

Next I wrote NASBUG T4, which used up all the rest of the available 2K, and contained many improvements and new features. Most important, it was still NASBUG compatible, so programs written for the other monitors would run under it.

At this point it was apparent that there was no further scope for significant improvement, because of the need to retain complete compatibility with the original old NASBUG 1. At this time I got my memory expansion and ZEAP, and re-assembled NASBUG T4 using ZEAP, which was fun because all the previous work had been done by hand in machine code! NASBUG T4 is the best monitor currently available for the NASCOM 1. But

Some of you have probably heard about NASCOM 2, and you may be wondering about its monitor. What happened was this: Using my NASCOM 1, with 32K board and ZEAP, I developed a completely new and somewhat incompatible monitor, by starting with NASBUG T4 and steadily improving it. Several major changes were made:

1. The Cursor on the screen is made to blink on and off. It is possible to move it anywhere on the screen. Lines on the screen can be edited, and even characters inserted and deleted by moving the rest of the line to left or right.
2. The line to be processed is always the line where the cursor was when enter (or newline) is pressed.
3. Output starts at the top and scrolls down.
4. The extended NASCOM 2 keyboard is fully supported including up, down, left and right arrows to move the cursor. (The old keyboard can do these too.)
5. The memory used by the monitor has to occupy addresses 0C00 to 0C7F.
6. All monitor commands perform comprehensive error checking on the line entered. Also, all routines are callable by the user program, NOT by a CALL instruction which has an actual address, but by a restart instruction followed by a (magic) subroutine number.
7. Various errors have been corrected, and lots of extra features added. There are very full input/output options, to make it easier to use printers, teletypes, etc. Also, the machine uses ASCII codes for carriage return, line feed, back space and clear screen.

This monitor is called NAS-SYS 1, and is the only monitor for the NASCOM 2. No changes are planned, and it will be completely standard. Even if changes are made there are no compatibility problems because of the use of subroutine numbers (see 6 above).

Now the crucial question - can NAS-SYS be used on a NASCOM 1, making it very like NASCOM 2? - the answer is yes, and I use my NASCOM 1 under NAS-SYS most of the time, BUT - will NASCOM provide it for you? Marketing Director, Kerr Borland, says "No plans at present." If you want it, why not write and tell him what you think about it - he might pay attention (he thinks I'm crazy).