PC2Flop and Flop2PC (North Star Horizon with Double Density FDC)

PC2Flop writes a North Star double-density, single or double sided disk, with a disk image transmitted from a PC. Flop2PC saves an image of a North Star disk to a PC. The disk image is transferred through the either serial port on the Horizon computer. The XMODEM CRC or checksum protocol is used for the transfer. The image is read or written directly from/to the floppy in raw format (512 bytes/sector, 35 or 70 tracks).

Several disk images for the Horizon can be found in the download area at deramp.com:
(north_star->horizon->double_density_controller->disk_images).

Horizon disk images from Dave Dunfield's website will also work. Go to the link below, then look for and follow the "System/Install disks" link. On that page, look for NSI links.
(http://www.classiccmp.org/dunfield/img/index.htm)

PC2Flop and Flop2PC run standalone at 0x100 or under CP/M. Any type of North Star diskette can be read or written (e.g., North Star DOS disks) even if running under CP/M. The program assumes the North Star FDC is strapped at E800.

Standalone operation may be required to create a bootable disk (e.g., CP/M) when no other bootable disk is available. This is difficult on the Horizon computer as there is typically not a ROM monitor installed in the machine. Use of a CPU board with a monitor allows loading of PC2Flop in a "cold" machine. Two options are typically used:

1) Use the monitor's ability to modify memory and key in the hex bytes of the program listed in LOADER.PRN. Execute the loader by running from zero, then send the program PC2FLOP.COM through port the console port on the Horizon (8 bit binary). After transmission is complete, reset the computer and run PC2FLOP at address 0x100.

2) If your monitor has an Intel hex loader, load PC2FLOP.HEX.

When copying a disk image to the PC (Flop2PC), the program attempts several retries, including restoring the track both from zero and from past the current track. 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.