EXHIBIT M

The New IEEE Standard Dictionary of Electrical and Electronics Terms
[Including Abstracts of All Current IEEE Standards]

Fifth Edition

Gediminas P. Kurpis, Chair

Christopher J. Booth, Editor

January 15, 1993

SH15594

RAM (random-access memory). A memory that permits access to any of its address locations in any desired sequence with similar access time to each location. *Note:* The term RAM, as commonly used, denotes a read/write memory. 641-1988

Raman-Nath region (acousto-optic device). The region that occurs when the Bragg Region inequality is reversed, that is $L < n\Lambda^2/\lambda_0$. The angle of incidence is generally zero degrees, and light is diffracted into many diffraction orders. [23]

ramp (1) (thyristor). A controlled change in output at a predetermined linear rate, from one value to another. 428-1981
(2) (railway control). A roadway element consisting of a metal bar of limited length, with sloping ends, fixed on the roadway, designed to make contact with and raise vertically a member supported on the vehicle. [119]
(3) (automatic control). *See:* **signal, unit-ramp.**
(4) (pulse terms) (single transition). A linear feature. 194-1977

ramp response (1) (null-balancing electric instrument). A criterion of the dynamic response of an instrument when subjected to a measured signal that varies at a constant rate. *See:* **accuracy rating (instrument).** [112]
(2) (automatic control).* *See:* **response, ramp-forced.** [3]
*Deprecated

ramp response time (null-balancing electric instrument). The time lag, expressed in seconds, between the measured signal and the equivalent positioning of the end device when the measured signal is varying at constant rate. *See:* **accuracy rating (instrument).** [112]

ramp response-time rating (null-balancing electric instrument). The maximum ramp response time for all rates of change of measured signal not exceeding the average velocity corresponding to the span step-response-time-rating of the instrument when the instrument is used under rated operating conditions. Example: If the span step-response-time-rating is four seconds, the ramp response-time rating shall apply to any rate of change of measured signal not exceeding 25% of span per second. *See:* **accuracy rating (instrument).** [112]

ramp shoe. *See:* **shoe.**

random (1) (data transmission). A condition not localized in time or frequency. 599-1985w
(2) (automatic control). Describing a variable whose value at a particular future instant cannot be predicted exactly, but can only be estimated by a probability distribution function. [3]
(3) (modeling and simulation). Pertaining to a process or variable whose outcome or value depends on chance or on a process that simulates chance, often with the implication that all possible outcomes or values have an equal probability of occurrence; for example, the outcome of flipping a coin or executing a computer-programmed random number generator. 610.3-1989

random access (computing systems). (A) Pertaining to the process of obtaining data from, or placing data into storage where the time required for such access is independent of the location of the data most recently obtained or placed in storage. (B) Pertaining to a storage device in which the access time is effectively independent of the location of the data. [2], [20], [85]
(2) (data management). (A) An access mode in which specific logical records are obtained from or placed into a file in a nonsequential manner. *Contrast with:* **direct access; sequential access.** (B) * *See:* **direct access.**
* Deprecated. 610.5-1990

random-access memory. *See:* **RAM.** 641-1988

random access method. * *See:* **direct access method.** 610.5-1990
* Deprecated.

random access programming (test, measurement, and diagnostic equipment). Programming without regard for the sequence required for access to the storage position called for in the program. [2]

random drift rate (gyro). The non-systematic time varying component of drift rate under specified operating conditions. It is expressed as an rms value or standard deviation of angular displacement per unit time. 528-1984w

random errors (navigation aid terms). Those errors which cannot be predicted except on a statistical basis. 172-1983

random failure (1) (class 1E static battery chargers and inverters). Any failure whose cause or mechanism, or both, make its time of occurrence unpredictable. 650-1979
(2) (reliability). *See:* **failure, random.**
(3) (software). A failure whose occurrence is unpredictable except in a probabilistic or statistical sense. *See also:* **intermittent fault; transient error.** 610.12-1990

random failures (station control and data acquisition). The pattern of failures for equipments that have passed out of their infant mortality period and have not reached the wear-out phase of their operating life-time. The reliability of an equipment in this period may be computed by the equation: $R = e^{-\lambda t}$ where λ is the failure rate and t is the time period of interest. C37.1-1979

random-incidence microphone (1) (audible noise measurement). A microphone that has been designed to have a flat frequency response in a diffuse sound field where sound waves are arriving equally from all directions. 656-1985