from the Publisher . . .

are they real?

We have a lot of buzz words these days, and one phrase we hear a lot is about companies being "real". Being the publisher of BYTE, it seemed to me that it would be worthwhile if I were to make a trip to visit the major microcomputer systems companies and talk with them ... possibly making them more real to our readers.

My first stop was in Denver — a short layover between planes on my way to Salt Lake. I tried to locate the Digital Group there, but had no luck. Sorry about that. I know they are real because I recently sent them a check for their video display generator and received one a few days later in the mail. I was disappointed not to have a chance to talk with them at greater length.

In Salt Lake I was met by Doug Hancey of Sphere and driven out to their new plant in Bountiful, a suburb. It's a small building and I have a feeling that they will quickly be outgrowing the facilities ... I don't think they realize what a demand there is going to be for their system.

They had a prototype up and running and it looked good. There were a couple of glitches, of course, but they seemed to have these well in hand and were expecting to be able to set up a production department very soon. The system is based upon the Motorola M6800 chip and features a PROM loader. They plan to have another PROM with Basic in it, which would be quite a step ahead for it would free all of the RAM memory for use and would permit instant use of Basic without the usual loading process.

I gather that Motorola has been extremely helpful in supplying information and support for the effort. This may have a lot to do with

Sphere HQ in Bountiful, Utah, just outside of Salt Lake. That's Michael Wise, the president, in front. These are new offices for Sphere and the production will be set up in the back part of the building.

Mike is demonstrating the prototype Sphere system. It is on three boards, a keyboard/character generator, CPU and memory board. The output is being displayed on a small television screen.

Here's Mike with the Sphere system cabinet and keyboard. In production there will be several more control keys on the keyboard, including a numeric set of keys for fast number entry, cursor control, etc.

some of the other 6800 based computer systems which are coming out . . . more on that later.

The plans were to set up a production facility in the back part of the building and have the first kits available in October. This will take some doing, but I wouldn't be surprised if they come close for they are a very determined group.

They have an interesting set of peripherals in the works, including some medium cost floppy disk systems, and a possible revolutionary tape system. We'll try to bring you up to date on Sphere as things progress.

MITS

The Altair 8800 has been selling well, as you probably know, and they are busy keeping up with it. They are also in production on all sorts of interface and control boards, memory boards, etc. They also have a very busy group of college-types working away at program development. They are delivering Basic now and are about ready to let loose Extended Basic. They put Basic into a system for me so I could see it work . . . then ran in a tape of a Hammurabi

game program and let me sit down and kill off the entire population of a mythical country in short order . . . and become instantly addicted to computer games. I promptly ordered a complete Altair 8800 with enough memory to handle Star Trek. I wanted it right now, but I had to get in line behind the other customers.

Next, in talking with Ed Roberts, the president of MITS, I found that the rumors of a new MITS system based upon the M6800 was
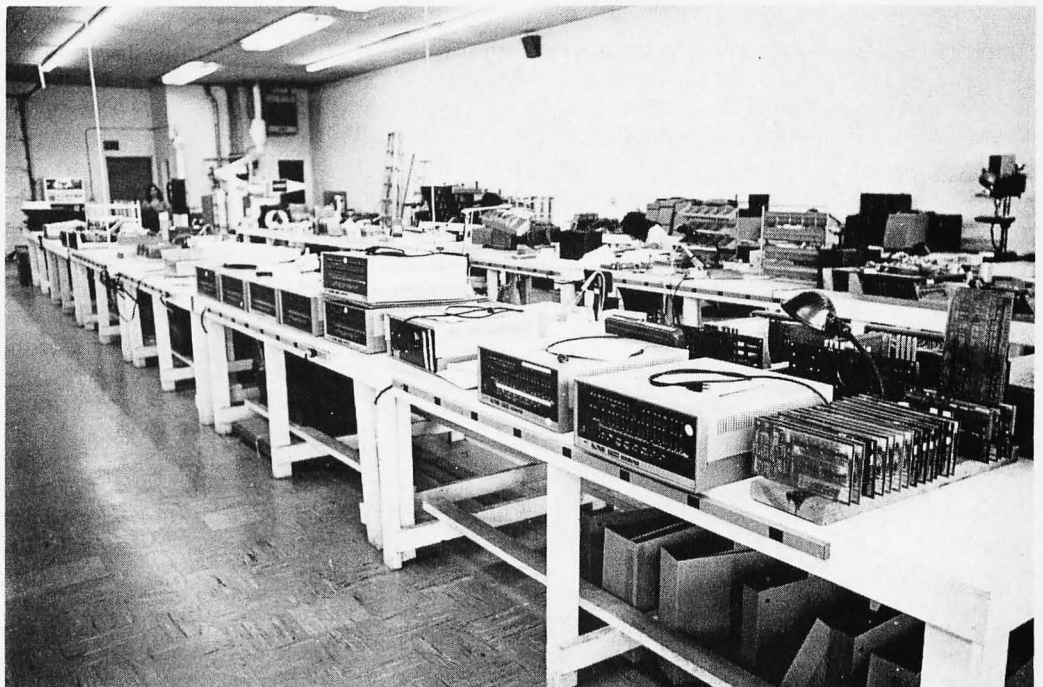
much more than a rumor. The dates of release weren't firmed up yet, but it was definitely coming down the pike. Ed said that MITS would give good support to both the Intel 8080 and Motorola M6800 systems. With both Sphere and MITS producing 6800 systems Motorola was doing well and their solid backup of their chips was paying off. This would also mean a big plus to users since this would allow a lot more swapping of programs and would simplify
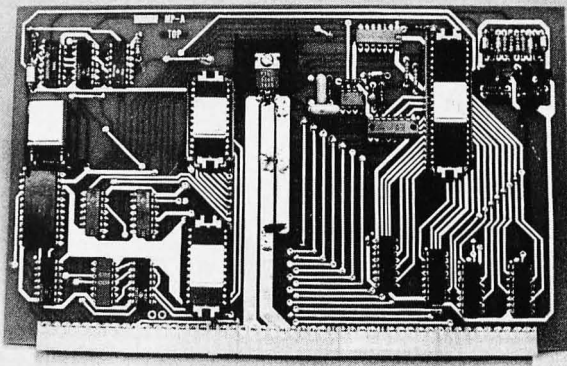
interfacing of memory and peripherals.

We'll have a lot more info on just what MITS is doing and their plans in the near future.

From New Mexico I flew to San Antonio and a short visit to Southwest Technical Products, Dan Meyer proprietor. SWTP has long been well known for their excellent hi-fi kits. Readers of *The Audio Amateur* (Peterborough NH 03458)

Meanwhile, at MITS, over 5000 Altair 8800's have been shipped. Here is a view of part of the production line (during lunch when people were out).

And at Southwest Technical Products this prototype CPU board was getting its final wringing out before getting into production. Systems are expected to be available by November! Motorola M6800 based . . . again!

have been reading the SWTP ads for some time and seen the rave reviews of the equipment.

Dan has a good sized plant and is doing a substantial business in audio kits. I went there to just say hello and tell him how much I enjoyed putting his television typewriter kit together . . . and to see what he might have up his sleeve for the future. To my amazement he had an M6800 CPU up and going, hooked to one of his TVT units. Those Motorola boys sure do get around. The plans are to have systems available in kit form by November . . . more support for 6800 systems . . . more users, more programs.

This is an exciting time in the microprocessor business with systems getting going just about every month. The Sphere, MITS and SWTP systems are just the vanguard of what is coming. There are outfits talking about some slower systems . . . probably 8008 based . . . which will come in under $200 for the CPU . . . and maybe even one for $100!

All of the firms are working hard to develop accessories, memories and programs. Look out 1976.

FLAKES

It just doesn't take any time at all for the flakes to rise. New as the computer hobby field may be, there are already some sharp operators in there taking advantage of the unwary. I'm put in mind of the "lifetime" guarantee offered by a chap selling ball point pens in the subway cars in New York.

One flake is selling imitation Southwest Tech circuit boards (the television typewriter circuit). Good luck if you fall for this one. SW Tech is a substantial firm with a long history of good products and service to back them up — I've built their TV typewriter and it is splendid. Said flake is getting ready to put out imitation microprocessor boards . . . and kits. Undoubtedly he will give all of the support to his boards and system that one might expect from someone operating out of a cellar.

Watch out!

. . . WAYNE GREEN

PCC Update

In conversation with Bob Albrecht at People's Computer Company, PO Box 310, Menlo Park CA 94025, the following updated information was obtained as BYTE #2 goes to press: PCC's publication will be charging a flat subscription rate of $5 for six issues, with no special rates for students.