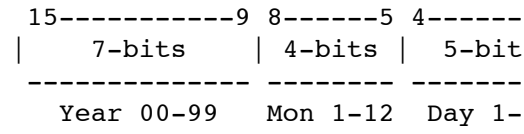
HDOS 2.0 System Y2K date patch
(submitted by Stanley K. Webb)

The following patches when entered change the date routines in HDOS to allow any year between 00 and 99 to be input at the "Date (DD-MMM-YY)?" prompt. Date routines in HDOS.SYS, SYSCMD.SYS, PIP.ABS, and ONECOPY.ABS are altered to accommodate the change in date format.

The patches remove the 70 year bias from the old encoding. Years now occupy the topmost 7 bits of the encoded date word (instead of the published specification of a sign bit followed by 6 bits encoding the year minus 70). The new encoding has no added bias. Years simply roll over at the century mark.

Dates encoded in the old format will be off by 70 years under the new system. Any program that encodes or decodes dates using the old method will be off as well.

This is the new date encoding:



From the (DD-MMM-YY) form.

These patches are valid for HDOS 2.0.

First, you need a modified version the PATCH.ABS program supplied with HDOS that doesn't ask for a Patch ID, Prequisite Code, and Patch Check Code when modifying a system file. If you have already obtained a modified PATCH.ABS, you can use it to make the patches in STEP (2).

STEP (1): Modifying the PATCH command

Let's call our new version SPATCH.ABS short for SuperPATCH.

```
>COPY SPATCH.ABS=PATCH.ABS
```

Now modify SPATCH.ABS using itself.

Make sure the old data (the octal numbers before the slash) are as shown before you make the patch. The patch is not actually made until you type control-D at the Address? prompt. You can always type control-C to abort the patch and then control-D to exit PATCH. The PATCH program assumes SY0: and .ABS to be the default device and file extension if they are not given at the File Name? prompt.

```
>SPATCH

PATCH Issue #50.06.00.

File Name? SPATCH
Patch ID? IFOJIC
Prerequisite Code? IFBEIADPGEFFCF
```

```
Address? 42231
042231 = 312/303
042232 = 244/^D         (control-D)
Address? 42263
042263 = 247/257
042264 = 304/^D
Address? 44055
044055 = 076/303
044056 = 000/354
044057 = 377/047
044060 = 046/^D
Address? ^D
Patch Check Code? DLMIAGPD

PATCH Issue #50.06.00.

File Name? ^D
>

STEP (2): Modifying HDOS 2.0 system files

>SPATCH                 (the name of your modified PATCH.ABS program)

PATCH Issue #50.06.00.

File Name? HDOS.SYS

Address? 12074
012074 = 106/000
012075 = 332/           Just press RETURN key to keep same code byte
012076 = 044/
012077 = 063/
012100 = 376/
012101 = 077/144
012102 = 322/^D         (control-D)
Address? 12276
012276 = 106/000
012277 = 376/^D
Address? ^D
PATCH Issue #50.06.00.

File Name? SYSCMD.SYS

Address? 51365
051365 = 106/000
051366 = 332/           Just press RETURN key
051367 = 335/
051370 = 051/
051371 = 376/
051372 = 077/144
051373 = 322/^D         (control-D)
Address? 52254
052254 = 106/000
052255 = 376/^D
Address? ^D
PATCH Issue #50.06.00.
```

```
File Name? PIP

Address? 60164
060164 = 106/000
060165 = 376/^D
Address? ^D
PATCH Issue #50.06.00.

File Name? ONECOPY

Address? 60263
060263 = 106/000
060264 = 376/^D
Address? ^D
PATCH Issue #50.06.00.

File Name? ^D
>
```

STEP (3): Reboot and set the system date. Newly created files will have the correct date.
Be sure to boot from a System Disk with these Y2K patches applied.
When using SYSGEN use the patched version of HDOS as your source disk to make sure these patches are propagated to all your system disks.