

PUBLISHER'S REMARKS

Wayne Green

A Visit To Ohio

Scientific, that is.

With the slacking off of computer shows in July (only one, in Virginia, near Washington), Sherry and I had a chance to take a day off and zip out to Ohio Scientific in Aurora, not very far from Cleveland.

It was prophetic that we should pass the Computer Shop display of an OSI system in the airline terminal on our way to visit OSI. I grabbed one of the OSI brochures, which were available at the little kiosk, so I could read up on the OSI products during our trip.

The Ohio Scientific building is impressive . . . over 50,000 feet of work space . . . something to make me jealous. OSI's new building houses most of the production and test facilities. They still are doing much of their product development and software work in the old plant in nearby Hiram, Ohio.

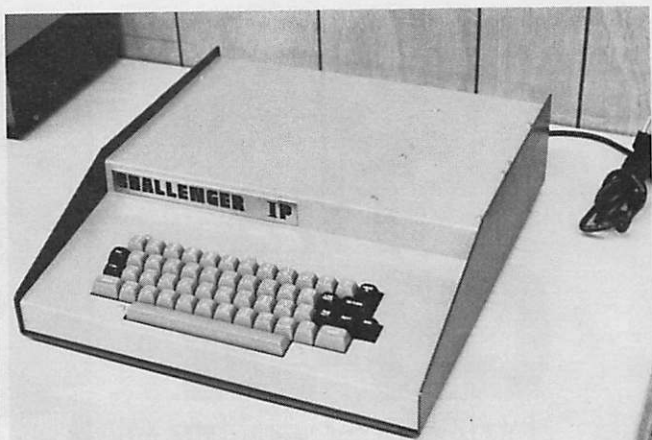
While some in the industry are concentrating on fighting the low-end price battle, and others

are on the high end, OSI is trying to cover all bases.

Their new Challenger IP weighs in at \$279 and provides a remarkable amount of computing for this incredible price. The thought, obviously, is to provide an alternative to the TRS-80 for computer stores to sell.

I think the first public showing was at the Philly show in August, where they had it on demonstration. This new system is even more amazing than the Challenger IIP, announced last year in response to the TRS-80. When you take the system out of the cabinet you see how simple and well designed it is.

With the IP system, OSI has introduced a strong price competitor for the KIM, but with a full keyboard and output for a video monitor . . . complete with BASIC in ROM! When a test unit arrived at my office, I had it running with a program in about ten minutes. Oh, I had some trouble loading the cassette at first, but a change of recorders fixed that. Some programs would load and some wouldn't . . . probably due to the head of my first recorder



The Challenger IP—outside.

not being cleaned recently.

On the high price end is the C3B system. The photo shows a top-of-the-line C3B system used at OSI for software development. This outfit, which includes the 74 MB disk, two floppy disks, a processor that has three microcomputer chips—6502, 6800, Z-80—so you can use programs developed for any of the popular microcomputer systems, a CRT terminal and the OSI operating system, sells for under \$13,000. If I didn't already have about \$40,000 invested in programs for our Prime system I'd jump for the C3B in a minute. That would give me a lot more computing for about one-fifth the price.

The IP and C3B are put together in OSI's assembly area, which keeps a lot of people very

busy. It's a b-i-g place. On one side of the assembly area I came across a C3-based word-processing system, complete with Diablo Hy Type printer.

Business Articles—and Beyond

Obviously many OSI systems are finding their way into business applications. On the off chance that I may not have made my intentions clear, I reiterate that I'm looking for articles for *Kilobaud MICROCOMPUTING* on how microcomputers are doing in business. I'd like to have the articles written in plain English, with as few buzzwords as possible. The articles should tell us what system was used, what operating system, where the programs were obtained or how they were developed, what problems arose and how they were surmounted, how the system works at present and what expansions are contemplated.

The OSI C3 system seems ideally suited for school use, where it can not only help the school keep track of all of its students and their grades, but could also act as a data base for storing educational programs that could be used via smart terminals by



Computer Shop display.



OSI's building.



OSI's large assembly area.

The C3-S1

by Ohio Scientific

**Possibly the world's
most popular
floppy disk based
microcomputer.**



Since its introduction in August, 1977, the Challenger III has gained tremendous acceptance in small business, educational and industrial development applications. Thousands of C3-S1's have been delivered and today hundreds of C3-S1 demonstrator units are set up at computer retailers around the country.

Why has the Challenger III become so successful in the fiercely competitive microcomputer industry? Here are just a few of the possible reasons.

■ The Challenger III is the fastest microcomputer in BASIC (see "BASIC Timing Comparisons," *Kilobaud*, October, 1977, where Ohio Scientific out benchmarks all competitors).

■ The Challenger III is the only computer system with a 6502A, 6800 and Z-80 offering the programmer all popular micros for maximum versatility.

■ The C3 is backed by the largest base of systems level software for any microcomputer system including:

For the 6502A:

- Microsoft 6 and 9 Digit BASIC
- Assembler Editor
- Word Processor
- OS-65D Development DOS
- OS-65U End User DOS with Extended BASIC
- For Floppys
- Winchester Hard Disks
- Multi-users (Level 2)
- Distributed Processing (Level 3)

For the 6800:

- Floppy DOS
- Assembler Editor

For the Z-80:

- Floppy DOS
- Microsoft Disk Extended BASIC
- Microsoft FORTRAN
- Microsoft COBOL
- Macro Assembler and Editor
- And Much More

■ The C3 supports OS-65U, the ultra high performance "virtual data memory" DOS for floppys and hard disks which makes complex file structures like multi-key ISAM easy to use.

■ The C3 is backed by a large library of applications programs

and can make use of the tremendous amount of BASIC programs offered by independent suppliers and publishers because it uses Microsoft BASIC, the standard of the industry. Complete turnkey and custom business packages are available for the C3 from most OHIO SCIENTIFIC DEALERS.

■ The C3 electronics and software are available in alternate mechanical configurations for special applications including the C3-OEM for volume users and the C3 letter series (C3-A, C3-B) which are optimized for use with hard disks.

■ C3 systems are always delivered ready to use with 32K static RAM, dual floppys for 500K bytes of on-line storage and an RS-232 port strappable from 75 to 19,200 baud all standard in the minimum configuration.

■ C3 systems offer the greatest expansion capability in the microcomputer industry. The C3 series supports OHIO SCIENTIFIC'S full line of over 40 expansion accessories. The maximum configuration is 768K bytes RAM, four 74 million byte Winchester hard disks (CD-74), 16 communications ports, real time clock, line printer, Word Processing printer and numerous control interfaces.

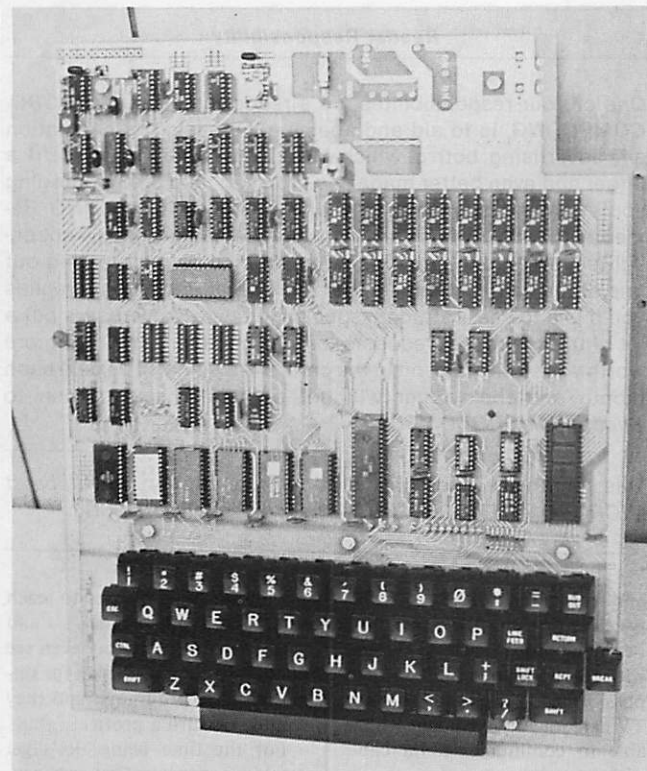
■ C3 systems have phenomenal performance-to-cost ratios. The C3-S1 base price with 32K RAM, dual floppys, RS-232 port complete with 8K BASIC and DOS is under \$3600 and expansion accessories are comparably priced. For example, the CD-74, 74 million byte Winchester disk complete with interface and OS-65U operating system at about \$6000.

The C3 series is quite possibly so successful because it offers the highest hardware performance, best software support, most versatility and greatest expandability in the microcomputer systems market at nearly the lowest price in the industry.

For more information, contact your local OHIO SCIENTIFIC DEALER or the factory at (216) 562-3101.

OHIO SCIENTIFIC

1333 S. Chillicothe Road • Aurora, Ohio 44202



The IP—inside.

students. If anyone runs into some applications such as this, *Kilobaud MICROCOMPUTING* is most interested in an article.

Programmers might also keep in mind that any programs developed for use on business systems could possibly be of value for more widespread distribution via a program publisher such as Instant Software, Inc. Programs will be selling for whatever seems a reasonable price, with some being projected to run as high as \$800. At that rate the royalty on a sale through computer stores would run to about \$8.5 million for every 100,000 sold.

Why Most Programs Are Worthless

Several of the people working on Instant Software have been

surprised at the third-rate quality of many programs being submitted for publication. I've heard the same complaint from most of the other people who are getting programs for possible publication too. How come?

If you mull over the history of software for microcomputers, the picture should come into focus and the quality of most of the programs written so far should be understandable.

Although it's true that a few businessmen have gone out and bought microcomputers, and then gone to the trouble to personally write the programs needed to use their systems, most microcomputer users have had less serious plans for their systems and have made do with what they could scrounge from magazine articles or books of programs, or borrow from friends.

The handful of dedicated pro-

grammers who have bought systems seem to have written debuggers, disassemblers, utilities and a rash of forgettable games. While I'm sure that the utility programs are great to have, the demand for them has been relatively small, and, as far as I know, no one has made anything more than egg money from such efforts.

So along comes Instant Software and a call for original programs—and what do we get? A lot of forgettable games. Fortunately there are a few diamonds among the rubble . . . and just a hint of the programs to come for business, for teaching and for practical uses of our microcomputers.

So far, most of the businessmen who have patiently worked out programs for their own use have not really become aware of the gold mines they have generated. Once they perceive the value of their work, they will submit it to the bigger program publishers. The only danger in this is that there is a finite need for each specific type of program, and if someone else gets there first, he gets the bonanza.

When the plan for Instant Software was announced, a few sharp programmers wasted no time in submitting programs . . . and they are in line for the payoff. With the dramatic need for hundreds—even thousands—more programs, it is still very early in the game. In a few months it is going to be a whole lot tougher to sell a program to a publisher because the large amounts of money involved are bound to bring in heavyweight programmers and even systems houses.

Consider that a first shipment of programs, even if it goes to only about half of the computer stores, say 500 stores, with ten copies per store, comes to 5000 copies for the initial sale. That would bring in well over \$4000 in royalties from the first run. We plan to be the major supplier of programs for Radio Shack, and that could bring the initial run up



C3B System in operation.



C3-based word-processing system.

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another five to ten thousand, at least. If Radio Shack expands TRS-80 sales to their entire fleet of nearly 10,000 stores, the program needs will be substantial.

It takes a large organization to bring about those sales figures. We're estimating the first-year costs of running Instant Software at above \$1 million for salaries alone, and that's just for publishing and distributing programs. If you horse around with a small outfit you'll probably be selling your programs for peanuts.

What Is Needed?

An insatiable need exists in the business field for programs of both general and specific nature. For instance, printers need to be able to estimate printing costs, which would be simple to computerize. They need a program for figuring page impositions. You'll do better to start writing programs for a field with which you are intimately familiar and work into unfamiliar fields later, getting help from friends who are in those fields.

Relatively small programs will be selling for the usual \$7.95. The

bigger, more-comprehensive ones will be selling for higher figures. I expect that complete sets of programs for a specific business—programs that definitely will help a dealer sell a system that runs perhaps \$12,000—will easily sell for \$1000 (with a nice royalty, obviously). We'll try to do the best we can on program pricing, keeping in mind supply and demand.

Educational programs are just barely starting. Those submitted so far have not been outstanding . . . with but a few exceptions. You know that a program which teaches BASIC programming is going to sell well in this field. I suspect that programs which teach the fundamentals of any other language will also sell briskly. Then might come programs for teaching the basics of computer electronics, such as gates and flip-flops. Eventually I expect we will carry a catalog of several thousand educational programs.

I expect that Instant Software will be pioneering in the development of video/computer programs. This will be a marriage of television and microcomputing. The early systems will probably be made up of a video recorder

Reader Responsibility

One of your responsibilities, as a reader of *Kilobaud MICROCOMPUTING*, is to aid and abet the increasing of circulation and advertising, both of which will bring you the same benefit: a larger and even better magazine. You can help by encouraging your friends to subscribe to *Kilobaud MICROCOMPUTING*. Remember: Subscriptions are guaranteed—money back if not delighted, so no one can lose. You can also help by tearing out one of the cards just inside the back cover and circling replies you'd like to see: catalogs, spec sheets, etc. Advertisers put a lot of trust in reader requests for information. To make it more worth your while to send in the card, a drawing will be held each month and the winner will get a lifetime subscription to *Kilobaud MICROCOMPUTING*!

This month's winner of a lifetime subscription to *Kilobaud MICROCOMPUTING* is Ray Slattery of Saddle Brook NJ.

and computer, with a box between to do the work. Later we'll be seeing video teaching systems with the computer built in, and possibly even including a small TV camera so the student will be able to communicate via cable with a teacher.

How far off is the day when an educational program is budgeted at \$500,000 or more? Not that far, when you consider that such

a program could be used to teach several million people . . . and used for years. We may even see budgets of over \$1 million for single teaching programs, and they would still turn a profit.

For the time being, let's get cracking on some first-rate programs to get businesses interested in buying microcomputers. You

(continued on page 21)

OUTPUT FROM ISI

Sherry Smythe

The purpose of this column is to provide some inside information on what has been happening in software publishing . . . and what is needed.

Now that Instant Software, Inc. (ISI) has moved into its new office building there is finally room for more employees. We have a new marketing manager, whose job it will be to get ISI products into every computer store in the world. The new project coordinator is Bill Gollan. He keeps things moving and coordinates the three main departments: program editing, production and marketing.

The new microcomputer lab, with its 30 systems, is certainly impressive. This allows the staff to check submitted programs quickly for just about any popular system. It's amazing how much faster things have been going now that everyone has room to work. Look for at least

20 new programs to be announced in the next issue of *Kilobaud MICROCOMPUTING*.

We've been receiving requests from dealers for Apple programs, but we haven't been getting many Apple programs. Don't miss the boat on having your Apple programs published if you've written anything significant. Remember that the first-come of each type of program will be the big winner on royalties. Coming in second doesn't pay off in programming any more than it does elsewhere.

We need good game programs for all systems—programs that will play a tough game of backgammon, chess, checkers, cribbage, etc. They have to be able to beat good players.

Good educational programs are also important. The latest Radio Shack ad campaign is aimed at students (or at least at

the parents of students). This means there is going to be a whale of a market for educational programs. They should have good graphics and be fun to use so kids will want to learn.

If you're interested in making money at home while having fun with your microcomputer, what better way is there than writing programs and getting royalties for them. Your equipment and office constitute business expenses, and those royalty checks can quickly mount up to more than many regular salaries. This can give you a freedom beyond most people's dreams. You might want to put your computer in a van and travel, writing programs as you go.

ISI is also involved in an investment opportunity for small (or large) investors with guaranteed returns of up to 15 percent per annum. Programmers interested in this type of money-making venture should contact me directly for more information. We're talking about cash outlays of from \$250 and up for one to five years' duration.

ISI Policies

Since ISI now has its own building, submissions of articles

for *Kilobaud MICROCOMPUTING* should be kept separate from ISI submissions. If you do intend a program for both *KM* and *ISI*, clearly state this in your cover letter, and don't forget the stamped self-addressed return envelope.

We insist on having a signed contract before we give a program a preliminary review, and several programmers have wondered why. The main purpose of the contract is a guarantee that the program is original and not a thinly disguised Hammurabi or other old standard. This also weeds out the user-group officials who try to sell donated programs to us . . . which has happened. We really can't afford to spend a lot of money processing and reviewing a stolen program that we can't publish.

We have other problems to contend with. For example, our associate-editor plan has been held up by a bug in the computer program for keeping track of associate editors. Such a business!

If you have any questions about possible programs, write. Please don't call, as this brings everything to a halt, often at a key moment. We haven't yet found anyone whose exclusive job it will be to sit and answer questions. The job is open. . . ?