

2. Plea for help

In the last newsletter we said that it was your newsletter. Please will you send in helpful tips to this software section of the newsletter. I promise to consider printing anything that isn't actually wrong!

3. Correction

The last newsletter said that to end a program you could jump to PARSE. I did not write that - it was edited by our super software? expert (Ta for the compliment Richard. Just wait until you want some hardware sorted!! D.H.) and INMC chairman David Hunt, who got it wrong! This is a complicated situation, and the ONLY 100 percent safe way that ALWAYS works is to jump to address 0. If you don't want to clear the screen, put in a 76 (HALT), and press RESET to carry on when you are ready.

4. Solution to Puzzle (in the last newsletter)

Nobody sent in a correct explanation of the problem, but I give half marks to those who made the program work by putting in code B7, which is OR A, before the INC A. The reason for the problem is that although INC A and ADD A, 1 might seem the same, INC A does not set the Carry flag, or change it at all. Once the carry flag gets set, the DAA instruction gets completely confused! To understand all this, use the S command to step through, keeping an eye on the Carry flag. Also, have a look at the Z80 programming manual, under INC, ADD, and DAA. If you don't understand the table describing DAA, you are not alone! By the way, perhaps the Z80 should set Carry when INCing - but if it did it wouldn't be 8080 compatible, so you really have to blame Intel for the 8080 design. Anyway, these little quirks make programming interesting.

5. NASCOM Monitor Programs - a personal view

Here is a brief history of the monitors - also known as operating systems - which have controlled my NASCOM 1 computer. By now I suspect that there maybe quite a few confused NASCOM owners, because so much change has occurred in the last year, so this may also help to clear up misunderstandings.

In the beginning I had NASBUG 1. This lasted about two minutes, then I blew it up - it got very hot, I burnt my fingers, and pulled its little legs off getting it off the board! I then had a replacement NASBUG 1, which worked, except for the tape loading problem. This was cured when NASBUG 1T2 was produced, and most NASCOMS probably use this monitor, which is the only standard 1K monitor.

Eventually the magic of NASBUG wore off, and frustration with slow tape loading set in, so I wrote a monitor called B-BUG, which was NASBUG compatible but with extra features, the most important of which was the read and write commands, for tape loading at four times the speed. B-BUG used about 2/3 of the second 1K EPROM, so there was still room for improvement.