Section 1

Basic Phenomena of Electronics

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Mathematics: Formulas, Definitions, and Theorems Used in Electronics Engineering

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THERESA M. KORN

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[1]The author acknowledges with gratitude the contributions of the late Professor Everard M. Williams to this section of the "Handbook" in the first edition, on which this revision is in part based.

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JOHN B. THOMAS *Professor of Electrical Engineering, Princeton University; Fellow, IEEE*

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Section 5

Systems Engineering

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Since everything, then, is cause and effect, dependent and supporting, mediate and immediate, and all is held together by a natural though imperceptible chain which binds together things most distant and most different, I hold it equally impossible to know the parts without knowing the whole and to know the whole without knowing the parts in detail.

— PASCAL, "Pensées," No. 72

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Section 9

UHF and Microwave Devices

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Section 10

Transducers and Sensors*

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Section 12

Filters and Attenuators*

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Section 15

Power Electronics

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Section 16

Pulsed Circuits, Logic Circuits, and Waveform Generators

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Section 17

Measurement and Control Circuits

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Section 18

Antennas and Wave Propagation

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Section 19

Sound Reproduction and Recording Systems

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Section 20

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Section 21

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Section 23

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Section 27

Computer-Aided Design of Electronic Circuits

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