PC2Flop and Flop2PC (for Altair 8 inch Drives with IMSAI SIO-2)

PC2Flop writes an Altair 8" floppy disk with a disk image transmitted from a PC. Flop2PC saves an image of an Altair 8" disk to a PC. The disk image is transferred through either serial port on an IMSAI SIO-2 serial board. The default location of the SIO-2 I/O address space is 00h-0Fh. This conflicts with the Altair FDC (08h-0Ah), so this program expects the SIO-2 base address to be 10h instead of 00h. The XMODEM checksum or CRC protocol is used for the transfer. The image is read or written directly from/to the floppy in raw format (137 bytes per sector, 32 sectors per track, 77 tracks).

These programs run standalone at 0x100 or under CP/M. Any type of disk (e.g., BASIC, Altair DOS) can be read or written even if running under CP/M. Lifeboat CP/M 2.2 for the Altair disk with CONFIG.COM already patched for an IMSAI SIO-2 is available in the same directory as PC2Flop and Flop2PC.

Standalone operation may be required to create a bootable disk when no other bootable disk is available. There are a couple of ways to load PC2FLOP into a cold machine:

1) Use the front panel to enter the hex bytes of the program listed in LOADER.PRN. Execute the loader by running from zero (no feedback is given), then send the file PC2FLOP.COM through the first SIO-2 port. After transmission is complete, reset the computer and run PC2Flop at address 100h. If the serial port has already been initialized by a monitor, then you can enter the program data starting at 15h and begin execution at 15h.

2) If you have an Intel hex file loader in PROM, load the file PC2FLOP.HEX and then run from 100h.

When copying a disk image to the PC (Flop2PC), the program attempts several retries including stepping off the track an back from both directions. If the read still fails, the error is noted and the copy process continues so that the remainder of the disk can still be recovered.