

POPOV, S.A.

New system of water and heat treatment of raw materials. Spirt.prom.
20 no.4:33 '54. (MLRA 7:12)
(Distilling industries)

PHASE I BOOK EXPLOITATION

SOV/4023

Popov, Sergey Aleksandrovich, Candidate of Technical Sciences, Docent

Proyektirovaniye inzhenernykh sooruzheniy iz alyuminiyevykh splavov (Design of Aluminum [Alloy] Engineering Structures) Moscow, Gosstroyizdat, 1960. 203 p. Errata slip inserted. 3,000 copies printed.

Ed.: G.K. Yevgrafov, Member, Academy of Construction and Architecture USSR, Honored Scientist and Technologist RSFSR, Professor; Ed. of Publishing House: G.N. Vilkov; Tech. Ed.: Ye.L. Temkina.

PURPOSE: This book is intended for construction engineers, designers, scientific workers, aspirants, and students in advanced courses in construction departments and schools of higher education.

COVERAGE: The book deals with characteristics of aluminum alloys used for construction work in the USSR and other countries. A review of the development of aluminum-alloy engineering structures is presented, and recommendations for selecting dimensions of structures and the basic premises of designing load-carrying

Card 1/5

Design of Aluminum (Cont.)

SOV/4023

constructions are given. No personalities are mentioned. There are 935 references: 87 Soviet, and the rest in other European languages, predominantly English and German.

TABLE OF CONTENTS:

Preface	
Ch. I. Brief Description of the Characteristics of Aluminum Alloys Used for Construction Work in the USSR and Other Countries	3
1. Growth of aluminum production in the USSR and other countries	6
2. Classification of aluminum alloys	8
3. Characteristics of formable aluminum alloys	9
4. Aluminum-alloy products	19
5. Characteristic features of production and joining of construction elements	22
Ch. II. Development of Constructional Forms of Engineering Structures Made From Aluminum Alloys	
6. Bridges	31
7. Roofing trusses of industrial and civil structures	31
	47

Card 2/5

TARANTOVSKIY, S.V., doktor tekhn. nauk, prof., red.; POPOV, S.A.,
kand. tekhn. nauk, nauchnyy red.; BEGAK, B.A., red. izd-va;
IGNAT'YEV, V.A., tekhn. red.; MOCHALINA, Z.S., tekhn. red.

[Structural elements made of aluminum alloys] Stroitel'nye kon-
struktsii iz aliuminievykh splavov. Pod obshchei red. S.V.
Taranovskogo. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i
stroit. materialam, 1962. 337 p. (MIRA 15:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut
stroitel'nykh konstruktsiy.
(Aluminum alloys) (Building materials)

POPOV, S.A.; KAMINSKIY, M.Ye.; PERESETSKIY, M.L.; NAYERMAN, M.S.;
SMIRNOVA, I.S.; MUSAYELYAN, Ye.K.; SIL'VESTROV, V.D. [deceased];
KULIKOV, A.V.; NESMELOV, A.F., kand.tekhn.nauk, red.; IVANOVA,
N.A., red.izd-va; GORDEYEVA, L.P., tekhn.red.

[Dressing grinding wheels with diamond and diamond-substitute tools] Pravka shlifoval'nykh krugov almaznymi instrumentami i zameniteliami almazov. Pod red. A.F.Nesmelova. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 101 p.

(MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut almaznogo instrumenta i protsessov almaznoy obrabotki. 2. Gosudarstvennyy nauchno-issledovatel'skiy institut almaznogo instrumenta i protsessov almaznoy obrabotki (for all except Nesmelov, Ivanova, Gordeyeva).

(Grinding wheels)

(Diamonds, Industrial)

POPOV, S. I.

Conference and seminar "Diamond tools and machining with
diamond tools." Stan. i instr. 35 no. 6243 Je '64
(MIRA 1788)

POPOV, S. D.

NABOKOV, V.A.; POPOV, S.D.; LAYUKHIN, M.A.; KHARLAMOVA, T.A.

The helicopter and prospects for use in the control of arthropod vectors of human disease [with summary in English]. Med.paraz. i paraz.bol. 26 no.1:5-11 Ja-F '57. (MLRA 10:6)

1. Iz sektora profilaktiki infektsiy Instituta malyarii, meditsinskoy parazitologii i gel'mitologii Ministerstva zdравo-okhraneniya SSSR (dir. instituta - prof. P.G.Sergiyev, zav. sektorom prof. V.A.Nabokov)

(ARTHROPODS, prev. and control
insecticide spraying with helicopter)

(INSECTICIDES
spraying with helicopter)

POPOV, S.D.

POPOV, S. D., DENISENKO, V. K., KOROVIN, F. T., GUTSEVICH, A. V.,
FEREFIL'YEV, P. P., POGODINA, E. A., FEDOROV, M. N., SPREANSKAYA, V. N.,
SIYANITSKIY, F. M., SHUSTROV, A. K., ALEKSANDROV, P. M., KLEVAKIN, V. N.,
BORISKIN, M. N., LIL'P, G. M., ZIL'BERMINTS, IV. and GUDNEVA, O. A.

"The Effectiveness of a Chemical Method for Combatting Arthropods
over Large Areas from Airplanes."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

(Leningrad - Moscow)

VOLKOV, Aleksandr Nikolayevich; GERASIMOV, B.A.; ZARING, P.V.; MUSHNIKOVA,
K.S.; NIKIFOROV, A.M.; PROKOPENKO, S.F.; POPOV, S.D.; CHUVAKHIN,
V.S.; MINEIKOVA, V.R., red.; GOR', Z.D., tekhn.red.; GUREVICH,
M.M., tekhn.red.

[Manual on controlling pests and diseases of farm crops] Posobie
po bor'be s vrediteliami i bolezniami sel'skokhoziaistvennykh
kul'tur. Izd.10, ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry,
1960. 615 p. (MIRA 13:11)
(Agricultural pests) (Plant diseases)

PLATONOV, Ye.V.; STEPANOV, A.D.; DOMANITSKIY, S.M.; POPOV, S.D.; MURZHIN, I.I., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor.

[Results of comparative tests of automatic control circuits for diesel locomotives] Rezul'taty sravnitel'nykh ispytaniy skhem avtomaticheskogo upravleniya teplovozov. Moskva, Gos. transportnoe shel-dor. izdvo, 1955. 157 p. (Vsesoiuznyi nauchno-issledovatel'skii institut sheleznodoroznogo transporta. Trudy, no. 109) (MLRA 9:2)
(Diesel locomotives) (Automatic control)

POPOV, S.D., inzhener.

~~Calculating and optimization of diesel and gas turbine loco-~~
~~otive generators. Vest. elektroprom 28 no.1:35-37 Ja. '57. (MLRA 10:4)~~

1. Khar'kovskiy elektroturbinnyy zavod Ministerstva elektrotekhnicheskoy promyshlennosti.
(Locomotives)

POPOV, S.D., inzh.

Calculation of the parameters of a network for connecting
back current relays in new locomotives. Vest. elektroprcm.
33 no.5:28-33 My '62. (MIRA 15:5)
(Electric relays)
(Locomotives--Electric equipment)

POPOV, S.D., inzh.; TIMOSHENKO, H.I., inzh.

Generator excitation networks of gas-turbine locomotives. Vest.
elektrom. 33 no.8:43-46 Ag '62. (MIRA 15:7)
(Gas-turbine locomotives) (Electric networks)

S/089/63/014/004/018/019
A066/A126

AUTHOR: Popov, Slavcho

TITLE: A new type of nomograms for γ -ray flaw detection

PERIODICAL: Atomnaya energiya, v. 14, no. 4, 1963, 418 - 419

TEXT: A new type of nomogram is suggested for the direct determination of the time t of exposure at a given thickness d of the test specimen, at an activity Q of the source of radiation, and at a distance F between source and film. Figure 1 shows a nomogram for steel and cast iron exposed to a Co^{60} source. The thickness of the test material may vary from 0 to 250 mm. There are 2 figures.

ASSOCIATION: Laboratoriya po primeneniyu radioizotopov v mashinostroyenii, Sofiya, Bolgariya (Laboratory for the Use of Radioisotopes in Machine Construction, Sofia, Bulgaria)

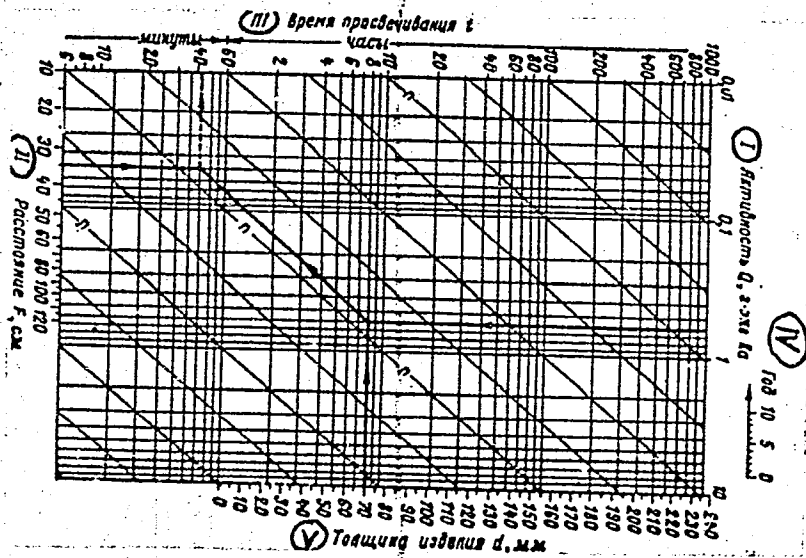
SUBMITTED: July 31, 1962

Card 1/2

A new type of nomograms for γ -ray flaw detection

S/089/63/014/004/018/019
A066/A126

Figure 1: Nomogram.
(I) activity Q ,
 $g \cdot eq / kg$; (II) distance F , cm;
(III) time t of exposure, min and h;
(IV) years; (V) thickness d of specimen, mm.

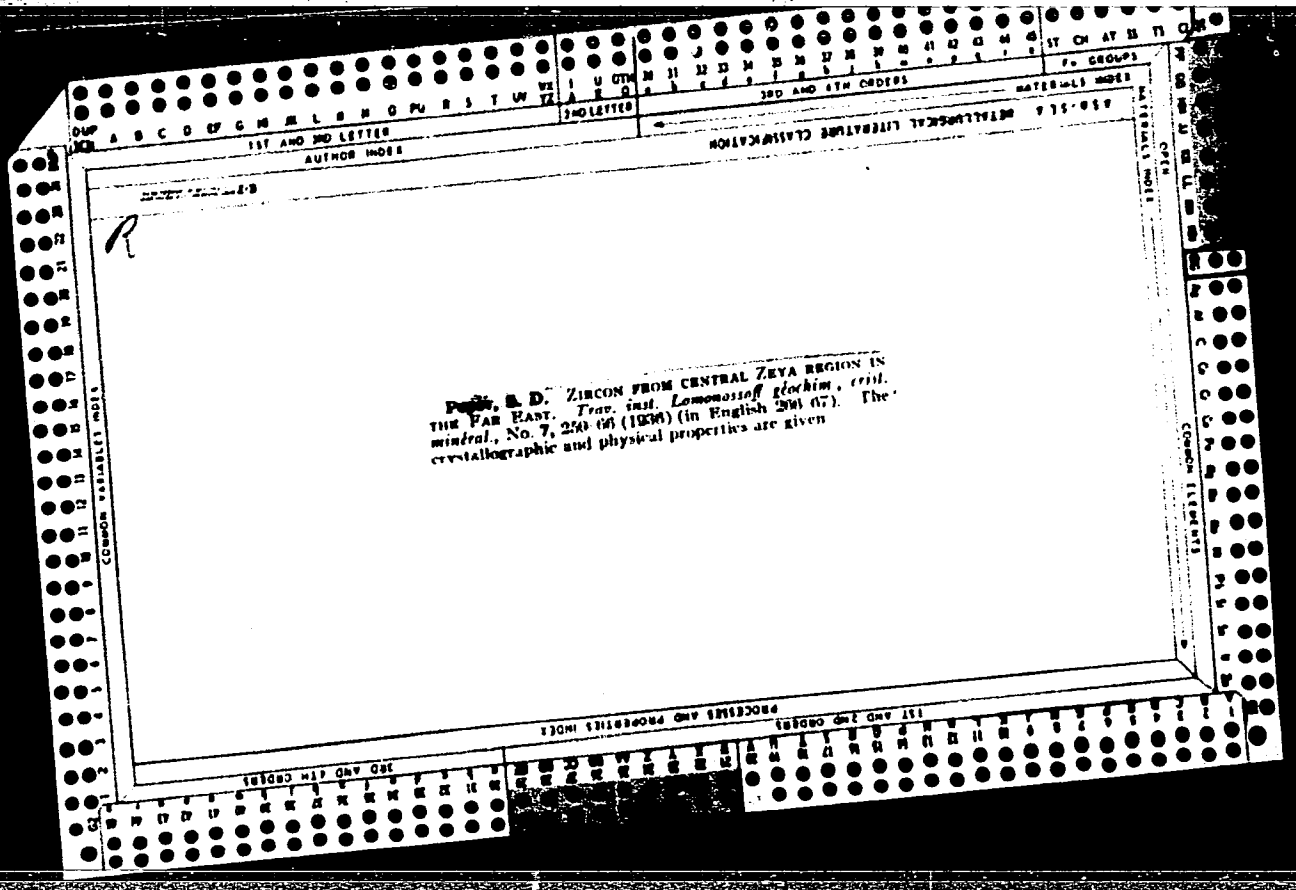


Card 2/2

POPOV, Slavcho

New type of nomogram for gamma-ray defectoscopy. Atom. energ.
1/4 no.4:418-419 Ap '63. (MIRA 16:3)

1. Laboratoriya po primeneniyu radioizotopov v mashinostroyeni,
Sofiya, Bolgariya.
(Nomography (Mathematics)) (Gamma rays) (Nondestructive testing)



1ST AND 2ND ORDERS PARCELS AND PROPERTIES INDEX

1

Speryite from central Zeya region in the Far East
 S. D. Popov and A. M. Popova. *Trav. inst. Lomonosovsk
 geokhimi., 1931, mineral. No. 7, 269-71 (in English 271)
 (1939).—Chem. and spectrum analyses of the mineral
 disclosed 86.40% of Pt, and the presence of some Ru.
 Nine references. A. A. Polgorov*

A.S.S.I.A. METALLURGICAL LITERATURE CLASSIFICATION

62

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

POPOV, S.D.
Map: URYUMKAN, river

OSU-m2340-

S-202

Popov, S.D. and Timofeyev, A. H.: O Poleznykh Iskopay-
nykh Verkhnego Tcheniya Reki Uryumkana.
Trudy Instituta Geologicheskikh Nauk, Vyp. 38, 1939
Akademiya Nauk SSSR
American Geographical Society, New York, N.Y.
Geological map of the Uryumkan Valley.
Scale - 1:324,000 (approx.)
Area: $51^{\circ}30'$ - $52^{\circ}15'$ N., $118^{\circ}44'$ - $119^{\circ}42'$ E

72

CA

8

Minerals found along the upper course of the Uryumkan River in the eastern Transbaikalian area of Siberia. S. D. Popov and A. A. Timofeyev. *Trudy Inst. Geol. Nauk. Akad. Nauk. SSSR*, No. 38, Mineral-Geokhim. Ser. No. 7, 47 pp. (1970). Descriptions of the morphology and hydrography and geology and of the following mineral deposits: Au, cassiterite, galena, molybdenite, sphalerite, monazite, HgS and W minerals. A map is included. B. Z. Kamich

INTERNATIONAL LITERATURE CLASSIFICATION

POPOV, S.D., otv.red.; BORISOV, N.I., red.; BUYANTUYEV, B.R., red.; GALAKTIONOV, I.I., red.; KROTOV, V.A., red.; OZNOBIN, N.M., red.; PAVLOVSKIY, Ye.V., otv.red.; SHNIPER, I. I., red.; TARASOV, Ye. B., otv.red.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

[Studies on the production forces of the Buryat-Mongolian A.S.S.R.]
 Materialy po izucheniiu proizvoditel'nykh sil Buriat-Mongol'skoi ASSR.
 No.2. Ulan-Ude, Buriat-Mongol'skoe knizhnoe izd-vo. 1955 507 p.
 (MIRA 12:4)

1. Akademiya nauk SSSR, Vostochno-Sibirskiy filial. 2. Sovet po izucheniyu proizvoditel'nykh sil AN SSSR (for Popov, Galaktionov, Tarasov).
 3. Zamestitel' predsedatelya Soveta Ministrov Buryat-Mongol'skoy ASSR (for Borisov). 4. Vostochno-Sibirskiy filial AN SSSR (for Buyantuyev).
 5. Institut ekonomiki AN SSSR (for Oznobin). 6. Gosplan Buryat-Mongol'skoy ASSR (for Shniper).
- (Buryat-Mongolia--Geography, Economic)

POPOV S.D.

ARSEN'YEV, A.A., kand.geologo-mineral.nauk, otv.red.; ASKASINSKIY, V.V., inzh.-geolog, red.; LEYTES, A.M., inzh.-geolog, red.; POPOV, S.D., doktor geologo-mineral.nauk, red.; Sostaviteli kart: LAPEKIN, S.I.; SULERZHITSKIY, L.D.; GALUSHKO, Ya.A., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Mineral deposits in Chita Province; ferrous and nonferrous metal deposits] Poleznye iskopaemye Chitinskoi oblasti; chernye metally i nemetallicheskie poleznye iskopaemye. Moskva, 1959. 141 p.

(MIRA 13:2)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. 2. Institut geologicheskikh nauk AN SSSR (for Lapekin, Sulerzhitskiy).

(Chita Province--Ore deposits)

POPOV, S.D., doktor geologo-miner. nauk, otv. red.; PREOBRAZHENSKIY, V.S.,
kand. geogr. nauk, otv. red.; CHEKMENEV, V.Ye., red.izd-va; KUZ'
MIN, I.F., tekhn. red.

[Types of landscape and natural regionalization of Chita Province]
Tipy mestnosti i prirodnoe raionirovanie Chitinskoj oblasti. Mo-
skva, Izd-vo Akad. nauk SSSR, 1961. 157 p. (MIRA 14:11)
(Chita Province--Physical geography)

SMIRNOV, Ye.V., prof.; POPOV, S.D., dotsent

Causes of some errors and failures in ascending cholangiography.

Vest. khir. no. 6:47-53 '65.

(MIRA 18:12)

1. Iz kliniki voyenno-morskoy i gosptal'noy khirurgii (nachal'-
nik - prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina
akademii imeni Kirova.

SMIRNOV, Ye.V., prof.; FO.OV, S.S., assistant

Repeated surgery on the biliary tract. Neurologia 27 no. 1 3
3-10 D 163 (MFA 1981)

1. Iz kliniki gosptel'noy i voyenno-morskoy khirurgii (na-
chalt'snik - prof. Ye.V. Smirnov) Voenno-meditsinskoy ordena
Lenina akademii imeni S.M. Kirova.

POPOV, S.K., kandi. med. nauk: II. III, V.I.I.

Treatment of external biliary-bronchial fistulae. Vest. khir. 92
no.5:76-77 My '64. (MIRA 18:1)

1. Iz kliniki voyenno-morskoy i gosпита'noy khirurgii (nachal'nik -
prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii imeni
S.M. Kirova.

POPOV, S.D. (Leningrad, ul. Plekhanova, d.26/27, kv. 29)

Inadequacy of the duodenal stump after ligation of the gastro-
duodenal artery in gastric resection [with summary in English,
p.159] Vest.khir. 77 no.8:46-53 Ag '56. (MLRA 9:10)

1. Iz gospi'tal'noy khirurgicheskoy kliniki No.1 (nach. - prof.
Ye.V.Smirnov) Voenno-morskoy meditsinskoy akademii

(STOMACH, surg.)

ligation of gastroduodenal artery causing inadequacy of
duodenal stump)

(DUODENUM, blood supply

ligation of gastroduodenal artery causing inadequacy of
duodenal stump in gastric resection)

POPOV, S.D.

Use of polychlorvinyl tubes in surgery of the bile ducts. Vest.
Khir. 84 no.6:31-36 Je '60. (MIRA 13:12)
(BILE DUCTS—SURGERY) (ETHYLENE)

POPOV, S.D., kand.med.nauk

Removal of the testis with teratoblastoma associated with extensive metastases to the retroperitoneal lymph nodes. Vest.khir. 86 no.3: 121-122 Mr '61. (MIRA 14:3)

1. Iz 2-y gospiatal'noy khirurgicheskoy kliniki (nach. - prof. Ye.V. Smirnov) Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(TESTICLE—CANCER) (RETROPERITONEAL SPACE—CANCER)
(LYMPHATICS—CANCER)

POPOV, S.D., kand.med.nauk (Leningrad, ul. Plikhanova, 26/27, kv.29)

Method for examining patients with external biliary fistulae.
Vest.khir. no.5:88-91 '62. (MIRA 15:11)

1. Iz 2-y gospi-tal'noy khirurgicheskoy kliniki (nach. - prof.
Ye.V. Smirnov) voyenno-meditsinskoy ordena Lenina akademii
im. S.M. Kirova. (FISTULA) (BILIARY TRACT—DISEASES)

POPOV, S.D., dotsent

Simple instruments and devices for biliary surgery. Vest. khir.
93 no.8:47-52 Ag '64. (MIRA 18:7)

1. Iz kliniki gosptal'noy i voyenno-morekoy khirurgii (nachal'nik -
prof. Ye.V.Smirnov) Voyenno-meditsinskoy ordena Lenina akademii imeni
Kirova.

SMIRNOV, Ye.V., prof.; POPOV, S.D., dotsent

Postoperative external drainage of the biliary tract through
biliary-duodenal anastomoses. Vest. khir. 94 no.1:7-13 Ja
'65. (MIRA 18:7)

1. Iz kliniki gosital'noy i voyenno-morskoy khirurgii (nachal'nik
prof. Ye.V.Smirnov) Voyenno-meditsinskoy ordena Lenina akademii imeni
Kirova.

SMIRNOV, Ye.V., prof. (Leningrad, T-101, Kirovskiy prospekt 2, kv.36)
POPOV, S.D., dotsent

Continuous suction of the contents through a duodenal catheter in
surgery of the biliary tract. Vest. Khir. 91 no.10:3-8 0 '63.
(MIRA 17:7)

1. Iz kliniki gosital'noy i voyenno-morskoy khirurgii (nachal'nik-
prof. Ye.V. Smirnov) Voenno-meditsinskoy ordena Lenina akademii
imeni S.M. Kirova, Leningrad.

POPOV, S.D., kand. med. nauk; CHALGANOV, A.I.

Motion pictures in surgery. Vest. Khir. 91 no.12:64-69 D 183.
(MIRA 17:9)

1. Iz kafedry voyenno-morskoy i gospital'noy khirurgii (nachal'nik- prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena lenina akademii imeni Kirova. Adres avtorov: Leningrad, Zagorodnyy prospekt, 47, klinika voyenno-morskoy i gospital'noy khirurgii.

DISTLER, V.V.; POPOV, S.D.; OVCHAROVA, Z.F.

Struverite, an accessory mineral of granites. Trudy Min. muz.
no.14:209-214 '63. (MIRA 16:10)

(Transbaikalia--Struverite)
(Transbaikalia--Granite)

POPOV, S.D., vrach; ABRAMOVA, O.I., operatsionnaya sestra; MELESHCHENKO,
A.M., operatsionnaya sestra (Leningrad)

Device for rewinding surgical silk thread. Med.sestra 21
no.12:49-50 D '62. (MIRA 16:4)
(SURGICAL INSTRUMENTS AND APPARATUS)

AM4026341

BOOK EXPLOITATION

S/

Popov, Sergey Aleksandrovich

Structural elements made of aluminum alloys (Stroitel'ny*ye konstruktsii iz alyuminiyevy*kh splavov) Moscow, "Vysshaya shkola" 63. 0226 p. illus., biblio. 10,000 copies printed. Textbook for colleges of civil engineering.

TOPIC TAGS: construction, reinforced construction, aluminum alloy, aluminum alloy structural members, aluminum alloy welding, aluminum alloy riveting, aluminum alloy bolting, aluminum alloy brazing, aluminum alloy construction economics

PURPOSE AND COVERAGE: The book contains a brief description of Soviet structural aluminum alloys, the technology of their manufacture, a survey of the design of aluminum-alloy structures and methods of calculation. The description is illustrated with examples of SSSR structures either under way or completed during the last few

Card 1/3

AM4026341

years. The book can be used as a textbook on reinforced structures or a text on aluminum-alloy building construction by students of higher educational institutions. The author is deeply grateful to the reviewers -- corresponding member AN SSSR Professor N. S. Streletskiy, Professor S. V. Taranovskiy, docent Ye. N. Sessig -- and the Department of Metal Structures of Moskovskiy inzhenerno stroitel'nyy institut im. V. V. Kuybyshev (Moscow Construction Engineering Institute) for valuable remarks.

TABLE OF CONTENTS [abridged]:

Foreword - - 3

Ch. I. General information on aluminum alloys and technology of production of stock parts - - 5

Ch. II. Fastening of structural elements made of aluminum alloys (Includes welding, riveting, bolting, and brazing) - - 24

Card 2/3

AM4026341

Ch. III. Principles of design of structures with aluminum alloys
-- 41

Ch. IV. Structural members and main trends in the design of
aluminum-alloy structures -- 95

Ch. V. Economics of aluminum alloys structural members -- 212
Literature -- 223

SUB CODE: MA, AP

SUBMITTED: 18Apr63

NR REF SOV: 060

OTHER: 000

DATE ACQ: 27Apr64

Card 3/3

POPOV, Sergey Petrovich, doktor sel'khoz. nauk; SOKOLOVA, R.K.,
red.; MOROZOV, L.I., tekhn. red.

[Improvement in reindeer farming] Rezervy olenevodche-
skogo khoziaistva. Murmansk, Murmanskoe knizhnoe izd-
vo, 1961. 30 p. (MIRA 17:2)

SIRAKOV, M.A.; POPOV, St.D. (Sofiya)

Schizophrenia in Bulgaria. Zhur. nevr. i psikh. 61 no.9:1396-
1401 '61. (MIRA 14:9)

(BULGARIA--SCHIZOPHRENIA)

CM

The identification of sulfanilamide preparations. S. P. Popov. *Farmatsiya* 10, No. 3, 37(1947); *Chem. Zentr.* (Russian Zone Ed.) 1948, 1, 927.—About 1-2 cc. of freshly prepd. Br water is added to 0.01 g. of the prepn. under examn., the mixt. is shaken vigorously, then 1-2 drops of NaNO₂ soln. (1:10), and finally 1-2 drops of 10% NH₄OH are added. Characteristic colors are developed, *sulfadiazine* showing violet, *white streptocide* lemon-yellow, *sulfathiazole* orange-red, *sulfanilic acid* bright yellow, *disulfan* faint yellow, and *sulfadiazine* colorless. *Sulfathiazole* also gives a bright lemon-yellow color when treated with concd. HNO₃. M. G. Moore

17

CA

Quantitative determination of paracetamol and benzo-
caine by bromide-bromate method. S. E. Popov. *Med.*
Prav. S.S.S.R. 1949, No. 3, 31-2. A 0.2-g. sample is
taken up in 60-80% AcOH and dil. with the same up to
50 ml.; 5 ml. aliquot is treated with 100 ml. H₂O, 10 ml.
0.1 (?) bromide-bromate soln., 5 ml. concd. HCl, shaken,
let stand 10-30 min., 0.5 g. KI added, shaken, and let
stand in the dark 10-15 min. and back-titrated with 0.1 N
thiosulfate in presence of starch; 1 ml. corresponds to
0.002085 g. paracetamol or 0.000413 g. benzocaine. Ac-
curacy within 0.5-0.3% is reported. G. M. K.

2

C.A.

Analysis of phenolphthalein. S. F. Mysak & Pharm. Plant.
Voronizhi. *Med. Press* 5558, 1949, No. 6, 25-6.
Phenolphthalein can be detd. by measuring the excess
KBrO₃ used to oxidize it. Dissolve 0.1 g. of sample in 15 ml.
of 0.1 N NaOH, add 8-10 ml. 0.5 N KBrO₃, 5 ml. 10%
KBr, and, while shaking, rapidly add 25 ml. acid mixt.
(20 ml. 80% AcOH and 5 ml. concd. HCl); after shaking 1
min. add 1 g. KI and titrate the liberated I with
0.1 N Na₂S₂O₃. One ml. of 0.1 N KBrO₃ = 0.00027 g.
phenolphthalein. Run a blank in parallel. G. M. K.

SHIKHOV, V.N.; POPOV, S.F.

Instruments for measuring static electric charges. Neft.
khoz. 41 no. 12:49-54 D '63. (MIRA 17:6)

POPOV, S. F.

PA 170T23

USSR/Chemistry - Formamide Derivatives Nov 50

"Reaction of Glycide and Its Ethers With Acid Amides: II. Interaction of Glycidic Esters With Formamide," F. G. Ponomarev, S. F. Popov, Lab. of Org Chem, Voronezh State U

"Zhur Obshch Khim" Vol XX, No 11, pp 2064-2068

Interaction of methyl and ethyl ethers of glycide with formamide yielded following products: N-propanol-2-methoxy-3-formamide, N, N-di-(propanol-2-methoxy-3)-formamide, N-propanol-2-ethoxy-3-formamide, and N, N-di-(propanol-2-ethoxy-3)-formamide. These products were

170T23

USSR/Chemistry - Formamide Derivatives Nov 50
(Contd)

formed with both a 1:1 ratio of reagents, excess of ester (1:2 ratio). Products were colorless liquids with characteristic and quite intensive odor, bitter taste.

170T23

Organic Chem

CP

Reaction of glycidic and its ethers with acid amides. II.
Reaction of glycidic ethers with formamide. F. G. Ponomarev and S. F. Pogov. J. Gen. Chem. U.S.S.R. 20, 2135-9(1950)(Engl. translation).—See C.A. 45, 5621b. B. L. M.

Voronezh State Univ.

LUNEVSKIY, I.I.; GULYAYEV, G.I., inzh., retsenzent; FEDOT'YEV, V.P.,
inzh., retsenzent; POPOV, S.G., inzh., red.; BOBROVA, Ye.N.,
tekhn. red.

[How to organize multiple machining at a machinery plant] Kak
organizovat' mnogostanochnuiu rabotu na mashinostroitel'nom
zavode. Moskva, Mashgiz, 191. 73 p. (MIRA 16:5)
(Machinery industry--Management)

POPOV, S. G.

Ustroystvo remont i regulirovka sel'skokhozyaystvennykh mashin (organization of repair and adjustment of the agricultural machine) Moskva, Trudreservizdat, 1955. 237 p. illus., diags.

"Rekomenduyemaya literatura": p. 233.

N/5
723.1
.P81

POPOV, S.G.; KOPEVSKIY, D.Ya., red.; KRYNOCHINA, K.V., tekhn.red.

[Construction features, repair and adjustment of agricultural
machinery] Ustroistvo, remont i regulirovka sel'skokhoziaistven-
nykh mashin. Moskva, Vses.nchebno-pedagog.izd-vo Trudrezervizdat,
1953. 237 p.

(Agricultural machinery)

(MIRA 13:2)

POPOV, S. G.

PANOV, D. IU., S. G. POPOV and A. I. KHOKHLOV.

Priblizhennoe reshenie graficheskim metodom zadachi o kruchenii dlia vintovogo profilia. (TSAGI. Trudy, 1934, no. 169, p. 25-31, diagsr.)

Summary in English.

Title tr.: Approximate solution of the problem of torsion of a propeller section by means of a graphical method.

QA911.M65 no. 169

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress.

POPOV, S.G.

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 224 - I

PHASE I

Call No.: QA930.P59

J.B. IH

BOOK

Author: POPOV, S. G.

Full Title: MEASUREMENT OF AIR FLOWS

Transliterated Title: Izmereniye vozdushnykh potokov

Publishing Data

Originating Agency: None

Publishing House: State Publishing House of Technical and Theoretical Literature (Ogiz)

No. of pp.: 296

No. of copies: 6,000

76

Date: 1947

Editorial Staff

Editor: Not given

Editor-in-Chief: Not given

Tech. Ed.: Not given

Appraiser: Not given

Others: Gratitude is expressed for valuable cooperation to Professors Kosmodem'yanskiy, A. A., Rakhmatulin, Kh. A., and Strelkov, S. P.

Text Data

Coverage:

This book deals with basic methods of experimental determination of speed and pressure in air flows. These methods consist of the application of various measuring apparatus, both simple and complicated. Short description of these apparatus, and, when possible, also theoretical explanations are given. Some of these apparatus are new and have no theoretical explanations, and some problems are still in

1/2

Over

26304

Izmereniye vozdushnykh potokov

AID 224 - I

an experimental stage. The book represents a slightly enlarged version of a course given by the author in the Moscow State University of the Order of Lenin im. M. V. Lomonosov. including results of aerodynamical research at this University. The book is divided into four chapters: I. Micromanometers (38 pages), II. The measurement of average pressure and velocity in an air flow (134 pp.), III. Determination of velocity and pressure in an unsettled air flow (40 pp.), IV. Visual study of air flows (58 pp.).

The book, especially the two last chapters, requires some closer study.

Purpose: The author does not give the purpose of this book. Judged by its contents, it might be used as a textbook and manual.

Facilities: Names of many scientists are mentioned in the text.

No. of Russian and Slavic References: The author uses extensive footnotes for mentioning foreign and Russian articles, publication, or statements. The major part originate in 1935-1939, with a few from earlier dates and some from 1940-1942.

Available: Library of Congress.

2/2

POPOV, S. G.

"Measurement of Air Currents" GITTL (1948)

Popov, S.G.

Popov, S. G. Examples of the exterior problem of the aerodynamics of a very rarefied gas. Vestnik Moskov. Univ. 3, no. 5, 25-37 (1948). (Russian)

Formulae for calculating the aerodynamic forces acting on cylinders, ogives and bodies of revolution in free molecular flow are developed. The assumptions are completely diffuse re-emission of the molecules and uniform "temperature" of the re-emitted molecules from every point on the surface of the body. [The later assumption does not correspond to constant body temperature (infinitely conducting body material) with constant accommodation coefficient as assumed by the author, because he perpetuates the mistake of Sanger and Bredt in computing the energy of the impinging molecules. This error was corrected by Stalder and Jukoff, J. Aeronaut. Sci. 15, 381-391 (1948).] The author concludes by pointing out that the aerodynamic forces for free molecular flow for different parts of the surface are additive, with certain restrictions on the shape of the body. The proper restriction seems to be the complete convexity of the surface.

H. S. Tsien (Pasadena, Calif.)

Source: Mathematical Reviews,

Vol 1 No. 3

SWW
BE
JSA

Popov, S. G.

Popov, S. G. On helical motions of an ideal fluid. Vestnik
Moskov. Univ. 3, no. 8, 35-47 (1948). (Russian)

It is well known that the equations of helical motions
(* $\omega_z/u = \omega_y/v = \omega_x/w = \lambda(x, y, z)$) represent a special case of
the Eulerian equations if the motion is steady, the external
forces are conservative and the density of the fluid is a
function of the pressure only. By considering helical motions
in a cylindrical tube, on a sphere, in a ring-shaped
tube and in a helical tube, the author gives examples of
various types of helical vortices: straight vortex, vortical
sphere, vortical ring and helical ring. As examples for
applications of helical motions are mentioned the detona-
tion spin in long tubes and the horseshoe vortices or more
generally the free vortex lines in the case of variable circu-
lation around an airwing of finite span. In both cases the
vortex lines and the streamlines coincide, i.e., equations (*)
are satisfied [Prandtl, Nachr. Ges. Wiss. Göttingen. Math.-
Phys. Kl. 1918, 451-477]. Helical motions appear also in
the problem of axisymmetrical flow and in the most general
three-dimensional flow.
E. Leitmanis.

0000

SMUT

Source: Mathematical Reviews,

Vol

No.

4

POPOV, SERGEI GRIGOR'EVICH, ed.

Gazovaia dinamika; sbornik statei. Perevod s angliiskogo i nemetskogo pod red. S.G. Popova i S.V. Fal'kovicha. Moskva, Izd-vo inostranoi lit-ry, 1950. 357 p., illus.

Includes bibliographies.

Title tr.: Gas dynamics; collected articles. Translation from the English and German.

QA930. P58

SO. Aeronautical Science and Aviation in the Soviet Union. Library of Congress, 1955.

POPOV, SERGEY GRIGOR'EVICH.

Examples of the exterior problem of the aerodynamics of a very rarefied gas. New York, 1951. 20 p. (American Mathematical Society. Translation no. 36.)

Trans. of Primery vneshnei zadachi aerodinamiki sil'no razrezhennogo gaza.

MnU NN RPB

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

PORVATOV, N.A.; ZUBOK, V.N., inzhener, retsenzent; POPOV, S.G., inzhener, redaktor; POPOVA, S.M., tekhnicheskii redaktor; MATVYEVVA, Ye.N., tekhnicheskii redaktor

[New method of high-speed preparatory work in the machine building industry] Novyi metod skorostnoi podgotovki proizvodstva mashin. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1951. 166 p. (MLRA 8:3)

(Machinery industry)

Popov, S. G.

Popov, S. G. **Remark on the integrals of Bernoulli and Lagrange (Cauchy).** *Moskov. Gos. Univ. Učenyje Zapiski* 152, *Mehanika* 3, 43-46 (1951). (Russian)

The author points out that in barotropic flow of an ideal fluid subject to conservative extraneous forces the usual Bernoullian expression B satisfies $dB = d\mathbf{x} \cdot \nabla \times \mathbf{w}$, where $d\mathbf{x}$ is the element of arc, \mathbf{v} the velocity, and \mathbf{w} the vorticity, and hence $B = \text{const.}$ on any curve such that $d\mathbf{x} \cdot \nabla \times \mathbf{w} = 0$. The usual statements apply to either (a) any curve lying on a surface containing both vortex-lines and stream-lines, or (b) irrotational or Gromeko-Beltrami motion. The author notices that certain mixed conditions, involving both the curve and the motion, are also sufficient. His simplest example is a motion such that both velocity and vorticity are everywhere normal to a fixed direction: then any plane curve whose plane is normal to this direction satisfies the condition. In a frame rotating at angular velocity ω , the author obtains a formula of the type $d(B+B') = \dots$, where B' is the centrifugal potential, and he discusses some analogous results which are corollaries of it.

Since the author makes some point of his attributions of names, the reviewer adds the following notes. (1) The result of Daniel and John I. Bernoulli was derived by them subject only to the hydraulic approximation (1730, 1740). (2) What are now usually called the "Bernoulli equation for (possibly unsteady) barotropic irrotational flow" and the "Bernoulli equation for the stream-lines" were first obtained by Euler, *Mém. Acad. Roy. Sci. Berlin* 1755, 274-315, 316-361 (1757); see §XXVIII of the former and §§LI-LII of the latter. (The former in the unsteady case is called the "Lagrange (Cauchy) equation" by the author; the latter is often attributed to Lagrange in the French literature.) (3) The extension of the latter to surfaces tangent to both stream- and vortex-lines, which the author does not mention, is due to Lamb [*Proc. London Math. Soc.* (1) 9, 91-92 (1878)]. (4) What the author calls the "Gromeko-Lamb equations" were derived by Lagrange in 1781 [*Oeuvres*, t. 4, Gauthier-Villars, Paris, 1869, pp. 695-748, see §14].

C. Truesdell.

SOVIET MATHEMATICAL REVIEWS (unclassified)
Vol 14, no 5, May 1953, pp 439-522

POPOV, S. G.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 281 - I

BOOK

Call No.: TL570.P58

Author: POPOV, S. G.

Full Title: SOME PROBLEMS AND METHODS OF EXPERIMENTAL AEROMECHANICS

Transliterated Title: Nekotoryye zadachi i metody eksperimental'noy aeromekhaniki

Publishing Data

Originating Agency: None

Publishing House: State Publishing House of Technical and Theoretical Literature

Date: 1952

No. pp.: 496

No. of copies: 4,000

Editorial Staff

Editor: None

Tech. Ed.: None

Editor-in-Chief: None

Appraiser: None

Others: The author expresses thanks for valuable help to Slezkin, N. A., and Petrov, G. I.

Text Data

Coverage: This book explains theoretically aeromechanic problems, and outlines experimental and laboratory methods of research. Many of these methods were elaborated by the Aerodynamic Laboratory of the Moskva University im. Lomonosov. Usually they are simple and may be used by

1/6

Nekotoryye zadachi i metody eksperimental'noy aeromekhaniki

AID 281 - I

small, not too-well-equipped laboratories. Each of the 48 sections into which the book is divided contains a paragraph on laboratory work related to the section's particular problem.

This is an up-to-date well-written textbook.

TABLE OF CONTENTS

Ch. I		PAGE
1.	Wind Tunnels. Flow Measurement	19
2.	Wind Tunnels. High Velocity Wind Tunnels	30
3.	Pressure Measurement with Micromanometers	
3.	Wind Tunnel Properties, and Flow Velocity Measurement	36
4.	Pressure Distribution on the Surface of Pressure and Velocity-measuring Pipe Models	45
5.	Calibration of Pneumatic Instruments for Measuring Flow Velocity	49
6.	Pipes for Measuring the Value and Direction of Velocity in Two and Three-Dimensional Flows	58
7.	Flow Velocity Measurement with Thermoanemometers	67

2/6

Nekotoryye zadachi i metody eksperimental'noy
aeromekhaniki

AID 281 - I

	PAGE
8. Resistance and Field of Velocity in Laminar and Turbulent Currents in Long Pipes	72
9. Measurement of Very Small Velocities of Air Flow	83
10. Thin Free Streamlines	89
11. Field of Velocities and Pressures of the Working Section of the Wind Tunnel	99
12. Visualization of Air Flows	108
13. Stroboscopes and their Application	122
Ch. II Aerodynamic Forces in a Settled Movement	
14. Measurement of Full Frontal Drag by a Gravimetric Method	127
15. Pressure Resistance	139
16. Body Profile Resistance	147
17. Measurement of a Body Profile Resistance by Approximate Method	156
18. Resistance of Friction	160
19. Lifting Force and Frontal Resistance of a Rotating Cylinder in a Flow	168
20. Determination of a Polar Curve of a Wing	175
21. Distribution of Pressure on the Wing Surface	190

Nekotoryye zadachi i metody eksperimental'noy aeromekhaniki		AID 281 - I
		PAGE
22.	Circulation around a Wing of Infinite and Finite Span	196
23.	Determination of Coefficients Lifting Force and of the Induced Drag along the Downwash Flow behind the Wing	205
Ch. III	Propellers	212
24.	Anemometers and their Application	218
25.	Determination of Ventilator Characteristics	
26.	Propeller Characteristics, and their Determination by Gravimetric Methods	229
27.	Distribution of Traction and of Power along the Propeller Blade	240
Ch. IV	Stability. Unsteady Motions	251
28.	Statocal Stability of Aircraft Models	262
29.	Autorotation	268
30.	Determination of Derived Forces and Moments	280
31.	Added Masses and Moments of Inertia	289
32.	Measurement of Variable Pressures	
33.	Determination of some Characteristics of Turbulence in the Working Section of the Aerodynamic Tunnel	295

AID 281 - I

Nekotoryye zadachi i metody eksperimental'noy aeromekhaniki		PAGE
	34. Turbulence in the Wake of a Body in a Flow	305
Ch. V	Similarity	
	35. Electrical Similarity of a Two-dimensional Steady Flow of a Perfect Incompressible Fluid	311
	36. Electrical Similarity of a Two-dimensional Steady Flow of a Perfect Compressible Fluid	320
	37. Hydraulic Similarity of a Steady Flow of a Gas	328
Ch. VI	Special Problems	
	38. Measurement of Gas Flow Parameters	344
	39. Determination of Aero and Hydrodynamic Forces when Bodies are moving in a Stationary Medium	355
	40. The Fall of Bodies into Water	368
	41. Reactive Force	382
	42. Normal Burning of Gas Mixtures and the Speed of its Propagation	389
	43. Detonation of Gases in Long Pipes	401
	44. The Spin during the Detonation of Gas in a Long Pipe	414
	45. Concentrated Shaped Charges	424
	46. Gas Streams Surrounded by Porous Surfaces	435

Nekotoryye zadachi i metody eksperimental'noy aeromekhaniki

AID 281 - I
PAGE

47. Convergent, Divergent, and Curvilinear Flows

445

48. Flows of Rarefied Gases

460

Literature

481

Name Index

490

Subject Index

491

Purpose: Approved by the Ministry of Higher Education of USSR as a textbook for institutions of higher learning

Facilities: A number of scientists in the field of aeromechanics are mentioned in the text.

No. of Russian and Slavic References: The text mentions a large number of books, and publications, Russian and non-Russian, dated up to 1952.

Available: Library of Congress.

POPCV, S. G.

POPOV, S.G.; TSURICHENKO, M.Ye., inzhener, retsenzent; PETROV, A.G.,
inzhener, redaktor.

[How to prevent defective production in machine construction
plants] Kak predupredit' brak na mashinostroitel'nom zavode.
Moskva, Gos. nauchno-tekhn. issledovaniya v oblasti mashinostroyeniya i sudostroyeniya.
lit-ry, 1953. 70 p. (MLRA 7:7)
(Machinery industry) (Quality control)

КОПОВ

Popov, S. G. On the theory of vortical flows of an ideal incompressible fluid. Vestnik Moskov. Univ. Ser. Fiz.-Mat. Estest. Nauk 8, 3-6 (1953). (Russian)

It is shown that a time-dependent plane flow with vorticity $-f_1(t)$ everywhere and body force $X = \frac{1}{2}ydf_1/dt$, $Y = -\frac{1}{2}xdf_1/dt$ has a stream function

$$\psi(x, y, t) = \frac{1}{2}y^2f_1(t) + \psi_1(x, y, t),$$

where ψ_1 is a harmonic function of x and y . Similarly, solutions of $\psi_x + \psi_y = \psi$ are stream functions of steady flows with $X = Y = 0$ and vorticity $-\psi$. First integrals are found for both types of flows.

J. H. Giese.

WAT

Mathematical Review
June 1954
Mechanics

Chiz Aeromechanics - Moscow State U.

PePeV, S.G.

PHASE I BOOK EXPLOITATION

SOV/5724

Moscow. Universitet.

Voprosy mekhaniki; sbornik statey. vyp. 193. (Problems of Mechanics; Collection of Articles. no. 193) [Moscow] Izd-vo Mos. univ., 1961. 169 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

Ed.: L. N. Sretenskiy, Corresponding Member, Academy of Sciences USSR. Ed. (This vol.): I. Z. Pirogov; Tech. Ed.: G. I. Georgiyeva.

PURPOSE: This book is intended for engineers and scientific workers interested in the mechanics of materials, fluid dynamics, and radiation.

COVERAGE: The book contains articles on problems of algebra, non-linear programming, motion of particles, elasticity, stress-strain, vibration, and flow of liquids. No personalities are mentioned. References follow all but one article.

Card 1/3

Problems of Mechanics; (Cont.)

SOV/5724

TABLE OF CONTENTS:

Karmishin, A. V., and R. S. Sholukova. Some Formulas for Reducing Algebraic Determinations to Polynominal Forms	3
Karmishin, A. V. New Analogues Between Problems of Motion of a Particle and Problems of Equilibrium of a Perfectly Flexible Thread	11
Korolev, V. I., I. G. Smirnov, and V. N. Sokopov. Investigating the Stability of a Cylindrical Shell Beyond the Limit of Elasticity	22
Moskvitin, V. V. Elastic-Plastic Strains After a Large Number of Cyclic Stresses	42
Ogibalov, P. M., and I. M. Tyuneyeva. Full Static Diagrams of the Stress-Strain of Steel Cables	52

Card 2/3

Problems of Mechanics; (Cont.)	SOV/5724	
Rodzevich, I. A. On the Computation of Multilayer Elastic Foundations		57
Savinov, G. V. Use of Electric Modeling Layout in Problems of Nonlinear Programming		68
Popov, S. G., and G. A. Savitskiy. On Aerodynamic Forces Acting on a Circular Cylinder Oscillating in a Flow		72
Prokof'yev, V. A. Infinitesimal Forced Waves in a Radiating Barotropic Medium		93
Prokof'yev, V. A. Distribution of Free Weak Plane Waves in a Radiating Viscous Gas		131
Kurlovich, Ye. A. Motion of a Sphere Under the Surface of a Heavy Liquid		157
AVAILABLE: Library of Congress		
Card 3/3		
	AC/dfk/ec	
	11-6-61	

POPOV, S.G., red.; KORSOYUTSKAYA, P.Ya., red.; POTAPENKOVA, Ye.S.,
tekh. red.

[Some problems in modern aerodynamics] Nekotorye zadachi sov-
remennoi aerodinamiki; sbornik statei. Moskva, Izd-vo inostr.
lit-ry, 1961. 99 p. (MIRA 15:8)
(Aerodynamics) (Plasma (Ionized gases))
(Magnetohydrodynamics)

S/124/62/000/004/007/030
D251/D301

24.7300

AUTHORS: Popov, S. G. and Savitskiy, G. A.
TITLE: Aerodynamic forces acting on a circular cylinder with its oscillations in a stream
PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1962, 31-32, abstract 4B175 (Uch. zap. MGU, 1961, no. 193, 72-92)

TEXT: Results are obtained in the theoretical and experimental investigations of the non-stationary aerodynamic forces acting on a circular cylinder with its oscillations in a stream. In the experimental part of the investigation, conducted in an aerodynamic tunnel with closed working part, the problem was posed of determining the dependence of the non-stationary aerodynamic forces acting on a circular cylinder in the presence of its transverse oscillations in a current on the numbers of Reynolds and Strukhal'. The variable forces were calculated with the aid of a battery of U-shaped spirit manometers, fixing the pressures at 30 points of the surface of the cylinder. The measuring system led to a dynamic ca-

Card 1/2

POPOV, S.G., dotsent

Longitudinal pull of the thread by the air stream. Tekst.prom. 21
no.5:57-59 My '61. (MIRA 15:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Textile machinery--aerodynamics)

POPOV, S.G., dotsent, kand.fiz.-matemat.nauk; BAL'CHENKO, V.I., student-diplomnik; NIKITINA, G.V., student-diplomnik

Horizontal tensing of the thread by air currents. Tekst. prom.
21 no.10:47-49 O '61. (MIRA 14:10)

1. Moskovskiy gosudarstvennyy universitet.
(Yarn--Testing)

POPOV, S.G., nauchnyy sotrudnik, dotsent; KOMAROV, A.M., nauchnyy sotrudnik,
... ..absistent SLUCHANOVSKAYA, Z.P.

Aerodynamic resistance of textile threads. Tekst.prom. 22 no.4:
77-83 Ap '62. (MIRA 15:6)

1. Mekhaniko-matematicheskii fakul'tet Moskovskogo gosudarstvennogo
universiteta.

(Thread--Testing)

POPOV, S.G., dotsent; KOMAROV, A.M., assistent; SLUCHANOVSKAYA, Z.P.,
mladshiy nauchnyy sotrudnik

Aerodynamic characteristics of ring spinning machine travelers.
Tekst.prom. 22 no.11:77-82 N '62. (MIRA 15:11)

1. Sotrudniki kafedry aeromekhaniki i gazovoy dinamiki Moskovskogo
gosudarstvennogo universiteta.
(Spinning machinery)

POPOV, S.G., dotsent; YAKOVLEV, L.S., student

Lengthwise drawing of the yarn by the air flow. Tekst. prom. 23
no.9:82-86 S '63. (MIRA 16:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Textile machinery) (Aerodynamics)

24c

E h7304-55 EW(m)/EPA(u)-2/EWA(m)-2 Pab-10 IJP(c) GS

ACCESSION NR: AT5007321

S/0000/64/000/000/0274/0287

76
64
B+

AUTHOR: Bayer, V. N.; Blinov, G. A.; Bondarenko, L. N.; Yerozolimskiy, B. G.;
Korobeynikov, I. S.; Mironov, Ye. S.; Naumov, A. A.; Onuchin, A. P.; Panasyuk,
V. S.; Popov, S. G.; Sidorov, V. A.; Sil'vestrov, G. I.; Skrinskiy, A. N.;
Khabakhpashev, A. G.; Auslender, V. L.; Kiselev, A. V.; Kushnirenko, Ye. A.;
Livshits, A. A.; Rodionov, S. N.; Synakh, V. S.; Yudin, L. I.; Abramyan, Ye. A.;
Vasserman, S. B.; Vechezlavov, V. V.; Dimov, G. I.; Papadichev, V. A.; Protopopov,
I. Ya.; Budker, G. I.

TITLE: Colliding electron-electron, positron-electron, and proton-proton beams

SOURCE: International Conference on High Energy Accelerators, Dubna, 1963.
Trudy. Moscow, Atomizdat, 1964, 274-287

TOPIC TAGS: high energy interaction, high energy plasma, particle physics, particle beam, charged particle beam

ABSTRACT: In the Institute of Nuclear Physics, Siberian Department, Academy of Sciences SSSR, programs on high-energy particle physics are mainly concerned with work on colliding charged particle beams. The Institute considers it unsuitable

Card 1/5

1.7304-51
ACCESSION NR: AT5007921

for its purpose to install huge accelerators whose construction requires large resources outlaid and long time. For work on colliding electron-electron, positron-electron, and proton-proton beams, three installations are being built, which are in various stages of readiness. Work on colliding electron beams was conducted at the institute (then a laboratory of the Institute of Atomic Energy named I. V. Kurchatov) in the Fall of 1956, after Kerst's report on accelerators with colliding proton beams of the FFAG type. By that time Soviet scientists had already acquired some experience in obtaining large electron currents; in particular, the mentioned laboratory had installed and then abandoned a device for the spiral storage of electrons (G. I. Budker and A. A. Naumov, CERN Symposium, 1, 76 (1956)), by which, subsequently, circulating currents of the order of 100 amperes were obtained. In 1957 two variants of this device were considered at the same time. The first one consisted of two accelerators with spiral storage and subsequent transition of the particles to synchrotron state in comparatively narrow paths. The second one had storage rings with constant magnetic field and frequent external injection because of the damping of the oscillations under the action of radiation. The first variant was more cumbersome; the second variant contained an element not developed at that time, namely a 100-kilovolt commutator of 10 kilo-amperes with nanosecond front. At the end of 1957, the first positive results were obtained

Card 2/5

L 47304-65

ACCESSION NR: AT5007921

with a packing discharger of 100 kilovolts, and work stopped on the variant with storage rings. Originally it was proposed to set up two devices: VEP-1 of 2×130 Mev energy, and VEP-2 of 2×500 Mev energy. The VEP-1 was considered as an actual model of an accelerator and as a device for conducting initial experiments at low energies. After the Panofsky report in 1958 on his work with colliding electron beams conducted in his laboratory at Stanford, construction ceased on 500-Mev storage paths and work was continued on the 2×130 -Mev installation. Instead of work on colliding electron beams with energies of 500 Mev, work at the end of 1958 was conducted with colliding positron-electron beams and the planning of the VEPP-2 device was begun, whose main elements are a strong-current electron accelerator and a high-vacuum storage path of 700 Mev energy. At the present time the VEP-1 and VEPP-2 are installed in Novosibirsk. The VEP-1 is in a state of neglect, but at the end of 1964 experiments will be begun with it. Installation of the VEPP-2 has been completed. To obtain a marked effect from the application of colliding proton beams, an accelerator is needed with an energy of at least 10 Gev. Since the ordinary accelerator at such energies is a very bulky machine, it was decided to combine the idea of colliding proton beams with the creation of an iron-less impulse accelerator with very large fields and a neutralized central busbar. This latter work of creating such a machine was reported by the authors at a Moscow conference

Card 3/5

L 47304-65
ACCESSION NR: AT5007921

held in 1956. The presence of a field with two directions in an iron-less accelerator with central busbar permits the acceleration of protons toward opposite sides in one machine, which makes possible the collision of protons in case of a suitable race-track. At the present time the Institute is developing a proton device with a magnetic field of about 200 kilogauss and radius of 2 meters for a particle energy of 12 Gev in the beam (equivalent energy is around 300Gev). Tests are being conducted on models, and an effective method of injection by overcharging of negative ions is under study. Also under development are an impulse electric power supply system of 100 million joules capacity and an hf power supply. Since 1958 the Institute has been conducting theoretical investigations on the limits of applicability of quantum electrodynamics [V. N. Bayyer, ZhETF, 37, 1490 (1959), and UFN, 78, 619 (1962)] for the calculation of the radiational corrections to the electrodynamic cross-sections [V. N. Bayyer and S. A. Kheyfets, ZhETF 40, 613-715 (1961) and Nuclear Physics (in print)], and on other problems of high-energy particle physics that are connected with the preparation of experiments on colliding beams [V. N. Bayyer, I. B. Khriplovich, V. V. Sokolov, and V. S. Synakh, in ZhTF, 1961]. The present report takes up under the mentioned three main headings the following pertinent topics: the accelerator-injection, storage paths, electron-optical channel,

Card 4/5

L 47304-65

ACCESSION NR: AT5007921

Input and output system, experiments on storage, proposed work, experimental set-up, physical layout of magnets, power supply, etc. Orig. art. has: 8 figures.

ASSOCIATION: Institut yadernoy fiziki SO AN SSSR (Institute of Nuclear Physics, SO AN SSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: EE, NP

NO REF SOV: 012

OTHER: 003

ML
Card 5/5

L 4237-66 EWT(m)/EPA(w)-2/EWA(m)-2 IJP(c) OS
ACCESSION NR: AT5007979 S/0000/64/000/000/1065/1072

51
BT

AUTHOR: Abramyan, Ye. A.; Bender, I. Ye.; Bondarenko, L. N.; Budker, G. I.;
Glagolev, G. B.; Kadymov, A. Kh.; Meshkov, I. N.; Naumov, A. A.; Pal'chikov, V.
Ye.; Panasyuk, V. S.; Popov, S. G.; Protopopov, I. Ya.; Rodionov, Yu. I.;
Samoylov, I. M.; Skriskiy, A. N.; Yudin, L. I.; Kon'kov, N. G.; Mostovoy, Yu. A.;
Nezhevenko, O. A.; Ostreyko, G. N.; Petrov, V. V.; Sokolov, A. A.; Timoshin, I. Ye.

TITLE: Work on the strong-current accelerators of the Nuclear Physics Institute,
SO AN SSSR. (I) Strong-current pulse accelerators with spiral storage of the elec-
trons. (II) Strong-current accelerators with one-revolution capture of the in-
jected electrons

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy.
Moscow, Atomizdat, 1964, 1065-1072

TOPIC TAGS: high energy accelerator, electron accelerator, electron beam, betatron,
plasma

ABSTRACT: The work on developing strong-current electron ring accelerators
was begun in 1965 by the authors at the Nuclear Physics Institute, Siberian Depart-
ment, Academy of Sciences SSSR, with the object of studying the possibility of

Card 1/3

L 4237-66

ACCESSION NR: AT5007979

forming relativistic stabilized beams. In the laboratories of the Institute experimental studies were carried out on the four methods for obtaining large ring currents of relativistic electrons: (1) spiral method of storing the electrons in installations of the betatron type with subsequent betatron synchrotron acceleration (Budker G. I. CERN Symposium 1, 68 (1956)); (2) obtaining of limiting electron currents by means of the injection of electrons from a strong-current linear accelerator into a ring chamber of large aperture with subsequent synchrotron acceleration; (3) storage of electrons in tracks (parking orbits) with constant magnetic field by means of the multiple injection of electrons from another less strong-current accelerator; this method is utilized for the storage of electrons and positrons in experiments with colliding beams (expounded in detail by G. I. Budker in the present collection, p. 274); (4) obtaining of large electron currents by means of the acceleration of electrons by a ring plasma. The present report discusses the first two methods under the following topics: (I) pulsed iron-less betatron with preliminary charge storage (B-2 device); strong-current pulsed synchrotron B-2S; pulsed strong-current betatron with spiral storage (B-3 device). (II) iron-less one-turn strong-current synchrotron (BSB); strong-current pulsed synchrotron B-3M. Orig. art. has: 7 figures.

Card 2/3

L 4237-66

ACCESSION NR: AT5007979

ASSOCIATION: Institut yadernoy fiziki SO AN SSSR (Nuclear Physics Institute,
SO AN SSSR)

SUBMITTED: 26May65

ENCL: 00

SUB CODE: NP.

NO REF SOV: 001

OTHER: 001

Ch
Card 3/3

L 07063-67 EWT(m) IJP(c)

ACC NR: AF6021621

(N)

SOURCE CODE: UR/0089/66/020/003/0210/0213

AUTHOR: Auslender, V. L.; Karliner, M. M.; Naumov, A. A.; Popov, S. G.; Skriskiy, A. N.; Shekhtman, I. A.

58
51
B

ORG: none

TITLE: Phase instability of an intense electron beam in a storage ring

19

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 210-213

TOPIC TAGS: storage ring, electron beam, automatic stabilization equipment, phase modulation, electron accelerator/ VEPP-2 storage ring

ABSTRACT: The authors consider radial-phase self-oscillations in storage rings at large beam currents. Conditions for the stability are obtained in the case of arbitrary frequency characteristics of the accelerating system. It is shown that stability conditions derived in earlier studies, stating that it is sufficient to tune the accelerating resonator to a frequency somewhat lower than the generator frequency in order to prevent self excitation of phase oscillations at arbitrarily large beam currents, are not borne out in practice, and that other factors must be taken into account in a more rigorous stability analysis. Allowance is also made for the interaction between the beam and the accelerating system and other elements of the vacuum chamber at harmonics of the electron-bunch revolution frequency. Some results of an experimental investigation of self excitation of phase oscillations in the storage rings of the Institute of Nuclear Physics of the Siberian Department of AN SSSR are

UDC: 621.384.60

Card 1/2

L. 07063-577

ACC NR: AP6021621

presented (VEPP-2). An example where the instability due to the eighteenth harmonic was eliminated is described. The authors thank G. I. Budker for continuous interest and B. A. Lazarenko, A. A. Litvinov, I. K. Sedlyarov, T. P. Starodubtseva, Ye. A. Pirushkin, and G. M. Tumaykin for help with the experiments. Orig. art. has: 5 figures and 14 formulas.

SUB CODE: 20/ SUBM DATE: 22Nov65/ ORIG REF: 004/ OTH REF: 001

Card 2/2YC

E 05822-67 FWT(m) IJI(=) GD

ACC NR: AT6031467 SOURCE CODE: UR/0000/65/000/000/0001/0014 (3)

AUTHOR: Budker, G. I. ; Kushnirenko, Ye. A. ; Skrinskiy, A. N. ; Naumov, A. A. ; Onuchin, A. P. ; Popov, S. G. ; Sidorov, V. A. ; Tumaykin, G. M.

ORG: none

TITLE: Present state of research on the VEP-1 electronic storage ring

SOURCE: AN SSSR. Sibirskoye otdeleniye. Institut yadernoy fiziki. Doklady, 1965. Sostoyaniye rabot na elektronnom nakopitele VEP-I, 1-14

TOPIC TAGS: synchrotron, electron scattering, electron beam/VEP-1 electronic storage ring, B-2C electronic synchrotron

ABSTRACT: The VEP-1 electronic storage ring consists basically of two paired high-vacuum magnetic tracks, 43 cm in radius, with a 3 x 4 cm² aperture a special B-2C electronic synchrotron, an electronic-optic channel, and a single thread system to extract the electron beam from the accelerator and insert it into the storage ring. This storage ring was designed for experiments in electron scattering with electrons of an energy of 2 x 130 Mev. It is now being used in

Card 1/2

50
B11

L 05822-67

ACC NR: AT6031467

experiments with electron scattering in a 45—90 degree angle. Descriptions are given of the installation, the process of electron storage, and radiance measurements. The results of the first experiments on electron scattering show that divergences from the reference curve of the Moller electron scattering do not exceed the statistical error. Orig. art. has: 8 figures:

SUB CODE: 09, 20/ SUBM DATE: none/ ORIG REF: 005/

kh

Card 2/2

L 07064-67 ENT(m) IJP(c)

ACC NR: AF6021622

(N)

SOURCE CODE: UR/0089/66/020/003/0213/0217

AUTHOR: Auslender, V. L.; Kulipanov, G. N.; Mishnev, S. I.; Naumov, A. A.; Popov, S. G.; Skrinskiy, A. N.; Tumaykin, G. M.

ORG: none

TITLE: Experimental data on the interaction of beams during collision

46
B

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 213-217

TOPIC TAGS: ^{ELECTRON BEAM} electron collision, storage ring, positron/ VEP-1 storage ring, VEPP-2 storage ring

ABSTRACT: The authors present a preliminary review of results of beam collision effects, obtained with the VEP-1 (electron-electron) storage ring and the VEPP-2 (positron-electron) storage ring. The installations and the main parameters of the beams in the storage rings are presented elsewhere (Atomnaya energiya, v. 19, 498 and 502, 1965; E. I. Zinin et al., present source, p. 220 [Acc. Nr. AF6021624]). Most of the data pertain to the VEP-1 storage ring at colliding beam energies of 43 Mev. The data presented include the diagram of resonances in the working region of the magnetic field, photographs of different spreading effects in the beams, the distribution of the densities of the particles in one beam with and without the collisions with the other beam, the dependence of the electron lifetime on the revolution frequency and on the colliding-beam current, and the dependence of the partial electron lifetime on various factors. The phenomena in the VEPP-2 storage ring were essential.

Card 1/2

UDC: 621.384.612.4

L 07064-67

ACC NR: AP6021622

0

Is similar to those in the VEP-1. Orig. art. has: 8 figures.

SUB CODE: 20/ SUBM DATE: 22Nov65/ ORIG REF: 003

Card 2/2 LC

L 07062-67 EWT(a) LJP(c)
ACC NR: AF6021624

SOURCE CODE: UR/0089/66/020/003/0220/0223

AUTHOR: Zinin, E. I.; Korobeynikov, L. S.; Kulipanov, G. N.; Lazarenko, B. L.; Matveyev, Yu. G.; Popov, S. G.; Skrinskiy, A. N.; Starodubtseva, T. P.; Tumaykin, G. M.

ORG: none

TITLE: Control and regulation system for the electron beam parameters in the VEP-1 electron-electron storage ring

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 220-223

TOPIC TAGS: electron beam, electron accelerator, storage ring, plasmoid acceleration, synchrotron radiation

ABSTRACT: The authors describe briefly the main systems used for different stages of adjustment and physical research of the VEP-1 assembly, first described by G. I. Budker et al. (Atomnaya energiya v. 19, 498, 1965). The parameters investigated were the magnitude of the injected current, the angular divergence and transverse dimensions of the beam, its energy and energy spread, and the position and angle at the exit from the electron-optical channel. The number of injected particles and the phase difference between the input and output were measured with lead probes. The first revolutions of the captured current were observed by recording the synchrotron radiation with a photomultiplier. The captured and stored currents were also measured with the aid of the synchrotron radiation. The radial position of the orbits was controlled either by regulating their radii by changing the frequency of the accelerating

Card 1/2

UDC: 621.384.6

L 07062-67

ACC NR: AF6021624

0
voltage or by producing azimuthal modifications of the magnetic field with additional turns. The positions of the orbits at the collision location were roughly monitored by means of an optical television system, and more accurately by a remotely controlled diaphragm located at the place of encounter. The systems used to measure the luminosity, to control the radial and azimuthal positions of the plasmoids, to determine the phase dimensions of the plasmoids, and to monitor and study various coherence effects are briefly described. The lifetime of the beam was monitored continuously with a special electronic system which determined the logarithmic derivative of a signal proportional to the current in the track. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 22Nov65/ ORIG REF: 001/ OTH REF: 001

Card 2/2X

I. ORU34-57 EST(1)/PCO GW
ACC NR: AT6035575

SOURCE CODE: UR/3152/66/000/012/0110/0116

48
39

AUTHOR: Popov, S. G..

ORG: none

TITLE: Marine magnetic survey in the Caspian and Black Seas

SOURCE: Razvedochnaya geofizika, no. 12, 1966, 110-116

TOPIC TAGS: magnetic anomaly, shipborne magnetic detection, airborne magnetic detection, magnetic detection equipment, earth magnetic field, strong magnetic field, magnetic field intensity, magnetometer, geomagnetic measurement, marine magnetic survey, oceanographic expedition, oceanography, oceanographic instrument

ABSTRACT: The author discusses the development of equipment used in and the results of magnetic test surveys performed in the Caspian Sea in 1960 and 1962. The article deals primarily with the development of instrument containers (see Fig. 1) for a ship-towed magnetometer. In the 1960 survey, a nonmagnetic metal container 40 cm in diameter and weighing 120 kg was used; however, in 1962, a new container 110 mm in diameter was designed using poly(vinyl chloride). Cross-sectional views of the fittings are given in the article, and the design and materials are discussed in detail. Towing tests at 3-4 km showed that the 20-kg container stayed outboard of the ship's track. At 10 km or more, a boom arrangement is recommended. In 1963, two new containers, 110 and 81 mm in diameter, were developed having 6-mm-thick re-

Card 1/3

L 08534-67

ACC NR: AT6035575

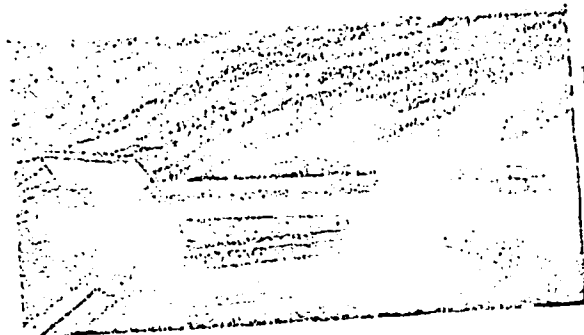


Fig. 1. Magnetometer container manufactured in 1962.

movable textolite fins secured with 2.5-mm-thick sheet-brass reinforcements. When towed, the fins are set for 1—1.5 m, and the towing cable is supported by foam-plastic floats attached at 5-m intervals along the cable, with cable scope being twice the ship's length. When stopped, the container is floated out 50 m from the ship for a measurement. Two plotted charts comparing the results of a 1952 aerial magnetic survey with the 1960 and 1962 marine surveys are given. Three profiles running near Krasnovodsk and crossing the northern wing of the south Caspian depression showed strong magnetic anomalies (up to 900 γ) which weakened towards the south. Results of the 1962 test survey showed that accuracy achieved in repeated measurements was 7.7 γ . It is stated that the tests demonstrated the suitability of

Card 2/3

L 08534-67

ACC NR: AT6035575

the equipment and technique described for regional oceanographic investigations.
Orig. art. has: 5 figures.

SUB CODE: 08/ SUBM DATE: none/ ATD PRESS: 5103

Card 3/3 *eqk*

L 25792-66 -- EWT(m) IJP(c)

ACC NR: AP6016376

SOURCE CODE: UR/0089/65/019/006/0498/0502

AUTHOR: Budker, G. I.; Kushnirenko, N. A.; Naumov, A. A.; Onuchin, A. P.;
Popov, S. G.; Sidorov, V. A.; Skriniski, A. N.; Tumaykin, G. M.40
B

ORG: none

TITLE: Status report on the VEP-1 electron storage ring

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 498-502

TOPIC TAGS: electron scattering, synchrotron, electron energy/B-25 synchrotron

ABSTRACT: This paper updates the report given at the International Conference on Accelerators held in Dubna in 1963 and describes the work carried out since that time. In the last two years the following work has been accomplished: accumulation of electrons simultaneously on two paths, study of certain interaction effects between two beams, and measurement of the luminance of the machine from the electron-electron scattering in the range of angles from 45 to 90 deg. The VEP-1 storage ring, designed to operate at electron-electron energy of 2 X 130 Mev, is connected to a B-25 synchrotron, as shown in a schematic diagram. The magnetic paths are 43 cm in dia and the aperture is 3 X 4 cm. All experiments were made at electron energies of 43 Mev and resonator voltage of 5 kv. The average injection current pulse did not exceed 10 ma, although more than 100 ma were available. Injection mode stability left much to be desired. Results of the experiments are shown in a series of graphs. Further experiments are planned at electron energies of 100 Mev. Orig. art. has 8 figures.

2

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 005

Card 1/1 CC

[JPRS]

L 29873-66 EWT(1)/EWP(m) JAJ

ACC NR: AP6013220

SOURCE CODE: UR/0421/66/000/002/0156/0159

AUTHOR: Popov, S. G. (Moscow)

47

ORG: none

B

TITLE: The relationship between the Strouhal and Reynolds numbers in plane flow past a round cylinder

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 156-159

TOPIC TAGS: Reynolds number, Strouhal number, fluid flow

ABSTRACT: The article is of the review type and consists of generalizations and correlations of data already existing in the literature. It first discusses the experimental data for a cylinder fixed in the flow. These data are illustrated by a plot of the Strouhal number against the Reynolds number. From these data it follows that, in the interval $2.5 \times 10^{-2} < R < 2.5 \times 10^2$, the Strouhal number $S \approx 0.2$. Similar correlations, always based on literature data, are given for other ranges of the Reynolds number, and for different initial conditions and geometries. Orig. art. has: 8 formulas and 4 figures.

SUB CODE: 20/ SUBM DATE: 20Jul65/ ORIG REF: 003/ OTH REF: 021

Card 1/1 ✓

POPOV, S. G.

Results of magnetic measurements in the transitional zone between the Asian continent and the Pacific Ocean.

Title: Conference on problems of marine magnetic surveys (held in Moscow in April 1962.

Source: Okeanologiya, v. 3, no. 4, 1963, p. 752

POPOV, S. I., Khisin, Ya. I.

Piroliz produktov polukoksovaniya gl'oskikh slantsev, goryuchiye slantsy, 1935,
NO 6, 69.

SO: Goryuchiye slantsy, No. 1934-35

TN .871
.374