## Handebug Downloading a Game Cartridge

Either Control-G or Shift-F4 will start the cart download process.

Handebug presents the FileIO requester for the user to specify the game cartridge data file. This requester is accompanied by the extra gadgets box that has these gadgets:

- "Page" LONGINT gadget

- "Offset" LONGINT gadget

- "Reset" BOOL gadget, which sets Page and Offset back to zero

- "Port 0" and "Port 1" BOOL gadget that toggles between these two

- Mutually-excluding ROM-size gadgets (pertaining to the particular port): 16K, 32K, 64K, 128K, 256K, 512K, 1M

Handebug uploads \$1800 bytes starting from \$2000 and stashes them for later restoration.

Handebug downloads the program HANDY:cartload.bin and then performs a GO.

The cartload bin program does a NotifyHandyReset. Handebug waits for this signal, times out after awhile.

Handebug sends down the page (8 bits) and offset (16 bits) cart destination address.

Handebug sends down the size (24 bits) of the data.

Handebug sends down a status byte where:

bit 7

This bit is clear if the user has specified Port 0, set if Port 1

bits 6 - 3

These bits are currently unused, should be zero

bits 2 - 0

These bits are used to select the ROM size of the port. These are the possible values:

7 = 1M

6 = 512K

5 = 256K

4 = 128K

3 = 64K

2 = 32K

1 = 16K

0 = unused

Finally, Handebug sends down the data.

After the cartload bin program has received all the data and copied it into the game cartridge, the program executes a BRK instruction. The monitor is reentered, and on entry a NotifyHandyReset is performed. After downloading the data, Handebug waits for this signal, times out after awhile. If the signal is received, Handebug replaces the stashed \$1800 bytes to \$2000.

The ROM size of each of the two ports should be made part of the settings saved in the HANDY:handebug.config file.

## Handebug Causing a Game Cartridge to Execute

Either Control-X or Shift-F5 will start the game execution process.

Handebug downloads the program HANDY:cartgo.bin and then performs a GO.

After this, Handebug behaves as it normally would after the user used the GO command.