PCGET and PCPUT

These programs make it easy to transfer files between a PC and a Polymorphic computer running Exec (System-88). Use PCGET to send a file from the PC to Exec and use PCPUT to send a file from Exec to a PC. Files are transferred over the Poly's serial port (printer port) using the XMODEM protocol. The Printer serial port is set to run at 9600 baud by both programs.

Once PCGET is on the Poly computer, subsequent file transfer – including retrieval of the PCPUT program – is simple. However, getting PCGET onto the Poly to begin with is the classic chicken and egg quandary. A small binary file loader can be entered using the front panel mode of the Poly computer in order to load PCGET.GO via the Poly's serial port. Once loaded, the SAVE command in Exec can be used to save PCGET.GO to disk. See the files "Binary Loader.txt" and BINLOAD.ASM in the same folder as this file for details.

For text files, Exec uses CR as the line terminator, not CR/LF as used on the PC. Also, null (0) is used to mark end of file and fill to the end of a sector, not ctrl-z (1Ah). For these reasons PCGET and PCPUT must treat text and binary files differently.

For all file types, Exec requires two values that are written to the directory for a new file: Load Address and Start Address. For an executable file, these fields must contain the load and run address of the program as expected. However, these fields have different uses for other file types. For text files, both fields must be zero. For a relocatable file, the start address must be zero and the load address contains the offset to a relocation bitmap within the file. Other files types and programs use the start address field for program specific functions.

Since none of the above information is present in the file to be transferred from the PC, PCGET uses the receive file extension the operator provides to make a best guess as to the text/binary, load address, and start address parameters. The user is then given the opportunity to confirm or change these values as required. PCPUT does the same but just for the text/binary option.