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CIA-RDP86-00513R001548720019-4

On the problem of breaking tests ...

25990x 26016 S/135/61/000/008/005/011 A006/A101

strength of glue-welded specimens exceeded almost by a factor of 2 that of welded Х specimens of the same design and by 83% that of glue-welded standard cross-shaped specimens. The strength of the new welded specimens was by 30% higher than that of standard cross-shaped specimens and the strength of the new riveted specimens was by 10 - 12% below that of riveted standard cross-shaped specimens. A particularly high difference was observed during uniform and non-uniform break of glued specimens. Experiments confirmed the conception on the high strength of glued joints under conditions of uniform break, exceeding even that of glue-welded joints, and on the very low strength of these joints during non-uniform break. The excoriments lead to the following conclusions: The breaking force of welded, gluewelded and riveted specimens depend on their rigidity and the system of loading. Ine opinion of some authors that the glue layer in a glue-welded joint does not increase its breaking strength is not correct. In structures whose components are exposed to uniform break, the use of glue-welded joints is efficient to the same degree as in structure parts subjected to shearing stresses. There are 2 tables and 4 figures.

Card 2/2

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CIA-RDP86-00513R001548720019-4

2/125/62/000/004/003/013 2040/2113

12200

AVPHCH: Shavyrin, V.H. (Moscow)

TTTLD: Utrangth of glue-welded joints

Fillibili: Avtomaticheshaya overha, no. 4, 1902, 16-22

Filly: Solves in $\beta_{\rm e}$ [6 s] (D16.7) duralumin produced by resistance welding soubled with special new [84-1 (VA-1) glue were tested for strength and proved better than all the riveted, welded or glued joints tested for long variable. At 20°3, the strength was 150 kgf/cm² in shearing and 740 kgf/cm² and 20 kgf/sm² respectively in tension with even and uneven loading; the intigue limit was 3.5 kgf/cm² which is three times higher than in normal value, and the impact strength was 2.6 times greater than the resistance of welded joints. The new glue was developed jointly by the VIAM and NIFM institutes and can be used for structures working at not higher than 150°C. In the experiments, joints were made in 1 to 2 mm sheets, telescopically

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ACCESSION NR AN		BOOK EXPLOITATIO		s/ 46	
'andidate d	of Technical S	ch (Engineer); Shavyri ciences); Andrevev. N ciences); Fel'dman, Le	kolay Khristoforov	.ch	
toi, betfew-welted	nts in mechan	ical engineering (Kley [Izd.vo "Tekhnika"],]	vesvarnyye soyedine	eniya v	
.,600 copies	printed	pot welding, quality			
FURPOSE AND CON work on the use	ERAGE: The b	ook reports the result ed joints in structure	ts of scientific and es made from high-s	d experimental brength	
aluminum alloys glue-welded jot ion of surface	Basic attents, developm for welding.	ntion is given to the ent of glue composition anticorrosion protect	technology of fabri on, glue application lon of glue-welded	icating n, preparat- joints,	
mechanization a	ind automation cators. The	of the glue welding p book includes a compar- s under static and cyc	process, and its tec rison of the streng	chnical- th of	
of normal and e designers, and	levated tempe	ratures. The book is n various branches of	intended for engine	iere'	
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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP8

CIA-RDP86-00513R001548720019-4

ACC NR. AT7007351

SOURCE CODE: UR/0000/66/000/000/0099/0105

AUTHOR: Shavyrin, V. N.

ORG: None

TITLE: Mechanizing the process of making glued and welded joints

(A)

SOURCE: Soveshchaniye po avtomatizatsii protsessov mashinostroyeniya. 4th, 1964. Avtomatizatsiya protsessov svarki i obrabotki davleniyem (Automation of welding and pressure treatment processes); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1966, 99-105

TOPIC TAGS: glue welding, industrial automation, welding technology, automatic welding

ABSTRACT: A technological process has been developed for making joints by a combination of resistance spot welding and cementing of metal structural elements. The addition of special structural glue to the joint increases the strength characteristics and provides anticorrosion protection. Two methods are used for making glued and welded joints: 1. conventional welding followed by application of the glue (penetration by capillary forces) and 2. welding over a fresh layer of liquid or paste cement. The author describes the universal VUS-1 welding manipulator designed for mechanization of the spot welding process on large structures with compound curvature. This manipulator lines up the panels normal to the electrodes of the welder, automatically moves

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ACC NR: AT7007351

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Card

the workpiece through the proper spacing along the seam and makes tack welds at these points. An eight-channel programmed control unit for this manipulator is also described. Closed-circuit TV may be used for remote control. The operation of the BPUl programmed regulator for automatically welding elements of varying thickness is discussed. Mechanization of the electrode cleaning process is considered and it is pointed out that the GZP dressing unit based on the UD-2M angle drill may be used for solving this problem. Finally, an automatic machine for applying the cement to the welded joint (capillary method) is described. Orig. art. has: 2 figures.

SUB CODE: 13/ SUBM DATE: None

APPROVED FOR RELEASE: 08/09/2001



CIA-RDP86-00513R001548720019-4



APPROVED FOR RELEASE: 08/09/2001

AUTHOR:	Shavyrina, A.V.	SOV/132-59-1-5/18
TITLE:	The Utilization of Geobotanical Symp Water on Virgin Lands of the Kustana zovaniye geobotanicheskikh priznakov tselinnykh zemlyakh Kustanayskoy obl	ay Oblast (Ispol'- v pri poiskakh vody na
TENIODICAL:	Razvedka i okhrana nedr, 1959, Nr 1.	, pp 23-24 (UCSR)
ABCTRACT:	Numerous shallow depressions occuring of the Kustanay oblast very often a ground water is to be found there a especially when the quack grass (Age other moisture-loving plants are gree depressions. There are three Soviet	indicate that under- t a slight depth. ropyrum repens) and owing in these
ASSOCIATION:	VSEGINGEO	
Card 1/1		

SHAVYRINA, A.V.,

Possibility of predicting the mineralization of underground water from the chlorine content of phreatophyte plants. Sov. geol. 4 no.3:111-113 Mr '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

(Phreatophytes) (Water, Underground)

APPROVED FOR RELEASE: 08/09/2001

VOSTOKOVA, Ye.A.; SHAVYRINA, A.V.; LANICHEVA, S.G.; VIKTOROV, S.V., doktor geogr. nauk, nauchnyy red.; FEDGROVA, L.N., red.izdva; IYERUSALIMSKAYA, Ye.S., tekhn. red.

> [Handbook on indicator plants for ground waters and soils in southern deserts of the U.S.S.R.]Spravochnik po rasteniiamindikatoram gruntovykh vod i pochvo-gruntov dlia iuzhnykh pustyn' SSSR. Poč red. S.V.Viktorova. Moskva, Gosgeoltekhizdat, 1962. 123 p. plates. (MIRA 15:12) (Hussia, Southern--Indicator plants) (Hussia, Southern--Desert flora)

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SHAVYRINA, A.V.

Possibility of using the geobotanical method in the search of fresh water in southern deserts.Trudy MOIP 8:27-31 164. (MIRA 17:12)

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CIA-RDP86-00513R001548720019-4



AFBUZOV, Yu.A.: FEDYUKINA, M.L.; SHAVYRINA, V.V.			
Dienes Interaction of di-(cyclohexene-l-yi-l), 2, 3-dimethyl-butadiene-l, 3 and 1-phenyl- Interaction of di-(cyclohexene-l-yi-l), 2, 3-dimethyl-butadiene-l, 3 and 1-phenyl-			
Interaction of di-(cyclohexene-l-yi-l), 2, 3-dimethyl-butadiene-1, 9 dna 2 P butadiene-l, 3 with nitroso compounds. Uch. zap. Mosk. un., No. 132, 1950.			
Monthly List of Russian Accessions. Library of Congress October 1952. UNCLASSIFIED.			

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13.1998年至11日1月1日日本市场的建筑和公司和公司和中国中国中国中国中国

MUSE/Checletry - Diene Southeses Mitrose Compounds

May/Jun 52

"The Reaction Letween Diene Hydrocarbons and Nitroso Ochgounds. Addition of 2, 3-Dimethylbutadiene-1, 3, 1-Thenylbutadiene-1, 3, and Di-(Cyclohexene-1-y1-1) to Aromatic Nitroso Compounds," Yu. A. Arbuzov, N. L. Fedyukina, V. V. Shavyrina, H. I. Shepeleve, Inst of Org Chem, Acad Sci USUR; Moscaw State U imeni M. V. Lomonosov

"In Ak Laure, Oldel Khim Mauk" No 3, op 50c-569

Studied the reactions of 2, 3-dimethylbutadiene-1, 3, trans-1-phenylbutadieno-1, 3 and di-(cyclohexene-1-yl-1) with aromatic nitroso coupds. Obtained the addn pro ucts of 2, 3-dimethylbutadiene-1, 3 with nitrosolenzene and pnitrosotoluene, or trans-1-phenylbutadiene-1, 3 with nitrosolenzene, o-nitrosotoluene and p-nitrosotoluene, and of di-(cyclohexene-1-yl-1) with nitrosolenzene and p-nitrosotoluene.

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           CHENCHIKOVA, A.P.; SHAVYRINA, V.V.
                   Some data on the sporocidal and bactericidal effects of 1-3-dichloro-
                   5,5-dimethylhydantion. Zhur.mikrobiol.epid. i immun. 28 no.8:78-81
                                                                               (MIRA 11:2)
                   A; 157.
                   1. Iz TSentral'nogo dezinfektsionnogo instituta.
                            (HYDANTOINS, effects,
                               1,3-dichloro-5,5-dimethyl hydantion, bactericidal &
                               sporocidal eff. (Rus))
                            (ANTISEPTICS, effects,
                               same)
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anı I. :	eral and Specialized Zoology. Insects. Harmful Insects Acarids. Classical esthods in the Control of Harmful ests am Acarids.	P
Add Jour	: Nof Thur - Biol., No 13, 1953, No. 02929	
Author Inst Title	: Shnaydor, D. V. <u>: Shavyrina, V. V.</u> : Control Scientific Rosearch Institute for Disinfectants : Insecticide Properties of Metaxychlor	
Orig Pub	: Tr. Tsentr. ni. dezinfekts. in-ta, 1957, 79p. 10, 211-216	
Abstract	: No abstract given	

Card 1/1

HANYRINA, V. V. APPROVED FOR RELEASE c08/09/2001 Class P USSR General Release Chemical Method of Consects P and Arachnids. Chemical Method of Consects P Arachnids P Arachnids. Chemical Method of Consects P Arachnids P Harmful Insects and Arachnids. Abs Jour: Ref Zhur-Biol., No 21, 1958, 96503. : Vashkov, V. I.; Klechetova, A. M.; Shavyrina, V. V.;/Shilova, J. A.; and Kalugina, T. I. : Central Scientific Research Disinfection Inst-Author Inst : The Activator's DMC Influence on the Insecticide Effectiveness of DDT Preparations. Title Orig Pub: Tr. Tsentr. n.-i. desinfects. in-ta, 1957, vyp 10, 198-204. Abstract: Then 1-20% of the activator DMC (4.41-dichlordiphenylmethylcarbinol) is added to DDT the effect on the DDT preparations against flies, bugs, lice and roaches is accelerated and the

Card 1/2

CIA-RDP86-00513R001548720019-4

17(2,12)

30V/16-59-6-17/46

AUTHORS Chenchikova, E.P. and Shavyrina, V.V.

IITLE. Some Data on the Sporicidal and Bactericidal Properties of Trichlorisocyanuric Acid

- PERIODICAL- Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 6. pp 82-86 (USSR)
- ABSTRACT: The authors performed tests to study the bactericidal and sporicidal properties of trichlorisocyanuric acid with a view to its possible use as a disinfectant. The investigations were performed with cambric test objects. The microbes were: Staphylococcus aureus, Escherichia coli, and a spore culture of Anthrax. Chloramine was used as the reference disinfectant. The results showed that trichlorisocyanuric acid had a bactericidal effect on Staphylococcus aureus 50 times greater than chloramine, and on Escherichia coli - 10 times greater. A 0.3% solution of trichlorisocyanuric acid killed anthrax spores in 10-15 minutes, whereas 10% chloramine showed no disinfecting effects in 6 hours action. Trichlorisocyanuric acid lost its active thlorine more ouickly than chloramine but less quickly than chloride of lime and calcium hypochloride. However, solutions of it provei less stable than.

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	307/16-59-6-17/46	
Some Data on t	he Sporicidal and Bactericidal Properties of Trichlorisocyanuric Acid	
	any of the chlorous solutions used for disinfection. A fise in temperature boosted the efficacy of the trichlorisocvanuric and solutions on both the spore and the vegetative forms - G.M. Ginzburg and A.S. Vinogradov maintained that protein does not play as great a protective role for chloramine as for other disinfectants. The present tests showed that protein somewhat lengthens the time necessary for the acid to exert 118 bactericidal or sporicidal effect. According to V.J. Vashkov, G.M. Ginzburg, V.M. Kovalev, G.F. Mayorova and Sokolova, altivated solutions of chloramine and chloride of lime may be used for disinfection in tuber- culosis, anthrax and other infections. Activation of tripuloriscovanaric and solutions with ammonium chloride specied up the desth of the spores by only 5-15 minutes - Further study of this preparation at a disinfectiant	
Card $2/3$	is recommended.	



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CIA-RDP86-00513R001548720019-4 "APPROVED FOR RELEASE: 08/09/2001

sov/16-59-9-3/47 Alekseyeva, M.I., and Shavyrina, V.V. AUTHORS: The Use of 1-chloro- β -naphthol for Disinfection in Tuberculosis TITLE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 9, PERIODICAL: pp 13-18 (USSR) 1-chloro-B-naphthol has not been widely used in disinfectant practice because of its low bactericidal activity (Ya.L.Okunevskiy). Vashkov, ABSTRACT: Chadova, Shavyrina and Ramkova have observed that it has a marked selective action on bacteria of the typhus-enteric group. Subject authors synthesized the substance by chlorinating β -naphthol with sulfuryl chloride in chloroform. A water-soap emulsion of the disinfectant was prepared and tested in concentrations ranging from 0.025 to 2% in the laboratory and under field conditions. The disinfecting action of the emulsion was tried out on gauze test-objects, soaked with fowl tuberculosis bacillus or with tuberculosis sputum, and on wooden, painted and plaster surfaces contaminated with Mycobacterium tuberculosis. The results proved that 1-chloro-B- naphthol is effective in a concentration 10 times less than that of chloramine. Its other advantages are that it does not discolor linen and has no obnoxious Card 1/2

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17(6)

. And the second se sov/16-59-9-3/47 The Use of 1-chloro- -naphthol for Disinfection in Tuberculosis smell. As far as can be observed, it has no toxic properties, although gloves are recommended when handling it due to the increased skin sensitivity it may provoke. For the disinfection of surfaces, crockery, utensils and linen in tuberculosis nidi it is recommended to use a 0.5% water-scap emulsion of 1-chloro- β -naphthol and to allow it to act for 60 minutes. There are 3 tables and 1 Soviet reference. Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut ASSOCIATION: (Central Disinfection Research Institute) September 29, 1958 SUBMITTED: Card 2/2

APPROVED FOR RELEASE: 08/09/2001



SHAVYRKIN, Yu.

NAMES OF STREET, STREET

经证书 新闻 网络

Processing corn for mixed feeds at the Melekess Milling Combine. Muk.-elev. prom. 29 no.8:24-25 Ag '63. (MIRA 17:1) 1. Zamestitel' glavnogo inzhenera Melekesskogo mel'nichnogo kombinata.



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GOLOSOVKER, S.Ya.; SHAVEIS, F.Ya.
Btiology of pyoderma in the newborn. Vop.okh.mat. 1 det. 3 no.1: (MIRA 11:2)
33-36 Ja-F '58.
1. Iz kafedry mikrobiologii (zav. - prof. V.H.Berman) i kafedry kozhnykh bolezney (zav. - prof. S.Ya.Golosovker) Leningradskogo pediatricheskogo meditsinskogo instituta (dir. - prof. N.T.Shutova) (SKIN--DISMASES) (INFANTS--DISEASES)

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APPROVED FOR RELEASE: 08/09/2001

KISTER, E.G.; ZLOTNIK, D.Ye.; FOPKOVA, L.M.; NAZAROVA, V.D.; SHASKOL'-SKAYA, T.P.
Combination chromate reagents for flushing fluids. Eurenie no.9i17-18 '65. (MIRA 18:10)
1. Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki.

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SHAMATERNIOV, J.

1 1 2 A 10

Sugadiently, I... "Let a time the northern redients into a rich granary for Karakistan", Trudy Vypendeby sesnii dersin. filinde Vress, c. akad. s.-ka. aruit

SO: U-411, 17 July 53, (Leto del Eleventiayka States, No. 20, 1949).


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ACC NR; AP6021605 SOURCE CODE: UR/0020/66/168/005/1048/1051	
AUTHOR: Kovylin, V. M.; Karp, B. Ya.; Shayakhmetov, R. B.	
ORG: Institute of Oceanology, Academy of Sciences, SSSR (Institut okeanologii Aka-	
demii nauk SSSR) TITLE: Structure of the earth's crust and sedimentary strata of the Sea of Japan on the basis of seismological data	
SOURCE: AN SSSR. Doklady, v. 168, no. 5, 1966, 1048-1051	
TOPIC TAGS: earth crust, seismic wave, ocean acoustics, wave propagation, seismograph	
ABSTRACT: The cross section profile 500 km in length located in the middle and south- ern parts of the Sea of Japan was investigated using shot points at depths of 90-150 m broad-band geophones, and an analyzer for recording bottom reflections. Sea depths and sedimentary bed structures were studied by recording reflected waves when the ves-	
of reflected waves P^4 and P^1 at the distance intervals 10-43 km and of 02 km, velo- ively. For the construction of the P^4 wave type, it was assumed that its near velo- ively. For the construction of the sedimentary beds was 2.0 km/sec. For the construction of:	
city of propagation in the sedimentary is the P^M wave type, using the method of time fields, it was assumed that its velocity of the P^M wave type, using the method of time fields, it was assumed that its velocity of the P^M wave type, using the method of time fields, it was assumed that its velocity of the P^M wave type, using the method of time fields, it was assumed that its velocity of the P^M wave type, using the method of time fields, it was assumed that its velocity of the P^M wave type, using the method of time fields.	
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MAKSUDOV, Norkhodzha Khodzhayevich, kand. biol. nauk; POGORDIKO, 1.F., doktor med. nauk, prof., red.[deceased]; SHAY AKHMEDOVA, R.S., red.

[Production of essential cils (terpenes) and their use in urolithiasis] Poluchenie efirnykh masel (terpenov) i ikh primenenie pri mochekamennoi bolezni. Tashkent, Izd-vo "Meditaina" UzSSR, 1964. 135 p. (MIRA 18:3)

APPROVED FOR RELEASE: 08/09/2001

11(4)

auto electronic and the second

SOV/92-59-3-12/44

AUTHOR: Shayban, D.A., Senior Operator

TITLE: Remodeling of Standard Processing Units (Rekonstruktsiya tipovykh ustanovok)

PERIODICAL: Neftyanik, 1959, Nr 3, pp 14-15 (USSR)

ABSTRACT: The author refers to Neftyanik, 1958, Nr 5, in which E.B. Khesin raised the question of improving designs of future processing units. The author maintains that another question of importance is the standardization of methods to be followed in remodeling units now in operation. Every refinery solves this problem in its own way. It is desirable, however, that the planning organizations develop a standard project for remodeling existing units. The reconstruction of the two-furnace cracking units of the Nefteproyekt type should be carried out on the basis of a standardized design. In the opinion of the author, a furnace and atmospheric columns should be added to the above-mentioned unit and placed ahead

Card 1/2

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Remodeling of Standard Processing Units SOV/92-59-3-12/44

of it. In this case the yields and the processing capacity of the entire combined unit will become equal to those obtained from both the sracking unit and the atmospheric-vacuum pipe still. It is also advisable that the standard reconstruction project provide for the installation of a vacuum column with the goudron flowing to the mild cracking furnace, and the vacuum gas oil flowing to the deep cracking furnace. Mild cracking furnaces should be equipped with side-reactors. Both furnaces will have to operate on narrow petroleum fractions and, as a result, a higher yield of cracked gasoline will be ensured, provided proper operating conditions are maintained. From the economic standpoint a reconstruction of existing units is highly desirable. Funds and equipment should be made available to refineries for this purpose.

ASSOCIATION: Khersonskiy NPZ (The Kherson Refinery)

Card 2/2

APPROVED FOR RELEASE: 08/09/2001

SHAYBEKOI, K.A.

3598. SHAYBEKOV, K.A. Oplata Truda Kolkhoznikov-Zhivotnovodov Kazakhstana (Po Sovetskomu Zakonodatel!stvu). Alma-Ata, Izd-vo Akad. Nauk Kaz SSR, 1954 95s. 20sm (Akad. Nauk Kazakh. SSR. Sektor Prava) 5,000ekz. 2r 50k.-(54-57164) P 331.20:636 (584.6) 4km. Let No. 3.

SO: Knizhnaya Letopis', Vol. 3, 1955

APPROVED FOR RELEASE: 08/09/2001



APPROVED FOR RELEASE: 08/09/2001

SHAY BEKOV, J.K. PANERATOV, I.F., kandidat yuridicheskikh nauk. Legal problems concerning wages of collective farm cattle breeders in Kazakhstan ("Wages of collective farm cattle breeders in Kazakhstan, according to Soviet legislation." S.K.Shibekov, A.G.Ashcheulov. Reviewed by I.F.Pankratov). Vest. AN Kazakh.SSR 11 no.3:94-97 Mr '55. (MIRA 8:6) (Kazakhstan--Collective farms) (Kazakhstan--Wages) (Shaibekov, S.K.) (Ashcheulov, A.G.)

APPROVED FOR RELEASE: 08/09/2001

Maslva SHAYBEKOVA, F.A.

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AUTHOP: Preschenkov, A. N.; Lukashenko, A. N.; Shaybo, N. V. 96 CRG: None 85		
TITLE: Scientific conference on the hydrodynamics of a submerged foil		
SOURCE: Prikladnaya mekhanika, v. 2, no. 4, 1966, 142-143		
TOPIC TAGS: hydrodynamics, fluid dynamics, flow analysis, cavitation, cavity flow, boundary layer flow		
ABSTRACT: A scientific conference on the <u>aerohydrodynamics of a foil</u> near a free surface and a solid surface was held at the <u>Kiev Institute of Hydromechanics of the</u> <u>USSR Academy of Sciences from 28-30 October 1965</u> , with 106 delegates from 45 Soviet institutions participating. The following scientific institutions were represented: <u>Central Scientific-Research Institute im. Academician A. N. Krylov; Central Institute</u> <u>of Aerohydrodynamics; Institute of Hydrodynamics, Siberian Branch, USSR Academy of</u> <u>Sciences ; Leningrad Shipbuilding Institute; Leningrad Institute of Water Transporta-</u> <u>tion Engineers; Central Scientific Research Institute of the Maritime Fleet;</u>		
tion Engineers; Central Scientific Research Research Research Engineers; Kazan' and Kivey Novosibirsk and Gor'kiy Institutes of Water Transportation Engineers; Kazan' and Kivey State Universities; Institute of Mechanics, Moscow State University; Kivey Institute State Universities; Institute of Mechanics, Moscow State Environme papers were pre-		
of the Civil Air Fleet; and Khar'kov Aviation institute. For general objects, among sented which dealt with actual aerohydrodynamic problems of high-speed objects, among Card 1/2	E	

1. 24787-05 ACC NR: AP6014221

which were the following: A. N. Panchenkov discussed problems of the unsteady motion of a foil at a variable distance from a surface, and the hydrodynamic boundary-value problem of a cavitating submerged foil. K. K. Fedyayevskiy presented an approximate nonlinear theory of a rectangular low-aspect-ratio foil moving near a fluid surface at high Froude numbers. V. I. Rudomanov reported on takeoff (lift) and landing (settling) dynamics of craft utilizing surface effect. V. M. Ivchenko reported on unstead hydrodynamic problems of supercavitating bodies and the use of electronic digital computers in propeller design. G. A. Ryazanov's paper dealt with electric flow simulation around foils of infinite span, and magnetic flow simulation around foils of finite span. V. V. Kopeyetskiy reported on the use of a magnetic simulation method for estimating the effect of blade thickness in the design of a propeller with a given blade pressure differential. V. A. Kas'yanov and G. N. Boyarskiy reported on investigations made on electrohydrodynamic flows and on boundary-layer control along a foil profile. Ye. D. Udartsev reviewed methods for the laminarization of the boundary layer of electrohydrodynamic flows. Yu. K. Biktimirov reported on specific features in plotting the potential of velocities caused by a source moving in a fluid. R. B. Nudel'man discussed bodies moving in a multilayer fluid, and V. T. Tokarev reported on a quantum-hydrodynamical analogy and its application in hydrodynamics problems. In a final statement, it is mentioned that the conference emphasized the importance and urgency of problems in aerohydrodynamics of a foil near a surface. The lag of Soviet science in the study of supercavitating foils was also mentioned, and a more intense study of three-dimensional cavitation problems was recommended. It was agreed that the proceedings of this conference be published. [Œ] 13, 01, 20/ SUBM DATE: none ATD Press: 4250 SUB CODE:

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行行的产生不能保持,你们可以有关于不是 HAY GALOU sov/2538 PHASE I BOOK EXPLOITATION 10(3); 1(2); 1(9)Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze Issledovaniya v oblasti teoreticheskoy i prikladnoy aerogidrodinamiki; sbornik statey (Research in Theoretical and Applied Aero-and Hydrodynamics ; Collection of Articles) Moscow, Oborongiz, 1959. 92 p. (Series: Its: Trudy, vyp. 111) 2,650 copies printed. Ed. (Title page): N.S. Arzhanikov, Honored Worker of the RSFSR in Science, Professor; Ed. (Inside book): A. S. Ginevskiy, Candidate of Technical Sciences; Ed. of Publishing House: E. A. Shekhtman; Tech. Ed.: V.I. Oreshkina; Managing Ed.: A. S. Zaymovskaya, Engineer. PURPOSE: This collection of articles is intended for scientific workers, engineers, and students of advanced specialized courses. COVERAGE: This collection of six papers is concerned with the aerodynamics of wings and shrouded propellers, hydrodynamic lubrication of bearings, and such fundamental problems as the viscosity of fluids and pressure losses due to local drags. Card 1/4

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 rotational velocity, the entire space between journal and bearing being assumed to be filled by the lubricant. References: 4 Soviet. 4. Shaydakov, V.I., Engineer. Aerodynamic Investigations of a "Shrouded-Propeller" System for Hovering 41 This article attempts to obtain a theoretical solution for the load-supporting characteristics of a shrouded propeller. The paper is of great practical interest because a shrouded rotor-propeller is both the load-carrying and propelling element of a new type of aircraftthe so-called "flying platform". Aerodynamic investigations made by F.P. Kurochkin, Candidate of Technical Sciences at MAI are mentioned. 5. Levkoyeva, N.V., Engineer. On the Problem of Determining Pressure losses Due to Local Drags 71 This paper presents a critical synopsis of current knowledge regarding pressure losses due to local drags in aircraft hydraulic systems. References: 17 Soviet, 5 German, 2 English, 1 French. 84 Card 3/4 	Researc	ch in Theoretical and Applied (Cont.) SOV/2538	
 Propeller[#] System for Hovering 41 This article attempts to obtain a theoretical solution for the load-supporting characteristics of a shrouded propeller. The paper is of great practical interest because a shrouded rotor-propeller is both the load-carrying and propelling element of a new type of aircraftthe so-called "flying platform". Aerodynamic investigations made by F.P. Kurochkin, Candidate of Technical Sciences at MAI are mentioned. 5. Levkoyeva, N.V., Engineer. On the Problem of Determining Pressure Losses Due to Local Drags 71. This paper presents a critical synopsis of current knowledge regarding pressure losses due to local drags in aircraft hydraulic systems. References: 17 Soviet, 5 German, 2 English, 1 French. 84 			
Losses Due to Local Drags 71 This paper presents a critical synopsis of current knowledge regarding pressure losses due to local drags in aircraft hydraulic systems. References: 17 Soviet, 5 German, 2 English, 1 French. 84		Depeller ⁱⁿ System for Hovering This article attempts to obtain a theoretical solution for the load-supporting characteristics of a shrouded propeller. The paper is of great practical interest because a shrouded rotor- propeller is both the load-carrying and propelling element of a new type of aircraftthe so-called "flying platform". Aerodynamic investigations made by F.P. Kurochkin, Candidate of Technical	41
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s/147/59/000/04/007/020 E022/E435 AUTHOR : Shaydakov, V.I. TITLE: A New Method for Computing the Vertical Velocity of Climb of Helicopters 4 PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1959, Nr 4, pp 64-69 (USSR) ABSTRACT : There are several methods in use at present. They are all based on the approximate expressions for the thrust and the turning moment of the rotor and are obtained either from the vortex theory or from the impulse theory. The most popular method is that due to L.S.Wieldgrube on account of its simplicity but it has a fundamental shortcoming in that it is based on the approximation for the induced velocity. This article presents a new method free from the above shortcoming. The thrust and the power of the rotor are given by Eq (1) and (2)respectively, the coefficient $C_{\rm T}$ and $m_{\rm K}$ in these equations being computed from the blade element theory as given by Eq (3) and (4) respectively. The meanings Card 1/6 of the symbols in the last two equations are as follows

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s/147/59/000/04/007/020 E022/E435 A New Method for Computing the Vertical Velocity of Climb of Helicopters c_{y7} , c_{x7} - mean values of c_v and c_x for a blade taken at the station $r = \overline{0.7R}$ - coefficient of solidity of the rotor at a-, that station \mathbf{K}_{T} and \mathbf{K}_{p} - thrust and power coefficients for the given shape of the blade Φ - coefficient of non-uniformity of the induced velocity field × (≈ 0.94) - coefficient of end losses of the rotor. The values of K_T , K_p and Φ may be taken from the table and Fig 1, the blades being trapezoidal, having a contraction η and a negative linear twist $(-\Delta \varphi)$. The mean reduced velocity of the air in the plane of rotation of the rotor, based on the impulse theory (see Ref 1) is given by Eq (5) which, for the case of hovering $(V_y = 0)$, reduces to Eq (6). The power required is then given by Eq (7) where L_p is the power lost in friction of the blade in the air. When the motion is steady and the power L_y weight G and ωR are given V_y Card 2/6

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S/147/59/000/04/007/020 E022/E435

A New Method for Computing the Vertical Velocity of Climb of Helicopters

then V_1 is given by Eq (8). Assuming now that the induced velocity v_1 is independent from V_Y and is always equal to its value at hovering (v_{1B}) then, by Eq (8), the vertical velocity of climb so obtained is underestimated. Giving it the symbol V_{YG} Eq (9) follows. All velocities are now referred to the induced velocity, this being denoted by a wave sign over the symbols. Then by Eq (6) and (9), the Eq (10) is derived, where V_{YG} is given by Eq (11), this being derived using Eq (1), (2), (3), (4), (6) and (9). In this last relation G is the coefficient of power losses which, according to Ref 2, may be taken as equal to 0.811 to 0.84 for single rotor-and 0.89 to 0.91 for double rotor-helicopters and q_M is the specific load per unit horse-power. The method of evaluation of the velocity of the vertical climb when the following values are given: H (height of flight); P (specific load kg/m² of the rotor disc); q_{M} ; S, x, σ_7 ; wR; η and $\Delta \phi^{\circ}$ is as follows.

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s/147/59/000/04/007/020 E022/E435 A New Method for Computing the Vertical Velocity of Climb of Helicopters 1) From the graphs take K_{T} , K_{p} , ϕ ; 16P 2) Determine $C_T = \frac{1}{(\omega R)^2}$ 3) Find C_{y7} and C_{xp7} ; 4) Computev_{1B} 5) Evaluate \tilde{V}_{yo} from Eq (11); 6) Find the true vertical velocity from Eq (12). This is repeated for several different heights, which enables the graph $V_{y} = f(H)$ to be drawn. When designing a helicopter, it is often necessary, in order to decide the choice of some design parameters, to be able to compute quickly the velocity of the take-off from the ground. This can be done in the following way: transform Eq (11) to read as in Eq (13), where η_0 is Card 4/6 given by Eq (14) and represents the relative efficiency

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S/147/59/000/04/007/020 E022/E435 A New Method for Computing the Vertical Velocity of Climb of Helicopters of the rotor. For modern rotors it may be assumed that $\eta = 2$, $\Delta \varphi = -5^\circ$, $K_T = 0.96$, $K_p = 0.923$, $\varphi = 1.03$. Then a graph of $\frac{\eta_{o}}{\varkappa \frac{3}{2}} = f(C_{y7\sigma7})$ may be constructed as shown in Fig 2 (which is for the profile NACA 230-11) and used for evaluation of $V_{y ab}$ in Eq (13). If some further assumptions are made, viz $\eta_0 = 0.7$, $\kappa = 0.94$, the graphs of Fig 3 are obtained which will make easier the choice of the parameters in the preliminary stages of design of a helicopter. Finally, the author computes some data in order to compare his method with that of L.W.Wieldgrube. Three different crafts are considered: (1) medium weight class (P = 16 kg/m^2 , ωR = 200 m/sec etc.) (2) light class (P = 8 kg/m², ωR = 130 m/sec etc) (3) a model (P = 2 kg/m²; ωR = 75 m/sec etc) and the results are shown in Fig 4. The two methods Card 5/6

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10,200	E191/E401
AUTHOR	Shaydakov V.I. Candidate of Technical Sciences
TITLE	Investigation of vertical descent states of a helicopter

SOURCE Moscow Aviatsionnyy institut Trudy No.142 Voprosy aerodinamiki nesushchikh vintov vertoletov. 81-141

The vertical descent of a helicopter proceeds in the TEXT so talled "vortex ring" and "windmill brake" states in which he clearly defined slipstream exists but viscosity forces produce a characteristic circulation of air around the rotor. Mast previous work devoted to these states of operation was purely Certain earlier theories applicable to windmills experimental do not fit the vertical descent states of a helicopter rotor In the present paper, a theory is advanced covering the vortex ring and windmill brake states which agrees with experimental Consideration is given to the Newton model of flow. results. Particles of air approaching the boundary of the real slipstream (which terminates due to viscosity) from below entirely lose their Card

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Investigation of vertical .

The pattern of an "air body" surrounding the The total thrust in the vortex ring state kinetic energy. consists of the reactive thrust due to the change of momentum rotor is given. inside the associated body of air moving with the rotor and the thrust due to the drag of the body of air. The real tive thrust to evaluated on the basis of the usual analysis the associated air body is evaluated by the assumption that its drog coefficient referred to the rotor discored is constant and amounts to 1.28. On this basis, the experimental relations e turned by P. Brotherhood (British ARC R, and M No 2735 1952) I tween the velocity of descent and the local slipstream structures at the disc and far behind it agree fairly well with the theoretical velocities derived in the present paper Es inthe the stability of motion in the vortex ring state if is stored that instability occurs in the state of ideal introduction the claimed that this is confirmed by experimental results in luding flight tests on British and American helicopiets. An approximate theory of the rotor in the windmail brake state is This state begins when the resultant ellips Lar forward. 611 -15

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Investigation of vertical

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through the disc is directed upwards. A pattern of flow characteristic of this condition is suggested. The total thrust is composed of two parts: one due to the influx of associated mass of air into the slipstream and the other part due to the exchange of momentum with the main slipstream passing through the The development of this assumption is shown to lead. d15(once again to relations between velocities which agree well with experimental results. On the basis of the theories so described the aerodynamic characteristics (thrust and torque coefficients) A derivation is given are derived for vertical descent states. for computing the vertical descent of a helicopter at partial A family of curves, each for a certain disc loading power relates the velocity of descent to the percentage of hovering At a disc loading of about 3 lb/ft² a rate of descent power of 30 fps is reached already at 80% of hovering power. The autorotation of a helicopter rotor with jet engines near the blade tips is examined by the method of the chara.teristi, blade section — It is shown that the assumption of a characteristic section at 70% of the blade radius is valid also in autorotation Card 3/5

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Investigation of vertical

The stability of autorotation is investigated for blades with jet ensines Russian tests with models have shown stable autoratation up to an effective blade pitch of 8' so that 9 can safely be expected in a full scale rotor. The computation of the rate of descent in vertical autorotation is given and some approximate The drag coefficient of the rotor in formulae are derived. verti al autorotative descent is computed and given as 1 21. The landing of a helicopter by sudden increase of blade pit h user the ground in autorotative descent is examined. The pitch Increase criterion for a landing from vertial autoritation is the ratio between the kinetic energy of the rator and of the methics. A perfect landing can be achieved when this satio This ratio as a function of the life left setficient ex.eed- " it the characteristic blade section is given for a helicopie. with it is turbojet engine at the blade tips and 20 5 methanically Only the former is shown to reach that low lift He len rotor The transition between flight of Gull place and osffi tent sateritation is analysed. Numerical examples are giver.

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69316 s/147/60/000/01/005/018 E191/E581 19000 10.6000 AUTHOR: Shaydakov, V. I. Theoretical Investigation of the Working of a Lifting TITLE: Helicopter Rotor in the State of Vertical Descent PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1960, Nr 1, pp 43-51 (USSR) An elementary theory is proposed for the working of a ABSTRACT: lifting rotor in vertical descent with engine-on which includes the vortex ring and windmill states. The theory is based on the application of the general theorems of hydrodynamics. In power-on vertical descent, viscosity forces cannot be ignored. The induced velocity variation upstream and downstream of the rotor shows an acceleration towards the rotor, further acceleration downstream and subsequent deceleration. Superimposing the descending motion of the rotor, surfaces of zero absolute velocity are found both above the rotor and underneath the rotor. Joining these surfaces around the rotor, an air "body" Card 1/6

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69316 S/147/60/000/01/005/018 E191/E581

Theoretical Investigation of the Working of a Lifting Helicopter Rotor in the State of Vertical Descent

> is obtained surrounded by the relative approach flow. The drag of this "body" is expressed in the usual way, based on a drag coefficient and the cross-section of the air "body". The rotor slipstream opposes this drag by an equal drag. The power to overcome this slipstream drag is supplied by the rotor. The total rotor lift is the sum of the drag opposing that of the air "body" and the reaction due to the impulse created in the circulating flow inside the "body". In the analytical expression for the total lift, the assumptions are made that the velocity distributions are uniform across the disc and in the region of deceleration of the slipstream its energy is entirely converted into heat so that the pressure remains constant. It is shown that the absolute velocity in the rotor is half the absolute velocity in the throat of the slipstream. Certain considerations lead to the assumption that the drag coefficient of the air "body" reduced to the rotor disc

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Theoretical Investigation of the Working of a Lifting Helicopter Rotor in the State of Vertical Descent

velocity is large so that the retarded velocity is much smaller than the velocity of approach, turbulent conditions exist (roughly so long as the induced velocity is more than half the velocity of descent). Otherwise, an orderly flow prevails. In the computation of the total rotor thrust, a cross-section of the rotor wake above the rotor is chosen, where the absolute velocity is a minimum. The induced velocity at this point is expressed by a formula, due to Sabinin, G.Kh. ("Theory of the Ideal Windmill", Trudy TsAGI, Issue 32, 1927). By this formula, this terminal induced velocity is less than twice the induced velocity in the rotor disc The reduction factor is larger than unity by the ratio of the induced velocity in the disc to the itself. velocity of descent. With these assumptions, the absolute velocities and the induced velocities are Card 4/6 computed. Their comparison with other investigations

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80959 \$/147/60/000/02/003/020

10.300 AUTHOR:	S/147/60/000/02/003/020 E191/E481 Shaydakov, V.I.
TITLE :	The Effect of the Depth of Fan Position in a Ring Duct on the <u>Aerodynamic Properties</u> of the System under Hovering Conditions
FERIODICAL:	Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya tekhnika, 1960, Nr 2, pp 22-30 (USSR)
ABSTRACT:	A <u>ducted fan</u> operating as a <u>flying platform</u> is examined with a deep ring duct having a flared entry of semi- circular profile. Ideal fluid, uniform distribution of velocity across the fan disc and an absence of losses due to tangential velocity components are assumed. The total thrust is the sum of the fan thrust and the ring thrust. In an earlier analysis of a ducted fan with a shallow ring duct, the ring thrust was expressed as the product of the mass flow and the velocity in the fan disc multiplied by a factor. This factor is plotted in Fig 3 as a function of the ratio of the flare radius to the fan radius (relative flare radius). The factor is unity when the ratio is zero. The curve for a deep
Card 1/4	duct lies below that for a shallow duct. When the ratio is 0.2, the factor for the deep duct is 0.6 and for the $\sqrt{100}$
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The Effect of the Depth of Fan Position in a Ring Duct on the Aerodynamic Properties of the System under Hovering Conditions

> shallow duct 0.72. Comparing the thrust of an unshrounded free propeller with that of a ducted fan of the same diameter, Fig 4 shows the ratio of thrusts against the relative flare radius for the same power input. As the flare radius increases, the thrust of the ducted fan increases towards a limit of 1.26 . In the case of a shallow duct, the ducted fan thrust for zero flare radius (plain tube) is the same as that of the unshrouded propeller, but the thrust of the fan in a deep tube is 80% of the free propeller. When the profile losses and the tip losses of the fan are taken into account, the lifting efficiencies of the free propeller and the ducted fan are compared. Fig 5 shows the ratio of the ducted fan to the free propeller efficiencies plotted against the relative flare radius for different free propeller efficiencies, both for deep and shallow ducts. At a flare radius of 0.15; a free propeller with an efficiency of 0.7 gains 16% in efficiency when placed in a deep duct and 10% in a

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The Effect of the Depth of Fan Position in a Ring Duct on the Aerodynamic Properties of the System under Hovering Conditions

> Fig 6 shows the ratio of thrusts of a shallow duct. ducted fan and a free propeller plotted against the relative flare radius when the free propeller efficiency is 0.7, and the same power is absorbed. The curves for both deep and shallow ducts tend to a Below a relative flare radius of 0.15, limit of 1.4. the shallow duct gives more thrust and above this flare radius, less thrust than the deep duct. When the thrust of the ducted fan is compared with that of a free propeller, of the same diameter as the outside diameter of the duct flare (equivalent propeller), the ratio of thrusts is plotted in Fig 7 against the relative flare radius. In the range of radii between 0.15 and 0.4, the ducted fan develops the same thrust as the equivalent propeller. Outside this range the ducted fan has a smaller thrust. Experiments were carried out at the Moscow Aviation Institute with four-bladed single and contrarotating aircraft propellers. The slipstream had almost no contraction when the flare had a lemniscate

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Investigating conditions of the vertical descent of a helicopter. Trudy MAI no.142:81-141 'ól. (MIRA 14:12) (Helicopters)

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YUR'YEV, Boris Nikolayevich, akademik [deceased]; LESNIKOVA, N.P., kand. tekhn. nauk; <u>SHAYDAKOVA, V.I.</u>, kand. tekhn. nauk; ARTOBOLEVSKIY, I.I., akademik, otv. red.; BRATUKHIN, I.P., prof., zam otv. red.; GORSHKOV, G.B., red. izd-va; LAUT, V.G., tekhn. red.

> [Selected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk SSSR. Vol.1. [Propellers, helicopters] Vozdushnye vinty. Vertolety. 1961. 551 p. (MIRA 15:1) (Propellers) (Helicopters)

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36.0-05 PHO-02 34 173924 173

ACC NR: AP6030250 SOURCE CODE: UR/0147/66/000/003/0043/0	049
AUTHOR: Shaydakov, V. I. 62	
ORG: none	
TITLE: Application of the method of <u>ring vortices</u> to aerodynamic design of lifting rotor systems $\mathcal{V}p$	
SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1966, 43-49	
TOPIC TAGS: aerodynamics, aerodynamic design, aerodynamic lift, vortex flow, heli- copter rotor, helicopter, circulatory flow	
ABSTRACT: The method of ring vortices, as it is called by the author, used for <u>aerodynamic calculations</u> of lifting rotor systems in axial and oblique flows is described. It yields the same accuracy as ideal rotor theory and is intended for investigating the regime of steep descent of an helicopter in the first approximati This method uses the Zhukovskiy formula for lift of an airfoil and consists in sub- stituting the vortex cylinder produced by the rotor by a system of discrete ring vo tices which is equivalent to the decomposition of a vortex cylinder into ring and longitudinal vortices used in the vortex theory of rotors. The longitudinal vortic are neglected here. The effect of nonlinearity of the axis of the vortex cylinder the inductive velocity of the rotor is evaluated and found to be less than 2.4%. T	r- es on
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SHAYPARGY, YALLA

Receival of the injurious effect of β -irradiation of field crop seeds with the help of physiologically active compounds. Probl. kosm. biol. 4:469-473 '65. (MIRA 18: (MIFA 18:9)



	ACC NR: AT6003881 SOURCE CODE: UR/2865/65/004/000/0469/0473	
	AUTHOR: Shaydarov, Yu. I.	
	ORG: none 19,44,5 TITLE: Elimination of the injurious effects of beta-radiation on the seeds of cultivated plants by means of physiologically active compounds	
	SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 469-473	
	TOPIC TAGS: beta radiation, radiation plant effect, plant genetics, plant growth, phosphorus, radioisotope, agriculture crop	
•	ABSTRACT: All forms of ionizing radiation characteristically depress the growth and development of plants. This work investigates chemical means of eliminating the injurious effect of increased doses of β -radiation on seeds of corn, lupine, turnip, and spring wheat. Radioactive phosphorus	
	seeds of corn, hupine, turnip, and spring when preparations were used as P^{32} was the β -radiation source. The following preparations were used as protective agents: N -(2-pyridyl)-N ₄ -(2"-hydroxy-1", 4"-naphthoquinon)- 4-ylsulfanilamide (designated P-46); di-(para-trichloroacetylaminophenyl) sulfone; and 2-ketononanoic acid. Half of the seeds were soaked for 2 days	
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ACC NR: AT6003881 in a solution of radioactive phosphorus, lightly dried, and then soaked in a 0.01% solution of the preparations for 2 days. The other half were kept in the preparation solutions for 4 days. Seeds soaked in water served as the control. All seeds were then grown in normal soil. Treatment of corn seeds with radioactive phosphorus lowered the weight of the green mass of corn plants. However, application of the preparations not only eliminated the injurious radiation effect but even increased the harvest as compared with the control. Under these conditions lupine was less responsive than corn to the effects of either ionizing radiation or the preparations. P^{32} clearly exerted a negative influence on spring wheat seeds, and the preparations had the opposite effect. Most effective in this case was P-46, which significantly but not completely decreased the injurious effect of radioactive phosphorus on wheat seeds. To study the aftereffects of treatment with radioactive phosphorus and P-46, seeds obtained from treated wheat plants were sown the following year. It was found that the harmful effects of ionizing radiation are re-Card 2/3÷.

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and also the absence of a significant change in the intensity of metabolic
processes, indicate that ionizing radiation, in the dose used, does not
damage oxidizing systems in the tissues. Orig. art. has: 3 figures.
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SUB CODE: 06 / SUBM DATE: none / CRIG REF: 008 / OTH REF: 008
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<u>L 11,258-66</u> RD ACC NR: AT6003906 SOURCE CODE: $UR/2865/65/001,000/0670/0675$ 37	
AUTHOR: <u>Tsvetkova</u> , I. V.; <u>Shaydarov</u> , Yu. I.; <u>Abramova</u> , V. M. <u>B+-</u>	
ORG: none 2,44	
TITLE: Special features of plant feeding under conditions of aeroponic cultivation for a closed system	
SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 670-675	
TOPIC TAGS: aeroponics, plant physiology, metabolic waste, fertilizer, sodium chloride, closed ecology system, test chamber, toxicology, excretion, plant growth	
ABSTRACT: In order to grow higher plants in closed ecological systems it is nec- essary to use mineralized products of human wastes. The danger of this procedure stems from the presence of excessive amounts of NaCl in min- eralized wastes. In order to evaluate the hazard of NaCl toxicity, experi- ments were performed at the Artificial Climate Station of the Institute of Plant Physiology of the Academy of Sciences, USSR. For this purpose	
Plant Physiology of the Academy of Scrences, ozzate	
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root metabolism or those of the microflora. The addition of NaCl to the mineral nutrient solution caused a sharp increase in absorption of sodium and chlorine ions by the plant. Additions of NaCl of up to 2% did not have any adverse effects on plant growth. On the contrary, the addition of NaCl to the nutrient solution caused a significant increase in the raw weight of the plant although the dry weight was approximately equal to that of plants grown on nutrient solution without additional NaCl. Apparently, the addition of NaCl causes the plant cells to absorb more water, resulting in extra succulence.

extra succulence. Plants grown aeroponically have been shown to possess a higher degree of resistance to salt, apparently Lecause of better aeration and

degree of resistance to sait, apparently conduct during the supply of the root systems. Tests have indicated that even significant concentrations of chlorine in aeroponic culture do not have a toxic effect on the plants. Consequently, the high amount of chlorides in the mineralized products of human metabolism will not result in death of the plants, provided they are grown aeroponically. Orig. art. has 5 tables.

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SHATHLING, L. M.

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36/19. Mehotonyje Monduluitorskije undoty S. F. Medina. (Monduraktor S rulkovoje Gradija. M h.O.-Kulju Se Unja Kozhkonita) urady Tul. 1. Man In-Ja Upp. 3, 1949, s. 194-64. - Bioliogr: 6 Lasy.

SO: Latoris' Shurnal'nyth Just y Tul. 10, Hoshva, 1949

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CIA-RDP86-00513R001548720019-4

s/003/60/000/007/002/002 B023/B077

Petrukhin, S. S., Shaydenko, A. Ya., Candidates of Technical

AUTHORS:

Sciences, Docents Intercollegiate scientific conference

TITLE:

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Vestnik vysshey shkoly, no. 7, 1960, 40-43 PERIODICAL:

TEXT: In a number of technical institutes (the MVTU, the Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute), Moskovskiy avtomekhanicheskiy institut (Moscow Automechanical Institute), Moskovskiy Stanko-instrumental'nyy institut (Moscow Institute of Machine Tools and Instruments), the Tul'skiy mekhanicheskiy institut (Tula Mechanical Institute), the Odessa, Tomsk and Donets politekhnicheskiy institut (Polytechnic Institutes), the Moskovskiy institut stali (Moscow Steel Institute), the Khar'kov, Tula and Sverdlovsk gornyy institut (Mining Institute), the Vereneration of the Verenerati Institutes), the Vsesoyuznyy zaochnyy energeticheskiy institut (All-Union Correspondence Power Engineering Institute) research has already yielded important results. By the order of the Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR (Ministry of Higher and Specialized

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Intercollegiate scientific conference

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Secondary Education of the Russian Socialist Federative Soviet Republic) an intercollegiate scientific conference was held in Tula on automation in production and on automatic machines, 350 conference participants representing 76 industrial organizations and institutes in Moscow, Leningrad, Khar'kov, Novosibirsk, Gor'kiy, Chelyabinsk, Penza, Sverdlovsk, Vladivostok, Kiyev, Perm', Rostov and other cities were present. The participants worked in six sections. Over 60 lectures were given. 115 persons took part in the discussion which followed. S. I. Artobolevskiy, Doctor of Technical Sciences, Professor lectured on "Theoretical principles of comprehensive automation of production processes" D. V. Charnko (Moscow Institute of Machine Tools and Instruments) spoke on "The structural system of the development of technological operations and its principles". B. M. Podchufarov, Candidate of Technical Sciences, Docent (Tula Mechanical Institute) lectured on "Dynamics of the cyclic automation", A. A. Andronov, Academician spoke on dynamics of machines in general, as found in studies of cyclic automation L. N. Koshkin, Candidate of Technical Sciences, Docent, lectured on "Automation of production methods, based on rotor lines". At the Odessa Polytechnic

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Intercollegiate scientific conference

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Institute under A. P. Voloshchenko, Candidate of Technical Sciences, Docent, studies are being conducted aiming at the analysis of the theory of mass operation. V. F. Preys, Candidate of Technical Sciences, Docent at the Tula Mechanical Institute spoke on bunker charging of automatic assembly lines. Results of studies of automatic rotor machines (constructed by L. N. Koshkin) were discussed by I. A. Klusov and V. F. Preys, both instructors, Candidates of Technical Sciences (Kafedra "Oborudovaniye shtampovochnogo proizdvodstva" (Department for "Equipment for Stamping Production")). Ye. N. Frolovich, Aspirant, spoke on automation based on rotor lines in the field of synthetic products. A. I. Zimin, Doctor of Technical Sciences, Professor, and A. S. Yezzhev, Engineer, (MVTU) reported on problems in the automation of synthetic pressings. I. M. Kratenko, delegate of the Tula economic administrative rayon reported on the mechanized protection devices in the mines of "Tulaugol" Combine. The studies of the Department of Calculation and Construction of Mining Machines of the Tula Mechanical Institute, conducted in cooperation with Kopeyskiy mashinostroitel'nyy zavod (Kopeysk Machine Building Factory), were discussed. Furthermore, the results of the studies of the Sverdlovsk gornyy institut (Sverdlovsk

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Intercollegiate scientific conference

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Mining Institute), Donetskiy politekhnicheskiy institut (Donets Polytechnic Institute), Tula Mechanical Institute, Gornyy Novocherkasskiy politekhnicheskiy institut (Novocherkassk Polytechnic Institute of Mining) and of the Institut Ukr NIIPROYEKT Gosplana UkrSSR were checked with respect to automation. V. N. Podurayev, Candidate of Technical Sciences, Docent, talked on "Vibration loops of metals in automatic production lines and automatic workbenches". I. A. Koganov, Candidate of Technical Sciences, Docent, (Tula Mechanical Institute) treated a similar subject. At the last general meeting O. A. Chukanov, Docent, Secretary of the Tul'skiy obkom KPSS (Tula District Committee of the CPSU) lectured on the possibilities of automation and mechanization of the Tula rayon. A resolution established that the success does not fully satisfy the daily needs. There are not enough laboratories and skilled workers at the district institutes. Constructive suggestions were made by E. A. Satel', Doctor of Technical Sciences, Professor; B. S. Balakshin, Doctor of Technical Sciences, Professor. The delegates decided 1) to improve the training of engineers in this field; 2) the Ministry of Higher and Secondary Specialized Education will be asked to

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SHAYDEROV, B.M., redaktor; NAGORNYY A.A., redaktor; SAVINA, Z.A., redaktor; POLOSINA, A.S., tekhnicheskiy redaktor.

[Results of operating and maintaining equipment in the petroleum industry; based on data of a meeting of chief engineers of the Ministry of the Petroleum Industry] Opyt ekspluatatsii i remonta oborudovaniia v neftianoi promyshlennosti i remont oborudovaniia v neftianoi promyshlennosti; po materialam soveshchaniia glavnykh mekhanikov Ministerstva neftianoi promyshlennosti 15-22 aprelia 1952 g. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gornotoplivnoi lit-ry, 1953. 299 p. (MLRA 8:11)

1. Vsesoiuzpye nauchnoye inzhenerno-tekhnicheskoye obshchestvo neftyanikov.

(Petroleum industry--Equipment and supplies)

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SHAYLEROV, B.M.; YUDOLOVICH, M.Ya.

[Oil-field mechanic's handbook] Spravochnik mekhanika neftepromyslov. Sostavili B.M.Shaiderov i M.IA.IUdolovich. Vol.2. [Drilling] Burenie. Moskva, Gos. nauchno-tekhnicheskoe izd-vo neftianoi i gornotoplivnoi lit-ry. 1953. 539 p. (Petroleum--Well boring)

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APPROVED FOR RELEASE: 08/09/2001



NAGORNYY, Aleksey Afanas'yevich; MALYSHEV, Konstantin Nikolayevich; SHAYDEROV, B.M., redaktor; BEKMAN, Yu.K., vedushchiy redaktor; TROFIMOV, A.V., texhnicheskiy redaktor

1.1.

[Organization of preventive repair of equipment used in the petroleum industry; a reference manual] Organizatsiia planovopredupreditel'nogo remonta neftepromyslovogo oborudovaniia; spravochnik. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gornotiplivnoi lit-ry, 1957. 269 p. (MIRA 10:7) (Petroleum industry--Equipment and supplies)

APPROVED FOR RELEASE: 08/09/2001



CIA-RDP86-00513R001548720019-4 **"APPROVED FOR RELEASE: 08/09/2001** 但如何在中间的行动 SOURCE CODE: UR/0413/66/000/018/0028/0029 ACC NR: AP6033448 INVENTOR: Arkad'yev, V. I.; Shayderov, V. A. ORG: none TITLE: Device for introducing <u>solid inhibitors</u> into <u>oil.</u> Class 12, No. 185849 SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 18, 1966, 28 - 29TOPIC TAGS: lubricating oil, propellant inhibitor, oil inhibitor ABSTRACT: An Author Certificate has been issued describing a device for introducing solid inhibitors into oil. It has a body with intake and outlet connecting pipes and a net. To increase the inhibitor interaction with the oil, to improve the fine dispersion of the inhibitor in the oil, and to prevent the deposition of resin on the inhibitor surface, the connecting pipe for lead in oil is fastened to the body tangentially and is provided with a nozzle, while the connecting outlet pipe is protected by a beaker and net (see Fig. 1). Orig. art. has: 1 figure. [Translation] Card 1/2 UDC: 678.053.3:66.097.7

APPROVED FOR RELEASE: 08/09/2001