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a.c.	alternating current	i.c.w.	} modulated c.w.
d.c.	direct current	m.c.w.	
h.v.	high voltage	s.w.*	
l.v.	low voltage	u.s.w.*	
a.f.	audio frequency	λ	wavelength
i.f.	intermediate frequency	c.r.	cathode ray
r.f.	radio frequency, including:—	c.r.o.	cathode-ray oscilloscope
v.l.f.	very low frequency, <30 kc/s	d.f.	direction finding
l.f.	low frequency, 30-300 kc/s	e.m.	electromagnetic, <i>but</i>
m.f.	medium frequency, 300-3000 kc/s	e.m.f.	electromotive force
h.f.	high frequency, 3-30 Mc/s	e.s.	electrostatic
v.h.f.	very high frequency, 30-300 Mc/s	a.f.c.	automatic frequency control
u.h.f.	ultra high frequency, >300 Mc/s	a.g.c.	automatic gain control
a.m.	amplitude modulation	a.p.h.c.	automatic phase control
f.m.	frequency modulation	a.v.c.	automatic volume control
p.m.	pulse modulation, including:—	m.u.f.	maximum usable frequency
p.a.m.	pulse amplitude modulation	p.p.i.	plan position indicator
p.c.m.	pulse code modulation	s.s.b.	single sideband
p.f.m.	pulse frequency modulation	d.s.b.	double sideband
p.ph.m.	pulse phase modulation	s.w.r.	standing-wave ratio
p.p.m.	pulse position modulation	v.f.o.	variable-frequency oscillator
p.w.m.	pulse width modulation	R/T	radiotelephony
ph.m.	phase modulation	W/T	wireless telegraphy
v.m.	velocity modulation	TV	television
c.w.	continuous wave		

* No clearly defined limits

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102 In line 4, for 'August' read '1950'
233 Change U.D.C. number to 621.318.722.1: 621.382.3
406 In line 6, for '1 500 bits' read '1 500 bits/min.'
498 In title, for 'Radiation' read 'Radiated'
501 In line 6, for 'proportioned' read 'proportional'
614 Add 'J. Vlas' as co-author
705 For 'S. D. Ghosdover' read 'S. D. Ghosdover'
943 Change U.D.C. number to 637.311.33: 646.32
1263 In journal reference, page numbers should read 990-992
1519 In line 6, for 'resonant' read 'resonant'
1790 Change U.D.C. number to 685.376: 621.61
1951 In line 7, for 'elements' read 'electrons'
1987 For 'A. J. Smaude' read 'A. J. Smaude'
2126 Change U.D.C. number to 621.317.74

2585 Change U.D.C. number to 621.307.13: 621.306.025.3
2608 In title, for 'V.H.F.' read 'U.H.F.'
2649 In line 7, for 'm/m' read 'mm'
2761 In line 6, for 'estimated for' read 'estimated from'
3782 In line 4, for 'Fydingdale Moor' read 'Fydingdale Moor'
3783 For 'J. F. Suthet' read 'J. P. Sochet'
2801 In line 7, for 'interpolated' read 'interpolated'
2871 & 2921 For 'E. Giv' read 'E. Giv'
3062 In title, for '1950 lota' read '1950 lota'
3099 In journal reference, for 'Vol. 64' read 'Vol. 65'
3223 Change U.D.C. number to 621.375.9: 621.372.44: 631.6
3690 In line 6, for 'Mc/s' read 'kMc/s'

IN PAPERS ABSTRACTED

The practice of allocating individual abstract numbers to corrections has been largely discontinued; a list of published corrections noted during 1960 is given below. The journal in which the correction appeared

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Abstract No.
730 of 1957 15th Dec. 1959, Vol. 116, No. 6, p. 1020
323 of 1958 March 1960, Vol. 21, No. 1, p. 145
3708 of 1958 Jan. 1960, Vol. AP-8, No. 1, p. 77
3718 of 1958 March 1960, Vol. 48, No. 3, p. 823
387 of 1959 July 1960, Vol. 48, No. 7, p. 1232
2407 of 1959 Sept. 1960, Vol. 5, No. 4, p. 228
3401 of 1959 15th Jan. 1960, Vol. 4, No. 2, p. 92
3528 of 1959 March 1960, Vol. 48, No. 3, p. 816
3765 of 1959 7th Sept. 1960, Vol. 248, No. 10, p. 603
3875 of 1959 Feb. 1960, Vol. 48, No. 2, p. 200
4053 of 1959 Feb. 1960, Vol. 48, No. 2, p. 164
4237 of 1959 Feb. 1960, Vol. 48, No. 2, p. 164
108 of 1960 Feb. 1960, Vol. 31, No. 2, p. 445
100 of 1960 Sept./Oct. 1960, Vol. 64D, No. 5, p. 600
161 of 1960 Nov. 1960, Vol. 64, No. 11, p. 2086
171 of 1960 May & Oct. 1960, Vol. 48, Nos. 5 & 10, pp. 981 & 1755
343 of 1960 Nov. 1960, Vol. 12, No. 11, p. 586

422 of 1960 Jan. 1960, Vol. 12, No. 1, p. 58
503 of 1960 1st Nov. 1960, Vol. 13, No. 9, p. 441
636 of 1960 9th Jan. 1960, Vol. 185, No. 4700, p. 76
883 of 1960 Dec. 1960, Vol. 64, No. 12, p. 2470
1086 of 1960 April 1960, Vol. 32, No. 4, p. 515
1300 of 1960 Dec. 1960, Vol. 14, No. 12, p. 1835
1383 of 1960 March 1960, Vol. 31, No. 3, p. 283
1401 of 1960 Aug. 1960, Vol. 14, No. 8, p. 1123
1540 of 1960 April 1960, Vol. 48, No. 5, p. 276
1651 of 1960 6th Aug. 1960, Vol. 155, No. 5, p. 685
1911 of 1960 June 1960, Vol. 48, No. 6, Part 1, p. 1159
2101 of 1960 15th March 1960, Vol. 4, No. 6, p. 230
2210 of 1960 June 1960, Vol. 32, No. 6, p. 776
2218 of 1960 April 1960, Vol. 32, No. 4, p. 515
2282 of 1960 May 1960, Vol. 13, No. 5, p. 155
2357 of 1960 Dec. 1960, Vol. 13, No. 4, p. 323
2642 of 1960 July 1960, Vol. 27, No. 7, p. 255
2718 of 1960 Sept.-Dec. 1960, Vol. 44, No. 3, p. 321
3053 of 1960 15th July 1960, Vol. 5, No. 2, p. 76
3108 of 1960 Aug. 1960, Vol. 2, No. 4, p. 263
3322 of 1960 March 1960, Vol. 15, No. 3, p. 630
3324 of 1960 March 1960, Vol. 2, No. 3, p. 225
3473 of 1960 Nov. 1960, Vol. 65, No. 11, p. 3656
3723 of 1960 Sept. 1960, Vol. 20, No. 9, p. 643
3906 of 1960 Jan. 1960, Vol. 154, No. 1, p. 92
4191 of 1960 Sept./Oct. 1960, Vol. 64D, No. 5, p. 600

LIST OF JOURNALS

A selection of the journals which are regularly scanned is given below, together with the addresses of their publishers or editorial offices and the abbreviations of their titles as used in the Abstracts and References. Applications for copies of any journal should be made to the addresses given.
The full title of each journal is given in bold type and is followed by the address, the abbreviated title being shown within brackets. In a few cases, the nature of a journal is indicated, where neither the title nor the address shows it clearly.

A

Acta Polytechnica Scandinavica, Publishing Office, Box 5073, Stockholm 5, Sweden. (*Acta polyt. scand.*)
Acustica, S. Hirzel Verlag, Stuttgart-N, Germany. (*Acustica*)
Akusticheski Zhurnal, Moskva, Kuznetskiy most, dom 9/10, U.S.S.R. (*Akust. Zh.*)
Alta Frequenza, Associazione Eletrotecnica Italiana, Milano (202), Via S. Paolo 10, Italy. (*Alta Frequenza*)
Anais da Academia Brasileira de Ciências, Caixa Postal 229, Rio de Janeiro, Brazil. (*An. Acad. bras. Sci.*)
Annalen der Physik, J. A. Barth, Leipzig C1, Solomonstrasse 15B, East Germany. (*Ann. Phys., Lpz.*)
Annales de Géophysique, Service des Publications du C.N.R.S., 18 Quai Anatole France, Paris 7^e, France. (*Ann. Géophys.*)
Annales de Physique, Masson & Cie, 120 Boulevard Saint-Germain, Paris 6^e, France. (*Ann. Phys., Paris*)
Annales de Radiophysique, 10 rue Carducci, Paris 10^e, France. (*Ann. Radiophys.*)
Annales des Télécommunications, 3 & 5 Boulevard Pasteur, Paris 15^e, France. (*Ann. Télécomm.*)
Applied Scientific Research, Martinus Nijhoff, The Hague, Netherlands. (*Appl. sci. Res.*)
Archiv der elektrischen Übertragung, S. Hirzel Verlag, Stuttgart, Germany. (*Arch. elektr. Übertrag.*)
Archiv für Elektrotechnik, Springer Verlag, Berlin-Wilmersdorf, Heidelberger Platz 3, Germany. (*Arch. Elektrotech.*)
Archiv für technischen Messen, R. Oldenbourg KG, München 8, Rosenheimer Str. 146, Germany. (*Arch. tech. Messen*)
A.T.E. Journal, Automatic Telephone & Electric Co. Ltd, Strowger Works, Liverpool 7, England. (*A.T.E. J.*)
Audio, Radio Magazines Inc., P.O. Box 629, Mineola, N.Y., U.S.A. (*Audio*)
Australian Journal of Physics, Commonwealth Scientific and Industrial Research Organisation, 314 Albert Street, East Melbourne C2, Victoria, Australia. (*Aust. J. Phys.*)
A.W.A. Technical Review, Amalgamated Wireless (Australia) Ltd, Sydney, Australia. (*A.W.A. tech. Rev.*)

B

B.B.C. Engineering Division Monographs, British Broadcasting Corporation, 35 Marylebone High Street, London, W.1, England. (*B.B.C. Engng Div. Monographs*)
Beama Journal, British Electric and Allied Manufacturers' Association, 36 Kingsway, London, W.C.2, England. (*Beama J.*)
Bell Laboratories Record, 463 West Street, New York 14, N.Y., U.S.A. (*Bell Lab. Rec.*)

Bell System Technical Journal, American Telephone and Telegraph Company, 195 Broadway, New York 7, N.Y., U.S.A. (*Bell Syst. tech. J.*)
British Communications & Electronics, Heywood & Co. Ltd, Drury House, Russell Street, Drury Lane, London, W.C.2, England. (*Brit. Commun. Electronics*)
British Journal of Applied Physics, 47 Belgrave Square, London, S.W.1, England. (*Brit. J. appl. Phys.*)
Bulletin de l'Association Suisse des Electriciens, Seefeldstrasse 301, Zürich 8, Switzerland. (*Bull. suisse. elektrotech. Ver.*)

C

Cables & Transmission, Sotélec, 16 rue de la Baume, Paris 8^e, France. (*Cables & Transm.*)
Canadian Journal of Physics, National Research Council, Ottawa 2, Ont., Canada. (*Canad. J. Phys.*)
Chalmers tekniska Högskolens Handlingsgämsper, Göteborg, Sweden. (*Chalmers Inst. Högsk. Handl.*)
Communication and Electronics, American Institute of Electrical Engineers, 20th and Northampton Streets, Easton, Pa, U.S.A. (*Commun. & Electronics*)
Communications on Pure and Applied Mathematics, Interscience Publishers Inc., 250 Fifth Avenue, New York 1, N.Y., U.S.A. (*Commun. pure appl. Math.*)
Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences, Gauthier-Villars, 55 Quai des Grands-Augustins, Paris 6^e, France. (*C. R. Acad. Sci., Paris*)
Current Science, Current Science Association, Bangalore-6, India. (*Curr. Sci.*)

D

Doklady Akademii Nauk S.S.S.R., Moskva, B-22, Podolskii per., 21, U.S.S.R. (*Dokl. Ak. Nauk S.S.S.R.*)

E

E.B.U. Review, Part A, 32 avenue Albert Lancaster, Bruxelles 18, Belgium. (*E.B.U. Rev.*)
Electrical Engineering, American Institute of Electrical Engineers, 33 West 39th Street, New York 18, N.Y., U.S.A. (*Elect. Engng. N.Y.*)
Electronic Applications, N. V. Philips' Gloeilampenfabrieken, Technical and Scientific Literature Department, Rindshoven, Netherlands. (*Electronic Applic.*)
Electronic Engineering, 29 Essex Street, Strand,

London, W.C.2, England. (*Electronic Engng.*)
Electronic Equipment Engineering, Sutton Publishing Company Inc., 172 South Broadway, White Plains, N.Y., U.S.A. (*Electronic Equipm. Engng.*)
Electronic Industries, Chestnut and 56th Sts, Philadelphia 39, Pa, U.S.A. (*Electronic Ind.*)
Electronic & Radio Engineer, See Electronic Technology.
Electronic Technology, Iliffe & Sons Ltd, Dorset House, Stamford Street, London, S.E.1, England. (*Electronic Tech.*)
Electronica, 320 West 42nd Street, New York 36, N.Y., U.S.A. (*Electronica*)
Elektronik, Franz-Verlag, München 37, Karlstrasse 35, Germany. (*Elektronik*)
Elektronische Rundschau, Verlag für Radio-Foto-Kinotechnik G.m.b.H., Berlin-Borsigwalde, Eichborndamm 141-167, Germany. (*Elektronische Rundschau*)
Elektrotechnische Zeitschrift, Edition A & B, VDE-Verlag G.m.b.H., Berlin-Charlottenburg 2, Bismarckstrasse 33, Germany. (*Elektrotech. Z.*)
Engineer, 29 Essex Street, London, W.C.2, England. (*Engineer, Lond.*)
Engineering, 36 Bedford Street, London, W.C.2, England. (*Engineering, Lond.*)
Ericsson Technics, Telefonaktiebolaget L. M. Ericsson, Stockholm 23, Sweden. (*Ericsson Tech.*)

F

Fizika Tverdogo Tela, Leningrad, V-164, Mendeleevskaya lin., 1, U.S.S.R. (*Fiz. Tverdogo Tela*)
Frequenza, Fachverlag Schleier & Schön G.m.b.H., Berlin S.W.61, Markgrafenstrasse 11, Germany. (*Frequenz*)

G

Geofisica Pura e Applicata, Istituto Geofisico Italiano, Milano, Piazza Leonardo da Vinci 12, Italy. (*Geofis. pura appl.*)
Geophysical Journal of the Royal Astronomical Society, Burlington House, London, W.1, England. (*Geophys. J. R. astr. Soc.*)

H

Helvetica Physica Acta, Journal of the Schweizerische Physikalische Gesellschaft, Birkhäuser Verlag, Basel, Switzerland. (*Helv. phys. Acta*)
Hochfrequenztechnik und Elektroakustik, Akademische Verlagsgesellschaft Coest & Portig K.-G., Leipzig C1, Sternwartenstr. 8, East Germany. (*Hochfrequenztech. u. Elektroakust.*)

I

IBM Journal of Research and Development, International Business Machines Corporation, 590 Madison Avenue, New York 22, N.Y., U.S.A. (*IBM J. Res. Developm.*)
Indian Journal of Meteorology and Geophysics, Manager of Publications, Civil Lines, Delhi 8, India. (*Indian J. Met. Geophys.*)
Indian Journal of Physics (and Proceedings of the Indian Association for the Cultivation of Science), 2 & 3 Lady Willington Road, Calcutta 32, India. (*Indian J. Phys.*)
Izvestiya Akademii Nauk S.S.S.R. (a) seriya fizicheskaya, Moskva, B-64, Podolskii per., 21, U.S.S.R.; (b) seriya geofizicheskaya, Moskva, B. Gruzinskaya, 10, U.S.S.R.; (c) otdeleniye khimicheskikh nauk, Moskva, M. Kharitonovskii per., 4, U.S.S.R. (*Izv. Ak. Nauk S.S.S.R.*) (a) ser. fiz., (b) ser. geofiz., (c) otd. khim. nauk)

J

Journal of the Acoustical Society of America, American Institute of Physics, 335 East 46th Street, New York 17, N.Y., U.S.A. (*J. acoust. Soc. Amer.*)
Journal of the American Ceramic Society, 20th and Northampton Streets, Easton, Pa, U.S.A. (*J. Amer. ceram. Soc.*)
Journal of Applied Physics, American Institute of Physics, 335 East 46th Street, New York 17, N.Y., U.S.A. (*J. appl. Phys.*)
Journal of Atmospheric and Terrestrial Physics, Pergamon Press Ltd, 4 & 5 Fitzroy Square, London, W.1, England. (*J. atmos. terr. Phys.*)
Journal of the Audio Engineering Society, P.O. Box 12, Old Chelsea Station, New York 11, N.Y., U.S.A. (*J. audio Engng. Soc.*)
Journal of the British Institution of Radio Engineers, 9 Bedford Square, London, W.C.1, England. (*J. Brit. Instn Radio Engrs*)
Journal of the British Interplanetary Society, 12 Bomborough Gardens, London, S.W.1, England. (*J. Brit. Interplan. Soc.*)
Journal of the Electrochemical Society, 1960 Broadway, New York 23, N.Y., U.S.A. (*J. electrochem. Soc.*)
Journal of Electronics and Control, Taylor & Francis Ltd, Red Lion Court, Fleet Street, London, E.C.4, England. (*J. Electronics Control*)
Journal of the Franklin Institute, Benjamin Franklin Parkway at Twentieth Street, Philadelphia 3, Pa, U.S.A. (*J. Franklin Inst.*)
Journal of Geomagnetism and Geoelectricity, Society of Terrestrial Magnetism and Electricity of Japan, Geophysical Institute, Kyoto University, Kyoto, Japan. (*J. Geomag. Geoelect.*)
Journal of Geophysical Research, 1515 Massachusetts Avenue, N.W., Washington 6, D.C., U.S.A. (*J. geophys. Res.*)
Journal of the Indian Institute of Science, Indian Institute of Science, Bangalore 12, India. (*J. Indian Inst. Sci.*)

Journal of the Institute of Navigation, John Murray Ltd, 50 Albemarle Street, London, W.1, England. (*J. Inst. Nav.*)
 Journal of the Institution of Electrical Engineers, Savoy Place, London, W.C.2, England. (*J. Inst. elect. Engrs.*)
 Journal of the Institution of Engineers, Australia, Science House, Gloucester and Essex Streets, Sydney, Australia. (*J. Inst. Engrs. Aust.*)
 Journal of the Institution of Telecommunication Engineers, Post Box 461, New Delhi, India. (*J. Inst. Telecommun. Engrs. India*)
 Journal of Mathematics and Physics, Massachusetts Institute of Technology, Cambridge 39, Mass., U.S.A. (*J. Math. Phys.*)
 Journal of the Optical Society of America, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*J. opt. Soc. Amer.*)
 Journal of the Physical Society of Japan, Maruzen Publishing Co., P.O. Box 605 Central, Tokyo, Japan. (*J. phys. Soc. Japan*)
 Journal of the Physics and Chemistry of Solids, Pergamon Press Ltd, 4 & 5 Fitzroy Square, London, W.1, England. (*J. Phys. Chem. Solids*)
 Journal de Physique et le Radium, 12 place Henri-Bergson, Paris 8^e, France. (*J. Phys. Radium*)
 Journal of the Radio Research Laboratories, Ministry of Posts and Telecommunications, Kokubunji P.O., Tokyo, Japan. (*J. Radio Res. Labs. Japan*)
 Journal of Research of the National Bureau of Standards, Sections: A. Physics and Chemistry, B. Mathematics and Mathematical Physics, C. Engineering and Instrumentation, D. Radio Propagation, U.S. Government Printing Office, Washington 25, D.C., U.S.A. (*J. Res. nat. Bur. Stand.*)
 Journal of Scientific Instruments, 47 Belgrave Square, London, S.W.1, England. (*J. sci. Instrum.*)
 Journal of the Society of Motion Picture and Television Engineers, 55 West 42nd Street, New York 36, N.Y., U.S.A. (*J. Soc. Mot. Pict. Telev. Engrs.*)
 Journal of the Television Society, 166 Shaftesbury Avenue, London, W.C.2, England. (*J. Telev. Soc.*)

K

Kungl. Tekniska Högskolans Handlinger, AB Henrik Lindström Bokhandel i Distribution, Stockholm, Sweden. (*Kungl. tek. Högsk. Handl., Stockholm*)

M

Marconi Review, Marconi House, Chelmsford, England. (*Marconi Rev.*)
 Metal Treatment, Industrial Newspapers Ltd, 17-19 John Adam Street, London, W.C.2, England. (*Metal Treatm.*)
 Monthly Notices of the Royal Astronomical Society, Burlington House, London, W.1, England. (*Mon. Not. R. astr. Soc.*)
 Mullard Technical Communications, Mullard House, Torrington Place, London, W.C.1, England. (*Mullard tech. Commun.*)

N

Nachrichtentechnik, V.E.B. Verlag Technik, Berlin C2, Oranienburger Str. 13/14, East Germany. (*Nachricht.*)
 Nachrichtentechnische Zeitschrift, F. Vieweg & Sohn, (20b) Braunschweig, Burgplatz 1, Germany. (*Nachrichtentech. Z.*)
 Nature, Macmillan & Co. Ltd, St. Martin's Street, London, W.C.2, England. (*Nature, Lond.*)
 Naturwissenschaften, Springer Verlag, Berlin-Wilmersdorf, Heidelberg Platz 3, Germany. (*Naturwissenschaften*)
 Note Recensioni e Notizie, Istituto Superiore delle

Poste e delle Telecomunicazioni, Viale Trastevere 159, Roma, Italy. (*Note Recensioni Notizie*)
 Nuclonica, 230 West 42nd Street, New York 36, N.Y., U.S.A. (*Nuclonica*)
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O

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