This was written on a

If you're wondering about the above somewhat satirical heading, it's intended to mirror the one used for "Forum" in the August issue, namely: "An important role for 'useless' small computers". How more effectively could I emphasise the validity of that article than by now using just such a computer as a word processor, to write this latest instalment?

FORUM
Conducted by Neville Williams

As you might recall, the basic theme in the August "Forum" was that small computers had come down so far in price that they could now be considered by many families as an affordable, even expendable, learning tool for the '80s.

At $99, for example, the Video Technology VZ200 (from Dick Smith Electronics) offered so much computing potential for such a modest outlay that it presented a golden opportunity for adults and children alike to gain hands-on keyboard experience — at home, in spare time, as an interesting diversion.

That the same notion had occurred to other writers and commentators was evident from the fact that it was mentioned on two or three occasions while our own article was in limbo, somewhere between the typewriter and the printing press. It has certainly been talked about since then.

As noted in the August issue, my observations were inspired, in part, by a couple of typical young families that I knew socially, in which there was evident pressure to buy a home computer of one kind or another. It is interesting to record what has happened in those homes during the intervening weeks.

Case histories

Initially, both families invested in a VZ200 basic computer, which they simply coupled to the family TV set, and both experienced a communal fascination and involvement with the games, the programs and the graphics that they were able to set up on the screen.

Objective number one — "Keyboard Konfidence" — soon became evident, with the kids variously fiddling with simple programs, practising poems on screen (even in raw BASIC), setting up "Flashwords", etc — each according to his/her age and interest.

It was about this time that father number one managed successfully to couple a portable tape recorder to his computer. Thus encouraged, he invested in a 16K memory module and, as well, obtained or contrived an elementary word processing program. From somewhere else came a printer of sorts; he was really having fun — and putting the system to tentative use as Honorary Secretary of a youth group.

Father number two was an interested observer but, over and above immediate family involvement, he had another objective in view: the ultimate purchase of a larger system for a business venture. Sooner or later, he would have to decide which to buy of those being offered to him as "absolutely and uniquely ideal" for his purpose. What he was hoping to gain was a better feeling for the whole subject.

So he bought a memory expansion module, a $40 Datasette cassette recorder and a small colour TV receiver (which the family needed, anyway) to serve as an interim monitor. He was lucky enough, also, to be able to borrow a simple printer and interface for a few weeks.

It was at that psychological moment that Dick Smith Electronics came up with a word processor program for the VZ200, on cassette for around $30. Father number two bought one immediately and set about using it for composing reports, planning documents and so on. It was consciously experimental and provisional but it allowed him to gain a much better appreciation of what he needed — and what he could afford!

As I write he has just invested in a modest but adequate business system, with a great deal more assurance than would otherwise have been possible. So, in that respect, his VZ200 has served its purpose, although I gather that he plans to leave it set up for casual use by the rest of the family.

While the foregoing might serve to validate what I was talking about in August last, the matter certainly doesn't rest there.

In that article, for example, I quoted from a review of the VZ200 in an earlier issue:

"If you want a computer to look after your share holdings, or for word processing, look elsewhere."

I didn't see fit to question that verdict because, at the time, no word processing program appeared to be available for the VZ200. There had been talk of one being written "some day" but a last-minute call to DSE brought nothing new to light.

In any case, could one take a VZ200 word processing program seriously if, as seemed likely, the text would comprise capital letters only?

Processor program

In fact, as I've indicated, a word processing program did turn up very shortly afterwards through DSE and I didn't have to spend much time with it to realise that the originators, G. Epps and M. Fackerell, had made an excellent job of it.

The program requires that the VZ200 be fitted with a 16K expansion memory module, providing a total of 24K. After loading, which takes only a couple of minutes, just over 15K of RAM is available for storing text.

Allowing an average of five characters plus one space per word, that means direct accommodation for about 2500 words of running text — sufficient for a fairly substantial essay or article, before resource to back-up cassette storage.

No less to the point, the new program enables the computer to input both upper and lower case letters to a printer so that the keyboard can be used, with Shift key, in the manner of an ordinary typewriter, The screen still displays capitals only but the text, as printed, is the normal mix of caps and lower case.

As to the VZ200 keyboard, I soon began to question, also, earlier reservations about the soft-touch "rubber" keys. In fact, they are not very different in appearance and touch from those on the Brother electronic typewriter reviewed in the August issue — and apparently enjoying ready acceptance in the marketplace.

In processor mode, the computer is completely re-programmed, with single-letter commands for most functions. Text can be typed in, then freely added to, deleted, modified, corrected, swapped around, tidied up, and so on, without any

'useless' computer!

inhibitions about lines and line numbers. It is a word processor in the true sense of the term.

After loading and pressing the Return key, the user is faced with a "menu" inviting him/her to specify what they want to do next:

(E)dit text
(C)lear text
(P)rint text
(L)oad file
(S)ave file
(V)erify file
(Q)uit program

Press "E" for Edit and text can be inserted, removed or modified, as required.

Press "C" for Clear text or "Q" for Quit the processor program and the user must verify the command with (Y)es before it is actually executed — a very desirable precaution.

Press "P" for Print, and the computer requests instructions in regard to the number of columns (20-99), single or double-spacing, left-hand margin, right-hand ragged or justified, page length and numbering, number of copies, etc.

Helpfully, each time the Menu is called up, it displays the number of spaces still left in the memory. The figure starts off at 15,042 and gradually diminishes as the stored text grows. As well, when text is being Saved on cassette, an on-screen display counts the number of characters as they are transferred.

Practical set-up

In my case, all these initial observations were made with the VZ200 system spread out on a workbench, along with

sundry instruments and tools and with an ageing EMI TV set as the monitor. I was intrigued to know how the system would appeal in more congenial surroundings as a complete budget-priced, domestic word processor — one of the roles we had originally dismissed as not worth considering!

Thinking about a monitor, I was intrigued by the possibilities of the 30cm "Princess" B&W TV receiver, which has been available for some time through chain stores like Woolworths and K-Mart. They are a good match for the VZ200 in size, colour and style and can be bought for $90 or less — complete with a 3-year warranty!

While the VZ200 program uses colour to emphasise block markers, etc, a tri-colour screen is not necessarily the best medium on which to display text. So why not a $90 monochrome monitor on which, with this program, the text would show up in white against a dark grey background?

As it turns out, the "Princess" TV receiver has a normal 50Hz mains power supply, with the internal circuitry fully isolated from the mains. This, plus a couple of video test points suggest the possibility of ultimate adaption as a video monitor. However, it worked so well with normal RF access through TV channel 1 that I did not feel necessary to pursue the matter at that stage.

What I did do was to make up a small wooden cradle on which the receiver could rest, raising it just enough (about 45mm) to allow the Memory Module and the Printer Interface to slip in underneath it. This allowed the computer to slide back against the base of the monitor, with the keyboard directly below the screen, in the approved manner!

Set up on a small (90cm × 45cm) table, with the cassette recorder on the right and the printer on the left, the system began really to look the part.

One difficulty that did arise concerned the provision of mains power. Four outlets are required, with two having to accommodate 1A plugpacks. These are too large to fit conveniently into any commercial 4-way outlet that I could find, so I made up one of my own, which I then fitted under the table for tidiness sake.

In actual use

This done, I simply sat down and "processed" the two main articles required for this issue: "Sony's Space Diversity Reception System" and "Forum". By the time I had finished "Forum", operation of the system had

become almost second nature; that's how simple it is to use for running text.

There was ample room in the memory to accommodate either one of the articles, which proved handy when I wanted to flip back and add a par or modify something that I had said.

But, every now and again, I took a couple of minutes off to dump the contents of the memory on to a cassette as a precaution against a silly error, a malfunction or a power failure. As most computer operators can testify, any one of those things can wipe out hours of work in a split second and it is reassuring to have at least most of it safely on tape (or disc) as a precaution against any such eventuality.

I did, in fact, unearth one aberration in the Epps and Fackerell program: if, by accident or oversight, three block markers are placed simultaneously on the left-hand side of the screen, the memory sheds some or all of the text as rapidly as if the "(C)lear Text . . . (Y)es" instruction had been punched in! So be warned.

But, enough said!

What the excercise has served to demonstrate is that a very useful word processor for running text can be assembled around a VZ200 system and a "Princess" TV receiver for between $550 and $580 — depending on your choice of cassette recorder. It would be well suited to producing draft copies of letters, essays, papers, articles, etc, ready for final typing.

Re-inventing the wheel

At this point, some may feel that I have devoted a whole article to re-inventing the wheel — but I don't think so. It is true that, every day, countless thousands of Australians produce letters, papers and articles on word processors but the vast majority of them would cost at least four or five times as much as the small, very useful system that I've just described.

You'd prefer to produce finished rather than draft text? And tackle more elaborate work? In the main, that would involve investing in a more elaborate printer, compatible with the VZ200 — something that father number one, mentioned earlier, is currently contemplating.

FOOTNOTE: At this point in the article, calling up the menu indicates that 2705 character spaces remain unused in the memory. Subtracting that figure from 15042 gives the length of text as 12337 characters; dividing by 6 puts the number of words at 2056 (approx) — a

handy check if the requirement is to produce an article of specified length.

Now back to the '20s . . .

Reproduced herewith is a letter from J.W.P. of Charlestown (Newcastle, NSW) — one of a number to hand from long-time readers of the magazine. Some have been prompted by my own (formal) retirement and others by the description, in the magazine, of modern counterparts of old-time receivers. I have read such letters with considerable interest and have been genuinely appreciative of the many expressions of goodwill. A sincere thank-you!

In fact, J.W.P's practical experience in wireless/radio/electronics predates my own by several years, although I was close enough behind him to have been familiar with the situations, the components and the designs to which he refers. I well remember the front-panel, swivelling, plug-in, honeycomb coils of the '20s and how a whole generation of them became redundant when local broadcast stations began to use the medium-wave rather than the long-wave band.

J.W.P. also has the advantage, in that I never knew Ross Hull personally, although his reputation as a hobbyist, a radio amateur and as the Technical Editor of "Wireless Weekly" had become almost legendary. At a time when travel was much less common than it is today, he made it to the USA and to the precincts of the ARRL, only to lose his life by electrocution.

While he undoubtedly would have gazed frequently into his technological "crystal ball", I very much doubt that he or others of his day could have had the slightest inkling of the digital era in which we now find ourselves.

John Moyle, who subsequently took over the job of Technical Editor, was like Ross Hull in many ways. He and I spent countless hours discussing the past, present and future but, while that happened much more recently (pre 1960) I doubt that even John envisaged the direction that electronics would take within the next 20 years.

But of this I'm certain: men of that calibre, with their love of electronics, their insatiable curiosity about technical things . . . they would not have been content to live in the past. While fondly remembering their one-time "home brew" equipment, they would have been heard calling CQ on a solid-state Kenwood or Yaesu.

Who knows? They might even have dashed off an article or two for the present Editor on a $600 word processor!