

# Word Processing on a Shoestring Budget

*by Everett M. Ellestad*

## **What's it all good for?**

Quite a lot has been written in the last year or so about the great help computers offer translators in the form of word processing and other facilities such as computer-aided translation. Since there will be no computers capable of translating in the foreseeable future, let us put such notions aside and concentrate on the advantages of word processors.

If one cuts through all the propaganda about output, cost calculations, turnover and whatnot, there remains, as I see it, several clearcut advantages in using even a very simple word processing system for translation.

First of all, a WP simply allows for faster typing. The psychologic block about making a mistake is removed, since errors are easily corrected without glueing little strips or using Tipp-Ex (a plus even if you don't do the typing yourself).

Secondly, everything can be changed before the final printout. Putting, as I said, any economical arguments aside, this means improved quality. Almost anything can be improved a second time through. Remember what Horace said about putting your work away for a week.

Thirdly, you have a convenient record of your work, and a record that can be quickly changed and corrected should your client come back with some good ideas.

The more sophisticated software programs can automatically check for typing errors and misspellings, not to mention having term bank access. These aids, however, are not discussed here.

trials and tribulations experienced might be of interest to other freelancers contemplating a leap from typewriter to word processor.

### **Basic equipment necessary**

My first purchase was a good, solid electronic typewriter to function as both typewriter and computer printer. There are numerous makes on the market, but to pound out page after page, even for only a couple of hours a day, you need a typewriter that will take it. I chose a German-made Olympia ESW 100 KSR, the 'KSR' stands for 'keyboard-send-and-receive'. This means that it can function as a computer terminal too (something, by the way, that not even the salesman knew! – I had to find it out for myself). Any well-built electronic typewriter having a so-called RS-232 interface will do as well (RS-232 is a standard designation for intercomputer communication).

I then carefully studied the home computer market to find one with a good enough 'typewriter' keyboard. I narrowed it down to a couple of models, and finally chose a Commodore 64, since it was a well-known make well covered by accessories and by numerous trade-press articles.

### **More to it than met the eye**

When it came to connecting up the two, I ran into a 'blank' wall of ignorant so-called experts. Not only did the sales staff not know what they were selling, there was no manual supplied. Finally, one was sent to me from the wholesaler in Denmark, printed in German! Luckily, most of the computerese was still in English (if one can call computerese English!). Failing completely to understand such jargon (I had studied Goethe and Schiller) I contacted the factory in Germany, to find out from the factory experts how to get things going. After months of deliberation, I was told it wouldn't work. In the meantime, however...

I found an (RS-232) interface to connect the Commodore 64 and 'any' electronic typewriter available on the open market, but there are in fact two different types: a parallel, called Centronics, and a V-24 serial. The Olympia typewriter had a V-24 input, which seems to be the most common. So I got hold of this little 'black box' and plugged it into the back of the computer. You then need a cable from there to the typewriter, which can be purchased from any well-stocked

electronics/computer supply house. I made one myself with a little patience and study. A small leaflet comes with the interface explaining the connections and suggests a suitable program to get the two to talk. But this is not necessary to know if it's word processing you're after, since several WP programs have such capability built in. Consequently, a good WP program was the next step.

### **The WP program jungle**

After reading countless computer magazines, I decided on a WP program that used a full so-called 80-column screen (which merely means 80 characters wide). This program shows on the screen what you get before you print. For neat layouts and offset-ready copy, this is a must. The program I chose is called Word Manager and is distributed in Europe by Impex in England (it comes free with their VideoPak plug-in-80-column board). But other programs of this kind are said to be just as good and more are turning up almost daily. This is something that depends on local conditions and local suppliers.

The addition of a disk drive completed the system, the only problem being that an 80-column format won't work with TV sets because the small letters need better resolution. A 'real', though inexpensive, computer monitor is needed. I picked a Philips

monitor with a frequency range of 15 MHz and a ready-made cable for the Commodore 64 and plugged everything in.

### **Some hidden surprises**

Did it work? Well, yes and no! The print feature for the RS-232 set-up didn't work, because the WP programs' baud rate selection didn't cover the 150 rate stipulated by the typewriter; baud rate is the speed of transmission from the computer to the printer. Standard was 110, 300, 600, and 1200. Such problems can, however, be bypassed by using a little 'smart' interface called Interpod, which could be programmed to convert all that was needed to drive any serial electronic typewriter, included the vitally necessary 'carriage return wait'. But there was a catch. The Word Manager program through the 'regular' print function sent only ASCII code 13 (ASCII designates the standard code numbers for transferring data between computers) for carriage return and not an additional code 10 for line feed, since regular printers apparently don't need it, but electronic typewriters often do. So check before buying whether the WP program can be 'modified' to work with several variations if you're going for a typewriter.

### **A little programming know-how goes a long way**

I had, however, completely given up on these so-called computer experts and had begun to teach myself BASIC and a little machine code (ML is the 'native tongue', so to speak, of computers). This came in very handy indeed.

Using an ML cartridge, I searched through the WP program until I found the correct address. I then altered it to send code 10 instead of 13. It worked! For the Word Manager WP program, this can easily be changed using only BASIC by POKEing the right number into the right place. POKE is a BASIC command to the computer to put a number in a memory address. The correct POKE on the Commodore 64 for this WP program is POKE 4509,10.

The non-functioning RS-232 print operation was my next target. Unable to locate the correct program addresses to fix up the baud rate, and once again getting no help in the matter from the software people, I merely redirected the 'file name' address to point to one I added at the end of the program. This worked too!

### **Was it all worth it?**

The answer depends on what you're looking for. Admittedly, it took about four months to get things operational, but then again, I had no one to give

me any advice, and most computer magazines go on and on about silly games and such stuff instead of dealing with practical problems.

If you're interested in learning a little something about computers and you can use the advantages offered by a word processor (having perhaps rather limited funds) this is the way to go. A 'professional' WP processor on the market costs today anywhere from £5000 to £10,000. My 'home-baked' system so far has cost less than £1800, including a few items that weren't even necessary!

Not only did I learn a good deal about computer programming, I've ended up with a machine that handles my bookkeeping, taxes and bank business. And, should I ever get the time, it can even play me a good game of chess.

There isn't the time nor space here to go into all of the details on how to put together your own set-up, but I will be glad to answer any and all letters from those of you who are interested in getting started with word processing in this 'home-baked' way, and I'll include a detailed description of how it can be done.

### **Basic equipment used**

**Commodore 64** (home computer) 64k memory, good graphics, sound; typewriter size keyboard, int. standard connections for both RS-232 and Commodore printing equipment.

**Olympia typewriter** (electronic) KSR model, full duplex operation capability (send and receive) daisy wheel printer function auto-erase, on-line speed — 14 to 17 letters a second.

**Philips monitor** (CRT type) Green phosphorus screen 15 mHz, sound.

**Commodore disk drive** (single disk type) Model 1541, single disk drive.

**Word Manager program** (WP software)

Full 80-column screen with all basic WP functions included — including global search and replace.

**Interpod interface** (programmable) Adjustable for baud rate, parity and bits, etc. Automatic carriage return wait and conversion to standard ASCII.

or

**CBM RS-232 interface** (duplex) Simple voltage conversion interface for connecting computer 'directly' to printer.

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