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PROCESSES AND PROPERTIES INDEX

Ca

Reduction of pyridine to piperidine in the presence of nickel. M. I. Ushakov, S. S. Livshitz and N. V. Zhdanova. *Ind. Sci. chim.* [5], 2, 573-6(1935).—The addn. of 0.4% of Pd or Co to a Ni catalyst on silica gel promotes the reduction of C_5H_5N to $C_5H_{11}N$ in the vapor state at 130-50°. The product contains no C_5H_9N or $AmNH_2$. The spent catalyst can be regenerated by passing steam over it at 150-450° or H at 450°. R. C. Elderfield

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CA

The salt properties of halides. Products of the reaction of the compounds of univalent positive halides with unsaturated hydrocarbons. M. I. Usbakov, V. O. Chistov and M. A. Shlosberg. *J. Gen. Chem.* (U. S. S. R.) 5, 1391-8(1935); cf. *C. A.* 29, 4080[9].—Methods of prepn. and properties of addnl. halohydrin esters are described. $C_7H_{14}IOBz$, m. 64.5-6°, was prepd. in 52% yield by adding to a suspension of 17 g. AgOBz in 200 cc. CCl_4 ½ of 12.7 g. of powd. I and then ½ of a soln. of 4.1 g. cyclohexene (I) in 20 cc. CCl_4 and adding the other halves in the same order after 1 hr., filtering off the ppt. after 24 hrs., washing the united filtrate with Na_2CO_3 soln. and H_2O, drying with $CaCl_2$, evapg. the solvent and crystg. from MeOH. Alternate addns. under mech. stirring of 16 g. I and 5.1 g. I to 25.5 g. Ag *m*-nitrobenzoate in 175 cc. $CHCl_3$ at −20°, isolation of the products as above and crystn. from alc. produced 35% $C_6H_{10}IOOCC_6H_4NO_2$, m. 92.3°. Addn. of 32 g. Br and 16.4 g. I to 40 g. Ag butyrate and 16 g. C_5H_5N in 200 g. $CHCl_3$ at −30°, immediate washing of the products with dil. H_2SO_4, isolation of the products as above and fractionation *in vacuo* of the distn. residue gave 47.4% $C_6H_{10}BrOOCPr$, b_5 138°, n_D^{20} 1.4799. $C_6H_{10}BrOOCCH_2CHMe_2$, b_5 141-2°, was prepd. in 48.6% yield as above by the interaction of 26 g. Ag isovalerate and 10 g. C_5H_5N in 200 cc. $CHCl_3$ with 20 g. Br in 50 cc. $CHCl_3$ and 10.2 g. I at −30°. Alternate addns. of 20 g. Br in 50 cc. CCl_4 and 2.8 l. of dry C_2H_4 to 31.5 g. AgOAc in 150 cc. CCl_4 at −18°, isolation of the products as above, soln. of the distn. residue in Et_2O, washing with H_2O, drying with $CaCl_2$, evapn. of the Et_2O and fractionation of the residue gave 23.8% CH_2BrCH_2OAc, b. 159-64°. $CH_2BrCH_2NO_2$, b_{10} 81.5° (contaminated with $C_2H_4Br_2$) was obtained in 9.5 g. yield when to a complex, prepd. by gentle heating of 30 g. $AgNO_2$ and 14 g. C_5H_5N, in 100 cc. $CHCl_3$ were added at −25° to −30° 28.2 g. Br in 50 cc. $CHCl_3$ and then within 20 min. 6 l. C_2H_4, the products isolated as above and the distn. residue was fractionated. Alternate addns. of 20 g. Br in 20 cc. CCl_4 and 2.8 g. C_2H_4 to 31.5 g. AgOAc in 150 cc. CCl_4, isolation of the products, soln. of the residue in Et_2O and evapn. of the Et_2O gave on distn. 17.7% $EtCH_2BrOAc$, b_{760} 161.5°. Treatment in like manner of 41.8 g. AgOBz in 150 cc. CCl_4 under stirring with 20 g. Br in 30 cc. CCl_4 and 2.8 l. C_2H_4 at −12° gave 25.8% $MeCH(CH_2Br)OBz$, b_{10} 152°. Addn. of 5.9 g. styrene in 20 cc. $CHCl_3$ to a $ClNO_2$ soln., obtained by conducting Cl (from 25 cc. of concd. HCl and 3.7 g. $KMnO_4$) into 10 g. $AgNO_2$ and 9 g. C_5H_5N in 50 cc. $CHCl_3$ at −25° to −30° isolation of the products and distn. of the residue *in vacuo* produced 6.5 g. $C_8H_7ClNO_2$, b_4 107°. Addns. of 10.7 g. Cl in 100 cc. $CHCl_3$ and 12.3 g. I to 25.5 g. $AgNO_2$ and 18 g. C_5H_5N in 20 cc. $CHCl_3$ at −30°, isolation of the products and distn. *in vacuo* gave 47% $C_8H_6ClNO_2$, b_{11} 108.9°. Chas. Blanc

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Chemistry of hormones of the androsterone group

N. D. Zelinskii and M. I. Ushakov. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat., Sér. chim.* 1936, 879-98 (in German 898-900).—The oxidation of α-cholestanone acetate (I) with CrO_3 in AcOH according to Ruzicka and co-workers (cf. *C. A.* 29, 810[6]) should give not only androsterone acetate but also the acetate of the 3-HO ketone. A mixt. of the semicarbazones from the neutral oxidation products of I yielded a new *semicarbazone* (II), $C_{21}H_{35}N_3O_2$, m. 224-3°, more sol. in EtOH than androsterone semicarbazone. Hydrolysis of II with alc. H_2SO_4 and saponin with KOH in MeOH yielded a *HO ketone* (III), m. 175-7°, isomeric with *trans*-allopregnan-3-ol-20-one, for which structures are proposed. To clarify the physiol. role of dehydroandrosterone, the α-oxide, m. 228.5°, was hydrated with aq. Me_2CO contg. a few drops of 10% H_2SO_4 at room temp., yielding *androstane-3,5,6-triol-17-one*, m. 301-2°, acetylated with Ac_2O in pyridine to a mixt. from which an *acetate*, m. 171-2°, was isolated. C. R. A.

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CA

4

Chlorine nitrate. M. I. Ushakov and V. O. Chistov. *Bull. soc. chim.* [5], 3, 2142-3(1936); *J. Gen. Chem.* (U. S. S. R.) 7, 253-4(1937); cf. *C. A.* 30, 2190[8]. A soln. of 9 g. $AgNO_3$ and 8.75 g. C_5H_5N in 50 cc. $CHCl_3$ was added drop by drop with stirring to a cold soln. (−30-5°) of 4 g. of Cl in 75 cc. of $CHCl_3$. Without rise in temp., the AgCl was removed by means of a glass filter and 0.3 g. C_5H_5N in 175 cc. petroleum ether added to the filtrate. The resulting white, cryst. ppt. was filtered, washed 3 times with petroleum ether (100 cc.) and dried 30 min. in a vacuum over H_2SO_4: yield of $ClNO_3.2C_5H_5N$, 6.2 g.; m. p. 77-8° with decompn. W. C. Fernelius

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CA

10

The catalytic reduction of ethylene chlorohydrin M. I. Cabakov and B. M. Mikhailov. *J. Gen. Chem.* (U. S. S. R.) 7, 240-52(1937).—When CH_2ClCH_2OH is treated with an alk. soln., it forms ethylene oxide, which can be catalytically reduced to EtOH, though some glycol is also formed by hydration. NaOH is better than $Ca(OH)_2$ in the soln. Pd deposited on $CaCO_3$ gives 91% EtOH, while Ni deposited on SiO_2 gives 80% EtOH and 20% glycol. With increased temp. the reaction rate rises, but the stability of the catalyst is decreased.

H. M. Leicester

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1ST AND 2ND ORDERS

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3RD AND 4TH ORDERS

CA

10

High-pressure hydrogenation of pyridine and pyridine bases in the presence of nickel-silica gel catalyst. M. I. Ushakov and A. I. Bronevskii. *J. Gen. Chem.* (U. S. S. R.) 7, 750-2(1937); cf. C. A. 29, 4358[6]. The liquid-phase hydrogenation in the presence of 20% of 50% Ni silica gel catalyst at 150° and 50-100 atm. resulted in 100% reduction of C_5H_5N to $C_5H_{10}N$ in 5 hrs. and that of coal-tar α-picoline fraction (I), b. 128-31°, to α-pipecoline (II) in 7 hrs. The β + γ-picoline fraction (III), b. 138-45°, was reduced to a mixt. of the corresponding pipecoline isomers at 200° in 4 hrs. **The relative velocities of catalytic hydrogenation of pyridine and picolines, and combined hydrogenation of pyridine bases.** M. I. Ushakov and E. V. Yakovleva. *Ibid.* 753-8. —The relative hydrogenation velocities of C_5H_5N and isomeric picolines were studied by fractional reduction of the mixts. of C_5H_5N and I with III in the presence of Ni-silica gel as described above. The hydrogenation was discontinued when the absorption rate of H_2 was considerably reduced, which occurred when about 50% H_2 required for the mixt. was absorbed. In the mixt. C_5H_5N + III, 79.8% $C_5H_{10}N$ was sepd. from the reduced fraction, and in the mixt. I + III 68.4% II. From the unreacted fractions 80.5% III was recovered. In the fractional hydrogenation of mixed HCl salts of C_5H_5N, I and III in absolute alc. in the presence of Pt black by the method of Hamilton and Adams (C. A. 22, 3105), C_5H_5N was completely reduced in 6 hrs. and I in 12.5 hrs., while only 4% III was reduced in 4 hrs. Thus, the velocity of hydrogenation of pyridines decreases with the introduction of a Me group into C_5H_5N. The rate of decrease increases with the greater distance between the Me group and the nuclear N in the mol.

C. B.

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1ST AND 2ND ORDERS

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10

Dehydroandrosterone oxide. M. L. Chikov and A. I. Lyutenberg. *Bull. soc. chim.* [5], 4, 1304-8; *J. Gen. Chem.* (U. S. S. R.) 7, 1821-4 (1937).—The simplest oxidations and reductions of the androsterone series at C atoms 3 and 17 provoke profound changes in physol. properties. The oxidation of dehydroandrosterone (I) at the double bond has been carried out according to the method of Prilejaev. BuO_2H in $CHCl_3$ (10 cc.) was added to 0.8 g. I in 10 cc. $CHCl_3$ at room temp. After 26 hrs. in a closed flask, the soln. was washed with 5% Na_2CO_3 and H_2O, dried over Na_2SO_4, evapd. and treated with petr. ether, forming crystals which, on recrystn. from AcOEt, gave 0.43 g. of *dehydroandrosterone oxide* (II), $C_{19}H_{28}O_3$, m. 227.5-8.5° (all m. pt. cor.). Hydration by treating 0.23 g. II in 17 cc. Me_2CO with 10 cc. H_2O contg. 2-3 drops of 10% H_2SO_4, for 30 hrs. at room temp. yielded 0.23 g. of *3,5,6-androstanetriol-17-one* (III), $C_{19}H_{30}O_4$, m. 301-2°, in square platelets on recrystn. from alc. Oxidation of 80 mg. III in 5.9 cc. AcOH by 60 mg. CrO_3 in 2.5 cc. AcOH at room temp. for 17-18 hrs. formed 65 mg. of 3,6,17-androstanetrione-5-ol (IV), m. 240° (decompn.), identical with the compd. obtained by Butenandt and Riegel (C. A. 30, 5234[6]). Treatment of 70 mg. IV in 7 cc. anhyd. $CHCl_3$ with a stream of dry HCl for 3 hrs. at 0° gave 50 mg. of 4,5-androstene-3,6,17-trione, m. 221-2°, previously obtained by B. and R. by direct oxidation of I. C. R. Addinall

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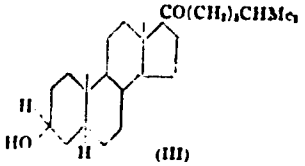
3-Epihydroxyetioallocholestyl isohexyl ketone. M. I. Lishakov, P. P. Epifanskii and A. D. Chinaeva. *Bull. soc. chim.* [5], 4, 1390-3; *J. Gen. Chem.* (U. S. S. R.) 7, 1825-7(1937).—The oxidation cleavage of the side chain of cholesterol and its derivs. yields HO ketones by rupture at the junction of the ring system and the side chain. The introduction of a tertiary C atom into the side chain may possibly provide another point of oxidation cleavage. Thus the oxidation of epicholestanyl acetate (I) may produce 2 HO ketones by oxidation at C atom 20 whereas cleavage at C atom 25 can only give 1 HO ketone. The neutral products from the oxidation of 33 g. I were treated with alc. $H_2NCONHNH_2$.AcOH for 20 days. The semicarbazone (623 mg.), m. 241°, was boiled with BuOH and yielded 280 mg. of *3-epihydroxyetioallocholestyl isohexyl ketone semicarbazide* (II), $C_{31}H_{61}N_3O_3$, m. 223-7° (decompn.). Successive acid and alk. hydrolysis of II and recrystn. from alc. gave the *HO ketone* (III), $C_{30}H_{50}O_3$, m. 175-7° (mixed with androsterone, m. 149-5°); *Ac deriv.*, m. 135-6°. No CHI_3 was formed on treatment of III in MeOH with alk. I. The mother liquors from the crystn. of III gave several mg. of an *unidentified substance*, m. 105-6°.



(III)

C. R. Addinall

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

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Ka

18

Characteristics of the nickel-silica gel catalyst in the high-pressure hydrogenation of pyridine and pyridine bases. M. I. Tabakov, A. I. Bronevskii and M. I. Ivanova. *Org. Chem. Ind.* (U. S. S. R.) 5, 33-5(1938); cf. *C. A.* 31, 5709[1]. In the previous high-pressure hydrogenation of pyridine and pyridine bases, the ~~addition~~ of 0.25-5% Fe to the Ni silica gel catalyst caused a considerable decrease in the catalyst activity, and that of 1-5% Co showed no neg. effect. Washing the Ni-silica gel with tap water, instead of distd. water, gave equally active catalyst. When the washing of the contact mixt. is entirely omitted, the catalyst is poorly active in the hydrogenation of C_5H_5N at 150°, but is equally as active as the washed catalyst at 175°. The catalysts are best reactivated by heating in an air current at 450° and reducing in a H current at the same temp. Chas. Blanc

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CA

Catalytic hydrogenation of mixed hydrochloride salts of pyridine bases. M. I. Ushakov, M. I. Ivanova and N. F. Kosheleva. *J. Gen. Chem.* (U. S. S. R.) 8, 1870-2(in English, 1872)(1938); cf. *C. A.* 31, 5799f. I. Livak

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CA 10

Oxidation of cholesterol and *trans*-dehydroandrosterone by means of osmic acid. M. I. Gabakov and A. I. Lyutenberg. *J. Gen. Chem.* (U. S. S. R.) **9**, 69-72 (1939); cf. *C. A.* **32**, 187[1].—It is shown that the *cis*-cholestane-3,5,6-triol (I) and *cis*-androstan-17-one-3,5,6-triol (II), previously obtained from cholesterol and *trans*-dihydroandrosterone, resp., by oxidation with OsO_4, are isomeric with the corresponding products formed by hydration of the oxides of cholesterol and dehydroandrosterone (cf. *C. A.* **32**, 577[1]). The triols were identified by converting them into the di-Ac derivs. and oxidizing the HO groups at the C atoms 3 and 6. Refluxing 40 g. I in 5 ml. C_6H_6 with 1 ml. Ac_2O gave the *di-Ac deriv.* of I, m. 188-9°. Oxidation of I in AcOH by CrO_3 yielded *cis-cholestane-3,6-dione-5-ol*, m. 241-3.5°. *Di-Ac deriv.* of II, m. 248.5-9.2°. Reduction of 120 mg. of 4,5-androstene-3,6,17-trione (cf. *loc. cit.*) with Zn dust in AcOH gave 110 mg. of *3,6,17-androstanetrione*, m. 191-2°.

Chas. Blanc

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PROCESSES AND PROPERTIES INDEX

CA

10

The reaction of the α-oxide of cholesterol with methylmagnesium iodide. M. I. Ushakov and O. S. Madaeva. *J. Gen. Chem.* (U. S. S. R.) 9, 436-41(1939).—The α-oxide of cholesterol does not react with MeLi or Me_2Mg at 80-100°, but when it is heated in C_6H_6 for 5 hrs. with MeMgI it gives 60% *6-methyl-3,5-cholestanediol* (I), m. 181-1.5° (cor.). If the reaction is continued for 7 hrs., the product is *6-methylcholesterol* (II), m. 134.5-5° (cor.). Evapn. of the mother liquor from this gives crystals m. 201-4°. I gives no ppt. with digitonin, but II does. One OH in I is tertiary, the other is secondary. Treatment of I with Ac_2O gives *3-acetoxy-4-methyl-5-cholestanol*, m. 164-5°. When I is heated with Ac_2O contg. H_2SO_4, *6-methylcholesteryl acetate*, m. 115-15.5°, is formed. When this is boiled with KOH soln., II is obtained. The position of the double bond is not proved, but it is assumed by analogy with cholesterol. When I is oxidized with CrO_3, it forms *6-methyl-3-cholestanon-5-ol*, m. 215.5-16° (cor.). When this is dissolved in $CHCl_3$ and dry HCl is passed in, *6-methyl-4-cholesten-3-one* (III), m. 120.5-7.5° (cor.), is formed. The ultraviolet absorption curve of III closely resembles that of cholestenone. The mechanism of these reactions is discussed. H. M. Leicester

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USHAKOV, M. I.

"Experiments on the Isomerization of the Oxide of Cholesterin", Zhur. Obshch. Khim., 9, No. 18, 1939. All-Union Institute of Experimental Medicine imeni A. M. Gor'kiy, Laboratory of the Chemistry of Sterols. Received 25 March 1939 .

Report U-1614, 3 Jan 1952.

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1. CHINAYEVA, A. D.: USHAKOV, M. I.: MARCHEVSKIY, A.T.

2. USSR (600)

"Obtaining 17, Methyltestosterone from Dehydroandrosterone," Zhur. Obshch. Khim., 9, No. 20, 1939. Lab. of the Chem. of Sterols, All-Union Inst. of Experimental Medicine imeni A.M.Gor'kiy. Received 11 May 1939.

9. [redacted] Report U-1626, 11 Jan. 1952.

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CA

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The synthesis of 2-methyl-10-cyclohexylanthracene. A. T. Marchevskii and M. I. Ushakov. *J. Gen. Chem.* (U. S. S. R.) 10, 1369-72(1940).—The condensation of *o*-(*p*-MeC_6H_4CO)$C_6H_4CO_2H$ with $C_6H_{11}(CH_2)_2CHMgBr$ (4-fold excess) in the usual manner. (Grignard reaction) yielded 12.5% *p*-tolylcyclohexylphthalide (I), m. 113.5–15°. I was reduced with Zn-Hg in the presence of HCl in AcOH by refluxing for 15 hrs. and adding HCl-AcOH soln. every 2 hrs. in small portions, yielding 40% *o*-[*p-tolyl(cyclohexyl)methyl*]*benzoic acid* (II) m. 155–6°. An attempt to reduce I with Zn in concd. alkali failed. II was heated with anhyd. $ZnCl_2$ powder at 180-90° for 20 min., yielding 75% 2-methyl-10-cyclohexyl-9-anthrol (III), m. 112–13.5°. III was reduced with Zn dust activated with Cu, and wetted with PhMe in aq. NH_3 (see Elbs, *J. prakt. Chem.* 41, 15(1890)), yielding 65% 2-methyl-10-cyclohexyl-9,10-dihydro-9-anthrol (IV), m. 166–7.5°. Finally, IV was heated with Ac_2O-AcOH (glacial) for 3–4 hrs. in an open beaker, yielding *2-methyl-10-cyclohexylanthracene*, m. 116.5–17°. A. A. P.

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PROCESSES AND PROPERTIES INDEX

6-Methyl-Δ^5-androstene-3,17-dione. O. S. Madaeva, M. I. Ushakov and N. F. Kosheleva. *J. Gen. Chem.* (U. S. S. R.) 10, 213-16(1940).—It is known that the introduction of an alkyl group in the 17-position increases the androgenic effect of the androstane derivs. *6-Methyl-Δ^5-androstene-3,17-dione* (I) was prepd. to study the effect of substitution in the 6-position. Oxidation of 3,17-androstenediol, m. 177-8°, in 225 ml. of dry $CHCl_3$ with 78 g. BzO_2H (20% excess) at room temp. for 24 hrs. gave 1.42 g. of the *5-oxide*, m. 198-9°; *diacetate*, m. 165.5-6°. MeMgI (from 0.55 g. Mg and 1.5 g. MeI in 18 ml. ether) and 0.06 g. of the oxide in 135 ml. of C_6H_6, after removing a part of the solvent at 78°, is refluxed 3 hrs. The reaction mixt. is dild. with iced water, made acid with H_2SO_4, the aq. layer extd. with AcOEt, and the solvent distd. off, forming a yellow oil. This on reworking with dil. alc. pptd. 30% *6-methylandrostane-3,5,17-triol* (II), highly hygroscopic product, m. 117-38°. It was purified by converting it with Ac_2O into the *3,17-diacetate*, m. 176.3-7.9°, and sapong. with 0.1 *N* alc. KOH at 53-7° for 4 hrs. to give II, m. 117-20°. *6-Methylandrostan-5-ol-3,17-dione*, m. 187-8°, was prepd. by treating dropwise with cooling for 1.5 hrs. 93 mg. II in 6 ml. of glacial AcOH with 1.75 ml. of 4% CrO_3 in AcOH, expelling the AcOH *in vacuo*, extg. the residue with ether + AcOEt, washing with 10% Na_2CO_3, drying with Na_2SO_4 and expelling the solvent. The dione (45 mg.) in 2.5 ml. $CHCl_3$, when satd. with dry HCl at 0° and the residue from the solvent recrystd. from C_6H_6 + MeOH, gave I, prisms, m. 163.5-6.5°. The physiol. action of I (comb-growth promoting) is not very pronounced and is about equal to that of Δ^5-androstenedione.

Chas. Blanc

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USHAKOV, M. I.

"4,5-6-Methyl Androstendione-3,17, "Zhur. Obshch. Khim. 10, No. 3, 1940. Laboratory of the Chemistry of Sterols, All-Union Institute of Experimental Medicine imeni A. M. Gor'kiy. Received 17 July 1939.

Report U-1526, 24 Oct 52.

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PROCESSES AND PROPERTIES INDEX

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The reaction of cholesterol α-oxide with phenylmagnesium bromide and phenyllithium. 6-Phenylcholesterol. A. D. Chinaeva and M. I. Ushakov. *J. Gen. Chem.* (U. S. S. R.) 11, 335-8(1941).—PhLi and cholesterol α-oxide (I) react in a sealed tube at 100° for 12 hrs. to give 40-50 wt. % of *3,5-cholestanediol* (or *3,5-coprostanediol*), m. 200-1°; *acetate* m. 176-7°. PhMgBr and I are boiled for 2 hrs. in C_6H_6. The resulting tar is dissolved in $CHCl_3$ and treated with HCl and semicarbazide to give *6-keto-3-cholestanol benzoate semicarbazide*, m. 250-7°, which, when heated with H_2SO_4, gives *6-keto-3-cholestanol* (II), m. 152.5-6°. Oxidation of II with CrO_3 gives 3,6-cholestanedione, m. 169-70°. II reacts with PhMgBr to give *6-phenyl-3,6-cholestanediol*, m. 190.5-200° (*monoacetate*, m. 170-80°). The latter reacts in pyridine with $SOCl_2$ to give *6-phenylcholesteryl acetate*, m. 148-9°. H. M. Leicester

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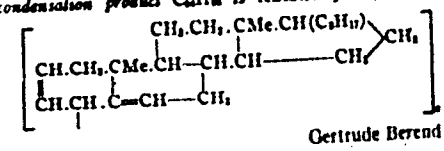
5,6-Dihydrostigmasterol. Abraham Mazur. *J. Am. Chem. Soc.* 63, 2442-4(1941).—Exptl. details are given for the work reported in *C. A.* 35, 2001[1]. C. J. West

Photochemical condensation of $\Delta^{2,4}$- and $\Delta^{3,5}$-cholestadienes. M. I. Ushakov and N. P. Kosheleva. *J. Gen. Chem.* (U. S. S. R.) 11, 203-6(1941).—$\Delta^{2,4}$-Cholestadiene (4 g.) in 50 ml. C_6H_6 was added to 5 g. fluorescein in 400 ml. 60% alc., the air removed with CO_2 and the mixt. subjected to direct sunlight for 35 days. The reaction product (yield 0.4 g.), after repeated recrystn., m. 283-4° and corresponded to the formula $C_{54}H_{88}$. The same compd. was formed during the photochem. condensation of $\Delta^{2,4}$-cholestadiene. It absorbed 2 mols. H on hydrogenation in the presence of Pd black and yielded on decompn. by heating to 250-300° a *compd.* $C_{27}H_{46}$, m. 87.5-8°, which on hydrogenation in the presence of Raney Ni in alc. absorbed 2 mols. H, the reaction mixt. contg. cholestane and pseudocholestane. The structural formula for the *condensation product* $C_{54}H_{88}$ is tentatively suggested as



Gertrude Berend

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USHAKOV, M. I.

"Isomeric Transformations of secondary and tertiary a-Furyl-carbinols. I. Diphenyl-furyl-carbinol ." Ushakov, M. I. and Kutcherov, V. F. (p. 1073)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 11-12.

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USHAKOV, M. I.

"Isomeric Transformations of secondary and tertiary a-furyl-carbinols. II. Secondary Alkyl-furyl-carbinol." Ushakov, M. I. and Kutcherov, V. F. (p. 1080)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 11-12.

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USHAKOV, M. I.

"Isomeric Transformations of secondary and tertiary a-furyl-carbinols. III. a'-Naphtyl-a-furyl-carbinols." Ushakov, M. I. and Kutcherov, V. F. (p. 1087)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 11-12.

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

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Photopolymerization of $\Delta^{5,6}$-cholestadienone. M. I. [illegible]hakov and N. F. Kosheleva (All Union Inst. Exptl. Med., Moscow). *J. Gen. Chem.* (U.S.S.R.) 14, 4138-41 (1944) (English summary). $\Delta^{5,6}$-Cholestadienone (I) prepd. in 11% yield according to Wettstein (C.A. 34, 1970), m. 80°. This (10 g.) in 50 cc. hexane irradiated by a Hg lamp in a quartz vessel for 80 hrs. yielded after successive crop-taking 3.3 g. *lumicholestadienone*, $C_{27}H_{40}O$, m. 179-80° (from EtOAc), which breaks down to the original material on sublimation at 150-60° and 2-2.5 mm. The dimer, on hydrogenation with Pd black in EtOAc, loses a mole of water and yields $C_{27}H_{40}O$, m. 107-8°, which on vacuum sublimation yields a mixt. of I and $C_{27}H_{40}$, m. 85-6°, identical with product described by U. and K. (C.A. 35, 7411[8]); the mixt. was sepd. chromatographically on Al_2O_3 in Et O.

G. M. Kosolapoff

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

17

Preparation of testosterone from $\Delta^{5,6}$-androstene-3,17-diol. M. I. Ushakov and A. D. Chinaeva (All-Union Inst. Exptl. Med.). *J. Gen. Chem.* (U.S.S.R.) 15, 661-6 (1945) (English summary).—Conditions were established for securing 40% yields of testosterone from $\Delta^{5,6}$-androstene-3,17-diol (I). I (200 mg.) in 20 cc. benzene was heated until 10 cc. of benzene was evapd., the residue was treated with 10 cc. benzene and 4.72 cc. benzene soln. of $Al(OBu\text{-}iso)_3$ (contg. 0.1124 g. per cc.); the mixt. was refluxed with exclusion of moisture for 40 min., treated with 4.8 cc. pure Me_2CO, and refluxed for 18 hrs. After diln. with Et_2O and washing with 10% H_2SO_4 and water, the org. layer was evapd. and the residue chromatographed on Al_2O_3 in benzene, with elution by 4:1 benzene-Et_2O mixt. There was obtained 80 mg. testosterone, m. 154°, while the preliminary elution by benzene gave small amts. of $\Delta^{5,6}$-*androstene-3,17-dione*, m. 160-70°. The oxidation in the presence of Me_2CO was studied in detail and was shown to proceed best in the presence of about 95 mols. Me_2CO, with yields showing a rapid drop on increase or decrease of Me_2CO used. Use of cyclohexanone, cyclopentanone, etc., gave considerably lower yields (20-5%). Similar results were obtained when PhMe was used for the solvent with cyclohexanone as the ketone (20-5% yields). Use of Al propoxide gave 20% yields of testosterone. *Testosterone propionate*, m. 120-1° (from hexane), was readily prepd. by treatment of the ketone with propionic anhydride in pyridine at room temp.

G. M. Kosolapoff

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Hydrogenation of hydrochlorides of pyridine bases and their mixtures in the presence of platinum black. II. M. I. Ushakov and M. Sh. Promyslov. *J. Gen. Chem.* (U.S.S.R.) 17, 1018-22(1947)(in Russian)(in English 1022-3); cf. C.A. 31, 5790[9]; 33, 5400[9].—Reactions with electrolytic H_2 were carried out in soln. in abs. EtOH (20-23 ml.) with 0.2183 g. Pt oxide per 0.0002 mole base, with the equiv. amt. of HCl; the progress of the reaction was measured by the vol. of H_2 absorbed. The reaction products were identified by the m. pp. of the dithiocarbamates. Relative rates of hydrogenation, v, expressed in fractions of that of $C_5H_5N.HCl$ with the same catalyst, and the products, were: (I) pyridine (to piperidine) 1.00; (II) 2-picoline (to pipecoline) 0.57; (III) 2-ethylpyridine (to ethylpiperidine) 0.54; (IV) 2-propylpyridine (to propylpiperidine) 0.52; (V) 2-phenylpyridine (to phenylpiperidine) 0.30; (VI) methyl-(2-pyridylmethyl)-carbinol (to methyl(2-piperidylmethyl)carbinol) 0.57; (VII) dimethyl(2-pyridylmethyl)carbinol (to dimethyl-(2-piperidylmethyl)carbinol) 0.36. Plots of the amt. of H_2 absorbed as a function of time are most often nearly horizontal over the whole duration of the reaction, after which they fall to zero abruptly. If hydrogenation of V is allowed to proceed to cyclohexylpiperidine, which corresponds to absorption of double the amt. of H_2, v = 0.057; correspondingly, the kinetic curve consists of 2 distinct, nearly horizontal portions, sepd. by a discontinuity: the 2nd stage, hydrogenation of the Ph substituent, sets in only after the 1st stage (hydrogenation of the pyridine ring) is at least 97% completed (after about 170 min.) and is then distinctly slower. In equimol. binary mixts. I + II, I + III, I + IV, and I + V, the kinetic curves show characteristic discontinuities indicating transition from hydrogenation of I into that of the 2nd component, the latter 2nd stage setting in, at a slower rate, only after hydrogenation of I is 97-98% complete; this is confirmed by analysis of the product of the 1st stage, which is found to be piperidine only. In I + VI and I + VII, hydrogenation is not selective: the kinetic curves show no discontinuity and both piperidine and methyl- and dimethyl(2-piperidylmethyl)carbinol appear in the product; in I + VI, 34% of the H_2 were spent on VI, 66% on I; in I + VII, 76.4% of the H_2 were consumed by VII, only 23.6% by I. In I + II (III, IV), v is less than for each component separately, the 1st stage being slower than the hydrogenation of pure I, the 2nd stage slower than that of II(III, IV). In I + V and I + VII, v is somewhat higher than with pure V and VII, resp. In I + VI, v is about the same as with pure VI.

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Action of hydrazine hydrate on dianisylideneacetone and the decomposition of the pyrazoline base from them into a cyclopropane derivative. M. I. Ushakov, N. P. Shusherina, and A. D. Chinaeva. *J. Gen. Chem.* (U.S.S.R.) **17**, 1678–83(1947)(in Russian).—Dianisylideneacetone, (p-$MeOC_6H_4CH{:}CH)_2CO$ (5 g.), 50 cc. EtOH, and 3.24 g. 78% $N_2H_4.H_2O$ agitated 40 min. at 65–70° gave, on cooling, 67% of a *pyrazoline deriv.*, $C_{19}H_{20}O_2N_2$, m. 130–1° (from EtOH); *Ag salt*, white crystals, darkening in the air or on heating (excess alc. leads to sepn. of metallic Ag); *HCl salt*, decomp. 173–4° (from EtOH); *nitroso deriv.*, m. 142° (from EtOH). When 16 g. pyrazoline deriv. was heated at 15–16 mm. to 140°, N evolution began and was finally completed after 2 hrs. at 200–30°; the product in Et_2O was treated with HCl to remove traces of the unreacted base and the residue on distn. gave 9 g. greenish oil, b_3 180–90°, solidifying on standing, m. 44–5° (from EtOH), d_4^{20} 1.0813, n_D^{20} 1.5676; the material decolorizes $KMnO_4$ in $CHCl_3$, gives with Br a green color turning to violet; on the basis of MR calcns. and chem. behavior the product is given the structure of *1-(p-methoxyphenyl)-2-[2-(p-methoxyphenyl)cyclopropyl]ethylene* (I). With $KMnO_4$ in dil. Me_2CO it gave anisic acid and a solid, m. 112–13° (from EtOAc). Hydrogenation in EtOH over Pt black gave a product (II), $C_{19}H_{22}O_2$, m. 70–1° (from EtOH), assigned the structure of the *ethane analog* of I. II (0.5 g.), 2.5 g. pyridine, and 0.5 g. Na heated 4 hrs. to 170–90° in a N atm., cooled, treated with pyridine, then with pyridine-H_2O, extd. with Et_2O, and the aq. soln. acidified with 20% H_2SO_4 and extd. with Et_2O gave 66% *1-(p-hydroxyphenyl)-2-[2-(p-hydroxyphenyl)cyclopropyl]ethane*, m. 172–3° (from benzene); this (0.1 g.) in 2.5 cc. pyridine with 2.5 g. Ac_2O yielded, after standing 2 days, the *di-Ac deriv.*, m. 121–2° (from MeOH). The formation of the cyclopropane deriv. is explained by an intermediate $RCH{:}CH\dot{C}HCH_2CHR$, with an allylic system which can shift its double bond to give $R\dot{C}HCH{:}CHCH_2CHR$; the former structure can yield the cyclopropyl deriv. on cyclization, as was the case in this instance, while the 2nd form gives rise to a 5-membered ring, as with the Kizhner compd. (*C.A.* 10, 1398).

G. M. Kosolapoff

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Hydrogenation of hydrochlorides of pyridine bases and their mixtures in the presence of platinum black. III. M. I. Ushakov and M. Sh. Promyslov. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 939–47(1949); cf. *C.A.* 42, 4583*i*.—Hydrogenation of tertiary alcs. of the pyridine series showed that diethyl-3-pyridylcarbinol takes up 4 moles H, yielding 3-(1-ethylpropyl)piperidine, although the 2-isomer gives normal reduction to the corresponding carbinol. Hydrogenation of the 3-isomer-HCl with 1 mole $C_5H_5N.HCl$ gave selective hydrogenation of the latter (95%) in an interrupted expt., and complete reduction in an expt. allowed to go to completion. Hydrogenation of mixed pyridine- and anabasine-HCl gave dissimilar results: pyridine and anabasine hydrogenate simultaneously; a similar result was obtained with a pyridine-nicotine mixt.; in both cases pyridine reduction was behind the alkaloid reduction by 20-30%. 2-Picoline instead of pyridine gave selective reduction, with the picoline being reduced first only in the mixt. with diethyl-3-pyridylcarbinol; the alkaloids, however, are more readily reduced in such mixts. although their individual reduction rates are slower. G. M. Kosolapoff

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USHAKOV, M.I.

4 (5)

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Synthesis of 3-alkylcholestadienes. N. F. Kucherova and M. I. Ushakov. *Zhur. Obshchei Khim.* 23, 315-20 (1953); cf. Ruzicka and Fischer, *C.A.* 30, 6754[7] and Urushibara, *et al.*, *C.A.* 31, 7881[8].—MeMgI (from 9.2 g. MeI) at −8° with 5.7 g. cholestenone in Et_2O gave, after the usual hydrolysis with 10% HCl, 73.7% *3-methyl-3,5-cholestadiene*, m. 81-2°, $[\alpha]^{18}_{D}$ −129° (CCl_4), does not react with maleic anhydride nor with Na-amyl alc. Similar reaction with EtMgI gave 68% *3-Et analog*, m. 77-8° (from EtOH-Et_2O), $[\alpha]^{17}_{D}$ −120°; BuMgBr gave 51.8% *3-Bu analog*, m. 64-5° (from EtOH-Et_2O), $[\alpha]^{18}_{D}$ −100.9°; C_4H_9MgBr (the reaction mixt. decompd. with NH_4Cl soln.) gave 40% *3-hexyl analog*, m. 40-8° (from EtOAc), $[\alpha]^{18}_{D}$ −93.8°; $C_6H_{11}MgBr$ gave 50% *3-cyclohexyl analog*, m. 144-6° (from EtOH-C_6H_6), $[\alpha]^{18}_{D}$ −84.3° ($CHCl_3$). Treatment of MeMgI (from 9.2 g. MeI) at −8° with 5.7 g. cholestenone, followed by 0.5 hr. at −10°, slow addn. of 10 g. NH_4Cl in 100 g. H_2O, and stirring 0.5 hr. at room temp. gave 79.6% *3-methyl-4-cholesten-3-ol*, m. 112-14° (from Et_2O), $[\alpha]^{18}_{D}$ 60.9°, which is very unstable and on heating and in the presence of acids (such as warming in EtOH-HCl) yields the diene. Similarly was obtained the *3-Et analog*, m. 89-91° (from Et_2O-EtOH), $[\alpha]^{18}_{D}$ 60.6°, whose behavior was similar. Cholestenone (11.4 g.) in 75 ml. Et_2O was added over 45 min. at −8° to MeMgI from 18.2 g. MeI, and the mixt. treated slowly after 1 hr. at 0° with 20 g. NH_4Cl in 180 g. H_2O without cooling, giving 85.9% *3-methyl-2,4-cholestadiene*, m. 68-9°, $[\alpha]^{18}_{D}$ −12.5°; this boiled with 96% EtOH and a little concd. HCl 5 min. gave *3-methyl-3,5-cholestadiene*, m. 81-2°. Thus the 3,5-cholestadienes form as a result of allylic shift of the cholestenols. Direct dehydration of the cholestenol by distn. *in vacuo* or treatment with dehydrating agents like Al_2O_3 gave only the 3,5-cholestadiene deriv.

G. M. Kosolapoff

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USMAKOV, M.M.

Pear

Forest pear is the best companion tree for the principal varieties. Les. i step' 4, no. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, NOVEMBER 1952 ~~1953~~, Uncl.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

1. USHAKOV, M. M.

2. USSR (600)

4. Viticulture-Kuban'

7. Needs of collective farm viticulture in the Kuban'. Vin. SSSR 13 No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, M.V.

Experience in studying methane by research methods. Khim. v shkole 15 no.4:26-35 Jl-Ag '60. (MIRA 13:9)

1. Oblastnoy institut usovershenstvovaniya uchiteley, Gor'kiy.
(Methane--Study and teaching)

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USHAKOV, M.V.

ZAKHVATKIN, V.K.; KOZLOVSKIY, V.A.; NIKOL'SKIY, D.A.; USHAKOV, M.V.

Conclusions drawn from experience in planning and building concentration plants. TSvet.met. 27 no.6:5-19 N-D '54. (MIRA 10:10)

1. Institut Mekhanobr.

(Ore dressing)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, M.V. (g.Gor'kiy)

Methodology in carrying out certain demonstration experiments (diffusion of gases). Khim.v shkole 12 no.6:31-34 N-D '57. (MIRA 10:12)

(Chemistry, Inorganic--Study and teaching) (Diffusion)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

YEVDOKIMOV, Pavel Dmitriyevich; PEROV, V.A., dotsent, kand.tekhn.nauk, retsenzent; NIKOL'SKIY, D.A., inzh., retsenzent; USHAKOV, M.V., inzh., retsenzent; KONTSEDALOV, A.I., inzh., retsenzent; VOL'PERT, B.M., inzh., otv.red.; GARBER, T.N., red.izd-va; PROKOROVSKAYA, V.L., tekhn.red.; BOLDYREVA, Z.A., tekhn.red.

[Design and operation of a tailings storage department in ore-dressing plants] Proektirovanie i ekspluatatsiia khvostovykh khoziaistv obogatitel'nykh fabrik. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 417 p. (MIRA 14:3)

(Tailings (Metallurgy))

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, M.V.

Enlarged Plenum of the Scientific Technological Council of the Institute for the Mechanical Processing of Minerals on the planning of ore dressing plants. Obog. rud 5 no.1:50-51 '60. (MIRA 14:8)

(Ore dressing--Congresses)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, M.V.

Krivoy Rog conference on exchange of experience in the design of ore dressing plants. Obog. rud 7 no.2:51-52 '62. (MIRA 16:4)
(Ore dressing—Congresses)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

ZAKHVATKIN, V.K.; USHAKOV, M.V.

Reorganization and expansion of the Ore Dressing Plant no.3 at the Leninogorsk Complex Metal Ore Combine. TSvet.met. 36 no.2: 1-8 F '63. (MIRA 16:2)
(Leninogorsk region (East Kazakhstan Province--Ore dressing)

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USHAKOV, N., podpolkovnik

He keeps track of every man. Komm. Vooruzh. Sil 3 no.1:54-55 Ja '63. (MIRA 16:1)

(Flight training)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N., podpolkovnik

Airplanes will be ready for training. Av. i kosm. 47 no.7, 75-78 Jl '64. (MIRA 17:7)

1. Rukovoditel' vnestatnogo korrespondentskogo punkta zhurnala "Aviatsiya i kosmonavtika".

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USHAKOV, Nikolai

Secret moment of transition. Nauka i zhizn' 30 no.4:82 Ap '63.
(MIRA 16:7)

(No subject headings)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.

Rabota [Moskovskogo] otdeleniia [Oktiabr'skoi] dorogi po-novomu. [The work of the Moscow section of the October railway on a new basis]. (Zhel-dor. transport, 1948, no. 8, p. 65-71). DLC: HE7.Z5

SO: Soviet Transportation and Communications. A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

19066

USHAKOV, N.

USSR/RR Maintenance 4602.0329 Jan 1948

"New Work of Railroad Section," N. Ushakov, Dir-Col Traffic, Chief, Moscow Sec of October System, 3½ pp

"Zh-d Transport" No 1

Describes assignments undertaken by section. 1947 plan for loading fulfilled 117.3% and unloading 110.5%. Following locomotive repair plans for 1947 fulfilled: average repair plan 112.1%, light repair 110.6%, washing 157.3%. Average passenger car repair plan fulfilled 117.4% and annual plan 100.5%

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USHAKOV, N.A., kapitan meditsinskoy sluzhby

Burns of the eyelids from napalm. Voen-med.zhur. no.8:50-53 Ag '60. (MIRA 14:7)

(EYELIDS--WOUNDS AND INJURIES) (BURNS AND SCALDS)
(NAPALM)

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L 48595-65 EWT(1)/EEC(b)-2/EWA(h) Pm-4/Po-4/Pq-4/Pg-4/Peb/Pl-4

ACCESSION NR: AP5013503 UR/0108/65/020/004/0003/0020

AUTHOR: Levin, B. R. (Active member), [illegible], N. A. (Active member)

TITLE: Some aspects of the current status of the problem of reliability

SOURCE: Radiotekhnika, v. 20, no. 4, 1965, 3-20

TOPIC TAGS: electronic equipment

ABSTRACT: In an article submitted at the invitation of the editors of *Radiotekhnika* (a publication of the A. S. Popov Society) an attempt [illegible] to evaluate [illegible] their explanation [illegible] (and probably heavily influenced by) the U. S. approach, the availability of the proceedings of eleven U. S. reliability symposia is mentioned in the foreword.

A considerable part of this review is devoted to a discussion of the use of standby components and systems, which is considered to be one of the most efficient means of increasing the reliability of electronic equip-

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ment. Component redundancy is preferred for economy reasons. (The following example is given: In order to achieve a reliability factor of 0.99 for a system consisting of 100 components each of which has a reliability factor of 0.9, it is necessary [illegible] nents; system redundancy would require the presence [illegible]) The development of methods of accelerated testing with forced operational conditions to obtain statistic[illegible] short time is considered to be the most important problem [illegible] tive method of reliability analysis involves simulation of the processes being studied to obtain criteria for probability distributions of failures in complex systems and "playback" of the [illegible] rather than in real time. The authors present some standard data on the reliability of electronic components and systems. Although their origin is not identified, a review of these data is of interest for comparative purposes.

The approximate proportions of components used in communication and radar equipment, for example, are as follows: resistors, 40%; capacitors, [illegible]%; vacuum tubes, 8%, chokes and transformers, 5%; and semi-

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conductor devices, 3% [The 16% not accounted for are probably other, nonelectronic, components]. In such equipment vacuum tubes are responsible for the majority of failures (60%), while resistors and capacitors cause only 6% of all failures. Replacement of components because of aging and changes in parameters beyond tolerance limits occurs 4—5 times as frequently as replacement due to failure. The following 1963 data are given on the reliability of some types of components with respect to their functioning time prior to first failure: magnetrons, 10^4 hr; vacuum tubes, 0.3×10^6 hr; semiconductor devices, 10^6 hr; transformers, 5×10^6 hr; resistors and capacitors, 10^7 hr.

Mean time before failure in a system without redundancy which consists of 100,000 series components is evaluated as being on the order of several tens of hours.

To increase reliability, "rationally designed" equipment is expected to operate with a load of 0.4—0.8 of the maximum value for a given component.

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The failure rate in mobile ground, airplane, and rocket equipment increases by factors of 25, 100, and 1000, respectively, as compared to performance of the same equipment under laboratory conditions.

The following table contains reliability data pertaining to various design methods, taken (according to the reference given) from a Soviet source . (Shishonk, N. A., ed. Osnovy teorii nadezhnosti i ekspluatatsii radioelektronnoy tekhniki (Fundamentals of the theory of reliability and exploitation of radioelectronic equipment). Izd-vo "Sovetskoye radio," 1964.

Reliability data

Method	Density of elements in 1 cm^3	Average time preceeding failure (hr)
Miniature component	0.2	0.2×10^6
Microminiature component	2	10^6
Micromodule	20	10^7
Miniaturized circuit	100	10^7
Integrated circuit	3000	10^7

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The article gives credit to the West for initiation of college and university training of reliability specialists who will combine a knowledge of the principles of electronic circuits with advanced mathematical knowledge in probability theory and statistics. It is stated that in the USSR reliability has not yet been introduced as a subject in higher educational establishments, except for theoretical courses and [illegible] in some technical schools. Conferences and seminars on reliability are held regularly at Moscow State University and at the Council on Cybernetics of the Academy of Sciences USSR.

The reliability Committee of the All-Union Council on Scientific and Technical Education (VSNTO), the Moscow and Leningrad Sections of the A. S. Popov Society, and the Reliability Section of the [illegible] Museum in Moscow deserve credit for [illegible] concluding statement stresses the importance of designing reliability into a system from the very first steps of its development, instead of trying to perform the impossible task of "injecting" reliability into existing equipment during testing or even during exploitation. The article is supported by a substantial bibliography on reliability containing [illegible] entries, 87 of

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ACCESSION NR: AP5013503

which appear to be of an original nature.
Orig. art. has 8 equations and 3 tables.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A. S. Popova (Scientific Research Society for Radio Engineering and Electrical Communications)

SUBMITTED: 08Jan65 ENCL: 00 SUB CODE: EC, GO

NO REF SOV: 071 OTHER: 036 FSB, v. 1, no. 6

Card 6/6

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

SYCHEV, V.I., inzh.; USHAKOV, N.A., inzh.

Construction of industrial enterprises in France. Prom.stroi. 42 no.11:43-47 N '64. (MIRA 18:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N. A.

35267. Primenenie zhelezobetonnykh konstruktsiy na metallurgicheskikh Zavodakh. Trudy IV vsesoyuz. Konf-tsii po beton i zhelezobeton. Konstruktsiyam. Ch. I. M.-L., 1949, S. 65-73

SO: Letopis' Zhurnal'nykh Statey Vol. 34, 1949 Moskva

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

1. USHAKOV, N. A.

2. USSR (600)

4. Factories - Design and Construction

7. Standardization of steel construction of rolling and tubing mill shops. Biul.stroi. tekh. 9 no. 21, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

1. USHAKOV, N. A.

2. USSR (600)

4. Building, iron and steel

7. Standardization of steel construction of rolling and tubing mill shops. Biul. Stroi. tekh. 9 no. 21. 1952.

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

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N. A., Engineer

"On the Design of Reinforced-Concrete Bunkers." Sub 23 Oct 51, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

KOSTYUKOVSKIY, M.G., kandidat tekhnicheskikh nauk; DOBROMYSLOV, N.S., arkhitekter; USHAKOV, N.A., kandidat tekhnicheskikh nauk.

Unified construction parameters and dimensions for shop buildings of steel plants. Strei.prom.34 no.7:27-30 Jl '56. (MIRA 9:9)

1.Giprotis (for Dobromyslov). 2. Gipromez (for Ushakov).
(Factories--Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.E., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; FOKIN, K.F., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G., prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk; SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY, M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A., inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn. nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERDLOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

MURASHEV, V.A.---(continued) Card 2.
MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; GVOZDEV, A.A., prof., retsenzent; MIKHAYLOV, V.V., prof., retsenzent; PASTERNAK, P.L., prof., retsenzent; SHUBIN, K.A., inzh., retsenzent; TEMKIN, L.Ye., inzh., nauchnyy red.; KOTIK, B.A., red. izd-va; GORYACHEVA, T.V., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

[Handbook for designers] Spravochnik proektirovshchika. Pod obshchei red. V.I.Murasheva. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Vol.5. [Precast reinforced concrete construction elements] Sbornye zhelezobetonnye konstruktsii. 1959. 603 p. (MIRA 12:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut betona i zhelezobetona, Perovo. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev, Gvozdev, Mikhaylov,V.V., Pasternak, Shubin). 3. Chlen-korresp. Akademii stroitel'stva i arkhitektury SSSR (for Mironov, Gusev, Moskvin, Kurek).

(Precast concrete construction).

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.A., kand.tekhn.nauk

Modular standardization of one-story industrial buildings. Prom. stroi. 38 no.5:5-13 '60. (MIRA 14:5)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.

(Modular coordination (Architecture))
(Factories—Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.A., kand.tekhn.nauk

Precast reinforced concrete construction elements in buildings of rolling and pipe-rolling mills. Prom. stroi. 38 no.8:21-25 '60. (MIRA 13:8)

(Rolling mills) (Precast concrete construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

LUBNIN, Aleksandr Il'ich, inzh.; LIBERMAN, Semen Abramovich, inzh.; SKAZHENIK, Georgiy Dmitriyevich, inzh.; MILLER, Viktor Yakovlevich, inzh.; PETRAKOV, Andrey Ivanovich, inzh.; USHAKOV, Nikolay Alekseyevich, kand. tekhn. nauk; VAD'YAYEV, Gavriil Mikhaylovich, inzh.; TIMYANSKIY, Samuil Yakovlevich, arkh.; KIKIN, A.I., doktor tekhn. nauk, prof., red.; BEGAK, B.A., red.; SHERSTNEVA, N.V., tekhn. red.

[Designing buildings and structures for metallurgical plants] Proektirovanie zdanii i sooruzhenii metallurgicheskikh zavodov [By] A.I.Lubnin i dr. Moskva, Gosstroiizdat, 1963. 321 p. (MIRA 17:2)

1. Gosudarstvennyy institut proyektirovaniya metallurgicheskikh zavodov (for Timyanskiy). 2. Gosudarstvennyy institut po proyektirovaniyu, issledovaniyu i ispytaniyu stal'nykh konstruktsiy i mostov (for Petrakov). 3. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut promyshlennykh zdaniy i sooruzheniy (for Ushakov).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

ASTRYAB, M.Yu., kand. tekhn. nauk; USHAKOV, N.A., kand. tekhn. nauk

Problems in standardizing engineering structures. Prom. stroi. 40 no.7:14-20 Jl '63. (MIRA 16:10)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut promyshlennykh zdaniy i sooruzheniy.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

ASTRYAB, M.Yu., kand. tekhn. nauk; USHAKOV, N.A., kand. tekhn. nauk

Unification of precast reinforced concrete hoppers. Prom. stroi. 41 no.10:15-17 O '63. (MIRA 16:11)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut promyshlennykh zdaniy i sooruzheniy.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.D.

Some observations on the second edition of Kh.M. Abdullaev's book "Genetic relation of mineralization to granitoid intrusions." Izv. AN SSSR. Ser. geol. 20 no.3:129-133 My-Je '55. (MIRA 8:9)
(Abdullaev, Kh.M.) (Ore deposits)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.D.; TROYANOV, M.D.; LITSENMAYER, N.V.

New evidence on finds of scheelite in hydrothermally changed magmatic, sedimentary, metamorphic, and other rocks. Sov. geol. no.53:80-86 '56. (MLRA 10:4)

(Scheelite)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.D.

Prospecting signs of skarn-type scheelite deposits. Uch. zap. SAIGIMSa no.7:153-157 '62. (MIRA 17:2)

1. Glavnoye upravleniye geologii o okhrany nedr pri Sovete Ministrov UzSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

COUNTRY : USSR
CATEGORY : Farm Animals.
Small Horned Cattle.
ABS. JOUR. : RZhBiol., No. 6, 1959, No. 25867

AUTHOR : Usnakov, N. F.
INST. :
TITLE : Some Problems Pertaining to the Development of Meat-Wool Sheepbreeding in the Ukraine.

ORIG. PUB. : Ovtsevodstvo, 1958, No 7, 4-9

ABSTRACT : No abstract.

Card: 1/1

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.F.

Rearing fall- and winter-born lambs separated from dams. Zhivotnovodstvo 21 no.10:41-43 O '59. (MIRA 13:2)

1. Starshiy zootekhnik-selektsioner po ovtsevodstvu Kanevskoy gosudarstvennoy stantsii po plemennoy rabote i iskusstvennomu osemeneniyu sel'skokhozyaystvennykh zhivotnykh.
(Kanev District--Lambs)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

Cand. Tech. Sci.

USHAKOV, N. N.

Dissertation: "Analysis of Errors in Inside Threading on Thread-Cutting Machines Under Conditions of Aviation Instrument Making."

24 Jun. 49

Moscow Order of Lenin Aviation Inst

imeni Sergo Ordzhonikidze

SO Vecheryaya Moskva
Sum 71

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.N.

KRASIVSKIY, Sergey Petrovich; USHAKOV, N.N., redaktor; ZNAMENSKIY, A.A., redaktor; BUGERT, A.P., tekhnicheskiy redaktor.

[Automation of industry] Avtomatizatsiia proizvodstva. Moskva, Vses.uchebno-pedagog. izd-vo Trudrezervizdat, 1956. 133 p. (Automation) (MLRA 9:5)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.N.

SAPIRO, David Naftal'yevich; USHAKOV, N.N., kand.tekhn.nauk, dotsent, retsenzent; TUBYANSKAYA, F.G., red.; ZUDAKIN, I.M., tekhn.red.

[Technology of manufacturing electrical equipment used in aviation] Tekhnologiia izgotovleniia aviatsionnogo elektrooborudovaniia. Moskva, Gos.izd-vo obor. promyshl., 1957. 375 p. (MIRA 11:1)
(Airplanes--Electric equipment)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

ZHOLDAK, Sergey Afanas'yevich; LYCHAGIN, Yakov Yakovlevich; POPOV, Vitaliy Semenovich; USHAKOV, N.N., dotsent, kand.tekhn.nauk, retsenzent; ZIL'BERSHEYD, M.M., inzh., retsent; LOSEVA, G.F., izd.red.; ROZHIN, V.P., tekhn.red.

[Technology of manufacturing electric elements for automatic electric units] Tekhnologiia izgotovleniia elektroelementov dlia elektroavtomaticheskikh ustroistv. Moskva, Gos.izd-vo obor. promyshl., 1959. 422 p. (MIRA 12:3)
(Electric machinery--Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

GLUSKIN, Ilya Yakovlevich; POLYAKOV, Nikolay Viktorovich; TROYNIN, Mitrofan Fedorovich; USHAKOV, Nikolay Nikolayevich; USHAKOV, Nikolay Stepanovich; SKYRANYAN, R.M., inzh., retsenzent; NEFEDOV, P.K., inzh., red.; YURKEVICH, M.P., red.izd-va; POL'SKAYA, R.G., tekhn.red.

[Over-all mechanization and automation of internal transportation in instrument plants] Kompleksnaia mekhanizatsiia i avtomatizatsiia vnutrizavodskogo transporta v priborostroenii. By I.IA.Gluskin i dr. Moskva, Mashgiz, 1961. 326 p. (MIRA 14:12)
(Instrument industry) (Automation)
(Conveying machinery)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

BELEVTSEV, A.T., kand. tekhn. nauk; GOLIKOV, V.I., kand. tekhn. nauk; GOTSERIDZE, R.M., inzh.; YEFIMOV, V.P., kand.tekhn. nauk [deceased]; KOPANEVICH, Ye.G., kand. tekhn. nauk; MALOV, A.N., prof.; PARFENOV, O.D., kand. tekhn. nauk; ROZENBERG, A.G., tekhn.; SEMIBRATOV, M.N., kand. tekhn. nauk; SKURATOV, A.Ye., kand. tekhn. nauk; SOKOLOVSKIY, I.A., kand. tekhn.nauk; SYROVATCHENKO, P.V., kand. tekhn.nauk; TISHCHENKO, O.F., doktor tekhn. nauk; USHAKOV, N.N., kand. tekhn. nauk; CHUMAKOV, V.P., kand. tekhn. nauk; SHAL'NOV, V.A., kand. tekhn.nauk; SHISHKIN, V.A., kand. tekhn.nauk; YUZHNYY, I.I., inzh.; BLAGOSKLONOVA, N.Yu., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Manual for engineers in the instrument industry]Spravochnik tekhnologa-priborostroitelia. Pod red. A.N.Malova. Moskva, Mashgiz, 1962. 988 p. (MIRA 16:2)
(Instrument manufacture)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

YURMANOV, B.N., kand. tekhn. nauk; USHAKOV, N.N., inzh.; TROYNIN, M.F., inzh., nauchnyy red.; PETRENKO, N.P., red.izd-va; VORONETSKAYA, L.V., tekhn. red.

[Transducers and amplifiers in construction technology]Datchiki i usiliteli v stroitel'noi tekhnike. Leningrad, Gosstroiizdat, 1962. 118 p. (MIRA 16:1)

(Automatic control)

(Construction industry—Equipment and supplies)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

AM4016086 BOOK EXPLOITATION S/

Gavrilov, A. N.; Ushakov, N. N.; Tsvetkov, N. M.

Technology of Aviation Electrical Equipment (Tekhnologiya aviatsionnogo elektrooborudovaniya), Moscow, Oborongiz, 1963, 523 p., illus., biblio. Errata slip inserted. 10,000 copies printed.

TOPIC TAGS: electrical equipment, casting, cold stamping, hot stamping, plastic, ultrasonic treatment, machining, coating, bushing, gear, threaded part, spring, housing, permanent magnet, winding, rotor, assembly, automation

PURPOSE AND COVERAGE: The book presents the basic problems of designing the technological processes applicable to aviation electrical equipment construction, the technology of fabricating standard and special components, problems of assembly, mounting, and inspection of aircraft electrical equipment. It reflects the experience of domestic and foreign electrical equipment construction and the results of certain research. Great attention is given to raising the quality and lowering the cost of making components by using progressive technological processes, mechanization and automation. The book is a text for students in aviation higher educational institutions and departments and can be useful for workers in industry.

Card 1/4

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USHAKOV, N.P.

Penetrating wound of the heart through the abdominal cavity. (MIRA 11:4)
Khirurgiia Supplement:11-12 '57.

1. Iz khirurgicheskogo otdeleniya Svobodnenskoy gorodskoy bol'nitsy (glavnyy vrach A.D.Makhnovskaya) Amurskoy oblasti.
(HEART--WOUNDS AND INJURIES)
(ABDOMEN--WOUNDS AND INJURIES)

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USHAKOV, N.P.

Late rupture of the liver. Khirurgiia Supplement:27 '57. (MIRA 11:4)

1. Iz khirurgicheskogo otdeleniya Svobodnyanskoy gorodskoy bol'nitsy Amurskoy oblasti.
(LIVER--WOUNDS AND INJURIES)

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L 9825-66

ACC NR: AP6003967 SOURCE CODE: UR/0104/65/000/005/0080/0081

AUTHOR: Ushakov, N. R. (Engineer); Pribytkov, A. V. (Engineer)

ORG: none

17
B

TITLE: Damage to a 330 kv line caused by falling of type RD-55 crossbraces

SOURCE: Elektricheskiye stantsii, no. 5, 1965, 80-81

TOPIC TAGS: electric power transmission, transmission line, electric power engineering

ABSTRACT: In January of 1964, with a wind of 20-28 m/sec and ice formation up to 19 mm thickness, approximately 4,500 crossbraces fell from the 330 kv line in question, resulting in the contact of the lines wich each other, short circuit formation with other lines and damage to line structures. In this report of investigation, the circumstances are described in detail, and conclusions are drawn as to the causes of the falling, which varied directly with anchor span length, wind direction, but not with misalignment of conductors. It was concluded that anchor spans should not be made over 6-7 km in future 220 and 330 kv lines; that jointed, blind braces should be installed on new lines; and that in addition to the lugless braces installed on the line, X-member crossbraces (example presented in an illustration) should be installed over a 3-4 km stretch of the line as an experiment in the reduction of longitudinal displacement of the conductors. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09 / SUBM DATE: none

HW

Card 1/1 UDC: 621.315.177

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, Nikolay Stepanovich; SOLOV'YEV, V.Ye., inzh., retsenzent; TROYNIN, M.F., inzh., red.; VASIL'YEVA, V.P., red.izd-va; SPERANSKAYA, O.V., tekhn.red.

[Electrically driven bridge cranes] Mostovye elektricheskie krany. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 150 p. (MIRA 13:4)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

TROYNIN, Mitrofan Fedorovich; USHAKOV, Nikolay Stepanovich; DYAD'KIN, Ye.I., inzh., retsenzent; VEREVKIN, N.S., kand.tekhn.nauk, red.; DUDUSOVA, G.A., red.izd-va; SHCHETININA, L.V., tekhn.red.

[Electric trucks] Elektrokary. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1960. 155 p. (MIRA 13:10)
(Industrial electric trucks)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

GLUSKIN, Ilya Yakovlevich; POLYAKOV, Nikolay Viktorovich; TROYNIN, Mitrofan Fedorovich; USHAKOV, Nikolay Nikolayevich; USHAKOV, Nikolay Stepanovich; SEYRANYAN, R.M., inzh., retsenzent; NEFEDOV, P.K., inzh., red.; YURKEVICH, M.P., red.izd-va; POL'SKAYA, R.G., tekhn.red.

[Over-all mechanization and automation of internal transportation in instrument plants] Kompleksnaia mekhanizatsiia i avtomatizatsiia vnutrizavodskogo transporta v priborostroenii. By I.IA.Gluskin i dr. Moskva, Mashgiz, 1961. 326 p. (MIRA 14:12)
(Instrument industry) (Automation)
(Conveying machinery)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

TROYNIN, Mitrofan Fedorovich; USHAKOV, Nikolay Stepanovich; FILIPPOV, N.M., inzh., retsenzent; ROZENGAUZ, B.M., inzh., retsenzent; VEREVKIN, N.S., kand. tekhn. nauk, red.; YEMEL'YANOVA, Ye.V., red.; SHERMUSHENKO, T.A., tekhn. red.

[Manual for electricians]Spravochnaia kniga elektromontera. Pod red. N.S.Verevkina. Leningrad, Lenizdat, 1962. 263 p. (MIRA 16:2)

(Electric power distribution--Handbooks, manuals, etc.)
(Electric wiring--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.S.; TROYNIN, M.F., inzh., red.; MITARCHUK, G.A., red. izd-va; SPERANSKAYA, O.V., tekhn. red.

[Electric bridge cranes] Mostovye elektricheskie krany. 2. izd., dop. i perer. Moskva, Mashinostroenie, 1964. 198 p. (MIRA 17:4)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

GLUSKIN, E.Ya.; POLYAKOV, N.V.; TROYNIN, M.F.; USHAKOV, N.S.; NEFEDOV, P.K., inzh., red.

[Overall mechanization and automation of intraplant transportation in instrument plants] Kompleksnaia mekhanizatsiia i avtomatizatsiia vnutrizavodskogo transporta v priborostroenii. 2., izd., ispr. i dop. Moskva, Mashinostroenie, 1964. 283 p. (MIRA 17:11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

BUSYGIN, G.M.; SIZIKOV, O.A.; USHAKOV, N.T.

Accelerated gluing in the manufacture of skis. Der. prom. 14 no.8:21-22 Ag '65. (MIRA 18:10)

1. Tyumenskiy institut "NIIPLESDREV".

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.V.

Using the gamma-ray method for checking thin parts. Zav. lab. 22 no.12:1452-1455 '56. (MLRA 10:2)

(Gamma rays) (Metals--Testing)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, N.V.

AUTHOR: Ushakov, N.V. 32-9-15/43

TITLE: The Photographic Effect of the Radiation of Some Radioactive Isotopes (Fotograficheskoye deystviye izlucheniya nekotorykh radioaktivnykh izotopov)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol.23, Nr 9, pp. 1080-1083 (USSR)

ABSTRACT: Here the dependence of the blackening density in the film of the type "Rentgen XX" upon the radiation dose of the isotopes Co^{60}, Ag^{110}, Se^{75}, Ir^{192} and Ta^{182}, which radiated gamma photons of various hardness was investigated. The pictures were obtained under conditions which were similar to those usually prevailing when X-raying technical objects. It is shown that when using density curves, and if the average radiation energy of some isotopes is known, the dependence of blackening density on gamma-photon energy can be obtained. When using the diagram and the density curves mentioned here, it is possible to determine the average radiation energy of Ta^{182}, which, because of the complicated nature of the gamma spectrum, is difficult to compute analytically. The diagrams given here show the dependence of exposure on the steel thickness in the registration of the radiation of

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

The Photographic Effect of the Radiation of Some Radioactive Isotopes 32-9-15/43

the isotopes Se^{75} by the film "Rentgen XX". It is shown that, besides the small number of gamma photons of Ta^{182}, which act upon the photo emulsion, also the filtration of the soft components of its gamma spectrum plays a part. The amplifying effect of screens is investigated, and it is shown that the zinc sulphide screens do not warrant a considerable shortening of exposure. The diagrams obtained here make it possible to determine the screen-amplification coefficient at any gamma-radiation energy within the domain under investigation. There are 4 figures and 2 tables.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

BENESHEVICH, I.I., kandidat tekhnicheskikh nauk; BOGIN, N.M., kandidat tekhnicheskikh nauk; BYKOV, Ye.I., inzhener; VLASOV, I.I., kandidat tekhnicheskikh nauk; GRITSEVSKIY, M.Ye., inzhener; GRUBER, L.O., inzhener; GURVICH, V.G., inzhener; DAVYDOV, V.N., inzhener; YER-SHOV, I.M., kandidat tekhnicheskikh nauk; ZASORIN, S.N., kandidat tekhnicheskikh nauk; IVANOV, I.I., kandidat tekhnicheskikh nauk; KRAUKLIS, A.A., inzhener; KROTOV, L.B., inzhener; LAPIN, V.B., inzhener; LASTOVSKIY, V.P., dotsent; LATUNIN, N.I., inzhener; MARKVARDT, K.G., professor, doktor tekhnicheskikh nauk; MAKHAYLOV, M.I., professor, doktor tekhnicheskikh nauk; NIKANOROV, V.A., inzhener; OSKOLKOV, K.N., inzhener; OKHOSHIN, L.I., inzhener; PARFENOV, K.A., dotsent, kandidat tekhnicheskikh nauk; PERTSOVSKIY, L.M., inzhener; POPOV, I.P., inzhener; PORSHNEV, B.G., inzhener; RATNER, M.P., inzhener; ROSSIYEVSKIY, G.I., dotsent, kandidat tekhnicheskikh nauk; RYKOV, I.I., kandidat tekhnicheskikh nauk; RYSHKOVSKIY, I.Ya., dotsent, kandidat tekhnicheskikh nauk; RYABKOV, A.Ya., professor [deceased]; TAGER, S.A., kandidat tekhnicheskikh nauk; KHAZEN, M.M., professor, doktor tekhnicheskikh nauk; CHERNYSHEV, M.A., doktor tekhnicheskikh nauk; EBIN, L.Ye., professor, doktor tekhnicheskikh nauk; YURENEV, B.N., dotsent; AKSENOV, I.Ya., dotsent, kandidat tekhnicheskikh nauk; ARKHANGEL'SKIY, A.S., inzhener; BARTENEV, P.V., professor, doktor tekhnicheskikh nauk; BERNGARD, K.A., kandidat tekhnicheskikh nauk; BOROVOY, N.Ye., dotsent, kandidat tekhnicheskikh nauk; BOGDANOV, I.A., inzhener; BOGDANOV, N.K., kandidat tekhnicheskikh nauk; VIENICHENKO, N.G., dotsent, kandidat ekonomicheskikh nauk;

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

BENESHEVICH, I.I.----(continued) Card 2.

VASIL'YEV, V.F., GONCHAROV, N.G., inzhener; DERIBAS, A.T., inzhener; DOBROSEL'SKIY, K.M., dotsent, kandidat tekhnicheskikh nauk; DLUGACH, B.A., kandidat tekhnicheskikh nauk; YEFIMOV, G.P., kandidat tekhnicheskikh nauk; ZEMBLINOV, S.V., professor, doktor tekhnicheskikh nauk; ZABELLO, M.L., kandidat tekhnicheskikh nauk; IL'IN, K.P., kandidat tekhnicheskikh nauk; KARPENIKOV, A.D., kandidat tekhnicheskikh nauk; KAPLUN, F.Sh., inzhener; KANSHIN, M.D.; KOCHUEV, V.P., professor, doktor tekhnicheskikh nauk; KOGAN, L.A., kandidat tekhnicheskikh nauk; KUCHURIN, S.F., inzhener; LEVASHOV, A.D., inzhener; MAKSIMOVICH, B.M., dotsent, kandidat tekhnicheskikh nauk; MARTYNOV, M.S., inzhener; MEDEL', O.M., inzhener; NIKITIN, V.D., professor, kandidat tekhnicheskikh nauk; PADNYA, V.A., inzhener; PANTELEYEV, P.I., kandidat tekhnicheskikh nauk; PETROV, A.P., professor, doktor tekhnicheskikh nauk; POVCHOZHENKO, V.V., professor, doktor tekhnicheskikh nauk; PISKAREV, I.I., dotsent, kandidat tekhnicheskikh nauk; SERGEYEV, Ye.S., kandidat tekhnicheskikh nauk; SIMONOV, K.S., kandidat tekhnicheskikh nauk; SIMANOVSKIY, M.A., inzhener; SUYAZOV, I.G., inzhener; TALDAYEV, F.Ya., inzhener; TIKHONOV, K.K., kandidat tekhnicheskikh nauk; USHAKOV, N.Ya., inzhenr; USPENSKIY, V.K., inzhener; FEL'DMAN, E.D., kandidat tekhnicheskikh nauk; FERAPONTOV, G.V., inzhener; KHOKHLOV, L.P., inzhenr; CHERNOMORDIK, G.I., professor, doktor tekhnicheskikh nauk; SHAMAYEV, M.F., inzhener; SHAFIRKIN, B.I., inzhener; YAKUSHIN, S.I., inzhener; GRANOVSKIY, P.G., redaktor; TISHCHENKO, A.I., redaktor; ISAYEV, I.P., dotsent, kandidat tekhnicheskikh nauk, redaktor; KLIMOV, V.F., dotsent kandidat tekhnicheskikh

(Continued on next card)

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BENESHEVICH, I.I. (continued) Card 3.

nauk, redaktor; MANKOV, M.V., inzhener, redaktor; KALININ, V.K., inzhener, redaktor; STEPANOV, V.N., professor, redaktor; SIDOROV, N.I., inzhener, redaktor; GERONIMUS, B.Ye., kandidat tekhnicheskikh nauk, redaktor; ROBEL', R.I., otvetstvennyy redaktor

[Technical reference manual for railroad engineers] Tekhnicheskii spravochnik zheleznodorozhnika. Moskva, Gos. transp.zhel-dor. izd-vo. Vol.10. [Electric power supply for railroads] Energosnabzhenie zheleznykh dorog. Otv.red. toma K.G.Markvardt. 1956. 1080 p. Vol.13. [Operation of railroads] Ekspluatatsiia zheleznykh dorog. Otv. red. toma R.I.Robel'. 1956. 739 p. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Petrov)
(Electric railroads) (Railroads--Management)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, O.F., kand.tekhn.nauk; KLYAVIR, I.Yu., kand.tekhn.nauk

Characteristics of the work of beet combines under the new method of sugar beet growing. Mekh. sil'. hosp. 12 no.9:16-17 S '61. (MIRA 14:11)
(Sugar beets--Harvesting)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, O.F. nauchnyy rabotnik; KLYAVIR, I.Yu., [Kliavir, I.IU.], nauchnyy rabotnik

Problems of growing monospermous sugar beets. Mekh. sil' hosp. 10 no.4:25 Ap '59. (MIRA 12:6)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly.
(Sugar beets)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

PREOBRAZHENSKAYA, V.B.; USHAKOV, O.P.

Find of diorites and syenite-diorites outcropping Permian sediments in the Yugor coastal area of Baydarata Bay. Inform. sbor. NIIGA no.32:5-8 '62. (MIRA 16:12)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, S. Z.

SA A 53
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538.23

8041. Magnetic viscosity of Permalloy in aperiodically varying and in sinusoidal fields. R. V. Telesnin and S. Z. Ushakov. J. Tech. Phys., USSR, 20, 1366-71 (Nov., 1950) In Russian.

The magnetic viscosity on the back of the hysteresis loop was determined in partial cycles, the peaks of which have the back of the maximum loop as envelope. The partial cycles were obtained by a Helmholtz pendulum contact-breaker. The magnitude of the magnetic viscosity is determined by a definite state of the ferromagnetic, i.e. that value of the magnetic field at which the process of the magnetization ends. In investigating the viscosity by partial cycles in an aperiodically varying field the viscosity manifests itself much less frequently than in a process following the miximum loop, although the final state of the ferromagnetic may be the same. The viscosity on the peak of a partial cycle is much higher than in the central part of the cycle. The permeability was also measured on the same partial cycles at acoustic frequencies. After eliminating the influence of eddy currents a considerable "viscous fall" of the permeability occurred at increasing frequencies.

SA A 53

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, Semen Zinov'yevich; KRASNOVSKIY, A.A., nauchnyy red.; LEVENSHTEYN, G.V., red.; SAVCHENKO, Ye.V., tekhn. red.

[Laws of motion] Zakony dvizheniia. Moskva, Izd-vo "Znanie," 1961. 38 p. (Narodnyi universitet kul'tury: Fakul'tet estestvennonauchnyi, no.13) (MIRA 14:11)

(Motion)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

SHEKHTMAN, Kh.; USHAKOV, T.

Planning and reducing expenditures for motortruck transportation of grain. Muk.-elev. prom. 29 no.9:11-12 S '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

CHUKHAR'KO, Z.; USHAKOV, T.; SHEKHTMAN, Kh.

Using linear programming in planning the conveying of grain loads. Muk.-elev. prom. 29 no.12:14-15 D '63. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, T.[illegible].

Growing activity [illegible] in industries. Tekst. prom. 21 no.1[illegible]:93 O '61. (MIRA 14:10)

1. Nachal'nik otdela tekhnicheskoy informatsii LatNIILegprom.
(Latvia--Textile industry--Technological innovations)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001858120008-8

USHAKOV, V.

Self-made switchboard. Politekh.obuch. no.11:89 N '59.
(MIRA 13:2)

1. Aktyubinskaya srednyaya shkola No.470.
(Electric switchgear)

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