Poly Learning System - Improvements and Enhancements

The follwing list summarises those improvements and enhancements embodied in POLY 2 (with Version -3.0 system software) as compared with POLY 1 (with Version 2.1 system software.)

- 1. Enhancement. Applicable to a wider range of learning applications, all levels of education, training and retraining, industry and commerce.
- 2. Enhancement. Greater interaction is provided between student and system, obtaining improved motivation and learning performance.
- 3. Enhancement. Cost reduced to approximately two thirds of the previous POLY 1 price.
- 4. Improvement. Up to a total of 32 POLY 2's may be networked, making possible more efficient use of shared facilities such as disk storage etc.
- 5. Improvement. Network communications speed improved by a factor of four for networks of 5 or more POLY 2's. Better service speed to student avoids frustration, system is virtually transparent to user, allowing concentration on learning task.
- 6. Enhancement. POLY 2 supports Centronics parallel data interface. (As well as optional Serial data interface.)
- 7. Enhancement. Integration of other forms of audio visual materials, to provide more explicit simulation and information.
 - * Interactive Video tape:
 - * Interactive Video disk:
 - * Interactive Carousel slides;
 - * Interactive Speech synthesis:
 - * Interactive Audio cassette;
- 8. System comprises three components, processor, keyboard and monitor.
 - * Detachable keyboard for convenience. May also be fixed to processor for robustness.
 - * Choice of monitors, Medium/High resolution display, cost vs performance, 80 column formats. Pan and tilt accessory option.

- 9. Enhancement. Keyboard and processor are constructed from plastic with built in EMI/RFI shielding which also provides static dissipation.
- 10. Enhancement. CP/M operating system is available on a single user basis. Provides access to an extensive range of commercial and business software. Optional high resolution monitor suitable for 80 column format is available.
- 11. Enhancement. Phone jack output of computer audio.
- 12. Enhancement. Variable control of sound pressure level provided on monitor front panel.
- 13. Enhancement. Lower weight provides easy transport. Separate units more easily handled.
- 14. Enhancement. Physical security is provided by fixing keyboard and/or monitor to processor with optional kits.
- 15. Enhancement. Keyboard ergonomics comply with European VDE standards.
- 16. Enhancement. Monitor mains feed is from processor rear panel, maintaining single mains connection for assembly. Single network connection cable is preserved.
- 17. Enhancement. Memory extension to 128 kiloByte Random Access. The 64k addressable memory is preserved and an additional 64k is arranged as RAMDISK, acting as disk drive Number 4. Provides approximately 50kByte of high speed memory for files, data etc without the need to access network. Removes any delay in progress of learning process, eliminating any frustration, improving motivation, extending concentration, expanding learning performance.

Programmes may be 'Broadcast" loaded or copied to RAMDISK and with the new 'search RAMDISK first' option these files will be automatically retrieved from RAMDISK rather than via the network. The new utility RDFORMAT is provided to flush RAMDISK memory. RAMDISK may also be utilised as a standard disk drive (Drive 4).

- 18. Enhancement. Comprehensive security checking is available via the new LOGON utility.
- 19. Enhancement. Control key added to keyboard. (For use with CP/M)
- 20. Enhancement. A new file type is introduced (.BSC) The three file types and their attributes now are;

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- .BAS Basic language source (full text)
- .BAC Basic language compiled, for fast load and execution.
- .BSC Basic language encoded. Provides for source form code to load 8 times faster than .BAS files. Provides for source form code to be "BROADCAST" on the network.
- 21. Enhancement. LOCK and UNLOCK procedures provided for Pascal random files.
- 22. Enhancement. Pascal reports line numbers with run time errors.
- 23. Enhancement. Faster read/write disk performance is provided, through reduced access contention, especially for larger network configurations. This is achieved by increased buffering. (Not available on systems employing Drive O, 32k version hardware)
- 24. Improvement. Print spooler provides additional facilities;
 - * Paging, with number of lines per page selectable
 - * Width, with number of characters per line selectable
 - * Automatic deletion of spool file after printing
 - * Emphasised characters mode
 - * Listings are date and time stamped to provide unique identity.

These are in addition to the existing six options provided.

- 25. Enhancement. Any printer may now be accommodated by use of the new INSTALL utility, which provides for configuring the system for the unique control information required.
- 26. Enhancement. New BASIC function UPCASE\$ is implemented.
- 27. Enhancement. New DOS command FIND implemented.
- 28. Enhancement. New DOS utility CLEAN implemented.
- 29. Enhancement. Line insert/Line delete edit functions enabled in DOS mode.
- 30. Enhancement. Auto repeat timing parameters may be adjusted by the user.

- 31. Improvement. MID\$ of an array is allowed (Basic)
- 32. Improvement. Clear to end of line is implemented to erase old information from screen when listing.

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- 33. Improvement. RENUM command validates syntax of entire statement before commencing renumber.
- 34. Improvement. HEX function accepts lower case as well as upper case.
- 35. Improvement. PROT command prompts for password if one has not been entered.
- 36. Improvement. GPRINT command may be called from Basic.
- 37. Improvement. COMPILE provides a file name in the same way that SAVE functions.
- 38. Improvements. 58 other lesser improvements have been implemented to provide more easy operation or faster performance. As these are each of a minor nature they are not listed separately.