.I.; MENDELEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk; MUSIYEVA, R.N.; NATANSON, A.V.; NIKITIN, M.V.; OVES, I.S.; OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PERYSHKIN, G.A., prof.; P'YANKOVA, Ye.V.; RAPOPORT, Ya.D.; REMEZOV, N.P.; ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.; RYBCHEVSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.; SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVIKOV, K.S.; STAVITSKIY, Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA, Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.; TSISHEVSKIY, P.M.; CHERKASOV, M.I.; CHERNYSHEV, A.A.; CHUSOVITIN, N.A.; SHESTOPAL, A.O.; SHEKHTER, P.A.; SHISHKO, G.A.; SHCHERBINA, I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ARKHANGEL'SKIY,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 2.
Ye.A., retsenzent, red.; AKHUTIN, A.N., retsenzent, red.; BALASHOV, Yu.S., retsenzent, red.; BARABANOV, V.A., retsenzent, red.; BATUNER, P.D., retsenzent, red.; BORODIN, P.V., kand. tekhn. nauk, retsenzent, red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsenzent, red.; GRIGOR'YEV, V.M., kand. tekhn. nauk, retsenzent, red.; GUBIN, M.F., retsenzent, red.; GUDAYEV, I.N., retsenzent, red.; YERMOLOV, A.I., kand. tekhn. nauk, retsenzent, red.; KARAULOV, B.F., retsenzent, red.; KRITSKIY, S.N., doktor tekhn. nauk, retsenzent, red.; LIKIN, V.V., retsenzent, red.; LUKIN, V.Y., retsenzent, red.; LUSKIN, Z.D., retsenzent, red.; MATRIROSOV, A.Kh., retsenzent, red.; MENDELEYEV, D.M., retsenzent, red.; MENKEL', M.F., doktor tekhn. nauk, retsenzent, red.; OBRAZKOV, S.S., retsenzent, red.; PETRASHEN', P.N., retsenzent, red.; POLYAKOV, L.M., retsenzent, red.; RUMYANTSEV, A.M., retsenzent, red.; RYABCHIKOV, Ye.I., retsenzent, red.; STASENKOV, N.G., retsenzent, red.; TAKANAYEV, P.F., retsenzent, red.; TARANOVSKIY, S.V., prof., doktor tekhn. nauk, retsenzent, red.; TIZDEL', R.P., retsenzent, red.; FEDOROV, Ye.M., retsenzent, red.; SHEVYAKOV, M.N., retsenzent, red.; SHMAKOV, M.I., retsenzent, red.; ZHUK, S.Ya. [deceased], akademik, glavnyy red.; FLISO, G.A., kand. tekhn. nauk, red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.; ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.; LUKHACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.; MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN, N.V., red.; SOBOLEV, V.P., red.; FERINGER, B.P., red.; FREYGOFER,
(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 3.

Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLINOV, P.N., tekhn. red.; GENKIN, Ye.M., tekhn. red.; KACHEROVSKIY, N.V., tekhn. red.

[Volga-Don; technical account of the construction of the V.I. Lenin Volga-Don Navigation Canal, the TSimlyansk Hydroelectric Center, and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'stve Volgo-Donskogo sudokhodnogo kanala imeni V.I. Lenina, TSimlianskogo gidrouzla i orositel'nykh sooruzhenii, 1949-1952; v piati tomakh. Moskva, Gos. energ. izd-vo. Vol.1. [General structural descriptions] Obshchee opisanie sooruzhenii. Glav. red. S.IA. Zhuk. Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of construction. Specialized operations in hydraulic engineering] Organizatsiia stroitel'stva. Spetsial'nye gidrotekhnicheskie raboty.

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 4.
Glav. red. S.IA. Zhuk. Red. toma I.N. Kostrov. 1958. 319 p.
(MIRA 11:9)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsii. Byuro tekhnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-korrespondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin, Razin).

(Volga Don Canal--Hydraulic engineering)

S/589/62/000/058/002/002
A001/A101

AUTHORS: Panchenko, N. I., Fedorov, Ye. P.

TITLE: On determining the coordinates of the pole for time service

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta, no. 58 (118), 1962, Issledovaniya v oblasti izmereniy vremeni, 39 - 64

TEXT: The first chapter contains the history of the problem of determining pole coordinates for the purposes of time service and the criticism of the activities of the International Latitude Service, SIL, which did not assure the furnishing of necessary data for time service. As this drawback was evident for the Soviet astronomers, the 10th All-Union Astronomical Conference, held at Pulkovo on December 8 - December 11, 1952, elaborated the plan and principal lines for activities of the Soviet Latitude Service, which are described in the second chapter. The latter started operations in May 1953 after the approval of the plan by the Astronomical Council at the AS USSR. The Soviet Latitude Service carried out calculations of preliminary pole coordinates by A. Ya. Orlov's method which is based

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On determining the coordinates of the... S/589/62/000/058/002/002
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on two main assumptions: 1) The annual component of the pole motion is assumed to proceed along an ellipse whose shape and orientation relative to the Earth do not change, and 2) the Chandler component is described, within short time intervals, by a circular and uniform motion; equations of both elliptic and circular motion are given, and a numerical example of calculation by Orlov's method of pole coordinates from 1952.6 to 1953.7 is presented. The Soviet Latitude Service uses the data furnished by the following institutions: 1) The Main Astronomical Observatory, AS USSR, at Pulkovo, 2) The Gravimetric Observatory, AS UkrSSR, at Poltava, 3) The Astronomical Observatory imeni Engel'gardt at Kazan', and 4) the Latitude Station imeni Ulug-Bek at Kitab. The authors discuss the nature and variations of the non-polar component of latitude variations, the so-called Kimura z-term, and point out that prior to 1958 the calculation of pole coordinates by Orlov's method was performed after excluding the z-term, but since 1958 this practice was changed and the z-term has not been excluded in calculations. The third chapter describes the organization of the Rapid Latitude Service, SIR, by the 9th Congress of the International Astronomical Union, which started speedy calculations of pole coordinates in January 1956. The authors criticize the basic operational principle laid by Director of the Central Bureau of SIL, Cecchini,

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consisting in requirement that the polhody of the International Latitude Service should serve as a test for the correctness of the results obtained by SIR. The inadequacy of this assumption, in the authors' opinion, follows from the incorrect assumption, by Cecchini, of the permanence of mean values of latitudes of the stations. They describe also the methods used by Director of the International Time Bureau, N. M. Stoyko, for calculating the mean coordinates of the pole based on observations with zenith-telescopes at Belgrad, Carloforte, Kitab, Midzusava, Poltava, Pulkovo, with photographic zenith-telescopes at Washington, Greenwich, Ottawa, Richmond, Tokio, and Danjon prismatic astrolabes at Algiers and Paris. The fourth chapter deals with reduction of pole coordinates to a common system. It consists of two problems: 1) reduction to the mean pole of the epoch of observations, and 2) reduction to the mean pole of some initial epoch. The first problem was completely solved by Orlov whose method is briefly outlined. The second problem is considered as being not yet solved, and the procedure used by Cecchini of reducing the observations to the "barycenter of the 1900-1905 polhody" is criticized as being not correct. The authors illustrate their statement by presenting the graph of pole motion according to calculations by the International Time Bureau, Soviet Latitude Service and International Latitude Service, which

On determining the coordinates of the...

shows the divergence of the polhody calculated by the latter from the former two. The fifth and sixth chapter deal with estimates of the accuracy of determination of pole coordinates and their extrapolation to the future. It is concluded that extrapolation is admissible only for short time periods, not exceeding 0.5 years, which is sufficient for practical purposes. In conclusion the authors advance a proposal of establishing a scientific center for the assembly and analysis of all latitude observations and performance of fundamental research. There are 3 figures and 9 tables.

Card 4/4

FEDOROV, Ye.P.

Experience in the operation of ZhR-5 transmitter-receiver sets.
Avtom., telem.i sviaz' 6 no.11:39-40 N '62. (MIRA 15:11)

1. Starshiy inzhener Likhoborskoy distantsii signalizatsii i svyazi Moskovskoy dorogi.
(Railroads--Electronic equipment) (Railroads--Communication systems)

FEDOROV, Ye.P.

An antenna mast for the ZhR-5 radio transmitter. Avtom., telem. i sviaz' 7 no.1:39 Ja '63. (MIRA 16:2)

1. Starshiy inzh. distantsii signalizatsii i svyazi Moskovsko-Okruzhnogo otdeleniya Moskovskoy dorogi.
(Railroads—Communication systems) (Radio—Antennas)

FEDOROV, Ye. P.[Fedorov, IE. P.]

This is what the scientists say. Znan. ta pratsia no.10:8 O '62. (MIRA 15:10)

1. Chlen-korrespondent AN UkrSSR.

(Life on other planets)

FEDOROV, Ye. P.

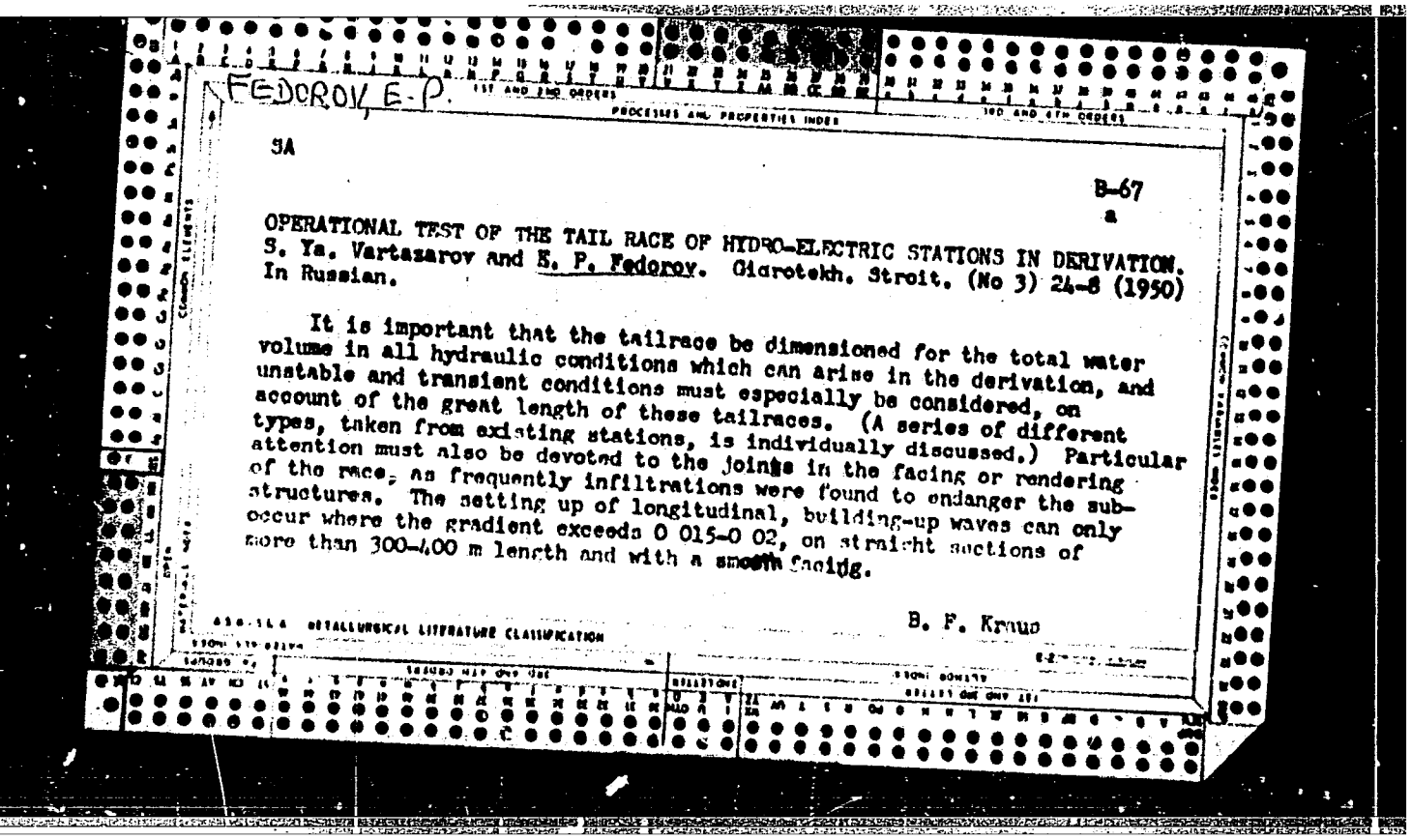
How we have increased the operational reliability of loudspeaker announcing systems. Avtom. telem. i sviaz' 8 no. 3:36-37 Mr '64. (MIRA 17:5)

1. Starshiy inzh. Moskovsko-Okruzhnoy distantsii signalizatsii i svyazi Moskovskoy dorogi.

FEDOROV, Ye.P.

Forum of the explorers of the universe; the 12th Congress of the International Astronomical Union. Priroda 54 no.3:81-86 Mr '65. (MIRA 18:4)

1. Chlen-korrespondent AN UkrSSR.



FEDOROV, E.P.

9A

B-67

OPERATIONAL TEST OF THE TAIL RACE OF HYDRO-ELECTRIC STATIONS IN DERIVATION. S. Ya. Vartazarov and E. P. Fedorov. Gidrotekh. Stroit. (No 3) 24-8 (1950) In Russian.

It is important that the tailrace be dimensioned for the total water volume in all hydraulic conditions which can arise in the derivation, and unstable and transient conditions must especially be considered, on account of the great length of these tailraces. (A series of different types, taken from existing stations, is individually discussed.) Particular attention must also be devoted to the joints in the facing or rendering of the race, as frequently infiltrations were found to endanger the sub-structures. The setting up of longitudinal, building-up waves can only occur where the gradient exceeds 0 015-0 02, on straight sections of more than 300-400 m length and with a smooth facing.

B. F. Kruus

FEDOROV E P

1044. Fedorov, E. P., Surge occurrence in chutes (in Russian), *Gidrotekh. Stroit.* 23, 4, 29–32, Mar. 1954.

Author checks criteria by Bakhmeteff and Vedernikov on chutes of different length and slope and found both inadequate to predict the size and location of the produced jump.

S Kolupaila USA

Hyd Tech 50

FEDOROV, Ye.P., kandidat tekhnicheskikh nauk.

On the article "Study of the action of running waves on hydraulic structures." Gidr.stroi. 26 no.6:54-55 Je '57 (MLRA 10:7)
(Waves) (Hydraulic engineering)

FEDOROV, Ye.P., kandidat tekhnicheskikh nauk.

Causes of wave formation in chute spillways and measures to prevent it. Gidr.stroi.25 no.6:48-51 Jl '56. (MLRA 9:9)
(Spillways)

SOV/98-59-8-13/33

3(5), 30(1)

AUTHOR: Fedorov, Ye.P., Candidate of Technical Sciences

TITLE: Wave-Formation in Fast-Flowing Rivers

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 8, pp 48-49 (USSR)

ABSTRACT: This is an answer to a critique by M.R. Razumovskaya (Ref.1) of an article on wave-formation in fast-flowing rivers (Refs.2 and 4) and reproaches her for rejecting without proof, many of the conclusions drawn in articles by the author of the article. These included the importance of the area covered by the current, for which Razumovskaya replaces the index of area R_0H_0 by $H_0/6$. However, this is criticized on the ground that it does not take the shape of the cross-section of the river-bed into consideration, as well as the breadth and depth. The suggested causes of wave-formation are found to be incorrect, or rather, incompletely researched, factors such as energy produced, the speed and the length of the stream flow being ignored. Razumovskaya also incorrectly criticized fig.2 in the original article, but her proposed project for the wave stream, given in fig.1 of her critique, is rejected as being unrealistic, since it shows no turbulence on the river-bed. She is also criti-

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Wave-Formation in Fast-Flowing Rivers

cized for failing to pay enough attention to the variation in depth, speed and volume of the current between the crest and the "tail" of waves, and for not fully understanding statements by Vedernikov and Kornish on wave-formation and the relation between energy and erosion, which she quoted. The author states that the reasons for wave-formation given in ref.2 are based on work by Vedernikov, Dressler, Kornish and research by the TNISGEI (Tiflis Scientific Research Institute of Construction and Hydraulic Power). The next point of criticism is that the critique by Razumovskaya contained certain false data concerning wave-structure, the effect of aeration, etc, particularly the contention that the power of wave-formation depends on the purely arbitrary value Q_{rasch}. The author cites the examples of the Tsnori, Bershuyetskaya, Baksan, and Ezminskaya rivers, where the stream flow is less than 25% of Q_{rasch}, and the Staraya, and Novaya Achalukskaya and Tetrikhevskaya, where it amounts to more than 40%. The statement that wave-formation decreases as the inclination of the river-bed increases is also refuted, the reverse being actually the case, in addition to the contention that there is no connec-

Wave-Formation in Fast-Flowing Rivers

tion between the speed of the current and wave-formation. The author concludes with some general remarks on the criticized article's lack of specific evidence in the form of graphs, indications of research methods used, etc., pointing out that the reason that some of the data provided is so difficult to understand is due to erroneous measuring carried out at the GruzNIIGiM. A short summary of the initial arguments is given at the end. There are 4 Soviet references.

FEDOROV, Ye.P.

Principles of the modern theory of polar movements. Trudy Polt.grav. obser. 2:3-20 '48. (MLRA 8:1)
(Earth--Rotation)

DROZDOV, S.V.; FEDOROV, Ye.P.

Latitude variations at Poltava for the period 1945.5 - 1946.5.
Trudy Polt.grav.obser. 2:57-61 '48. (MIRA 8:1)
(Poltava--Latitude variation)

FEDOROV, Ye.P.

Determining the value of a screw turn on the micrometer from observations of scalar pairs compiled on the basis of Washington zenith stars. Trudy Polt.grav.obser. 2:79-83 '48. (MLRA 8:1)
(Micrometer)

PA 3/50T46

FEDOROV, YE. P.

USSR/Geophysics - Ocean 1 Aug 49
Terrestrial Motion

"Influence of Fluctuations in the Ocean's Level, Caused by the Motion of the Earth's Poles, Upon This Motion," Ye. P. Fedorov, 4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 4

Fluctuations of instantaneous axis of rotation of the earth are accompanied by changes in centrifugal force potential, this causing certain changes in the form of the ocean's surface. Shifts in water masses which occur also have a reciprocal influence

3/50T46

USSR/Geophysics - Ocean (Contd) 1 Aug 49

upon the movement of the instantaneous axis of rotation, causing a slight increase in its period of free nutation. Considers jointly the influence of fluctuations of the ocean's level and elastic deformations of the solid part of the earth's spheroid, considering actual distribution of land and water on the earth's surface. Submitted by Acad L. S. Leybenzon 9 Jun 49.

3/50T46

FEDOROV, Ye.P.

Causes for changes in the inclination of the axis and azimuth of meridian instruments. Trudy Polt.grav.obser. 3:126-148 '50. (Astronomical instruments) (MLRA 8:1)

FEDOROV, Ye.P.; KULAGIN, S.G.

Latitude variations in Poltava according to observations from July 5, 1949 to September 1, 1950. Astron.tsir. no.105:4-5 S '50. (MLRA 6:8)

1. Poltavskaya Observatoriya.
(Poltava--Latitude variation) (Latitude variation--Poltava)

FEDOROV, Ye.P.

Consideration of the effect of ocean tides in studying the lunar-solar variations in the force of gravity. Trudy Polt.grav.obser. 4:88-102 '51. (MLRA 6:6)

(Gravity) (Tides)

FEDOROV, Ye.P.

New program for the latitude service and its testing in Poltava. Trudy Polt.grav.obser. 4:294-327 '51. (MLRA 6:6)
(Stars--Observations) (Latitude variation)

FEDOROV, Ye.P.

Studying the ocular micrometer of the Wanschaff vertical circle. Trudy Polt.grav.obser. 4:347-360 '51. (MLRA 6:6)
(Vertical circle) (Micrometer)

FEDOROV, YE. P.

USSR/Astronomy - Nutation 1 Oct 51

"Separate Determination of the Coefficients of the Main Terms of Nutation in Declination and Longitude," Ye. P. Fedorov, Poltava Obs of Acad Sci Ukrainian SSR

"Dok Ak Nauk SSSR" Vol LXXX, No 4, pp 569-572

Investigates the error in nutation for various errors in the other variables measured. Compares results with actual observations. Submitted 5 Jul 51 by Acad V. G. Fesenkov.

222T34

1. FEDOROV, Ye. P.

2. USSR (600)

4. Poltava - Latitude Variation

7. Latitude variations for Poltava in 1950. Astron.tsir, No. 110, 1951.

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

FEDOROV, YE. P. PA 251T82

USSR/Academy of Sciences Sep 52

"Third Conference on Latitudes," Ye. P. Fedorov, Cand Phys-Math Sci

Vest Ak Nauk SSSR, No 9, p 117

The following two reports were read at the Third All-Union Conference on Latitudes in Poltave: K.A. Kulikov, Dr Phys-Math Sci, "Latitude Service - International and Soviet"; Ye. P. Fedorov of the Poltava Gravimetric Observatory, "Study of the Inner Structure of the Earth by Methods of Astronomy and Gravimetry." A new method for determining the coordinates of poles was proposed by A. Ya. Orlov, Corr Mem, Acad Sci USSR

251T82

FEDOROV, Ye. P. PA 227T37

USSR/Astronomy - Moon's Oscillations 1 Aug 52

"Lunar Half-Monthly Oscillations in Latitude According to Observations at the Stations of Karloforte and Yukaya From 1899 to 1934" Ye. P. Fedorov, Ye. I. Yevtushenko, Gravimetric Obs of Acad Sci Ukrainian SSR, Poltava

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 731, 732

Gives the results of operating on all the published observations at the 2 subject stations (namely, 66,220 observations at Karloforte, and 65,736 observations at Yukaya). States that in the analysis of the half-monthly oscillations

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of latitude they detd 2 waves: tidal and nutational. Submitted by Acad V.G. Fesenkov 7 Jun 52.

227T37

1. FEDOROV, YE. P. and YEVTUSH'YENKO, YE. I.

2. USSR (600)

4. Latitude Variation-San Pietro, Italy

7. Semimonthly lunar variations in latitude bases on observations made at stations in Carloforte and Ukiah from 1899-1934. Astron.tsir. no. 126, 1952.

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

1. FEDOROV, Ye. P.

2. USSR (600)

4. Poltava - Latitude Variation

7. Latitude variations at Poltava from simultaneous observations on two zenith telescopes during the period 1950.9--1952.2. Astron.tsir. No. 126, 1952.

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

FEDOROV, Ye P.

USSR/Astronomy - Geographical Latitudes 1 Aug 53

"Slow Non-Polar Variations of Latitudes," Ye. P. Fedorov, Poltava Obs Acad Sci USSR

DAN SSSR, Vol 91, No 4, pp 759-762

Outlines results of observational analysis of the Central Bureau of International Latitude Service which confirm correctness of principles introduced by the Poltava program and correctness of suggestions for changes in the program of MSSh introduced by Soviet astronomers. Presented by Acad V. G. Fesenkov, 5 Jun 53.

272T33

FEDOROV, E.P.

Variations in the latitude of Poltava in 1952 from simultaneous observations on two zenith telescopes. Astron.tsir. no.135:4 F '53. (MLRA 6:6)

1. Poltavskaya observatoriya. (Poltava--Latitude variation)

AKSENT'YEVA, Z.N.; FEDOROV, Ye.P.

A.IA.Orlov; obituary. Astron.tsir. no.146:1 F '54. (MLRA 7:6)

1. Poltava, Observatoriya. (Orlov, Aleksandr Iakovlevich, 1880-1954)

FEDOROV, Ye.P.

Daily lunar wave in latitude variations. Astron.tsir. no.148:12 Ap '54. (MLRA 7:8)

1. Observatoriya (Poltava)
(Latitude variation)

FEDOROV, Ye.P.

Results of observations made on two zenith telescopes at Poltava from 1949.8 to 1954.2. Astron.tsir. no.149:7-8 My '54. (MLRA 7:7)

1. Poltava, Observatoriya.
(Poltava--Latitude variation) (Latitude variation--Poltava)

FEDOROV, Ye.P.; PANCHENKO, N.I.

Motion of the pole in 1952 from data of the International and Soviet Latitude Service. Astron.tsir. no. 149:8-10 My '54. (MLRA 7:7)

1. Poltava, Observatoriya.
(North Pole)

POPOV, N.A.; FEDOROV, Ye.P.

Problem of methods for observing deflection of a light ray in the solar field of gravity. Astron.tsir. no.151:21-22 Jl '54. (MLRA 8:3)

1. Observatoriya, Poltava.
(Eclipses, Solar--1954) (Light)

FEDOROV, Ye.; YEVTUSHENKO, Ye.

Daily latitude variations according to observations made on two zenith telescopes at Poltava. Astron.tsir. no.152:17-18 S '54. (MLRA 8:3)

1. Poltava observatoriya.
(Poltava--Latitude variation)

FEDOROV, Ye. P.

PANCHENKO, '.. I.; FEDOROV, Ye.P.

Movement of the earth's pole according to data from the International and the Soviet Latitude Services. Astron.tsir.no.156:8-9 Ja'55. (MLRA 8:10)

1. Observatoriya, Poltava
(Latitude variation)

FEDOROV, Ye.P.

Determining the constant of nutation from observations of the International Latitude Service. Astron.tsir. no.164:10-12 O '55. (MLRA 9:5)

1. Observatoriya, Poltava.
(Nutation)

FEDOROV, Ye.P.

Extrapolation of polar coordinates. Astron.tsir. no.164:13-15 O '55. (MLRA 9:5)

1. Observatoriya, Poltava.
(Coordinates, Polar)

FEDOROV, YE. P.

"The Computation of the Pole Co-ordinates" (Section III) -a paper submitted at 11th General Assembly of International Union of Geodesy and Geophysics, 3-14 Sep 57, Toronto, Canada.

C-3,800,146

FEDOROV, Ye. P. Doc Phys-Math Sci -- (diss) "Nutation and forced movement of the earth's poles according to data of latitudinal observations." Pulkovo, 1957. 14 pp (Acad Sci USSR. Main Astronomic Observatory), 100 copies (KL, 44-57, 98)

FEDOROV, Ye. P.,

"Computing the Coordinates of the Pole," The International Association of Geodesy; Abstracts of the Reports of the XI General Assembly of the International Union of Geodesy and Geophysics, Moscow, Izd-vo AN SSSR, 1957. 63 p.

The systematic errors in the corrdinates of the Pole published by the Central Bureau of the International Latitude Service (ILS) are caused by an insufficient number (3-6) of observations. The regular latitude observations are now conducted at 13 stations and will be increased probably to more than 20 during the IGY. With a sufficiently large number of stations participating in this program, the inherently weak loop method of calculations is still the most acceptable as some difference in the systems of declinations at various stations will not significantly affect the results. Mean latitudes are determined by A Orlov's method.

FEDOROV, YE. P.

20-6-9/48

AUTHOR: Fedorov, Ye.P.

TITLE: On the Forces of Interaction Between the Earth's Core and Crust Occurring in Consequence of the Nutation (O silakh vzaimodeystviya yadra i obolochki zemli, voznikayushchikh vsledstviye nutatsii)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 6, pp. 1084-1087 (USSR)

ABSTRACT: When investigating the rotational motion of the earth's crust it is necessary to consider the effect of the exterior disturbing forces of attraction of the moon and the sun and also the forces of interaction between crust and core. At first formulae for the temporary modification of the kinetic moment of the earth's crust and of the kinetic moment of the whole earth aregiven. It is not possible to determine the coefficients of all mutation terms from the observations and therefore the author confined himself to the determination of the fundamental terms and of the half-month terms. The result obtained can be described as follows: The mobility of the earth's core with regard to the earth's crust has the following effects: 1) An extension of the modulus of the vector $\vec{U}_1 = 0'',217\alpha g_s e^{+i\alpha t}$ (Here g_s denotes the modulus of the

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On the Forces of Interaction Between the Earth's Core and Crust Occurring in Consequence of the Nutation. 20-6-9/48

vector G_s, that is, of the kinetic moment of the earth's crust; moreover it is valid $\Omega = \alpha t$, where t denotes the time). The moment occurring in consequence of the fundamental nutational motion can be described as a sum of $\vec{U}_1 + \vec{U}_2$. Here it is valid $\vec{U}_2 = -0'',032\alpha z_s e^{-i\alpha t}$. 2) The inversion of the direction of the vector V_1. (Here the moment occurring in consequence of the half-monthly nutation can be put down in the form of the sum $\vec{V}_1 + \vec{V}_2$ with $\vec{V}_1 = 0'',0023\ \beta g_s e^{+i\beta t}$, $\vec{V}_2 = -0'',0001\beta g_s e^{-i\beta t}$. 3) The derivation of V_1 and V_2 to that side which is contrary to the direction of rotation of these vectors with regard to the earth. An exact conformity of the theoretical conclusions with the observations cannot be expected because of the rough model that has been applied here. For further precision of these results it is necessary to analyse new data of observations. There are 9 references, 5 of which are Slvic.

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20-6-9/48

On the Forces of Interaction Between the Earth's Core and Crust Occurring in Consequence of the Nutation.

ASSOCIATION: Poltava Gravimetric Observatory, AN of the Ukrainian SSR (Poltavskaya gravimetricheskaya observatoriya AN USSR)

PRESENTED: By Academician V.G.Fesenkov, April 2, 1957

SUBMITTED: April 1, 1957.

AVAILABLE: Library of Congress

Card 3/3

PHASE I BOOK EXPLOITATION 1189

Fedorov, Yevgeniy Pavlovich

Nutatsiya i vynuzhdennoye dvizheniye polyusov zemli po dannym shirotnykh nablyudeniy (Nutation and Forced Motion of the Earth's Poles Based on Data from Latitude Observations) Kiyev, Izd-vo AN Ukrainskoy SSR, 1958. 142 p. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Poltavskaya gravimetricheskaya observatoriya. Resp. Ed.: Aksent'eva, Z.N., Corresponding Member AN Ukr SSR

PURPOSE: The book is intended for scientists and graduate students working in the field of astronomy and geophysics.

COVERAGE: The author develops a theory of rotation for an elastically deformable Earth and compares his conclusions with the results of latitudinal observations. Such observations are utilized to determine independently the coefficients of the main members of nutation in an inclined plane and longitude. The author discusses the phase retardation of nutation and formulates equations for the forced movement of the Earth's poles. This study leads to several conclusions affect-

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ing our understanding of the interaction between the Earth's core and mantle. The work includes 17 figures and 30 tables. Scientists mentioned: N.I. Idel'son, N.A. Popov. There are 59 references, of which 20 are Soviet, 24 English, 10 German, 4 French, and 1 Czech.

TABLE OF CONTENTS:

Nutation and Forced Motion (Cont.) 1189

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Nutation and Motion (Cont.)

AVAILABLE: Library of Congress

Card 4/4

MM/gmp
2-26-59

AUTHOR: Fedorov, Ye.P.

SOV/10-59-1-5/32

TITLE: Some Problems of the Physics of the Earth at the Tenth Congress of the International Astronomical Union (Nekotoryye problemy fiziki zemli na X s"yezde mezhdunarodnogo astronomicheskogo soyuza)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya geograficheskaya, 1959, Nr 1, pp 48-51 (USSR)

ABSTRACT: This article gives a brief account of the activity of the above-named congress, which took place in Moscow from 12 to 20 August 1958. Among other things, it dealt with irregularities in the rotation of the earth and studies in the movements of the earth's poles. The congress was attended by a number of astronomers, that included L. Essen and G. Dzheffris from England, A. Danzhon and N.M. Stoyko

Card 1/2

Some Problems of the Physics of the Earth at the Tenth Congress of the International Astronomical Union

from France, V. Markovits and D. Brower from the USA.

ASSOCIATION: Poltavskaya gravimetricheskaya observatoriya AN UkrSSR (Gravimetric Observatory of the AS UkrSSR, in Poltava)

FEDOROV, Ye.P.

26

PHASE I BOOK EXPLOITATION 807/5742

Akademiya nauk SSSR. Mezhduvedomstvennyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. VIII razdel programmy MGG: Shiroty i dolgoty.

Predvaritel'nyye rezul'taty issledovaniy kolebaniy shirot i dvizheniya polyusov zemli; sbornik statey (Preliminary Data of Latitude Variations and Migrations of the Earth's Poles; Collected Articles. No. 1) Moscow, Izd-vo AN SSSR, 1960. 97 p. Errata slip inserted. 1,000 copies printed.

PURPOSE: This collection of articles is intended for astronomers, geophysicists, and other scientists concerned with the problem of latitude variations and the migration of the Earth's poles.

COVERAGE: Part I of the collection contains preliminary results of latitude observations from 1957.5 through 1959.0 made at IGY stations in the USSR network, including new stations in Siberia. Part II consists of articles describing new instruments, observational programs and methods, and procedures of processing the latitude observational data. With the larger number of stations and the use of new instruments it is anticipated that the final results will provide a more comprehensive study of anomalies and instrumental

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errors in latitude observations than has been possible previously. No personalities are mentioned. English abstracts and references follow each article.

TABLE OF CONTENTS:

Preliminary Data of Latitude Variations (Cont.) SOV/5742

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PART TWO

FEDOROV, YE.P.

PHASE I BOOK EXPLOITATION SOV/5721

Vsesoyuznaya astrometricheskaya konferentsiya.

Trudy 14-y Astrometricheskoy konferentsii SSSR, Kiyev, 27-30 maya 1958 g. (Transactions of the 14th Astrometrical Conference of the USSR, Held in Kiyev 27-30 May 1958) Moscow, Izd-vo AN SSSR, 1960. 440 p. Errata slip inserted. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Glavnaya astronomicheskaya observatoriya (Pulkovo).

Resp. Ed.: M. S. Zverev, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: N. K. Zaychik; Tech. Ed.: R. A. Zamarayeva.

PURPOSE: The book is intended for astronomers and astrophysicists, particularly those interested in astrometrical research.

COVERAGE: This publication presents the Transactions of the 14th Astrometrical Conference of the USSR, held in Kiyev 27-30 May 1958. It includes 27 reports and 55 scientific papers presented at the plenary meeting of the Conference

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Transactions of the 14th Astrometrical (Cont.) SOV/5721

and at the special sectional meetings. An appendix contains the resolutions adopted by the Conference, the composition of the committees, the agenda, and the list of participants at the Conference. A brief summary in English is given at the end of each article. References follow individual articles. The Presidium of the Astrometrical Committee (Chairman M. S. Zverev), which supervised the preparation of this publication, expresses thanks to the members of the secretariat: V. M. Vasil'yev, I. G. Kol'chinskiy, A. B. Omegina, and Kh. I. Potter.

TABLE OF CONTENTS:

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FEDOROV, Ye.P., doktor fiziko-matem.nauk

Forty-five hundred and forty kilograms are in orbit. Znan.ta prat-sia no.7:3 Jl '60. (MIRA 13:8)

1. Direktor Glavnoy astronomicheskoy observatorii An USSR.
(Artificial satellites)

ORLOV, Aleksandr Yakovlevich, zasl. deyatel' nauki USSR [1880-1954]; AKSENT'YEVA, Z.N., otv. red.; LAVRENT'YEVA, Ye.V., starshiy nauchnyy sotr., red.; POPOV, N.A., starshiy nauchnyy sotr., red.; FEDOROV, Ya.P., starshiy nauchnyy sotr., red.; ORLOV, B.A., starshiy nauchnyy sotr., red.; LABINOVA,N.M., red.izd-va; RAKHLINA, N.P., tekhn. red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh. Kiev, Izd-vo Akad. nauk USSR. Vol.1. 1961. 353 p. (MIRA 14:10)

1. Deystvitel'nyy chlen AN USSR i chlen-korrespondent AN SSSR (for Orlov). 2. Chlen-korrespondent AN USSR (for Aksent'yeva). 3. Poltavskaya gravimetricheskaya observatoriya (for Lavrent'yeva, Popov, Fedorov). 4. Glavnaya astronomicheskaya observatoriya v Pulkove (for Orlov, B.A.).

(Astronomy) (Earth) (Latitude)
(Orlov, Aleksandr IAkovlevich, 1880-1954)

ORLOV, Aleksandr Yakovlevich, zasl. deyatel' nauk USSR; AKSENT'YEVA, Z.N., otv. red.; LAVRENT'YEVA, Ye.V., starshiy nauchnyy sotr., red.; POPOV, N.A., starshiy nauchnyy sotr., red.; FEDOROV, Ye.P., starshiy nauchnyy sotr., red.; ORLOV, B.A., starshiy nauchnyy sotr., red.; LABINOVA, N.M., red. izd-va; RAKHLINA, N.P., tekhn. red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh. Kiev, Izd-vo Akad. nauk USSR. Vol.3. 1961. 242 p. (MIRA 15:1)

1. Deystvitel'nyy chlen AN USSR, Chlen-korrespondent AN SSSR (for Orlov). 2. Chlen-korrespondent AN USSR (for Aksent'yev). 3. Poltavskaya gravimetricheskaya observatoriya (for Lavrent'yeva, Popov, Fedorov). 4. Glavnaya astronomicheskaya observatoriya v Pulkove (for Orlov).

(Geophysics)

FEDOROV, Ye.P. [Fedorov, IE.P.]; GLAGOLEVA, I.I. [Hlabolieva, I.I.]

Flattening of latitude observations. Dop. AN URSR no.4:473-477 '62. (MIRA 15:5)

1. Glavnaya astronomicheskaya observatoriya AN USSR. 2. Chlen-korrespondent AN USSR (for Fedorov).
(Astronomical geography) (Electronic digital computers)

PANCHENKO, N.I.; FEDOROV, Ye.P.

Determination of polar coordinates for use of the time service. Trudy inst. Kom., stand., mer i izm. prib. no.58:39-64 '62. (MIRA 15:11)
(Time—Systems and standards)
(Coordinates, Polar)

FEDOROV, Ye.P.

Plenum of the Commission for studying the Earth's Rotation. Vest. AN SSSR 32 no.8:120-122 Ag '62. (MIRA 15:8)

1. Chlen-korrespondent AN USSR.
(Earth--Rotation)

FLEYE?, A.G. ?tv. red.; PAVLOV, N.N., red.; PANCHENKO, N.I., red.; PODOBED, V.V., red.; FEDOROV, Ye.P., red.

[Rotation of the earth; materials of the expanded plenum of the Committee for the Study of the Earth's Rotation of the Astronomical Council of the Academy of Sciences of the U.S.S.R. on April 10-13, 1962, in Kiev] Vrashchenie Zemli; materialy rasshirennogo plenuma Komissii po izucheniiu vrashcheniia Zemli Astronomicheskogo soveta AN SSSR, Kiev, 10-13 aprelia 1962 g. Kiev, Izd-vo AN USSR, 1963. 309 p. (MIRA 17:9)

1. Akademiya nauk URSR, Kiev. Holovna astronomichna observatoriya.

FEDOROV, Ye.P. [Fedorov, IE.P.]

In the depths of the planet. Nauka i zhyttia 13 no.10: 24-25 N '63. (MIRA 16:12)

1. Direktor Glavnoy astronomicheskoy observatorii AN UkrSSR, chlen-korrespondent AN UkrSSR.

FEDOROV, Ye.P., otv. red.; LUKATSKAYA, F.I., red.; GORYNYA, A.A., red.; KOLCHINSKIY, I.G., red.; BEREZINETS, L.P., red.

[Studies in the physics of stars and diffusion matter] Issledovaniia po fizike zvezd i diffuznoi materii. Kiev, Naukova dumka, 1964. 74 p. (MIRA 17:11)

1. Akademiya nauk URSR, Kiev. Holovna astronomichna observatoriya.

FEDOROV, Ye.P., otv. red.; GORYNYA, A.A., red.; KOLCHINSKIY, I.G., red.; LUKATSKAYA, F.I., red.; BEREZINETS, L.P., red.

[Problems in astrometry] Voprosy astrometrii. Kiev, "Naukova dumka," 1964. 94 p. (MIRA 17:6)

1. Akademiya nauk URSR, Kiev. Holovna astronomichna observatoriya.

KOVAL', I.K., otv. red.; FEDOROV, Ye.P., red.; GORYNYA, A.A., red.; KOLCHINSKIY, I.G., red.; LUKATSKAYA, F.I., red.; BEREZINETS, L.P., red.

[Physics of the moon and planets] Fizika Luny i planet. Kiev, Naukova dumka, 1964. 137 p. (MIRA 17:10)

1. Akademiya nauk URSR, Kiev. Holovna astronomichna observatoriya.

FEDOROV, Ye.P.

Allocation of operating frequencies for ZhB-5 transmitter-receiver units. Avtom. telem. i sviaz' 8 no.1:36 Ja '64. (MIFA 17:3)

1. Starshiy inzh. Moskovsko-Okruzhnoy distantsii signalizatsii i svyazi Moskovskoy dorogi.

AP4046588

[illegible] of lunar figure [illegible]

SOURCE: AN SSSR. Vestnik, no. 7, 1967, [illegible]

TOPIC TAGS: terrestrial reference ellipsoid, earth mass center, [illegible], lunar physical libration, [illegible] angle, lunar hypsometry, fundamental catalogue, [illegible], Markowitz method

ABSTRACT: Lunar observations are used for determining the orient[illegible] terrestrial reference [illegible] its cen-

[illegible] constants at which the positions [illegible] lunar [illegible] are determined instead of points on the [illegible]. The method improves the observation data and makes it possible to correct lunar

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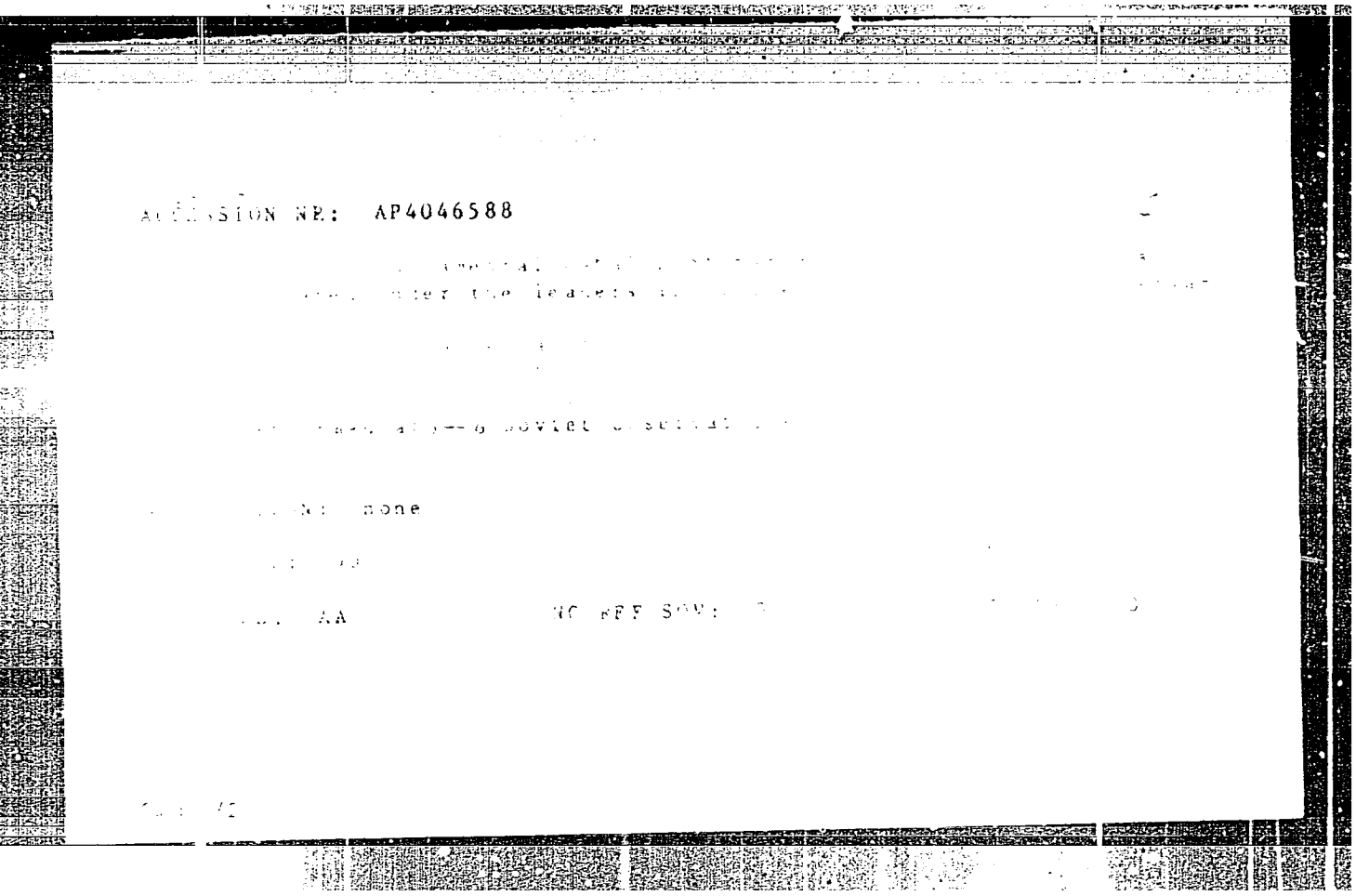

ACCESSION NR: AP4046588

none

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Vasileva, I. I.; Fedorov, Ye. ...

... the spectrum of err...

... in reality in real ...

... observation errors ... latitude

... astronomic ...

Analysis of the accuracy of latitude variations data at

... shown in Fig. 1 of the Enclosure. The determination of ... variations is described as ... computation of standard latitude values, i.e., mean values of certain time intervals, and 2) the smoothing of these values. To accomplish ... the authors used the method of moving averages. Both

L 8748-65
ACCESSION NR: AP4040850

of the spectrum, while the smoothing transforms [illegible] real

[illegible]

ASSOCIATION: Glavnaya astronomicheskaya observatoriya Akademii nauk
UkrSSR [Main Astronomic Observatory, Academy of [illegible]

ACCESSION NR: AP4040650 ENCLOSURE: 01

Fig. 1. Relationships of spectral-density errors

$F^2(\omega)$ - square of the transfer function of

KORSUN', A.A.; YAKUSHEVA, N.B.; YATSIKOV, Ya.S.; FEDOROV, Y. .P., otv. red.

[Results of observations with zenith telescopes in 1960-1963: Pulkovo, Gorkiy, Kitab, Poltava, Kazan, Irkutsk, Blagoveshchensk] Rezul'taty nabliudenii na zenit-teleskopakh v 1960-1963 gg.: [Pulkovo, Gor'kii, Kitab, Poltava, Kazan', Irkutsk, Blagoveshchensk.] Moskva, 1964. 50 p.
(MIRA 18:5)

1. Akademiia nauk URSR, Kiev, Holovna astronomichna observatoriia. 2. Chlen-korrespondent AN Ukr.SSR (for Fedorov).

FEDOROV, Ye.P., otv. red.; GORNYY, A.A., red.; KOLCHINSKIY, I.G., red.; LUKATSKAYA, F.I., red.; BEREZINETS, L.P., red.

[Spectrophotometric studies of active formations on the sun] Spektrofotometricheskie issledovaniia aktivnykh obrazovanii na Solntse. Kiev, Naukova dumka, 1964. 104 p. (MIRA 17:12)

1. Akademiya nauk URSR, Kiev. Holovna astronomichna observatoriya.

YAKOVKIN, A.A., otv. red.; FEDOROV, Ye.P., red.; AKSENT'YEVA, Z.N., red.; BARABASHOV, N.P., red.; BOGORODSKIY, A.F., red.; GORYNYA, A.A., red.; KOVAL', I.K., red.; KOLCHINSKIY, I.G., red.; TSESEVICH, V.P., red.; KOVALENKO, L.D., red.

[Figure and motion of the moon] Figura i dvizhenie Luny. Kiev, Naukova dumka, 1965. 135 p. (MIRA 18:7)

1. Akademiya nauk URSR, Kiev.

1. FEDOROV, YE. P., Eng.

2. USSR (600)

4. Road Machinery

7. Heavy trailer grader D-20B. Mekh. stroi. 9, No. 10, 1952

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

1. ROSTOTSKIY, V. K.; FEDOROV, YE. P., Engs.

2. USSR (600)

4. Road Machinery

7. Self-propelled medium type grader D-265. Mekh. stroi. 9, No. 10, 1952

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

FEDOROV, Ye.P.

TARASOV, V.A., inzhener; FEDOROV, Ye.P., inzhener, retsenzent; NEMIROVSKIY, E.I., inzhener, redaktor; MODEL', B.I., tekhnicheskiy redaktor

[Automotive asphalt-concrete placer] Samokhodnyi ukladchik asfal'to-betona. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 122 p. [Microfilm] (MLRA 7:10)
(Road machinery)

VENTSKOVSKIY, Z.L., inzhener; FEDOROV, Ye.P., inzhener.

The D-255 motor grader. Vest.mash. 33 no.9:27-30 S '53. (MLRA 6:10)
(Road machinery)

FEDOROV, Ye.P., inzh.

New D-426 automotive grader. Stroi. i dor. mashinostr. no.4:14-16 Ap '58. (MIRA 11:4)

(Graders (Earthmoving machinery))

ANTIPOV, L.A., inzh.; LEZHEPEKOV, B.S., inzh.; STAVTSEV, B.N., inzh.; FEDOROV, Ye.P., inzh.

Improving the design of motor graders at the Orlov Factory. Stroi.i dor.mash. 7 no.2:7-9 F '62. (MIRA 15:5)
(Graders (Earthmoving machinery))

FEDOROV, Ye.P.; SHAL'MAN, Yu.I., kand. tekhn. nauk

Evaporation combustion chamber of a gas-turbine engine and characteristics of its operation. Avt. prom. 30 no.5:42-45 My '64. (MIRA 17:9)

FEDOROV, Ye.P.; YATSKIV, Ya.S.

Causes of the spurious "bifurcation" of the period of the earth's free nutation. Astron. zhur. 41 no.4:764-768 Jl-Ag '64 (MIRA 17:8)

1. Glavnaya astronomicheskaya observatoriya AN UkrSSR.

L 24770-65 EWT(d)/EWT(m)/EWP(t)/EPF(n)-2/T-2 Pu-4

ACCESSION NR: AP5001136 S/0113/64/000/005/0042/0045

AUTHOR: Fedorov, Ye. P., Shal'man, Yu. I. (Candidate of technical sciences)

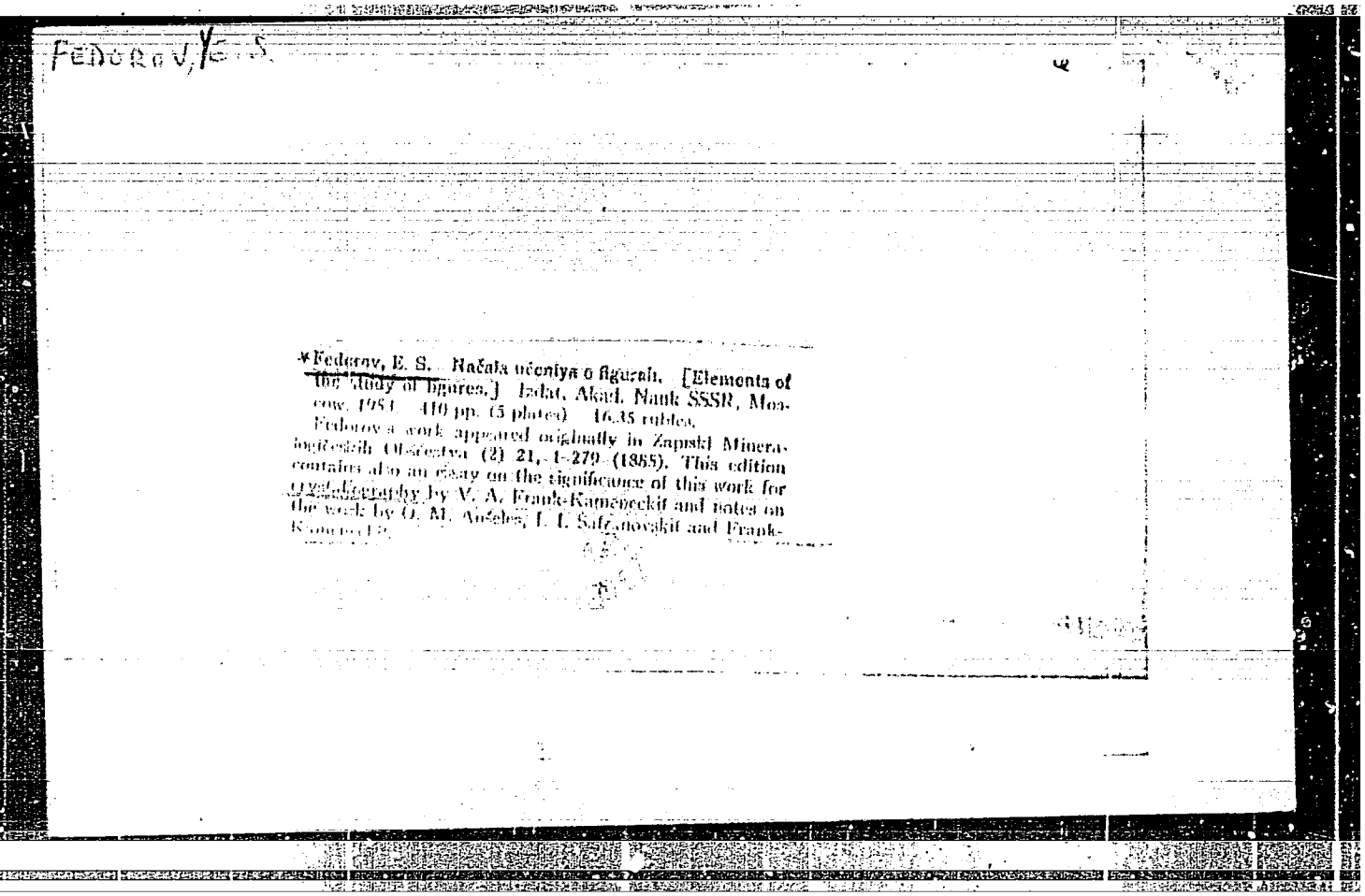
TITLE: Vaporizing combustion chambers of gas turbine engines and the features of their operation

SOURCE: Avtomobil'naya promyshlennost', no. 5, 1964, 42-45

TOPIC TAGS: gas turbine engine, vaporizing combustion chamber, annular combustion chamber, fuel evaporation, carbon formation

ABSTRACT: In foreign gas turbine engines of low horsepower annular vaporizing combustion chambers are now being used instead of atomizer combustion chambers. Such engines are being manufactured in the U.S.A., England and Japan. The present paper describes such engines with slot, direct flow and other vaporizing chambers. The entire process is subdivided into fuel evaporation, flow of the steam-air mixture in the fire tube, and mixture of the enriched mixture with air while flowing. The process is described in detail on the basis of publications by W.D. Pouchot, I.R. Hamm, F.D. Williams, papers in "The Aeroplane" and "MTZ Journal", as well as a paper by I. Savan, M. Kunugi and H. Ohmai. The results of tests indicated that introduction of vaporized fuel [illegible]

fuel system must ensure only a precise fuel feed into the vaporizing parts and not atomization. This results in lower pressures, simplifying the fuel equipment by making possible the use of large-size fuel jets. The vaporizing combustion chamber has a low level of carbon formation. These advantages of the vaporizing combustion chamber [illegible] with



Fedorov, E. S.

*Fedorov, E. S. Načala učeniya o figurah. [Elements of the study of figures.] Izdat. Akad. Nauk SSSR, Moscow, 1951. 410 pp. (5 plates) 16.35 rubles.

Fedorov's work appeared originally in Zapiski Mineralogicheskih Obščestva (2) 21, 1–279 (1885). This edition contains also an essay on the significance of this work for crystallography by V. A. Frank-Kamenetskiĭ and notes on the work by O. M. Ančabe, I. I. Safronovskiĭ and Frank-Kamenetskiĭ.