

*Modern
Dictionary
of Electronics*

SIXTH EDITION


**REVISED
and UPDATED**

Rudolf F. Graf

REMBRANDT EXHIBIT 2009


Newnes is an imprint of Butterworth-Heinemann

Copyright © 1997 by Butterworth-Heinemann

 A member of the Reed Elsevier group

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

 Recognizing the importance of preserving what has been written, Butterworth-Heinemann prints its books on acid-free paper whenever possible.

Library of Congress Cataloging-in-Publication Data

Graf, Rudolf F.

Modern dictionary of electronics / by Rudolf F. Graf. — 6th ed.

p. cm.

Reprint. Originally published: Indianapolis, Ind. : H.W. Sams,

© 1984.

ISBN 0-7506-9870-5

1. Electronics—Dictionaries.

TK7804.G67 1996

96-25894

621.381'03—dc 20

CIP

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

The publisher offers special discounts on bulk orders of this book.

For information, please contact:

Manager of Special Sales

Butterworth-Heinemann

313 Washington Street

Newton, MA 02158-1626

Tel: 617-928-2500

Fax: 617-928-2620

For information on all Newnes electronics publications available, contact our World Wide Web home page at: <http://www.bh.com/bh>

Edited by: *Charlie Buffington and Jack Davis*

Illustrated by: *T.R. Emrick*

Printed in the United States of America

1098765432

REMBRANDT EXHIBIT 2009

depth of penetration of electric currents into a conductor decreases as the frequency increases. 4. A characteristic of current in a conductor whereby as the frequency increases more and more current flows near the conductor surface and less at the center.

skinner—A wire brought out at the end of a cable prepared for soldering to a terminal.

skinning—Peeling the insulation from a wire.

skin tracking—Radar tracking of an object without the aid of a beacon or other signal device on board the object.

skip—1. A digital-computer instruction to proceed to the next instruction. 2. In a computer, a "blank" instruction. 3. To ignore one or more of the instructions in a sequence. 4. Term referring to propagation of radio signals over considerable distances due to reflection back to earth from the ionosphere.

skip distance—The distance separating two points on the earth between which radio waves are transmitted by reflection from the ionized layers of the ionosphere.

skip fading—Fading due to fluctuations of ionization density at the place in the ionosphere where the wave is reflected, which causes the skip distance to increase or decrease.

skip-if-set instructions—In computers, a class of instructions in which provision is made for examining particular logic conditions. Usually they are used in conjunction with a jump (branch) instruction. For example, a skip-if-word-register-ready instruction would allow the program to check for a ready condition of the word register and then permit the program to continue along one of two different paths, depending on the condition of the word register.

skip keying—The reduction of the radar pulse-repetition frequency to a submultiple of that normally used, to reduce the mutual interference between radars or to increase the length of the radar time base.

skip zone—Also called zone silence. A ring-shaped space or region within the transmission range wherein signals from a transmitter are not received. It is the distance between the farthest point reached by the ground wave and nearest point at which the refracted sky waves come back to earth.

skirt selectivity—A measure of the resolution capability of spectrum analyzer when displaying signals of unequal amplitude. A unit of measure would be the bandwidth at some level below the 6-dB-down points.

sky error—See Ionospheric Error.

sky hook—Amateur term for antenna.

sky noise—1. Noise produced by radio energy from stars. 2. Background micro-

wave radiation coming from deep space. It can be a noise source for dish antennas and sets a lower boundary for the possible noise temperature of any dish antenna of approximately 16 to 20 K.

SKU—Stockkeeping unit. Abbreviation used in many computer reports to define an individual stock item.

sky wave—See Ionospheric Wave and Indirect Wave.

sky-wave correction—In navigation, a correction for sky-wave propagation errors applied to measured positional data. The amount of the correction is established on the basis of an assumed position and on the height of the ionosphere.

sky-wave station error—In sky-wave-synchronized loran, the station-synchronization error due to the effect of the ionosphere on the synchronizing signal transmitted from one station to the other.

sky-wave-synchronization loran—A loran system in which the range is extended by using ionosphere-reflected signals for synchronizing the two ground stations.

sky-wave transmission delay—The longer time taken by a transmitted pulse when carried by sky waves reflected once from the E-layer, compared with the same pulse carried by ground waves.

slab—A relatively thick crystal from which blanks are cut.

slab line—A double-slotted coaxial line the outer shield of which has been unwrapped and extended to infinity in both directions so that the resulting configuration is a cylindrical conductor between two parallel conductors.

slab wafer—A slice of semiconductor material that has straight edges, as opposed to a conventional rounded wafer that has 21 percent less area than a square with comparable dimensions.

slant range—1. In radar, the line-of-sight distance from the measuring point to the target, particularly an aerial target. 2. Line-of-sight distance between two points not at the same elevation.

slap-back—An echo effect that is produced where the original signal reappears as distinct echoes that decay in level each time they appear. One way of creating slap-back is to feed the output signal from the play head back into the record head, at a slightly lower level. For example, if the sound "la" is originally fed to the recorder, then "la-la-la...la" will be heard, with each "la" slightly lower in level until the signal fades away.

slave—1. A component in a system that does not act independently, but only under the control of another similar component. 2. A device that follows an order given by a master remote control.

REMBRANDT EXHIBIT 2009