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# DICTIONARY OF COMMUNICATIONS TECHNOLOGY

Terms, Definitions and Abbreviations  
Second Edition

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used to contact other marine telephones or to reach landbased telephones through an operator.

**mark** 1. In single-current telegraph communications, a mark represents the closed, current-flowing condition. 2. In data communications, a mark represents a binary 1; the steady-state, no-traffic state for asynchronous transmission. 3. The idle condition. 4. In the context of the virtual terminal, a mark is a signal inserted into an output data stream by the virtual terminal, to acknowledge that an attention or interrupt input signal has been received.

**marker** The common control device for a crossbar switch.

**mark-hold** The normal no-traffic line condition whereby a steady mark is transmitted.

**Markov constraint** A constraint on the routing method according to which the future route of a packet is independent of its past history, such as its source or its route so far. This constraint is implied by directory routing.

**mark-to-space transition** The transition, or switching from a marking impulse to a spacing impulse.

**MARS** Military Affiliate Radio System.

**MASER (Microwave Amplification by Simulated Emission of Radiation)** A device that generates signals in the microwave range, with low-noise characteristics.

**mask** Pattern of bits (1s or 0s) specified by the user that can be used with the trap mode of a communications test set.

**masking** A method of transforming one set of data into another while blocking or excluding some data from this process on the basis of code patterns or position.

**master clock** The source of timing signals, or the signals themselves, which all network stations use for synchronization.

**master cryptography key** In IBM's SNA, a

cryptographic key used to encipher operational keys that will be used at a node.

**master group** In Frequency Division Multiplexing (FDM), an assembly of 10 supergroups occupying adjacent bands in the transmission spectrum for purposes of simultaneous modulation and demodulation.

**master modem** In a multipoint system, the modem that transmits constantly in the outbound direction. Usually the modem at the central site. In a multiterminal system, the term represents a remote master, or a master modem that is not located at the central site.

**master station** 1. In multipoint circuits, the unit which controls/polls the nodes. 2. In point-to-point circuits, the unit which controls the slave station. 3. In LAN technology, the unit on a token-passing ring that allows recovery from error conditions, such as lost, busy, or duplicate tokens; a monitor station.

**MATE** An asynchronous communications software program from Concept Automation that operates on Data General MV computers.

**mathematical model** A mathematical description or approximation of some real event.

**matrix** In switch technology, that portion of the switch architecture where any input leads and any output leads meet.

**matrix switch** A device that allows any input to be cross-connected to any output.

**Matrix Switch Host Facility 2 (MSHF2)** Software from Bytex Corporation of Southborough, MA, which operates on IBM mainframes, enabling Bytex and IBM matrix switches to send network management data directly to IBM's Netview operating on the host.

**MAU** Multistation Access Unit.

**maximum SSCP rerouting count** In IBM's SNA, the maximum number of times a session initiation request will be rerouted to intermediate SSCPs before the request reaches the destination SSCP. This count is used to prevent endless rerouting of session initiation requests.

## SITA

**SITA** Société Internationale de Télécommunications Aeronautiques.

**Site** A node in a bulletin board system network.

**site number** A number assigned to a site in a bulletin board system network.

**skewing** The time delay or offset between any two signals.

**skirt** A descending edge on an adapter card behind its connector. The presence of a skirt may restrict the expansion slots into which the adapter card can be installed.



Card with skirt



Card without skirt

**Skylin X.25** A satellite-based shared X.25 network service offered by Scientific Atlanta, Inc., of Atlanta, GA. Skylin X.25 supports interactive communications between multiple VSAT locations and a shared network hub via a Ku-band satellite.

**Skylink.25** A third generation VSAT data network marketed by Scientific-Atlanta, Inc., which is based upon the CCITT X.25 architecture and supports a variety of commonly used protocols.

**Skyнет** Digital transmission service offering from AT&T Communications, featuring on-site earth-station facilities for wideband satellite trans-

mission, with Accunet Reserved 1.5 circuits. Also called High-Capacity Satellite Digital Service (HCSDS) and Skynet 1.5.

**Skypaper** A trademark of National Satellite Paging of Washington, D.C., as well as the name for the first FCC licensed and operating nationwide paging system marketed by the vendor.

**Skyphone** A direct-dial telephone service for airline passengers offered by British Telecom International.

**SLAR** Side-Looking Airborne Radar.

**slave** A called unit under the control of commands and signals from a master (calling) unit.

**slave station** In point-to-point circuits, the unit controlled by the master station.

**SLC** Submarine Laser Communications.

**SLCSAT** Submarine Laser Communications Satellites.

**SLIC** Subscriber Line Interface Card.

**slicing level** A voltage or current level of a digital signal where a one or zero bit can be determined or not. Also threshold.

**slip** A defect in timing that caused a single bit or a sequence of bits to be omitted or read twice. Slips are primarily caused by improper synchronization resulting from wander and improper distribution of the network reference frequency.

**SLIP** Serial Line IP.

**SLM** System Logic Module.

**slot** 1. A unit of time in a TDM frame where a sub-channel bit or character is carried. 2. Basic information unit (an 18-bit pattern) sent on an IBM 3600 System Loop. Specifies a command, data, or a sync pattern.

**slot sharing** A procedure by which more than one terminal may contend for the same slot thereby increasing the number of terminals that may be attached an IBM System 3600 Loop.