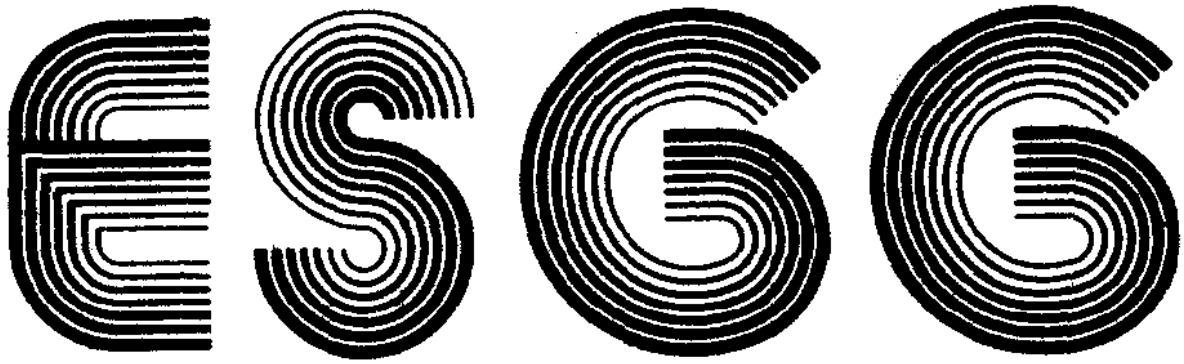
volume three/ August 1st, 1984 number 15

bi-monthly periodical of the ***Exidy Sorcerer Gebruikers Groep***

a translation in English of the original Dutch version



The L O G I C partner to a Sorcerer

Subscriptions : per annum f. 27,50 (Europe)
f. 32,50 (other countries)

(more information: page 2)

Send your copy to : redaktie ESGG
p/a postbus 510
1000 AM AMSTERDAM Holland

Coordinator foreign relations: C. Boone
Stationsplein 26
B-9100 LOKEREN Belgium

****

CONTENTS OF THIS ISSUE

ESGG-information and service	page	2
Info		3
From other magazines		4
Books		4
Input		5
DEVSYS pack		6
Chiptip or repeat key?		7
A TV for a monitor (2)		8
Wordprocessor and directory		9
Creating databases (5, end)		11
Technical modifications		12
Testing of ROMs		13
Looking at BDOS calls from Exbasic		14
Exidy 30 tracks MPI disk controller (4)		16
Eric's parts administration (2)		18
To our foreign readers		20

****

EDITORIAL STAFF

chief editor : Welmoed J. Jonker.
hardware-editor : Aad van Duijvenbode.
software-editor : Kees van Duijvenbode.
general editor : Don Siahaya.

****

SUBSCRIPTION.

You become a subcriber when remitting the fee due to postal check account number 5368539 of ESGG at Lopik, The Netherlands, referring to 'subscription periodical'. Subscriptions run from June 1st of the current volume.

SUBSCRIPTION-ADMINISTRATION.

Send your change of address and complaints about the delivery to:
Administratie ESGG periodiek
Prins Hendrikstraat 3d
3071 LG ROTTERDAM Netherlands

****

ADVERTISEMENTS.

macro's: exclusively for business:
acquisition: M. Sanders
Richard Wagnerlaan 25
2253 CB VOORSCHOTEN.

micro's: Only open to private persons.

Size : -a line of text consists of 66 characters or spaces.
-there is a maximum of six lines for each advertisement.
Cost : the cost per two lines of text is Dfl. 3,00.
Entering: send your advertisement to the editor before the first day of each odd month. Mention also the total of 66 character lines and your account nr.
Payment : Remit the amount due to postal check account number 5368539 of ESGG at Lopik, referring to 'micro's'.

If your remittance is not received before the first day of an odd month insertion in that number is no longer possible!

****

COPYRIGHT ESGG.

Copying of articles, diagrams or parts of them from this issue is only permitted to members or subscribers for non-commercial purposes, on the condition that one refers to ESGG, and the number of the issue.
Copying by third parties (non-subscribers) is only permitted after having acquired written permission from the ESGG editor.

****

SOFTWARE COLLECTOR.

If you like to offer yourself developed so-called public domain software to your fellow members, send it on cassette to:
Wim Warning
Vogelweide 83
3815 HE AMERSFOORT The Netherlands

****

ESGG-SERVICE

Prices are including postal rates for second class mail all over the world. The language of explanations in the software is mainly Dutch! Because of transport risks no mail-order possible for diskettes! Advance payment and collect at Sorcerer Days possible!

Ordering : only by means of postal check to account number 5368539 of ESGG at LOPIK, referring to: ESGG-service.

in your order state name and quantity of the desired article.

you do not receive an acknowledgement of your order.

if the article is not in stock or no longer available THEN you will be informed so!

Ordering diskettes: see restriction above.
Catalog obtainable from CP/M-users group Netherlands.

Available formats are 77 tracks hard- and softsectored, 40 and 30 tracks softsectored. The last-named two formats are 2 and 3 disks respectively. We always send the mentioned quantity of diskettes to you (possibly only formatted).

Non ESGG members and non subscribers pay Dfl. 10,= extra per vol.

Guarantee: Electronic articles from ESGG are subject to guarantee for proper operation. ESGG is not liable for damage caused by incorrect installation by others than the official technicians at Sorcerer days.

Below is a list of articles available at this very moment:

name article (prices a piece!)	Sorcererday-collect	by mail
1. Collect-cassettes with various programs (nrs. 1 t/m 15).....	Dfl. 7,50	Dfl. 15,00
2. Collect-disks *) with various programs, per volume: 77 HS/SS.....	Dfl.25,00	
40 SS	Dfl.30,00	
30 SS	Dfl.40,00	
*) see: ordering)		
3. ESGG diskettes nrs 1-3	as in pt. 2	
4. Eprom Basic EXTension (version 8) with description of installation and manual		Dfl. 35,00
5. Manual Bext		Dfl. 5,00
6. Invers video print (assembled).....		Dfl. 20,00

****

INPUT
a column to ask questions and also to give your opinion or comment.

If you have a problem, describe it as clear as possible and send it in a post-paid envelope to the editor. Our team then will try to find a solution. We claim the right of publication for question and solution in our magazine.

****

INFO.

* Before you is number 15 of the ESGG periodical. In this issue is inserted a listing of all the articles published in the previous volumes. We hope you can use it to create a handy reference. We did not number the pages, so you may take them out, without altering the numbering of this issue.

* The future looks good for our readers. In the 'portfolio' we have articles on improvements of CP/M, an article on process control (with explanation and diagrams!), and also many small remarks and advices.

* The price for the (fill in yourself) article/program this time is given to the author of the article and program concerning the editing of Basicode in wordprocessor,

  mr. T.E. Huisman
  Ieplaan 48
  2565 LN 's GRAVENHAGE

  with the congratulations from the editor. We look forward with interest to the solution, announced in that article, for 'PP' (back to Basic).

* We already did inform you that not a single member reported to be willing to assist either board or editor. I really hope someone is going to be prepared to do something for his (or her) club. Otherwise I foresee a bad health situation for those now working themselves off daily for your benefit. Or might it be that we have become a nation believing that the elfs are doing all this for us?

* Wim Warning sent in a distress call: The last bytes of cassette based programs are recorded now and he urgently needs new programs to be able to supply you with a new cassette the next Sorcerer Day! Please do look in your library if there is something of use for the ESGG, or otherwise 'simply' write one?

* Speaking of the next Sorcerer Day: This Day is going to be Saturday September 8, 1984 in hall Kunstmin at Gouda. The address still is Boelekade 69. The hall is open from 10-16 hours. For new subscribers: Kunstmin is about a five minute's walk from the railroad station. You are by car? In the near surrounding there is enough parking space. Be seeing you!

* A day like our Sorcerer Day is usually not successful without the help of a lot of volunteers. We now again need your assistence urgently for the morning construction and evening tear down as well as for various activities during the day! If you like to help us out, please give a call to the secretary, Charles Netteler at 010-330493.

* The theme for this Sorcerer Day is concerning hard- and software: Improvements, alterations and so on, that will create a better and more easy tool for us. If you have alterations, programs and so on that you would like to demonstrate, please report this to the secretary, Charles Netteler (phone 010-330493) too, we then will reserve some space for you!

* Although it is not a habit of us to 'push' commercial programs, one of the readers took the trouble to explain about the advantages of the DEVSYS Pack. Being a clear explanation we thought to serve you in publishing it (somewhere further in this magazine).

* If I am correct the HCC Newsletter of June or July ought to contain something about the ESGG. This is mainly done because we did receive signals that there were users going to sell their system thinking they had

become the only Sorcerer users left. As you might know: Unknown is unliked, so....

* Very carefully and with reservation: You probably will find an inquiry form in the periodical this fall! We hope to set up an inventory of all equipment on hands and the knowledge gained. This being to your advantage (when having problems) and to others (shared and increasing knowledge). Are you willing to co-operate?

* Being this close to vacation one's head does not feel much for working, or editing a magazine, so if you find a bug somewhere, please do not blame it on us!

* We did not say thanks to them at all! That's why I now officially like to thank both of our hard-working members Jan van Dijk (board member) and Aad van Duijvenbode (co-ordinator and editor-hardware) for the many hours they have invested in the passed time (years) to help make the ESGG what she is now. This is the right spirit!

****

FROM OTHER MAGAZINES.

* Databus nr. 6: Interesting articles about low-cost inkjet printers and increased quality with plotters. On this subject the magazine contains many an article.

* PCM nr. 5: What can one really do for the office with a home-computer? A test of a couple of programs for the simple home-computer. A glance at the screen and into the technique is given in 'View on monitoring screens'. A mouse in the house, for old software? This is said to be possible! Look out, you Sorcerer users! Our address in PCM is wrong! The secretaryship is at: Prins Hendrikstraat 3d, 3071 LG Rotterdam.

* Micro/Info nr. 4: Technical drawing with the micro: You need a lot of memory! Also an advise, to keep record of the times you use your system as well as when and for what is given in 'Keep an eye on the computer'. Is compiling really profitable and quicker? A small investigation about the possibilities in 'Basic compilers promise more than theyoffer'. Finally an article about speech synthesis and -recognition.

* Micro/Info nr. 5: A theme issue, fully dedicated to wordprocessing. It is worth reading to those that plan the purchase of a program for this.

* Elektuur nr. 248: A description of extensions to your electronic typewriter, enabling you to connect it to your computer and thus providing quality printing from the wordprocessor. Also a follow-up for the digital cassette recorder. We refer to the issues of January and April '84.

****

BOOKS.

* From Compudata we did receive a sheet bulletin with things worth knowing concerning the software supplied by them (problem reviews). As this bulletin is not stapled it is not always clear what page is the next to read. Perhaps they can start numbering the pages? This gives clearness.

* In the same bulletin they refer to two books issued and dedicated to the Exidy Sorcerer:
Exidy Handleiding voor Middelbaar Economisch Onderwijs, two parts writ-

ten by H. Peters and issued by Wolters-Noordhoff at Groningen. The number is ISBN 90.01.70754.8; price not known.

* In Micro/Info nr. 5 they review a book that might be of interest to owners of S100 systems. It concerns a book called 'Bits and Bytes' by Marc Garetz and released in Dutch by Delfia Press. It is a pity that in their review they think negatively about this book, stating it being released too late and only dedicated to S100, Z80 and CP/M systems with 8 inch drives and thus being more of interest to Americans. They also feel the lack of linking to 16-bitters and MS-DOS a shortcoming and a reason for better not having released it.
They may have thought the Commodores and alikes are the only machines sold here?

****

INPUT.

* Mr. M. de Boer from Beverwijk informs us that the program from the article High Resolution Graphics in ESGG numer 12 is a fine piece of work but that there are unfortunately a couple of bugs in it:
at 80 is 00; dit ought to be 06;
at EC is F0; dit is to be F8.
Maybe you already did find out, if not Martin has saved you a lot of work.
Since a couple of weeks he owns ZCPR2, however he has some trouble with it. The video screen is not what one calls steady. If you have the same experience (and perhaps found the solution?), please let us know so.

* Mr. Frank van der Leegte has discovered a gap in the article mentioned afore. To be sure you know how to call the routine, the missing link is issued hereafter, being in Basic:

```
10 REM example call FILL routine from ESGG number 13
20 PRINT CHR$(12)
30 INPUT "X1, Y1";X1,Y1
40 INPUT "X2, Y2";X2,Y2
50 INPUT "FILL character : ";CO
60 :
70 POKE 0,X1: POKE 1,Y1: POKE 2,X2: POKE 3,Y2: POKE 4,CO
80 POKE 260,0: POKE 261,128
90 AA=USR(15)
```

* Dick Hovestadt from Heerhugowaard has sent to us an adaptation for the program CASRE (copy cassette to disk). In the original version only one file was copied to disk. When using the next adaptations the entire contents of the cassette is sent to disk one after another! The changes are best to be made with SID or DDT. Change the contents of the addresses below as mentioned:

address	there is	has to become
107	98	9A
115	97	99
187	97	99
196	C9	C3
197	00	0E
198	00	FE

* From mr. Daniel Say from Vancouver, Canada, we did receive a letter requesting an earlier announcement of the data of the Sorcerer Days (he suggests about half a year!). In this way vacations could be plan-

ned to these events. Furthermore he considers the new printing type of the periodical to be a pleasant improvement making the magazine better readable.

The Sorcerer Days, mr. Say, are to be held halfyearly, being in the months March and September. Although it is difficult to point out the exact date yet, these events usually are in the second half of March and in the first half of September. This is mainly because it is depending on Mardy Gras (the spring holidays of the elementary schools) and the days the CP/M users group of Holland organizes their meetings. We therefore can not be more precise!

* Messrs. Fred Knottenbeld and Fedde Ringenaldus sent in some remarks and corrections to the program DATACOM, which we give to you hereafter:
In the newest version 3.0 of the program DATACOM, being released on one of the future cassettes (or disks), there is unfortunately (regardless all checks!) a bug. You are invited to change at addresses 6C2/3/4 the contents CD C5 03 into 00 00 00.
In this program a lot of trouble has been taken to restrict the input of the filenames to only those, allowed by the CCP. The reason for this is that otherwise you are not able to get to those names from the CCP. Now it turned out there are persons considering this check to be an error and therefore removing it. This may be accomplished at addresses 267/8/9 by changing the existing code into C3 9E 02. The input of characters however now is entirely your responsability (as are the eventual consequences!).

****

DEVSYS PACK.

Fedde Ringenaldus has taken the trouble to describe the advantages that do not know the DEVSYS Pack, what they are with regard to the 'conventional' manner of constructing assembly programs.

DEVSYS is a ROM-pack in which a program has been stored to create assembly language programs and to debug them. The pack consists of an editor, assembler and debugger and some disk support routines.

The EDITOR is a line based editor, allowing an easy input or change of source text. This editor, for example, has a command -besides the regular editor commands- that helps replacing a string by another. This can be done for once or by choice several times through a single command. It also is possible by use of another command to search for a certain string in the text. The TABs are placed in such placed that text is outputted to the screen or the printer in an orderly way. One of the unique commands allows you to insert very simply some comment in successive lines, afterwards. The editor is of course also capable of inputting other types of text files, like Pascal is.

The ASSEMBLER, being in this pack, is absolute and combined with the loader: the Z80 machinecode is placed at the right address in memory at once.

There also is a DEBUGGER in this pack. By means of this debugger it is possible to place a number of breakpoints in a program and then to look into the registers for the present contents. In this manner it is possible to detect bugs quickly.
To those that do not have a disk system it is possible to put the source text on CASSETTE with the help of the monitor command SAve and of course get it back with the use of LOad. For the convenience of disk users LOAD

and SAVE commands are inserted to enable a disk save or load of source text. It is also possible to load more than one file after another ("merge"). This part also consists a BOOTSTRAP LOADER for 5 1/4 inch softsectored diskettes.

CP/M users may now point out: "This is ridiculous; I can do this too with EXASM, EXLINK, ED and DTT or SID".
Howvere the working order then is:

```
Read ED          <==================¦
read file                           ¦
edit                                ¦
write file                          ¦
get EXASM                           ¦
2x get file                         ¦
write object                        ¦
get EXLINK                          ¦
get file                            ¦
write COM file                      ¦
get DDT (or SID)                    ¦
debug file                          ¦
when error found   <================¦
```

With DEVSYS this only is to be:

```
get file
edit          <======================¦
assemble                              ¦
debug                                 ¦
no errors? Then write, else  <========¦
```

A lot of actions thus can be prevented as the source text remains in memory, which can save a lot of time when debugging. Therefore this is by far a better tool.

To those that communicate very often with other computers through a RS232 connection, there is also a HOST version, in which the disk routines have been replaced by a communications program. When making simple changes in the hardware speed may be possible up to 9600 Baud. With this host version it is also possible to createa Sorcerer network around just one disk system. There is a CP/M program, available that is able to get source files from other Sorcerers and store them on disk. This system also can serve as spooler for a printer.

****

CHIPTIP OR REPEAT KEY?

There is nothing new under the sun and each improvement starts another. To make as much readers as possible profit from the findings or remarks, Hermine Bakker again took the pen to inform you accordingly.

There has been said quite a lot about getting Basicode software in this magazine. Now there are people having relalively poor radio reception that call on me about the time constant, used in the read program. They whisper reproachfully why I do not change these things when issueing programs in concern with Basicode.
To start off with the last remark: If I enclose spiritual property of others in my programs, and I change something in it, then this is only done after having had contact with those others. This time constant took a lot of calculation, considering and checking. If I am not very sure, I do

not touch it. That is all. This does not mean that I am deaf to those that collect program of the air after having changed this constant, in the contrary! That is why this chiptip.

It is obvious that everyone is free to experiment with time constants that may do a better job it their special situation. In concern is the time constant 24 Hex in the machine language read program. In Tiny Pascal by Dr. De Vries 22 Hex is being used. In the south of this country this is better 20 Hex and collecting BBC Basicode programs will turn out td be a success for 95% when changing the constant into 1C Hex.
These changes can be made also by less experienced owners. Unless you like to make a change when having BEXT8, as this constant is 'baked-in' in that program! Also being 24 Hex! Odd is that I heard from a guy who could not get his Basicode programs read and found the solution in BEXT8! He had his standard routines typed-in and saved on tape. These he reads first, puts the Basicode recording in the recorder, GOes to BEXT8 by GO DFEO, types I=USR(1) and...look there: all is successful. In spite of the 24 Hex....

I will point out to you the addresses of the time constant in a moment. As far as Standard Basic is in concern and your tape system works well, one is to use the monitor command 'EN' together with the address, after which you type the required value and close with /. Changes to be made in disk-versions can de done with DDT or SID (DDT PROGNAME.COM e.g.). The concerning program now is loaded regardless of the address where it is supposed to reside or work, from 100 upwards. I will try to point out the exact address that is to be changed by the command Sxxxx, from which mode you can return by typing a period. DDT and SID both mention at the beginning which memory address is the NEXT after your program. Up to that address resides your program (calculate the number of pages). Then leave DDT/SID by GO and SAVE your program to disk.

First the cassette version: Those that have their ml read and write routines separatedly on tape, will findthe '24' at address FEOF. Those that use Basicode-2 with the entire story, will find the constant in the environment of address 1DB1 (Depending on the eventual changes made in the program, this address is slightly different, up or down. Check it first). The cassette versions of Tiny Pascal (PASCL and PASC2) have their constant at 9E64. Change: See afore. If you feel uncertain how to SAVE anew, do ask help.

Now the disk versions (yes, plural!). You do yet know: get them with DDT or SID. Here is the list:

filename	blocksize	blocks to be saved
BCREADEX.COM	010F	SAVE 2 BCREADEX.COM
EASYBC2.COM	071F	SAVE 9 EASYBC2.COM
TINYPASC.COM	3F84	SAVE 90 TINYPASC.COM
TPASC2-2.COM	3F84	SAVE 90 TPASC2-2.COM
TPASC1-4.COM	3F84	SAVE 90 TPASC1-4.COM

Wonder why I mentioned the REPEAT key??.... I only mentioned it as an apology in case I eventually repeated myself. You might have read this somewhere else. However you could not have seen all these programs, so..

****

A TV FOR A MONITOR (2).

By Aad van Duijvenbode.

There is still a number of people that like to use a (portable) TV set for a monitor but do not know how to adapt. Therefore it might be useful to write again about it, especially to those new in computers.

Let us assume the advantages to use a TV set for a monitor are known. As there are some tenths of makes of TV sets, we only restrict to just one (known) kind, yes, a PHILIPS. With this type of TV set it is very easy to obtain a diagram, which makes all a lot easier. We start from the well-known TX chassis.

The entry of the video amplifier is transistor TS350 (drawing 1). The connection between resistor R256 and coil S248 has to be broken. This could be done by desoldering the coil at the side of the resistor. The signal coming from the computer is to be offered through a capacitor of approximately 10 µF to the bas of this transistor. If switch S is toggled, the monitor has become a regular TV set again. Mind the right position of the + connection of the capacitor. This connection is the entry of the video final stage and present in every TV set. The point is of course to find the right spot. From there a child could do it. Usually the middle lead of the contrast regulator is just 'after' this entry. The connections to/from the switch and from/to the connecting plug have to be as short as possible being preferable coax(ial cable).

To improve eventually occurring distortion in the screen (being the raster itself) one ought to add a resistor of approx. 100 KΩ, although not necessarily needed. This resistor is to be connected between the emittor of transistor TS560 and cathode of diode D450 (diagram 2).

GOOD LUCK!

diagram 1

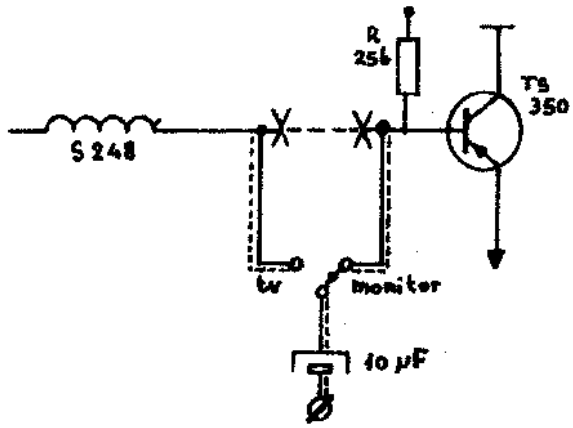
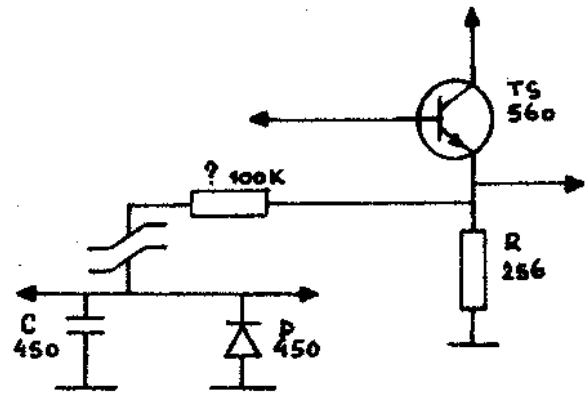


diagram 2



****

S O R C E R E R - D A Y G O U D A

8 S E P T E M B E R 1 9 8 4

HALL KUNSTMIN BOELEKADE 69 10-16 HR

****

WORDPROCESSOR AND DIRECTORY.

By Welmoed Jonker

How many users of the wordprocessing program by Exidy there are, I dare not value.
As so many programs the wordprocessor has advantages as well as disavantages. Users do not judge programs for their abilities but also for their ease and comfort to the user. I do not tread the dangerous field of weigh-

ing pros and cons now. You by now have found them all when using the program.
Although I do not wish to make the impression to tell a sales story, I do feel that the improvements made by Aad van Duijvenbode (see ESGG number 8, page 6), create a pleasing and comfortable version for use with disks. We however were no good compatriots when we did not complain! And thus, who seeks will find something to be desired.

One of the less agreeable things is that the WP pack (and so the disk version) does not allow to peek on the disk to see whatever is in the directory. A program like SPELLBINDER does have that possibility. Should this be a reason to wrok with that program and kick off the WP pack?.... Certainly not, I guess. Now this is a very personal opinion, but I dislike a filled screen to 'tumbling over' and thereafter the start at a clean page. The scrolling of the screen as is done by the WP pack is more to my liking, especially when having to edit a long file this scrolling is much more acceptable and the regularly disappearance of a piece of your tetxt.

We did proceed then with the (improved) WP pack, be it as a disk version. Now, to be able to see whatever is on disk, one has to use some tricks. Without adaptations into the program this most centainly does not succeed. So where is the way, when not feeling home in m1?.... Well, one now does exactly that, most familiar when using a WP pack! One creates a WP file and calls it 'FILEMENU.WPF'. In this file one first inserts the name as is used in the directory. When using Aads version, you also have to insert the extension, to be sure how to call a file that is to be read. An advantage of creating a file like this is, that after the name one can also give a short description of the contents of the file. You then do not have to wonder what the file is about! However, consider your screen to be able to display only a 64 characters! So if you like to read all in one line, do not pass beyond this number of characters!

It is not the most easy way, for each time you create a new file, you must insert the name into the filemenu and then write it to disk. Take it from me, that this is a better way then leaving the wordprocessor to return to CP/M and then (especially with Aads program) having to start the entire game all over. If you have frequently changing files on a disk and while being at work need just that one special file from one of your disks, then it becomes one of the more pleasing methods!
To give to you an impression of the structure of a filemenu.wpf, a piece of this file is taken from one of my wp-disks and shown below:

```
************** FILE MENU ESGG (NETH) ARTICLES DISK ************
****************** updated to      27  May 1984 ***************
filename/type      article name and description
-------------------------------------------------------------
diskdriv com       diskdriver for exidy wp-pack
pip      com       system program!
bcod>wpf wpf       editing basicode programs with wp-pack
last line....
```

Do you use the CATALOG program to create a library of your disks? Then you might be aware of the fact that when wp-files are frequently added and deleted, this influences the contents of CAT. This too is to overcome in a rather simple way. I supplied one disk with the serialname and extension number for the wordprocessing disks: e.g. '-**WORDPR.20**'.
Next I created a file that clearly identifies the nature of the wp-files on this disk. This could be done by a name like 'ESGGNET.EDI', through which I show that this disk is one holding files concerning editorial matters for the Dutch version of the periodical. Finally I also saved a file 'FILEMENU.WPF' on that disk.

While catalogueing I only needed to change the extension number and the identifier's name and extension to be able to have all wp file disks catalogued. As these names probably never are going to be changed, te catalogue is only to be built up with only few deleted files. In this way the library listing remain 'clean'.

Perhaps you already knew, if not.... well use it to your advantage!

****

CREATING DATABASES (5, end).

With this final explanation concerning the creation of a database developed by himself, an end has come to the article by Frans Cieremans. We hope, with him, that you have gained some or more insight in one of the many ways database programs can be created. If you would like to contribute to these series, we are happy to receive your article. Through this medium we like to thank Frans for the trouble taken to put his lecture into writing.

```
    Example of INPUT-routine with changes-report (line 420/520)
    J=1 till 60 input lines length
    A=1 till 24 lines on the screen
    U=1 till 80 positions in a line
    X= coordinate of position of input on the screen
    R= type of input routine     C$= new input
    T$= old present value        L$= holds T$ temporarily

9890 PRINT FNCURS$(A,B);STRING$(J,46)
     Put dots as long as the input-length
9900 T$=T$+O$:T$=MID$(T$,1,INSTR(T$,O$)-1)
     Eventual spaces cut of at end T$. O$=aid.
9910 PRINT FNCURS$(A,B);T$:RETURN
     Put T$ on the dots and let the rest of them stay visible

      10000 is jump if the file is to be manipulated
      11000 is jump if the program asks questions

10000 X=A*100+B:LSET IO$=Z$+" "+AA$+" "+KEY$+STR$(X):LSET I1$=T$
10010 GOSUB 10030:IF C$="" THEN RETURN
      REM If there is no input, see if the old and the new
      REM values differ
10015 T$=I1$+O$:IF LEFT$(T$,INSTR(T$,O$)-1)=C$ THEN RETURN
      Put new value file-buffer and save it,
      increase record-counter.
10020 LSET I2$=C$:A%(9)=A%(9)+1:PUT #7,A%(9):RETURN
10030 ON R GOTO 11000,10050,10060,10070,10080,10100,10120
10040 ER$="Wrong input, try again.":GOTO 3100
10050 GOSUB 11000:GOTO 2500
      Test the inputted signs, convert to CAPITALS.
10060 GOSUB 1510:IF VAL(T$)=0 THEN C$="":RETURN ELSE C$=T$:     RETURN:
10070 LSET I1$=T1$:GOSUB 2250:IF VAL(B$)=0 THEN C$="":RETURN
      ELSE C$=B$:RETURN:REM Numerical input-routine
10080 GOSUB 10070:IF D>13 AND D<32 THEN RETURN
10090 IF VAL(B$)<1000 THEN U=U-6:GOTO 10080 ELSE RETURN
      Obligatory date-input-routine DD/MM/YY
10100 GOSUB 11000:IF D>13 AND D<32 THEN RETURN ELSE IF C$=""
      THEN 10100 ELSE RETURN:REM Obligatory input, min. 1 letter
10120 GOSUB 10050:IF D>13 AND D<32 THEN RETURN
10130 IF VAL(C$)=0 THEN 10120 ELSE RETURN:REM Obligatory numerical input
11000 GOSUB 9900
```

```
11010 L$=T$
11020 I=0:C$=""
11030 PRINT FNCURS$(A,B);:REM Put cursor at coordinate (screen)
11040 D=ASC(INPUT$(1));:  REM Get a letter.
11050 IF D<32 OR D>128 THEN 11090
11060 PRINT CHR$(D):       REM Put letter on screen.
11070 C$=C$+CHR$(D):       REM Put letter in a STRING$
11080 I=I+1:IF I=J THEN D=13:PRINT CHR$(7)
      Input-length full? Then RETURN and sound buzzer
11090 IF D<>8 THEN 11120: REM Arrow to the left
11100 IF I>0 THEN I=I-1:C$=LEFT$(C$,I):T$=C$:GOSUB 9890
11110 GOTO 11030
11120 IF D<>152 THEN 11140:REM Restore old value HOME-key
11130 T$=L$:GOTO 11010
11140 IF D<>21 THEN 11190: REM Arrow to the right letter in C$
11150 IF L$="" THEN L$=SPACE$(J)
11160 IF I<J THEN I=I+1:C$=C$+MID$(L$,I,1):T$=C$:GOSUB 9890
11170 IF I=J THEN D=13:GOTO 11220
11180 GOTO 11030
11190 IF D<>10 THEN 11250: REM Complete the line
11200 IF I>0 THEN T$=C$+MID$(L$,I+1,LEN(L$)-I):GOSUB 9890:D=13:C$=T$
11210 D=13
11220 IF D<>13 THEN 11250: REM Return
11230 IF I=0 THEN C$=T$
11240 T$="":RETURN
11250 IF D<>24 THEN 11270: REM Cancel
11260 T$="":GOSUB 9890:GOTO 11020
11270 IF D<>9 THEN 11310:  REM TAB-key till end of the string
11280 I=LEN(T$):C$=T$:GOTO 11030
11310 IF D<>20 AND D<>21 AND D<>26 AND D<>23 THEN 11330
      Various cursor-control signs used by the program.
      e.g. return to previous field (arrow-up)
11320 T$="":RETURN
11330 IF D<>27 THEN 11030
11340 T$="Stop":GOSUB 9890:C$=L$:T$="":RETURN
      Interrupt with ESC and put "Stop" on the screen.
      Test in the program after: GOSUB 10000 and GOSUB 11000,
      see line 5520 (4000 = menu).
```

****

TECHNICAL MODIFICATIONS.

by Aad van Duijvenbode.

This time too another modification that is of (possible) interest to only a select group. It concerns printing using a TEC/ITOH daisywheel printer of which the so-called handshaking is not correct. Handshaking is the procedure that makes the printer keep step with the computer. If this is not functioning as meant characters might be lost.

The modification has to be performed inside the printer itself. To do so, one has to remove the top-lid first, as most of you will understand. Next to do is to remove the bar that keeps the four print boards positioned. Then remove the two cables from the righthand board. Now remove the print itself. There ought to be a code on it:

FP-1500-25 CPU 8 BIT ZEE 61-81101.

The actual modification is the next:

a. at the top side of this board, the track from IC 17 pin 1 is to be cut (at components side).
b. now connect IC 17, pin 1 to IC 13, pin 37,

and that concludes the modification. Now reassemble the disassembled parts and ....? GOOD LUCK.

****

TESTING OF ROMs.

In the following program the explanation of the operation is given in REM statements, therefore we do not have to give further explanation. The spiritual father?... Henk Warnitz.

```
 1 REM This program is to test the ROM IC's of the Sorcerer.
 2 REM It has been tested on three different versions of the
 3 REM Sorcerer, the result was 'OK'. Unless there are more and
 4 REM other versions of Sorcerer software, your result has to
 5 REM be the same. The most likely is that ROMs make bad con-
 6 REM tact in the socket. There is also a very small chance
 7 REM your ROMs were wrongly programmed.
 8 REM The working is very simple. Each ROM-byte is called by
 9 REM PEEK(N) and added to the previous (decimal) byte.
10 REM If only just one byte changes, than the check-sum will be
11 REM different.
12 REM Maybe this program explains why certain statements or
13 REM programs are not working properly on your computer.
14 REM
15 REM Good luck. Comments are welcome, but mention the serial-
16 REM number of the Sorcerer, and the version and date of the
17 REM software to J.A.H. Warnitz, De Steenkamp 20,
18 REM 3781 VP Voorthuizen. (Holland)  Tel. 03429-3181
19 PRINTCHR$(12)
20 PRINT"Do you want it to be printed ";:INPUTJN$
30 PRINT"What is the date of this test ";:INPUTD$
40 IFJN$="y"ORJN$="Y"THENGOSUB500
45 PRINT"Date of test :"SPC(10)CHR$(14);D$;CHR$(20)
50 PRINT:PRINT"Calculating the checksum of the moni-"
60 PRINT"tor ROM, BASIC-ROMPACK and ASCII-ROM for the test."
70 PRINT:PRINT"-- EXIDY STANDARD MONITOR VERSION 1.0 checksum --
80 PRINT:PRINT:GOSUB 510
90 PRINT"This takes about 25 seconds.
100 PRINT
110 REM ------------------------------------------------------
120 FOR N=-8192 TO -4097
130 CS=CS+PEEK(N)
140 NEXT
145 PRINT:IF JN$="y" OR JN$="Y" THEN GOSUB 500
150 IF CS-479334<>0 THENPRINT"MONITOR ROM is bad.":GOTO 170
160 GOSUB 520
180 REM ------------------------------------------------------
190 PRINT"-- STANDARD BASIC ROM-PACK checksum --
200 PRINT:GOSUB 510
210 PRINT"This takes about 48 seconds.
220 PRINT
230 REM ------------------------------------------------------
240 CS=0
250 FOR N=-16384 TO -8193
260 CS=CS+PEEK(N)
270 NEXT
275 PRINT:IF JN$="y" OR JN$="Y" THEN GOSUB 500
280 IF CS-1096551<>0 THENPRINT"BASIC ROM-PACK is bad.":GOTO 300
290 GOSUB 520
310 REM ------------------------------------------------------
320 PRINT"-- ASCII-ROM checksum --
```

```
330 PRINT:GOSUB 510
340 PRINT"This takes about 6 seconds.
350 PRINT
360 REM ------------------------------------------------------
370 CS=0
380 FOR N=-2048 TO -1025
390 CS=CS+PEEK(N)
400 NEXT
405 PRINT:IF JN$="y" OR JN$="Y" THEN GOSUB 500
410 IF CS-45828<>0 THENPRINT"ASCII-ROM is bad.":GOTO 430
420 GOSUB 520
440 PRINT
450 PRINT"I am ready!"
455 GOSUB 510
460 END
500 POKE-16432,147:RETURN
510 POKE-16432,240:RETURN
520 PRINT"Checksum is 0, so ROM is OK.
530 PRINT"##################################":PRINT:RETURN
```

If you use the BEXT8 ROM in the BASIC-PACK and at address DCBC is 1E 20 instead of 1E 24, then line 280 CS 1096551 is different: CS 1096555.

****

LOOKING AT BDOS CALLS FROM EXBASIC.

Fred Knottenbeld, who did surprise us before with a sound article, again has constructed something special for you. Usually the use of a computer is limited to using programs in one or another language (mainly Basic). All that is going on in the control program remain hidden for many of us. Often this is because using machine language is for many just about the same as learning Chinese or Russian. However, when you take the time to dig deeper into it, you suddenly get more insight into the way the machine does its job. The article by Fred gives you the tool to look into BDOS. Although we try to insert as few English text in the Dutch periodical as is possible, we can not always get around. Especially machine language programmers are used to commenting in English in their programs. This now is thrown in free!

Recently I had to know for a certain application what BDOS calls were made successively by EXBASIC during disk access (like LOAD, SAVE, KILL etc.).
The following program catches all BDOS calls and shows the contents of the relevant registers on screen. Of course one needs to know the meaning of the function codes or look them up in a table.
In this way one can observe, for example, that EXBASIC is doing a SETDMA call before each disk access and one also can see what DMA addresses are used by EXBASIC for the various disk functions. It will strike you that EXBASIC does not use CP/M functions that concern keyboard or screen. For these direct calls are made to the Exidy monitor.

An example of the shown information is given hereafter. A one-line EXBASIC program is saved to disk by the command SAVE "TEST".
On screen one sees now:

```
5D0C 1A 00        (=set DMA address to 5D0C)
5CE7 13 FF        (=delete file named TEST.BAS; 5CE7=FCB address)
                  (status FF shows that this name did not exist)
5CE7 16 01        (=create file named TEST.BAS; 01=dir. code)
5D0C 1A 00        (=set DMA address to 5D0C)
5CE7 15 00        (=write 1 record to file; status 00: OK)
```

```
5D0C 1A 00        (=set DMA address to 5D0C)
5CE7 10 01        (=close file; 01= dir. code)
```

The program of course also can serve to follow BDOS calls of other than EXBASIC programs. Upon activation it only uses the memory area from 8 to 1A included. Its operation theory is that the BDOS call does not jump directly to CP/M, but is caught. The contents of the Z80 registers DE and C (being the only of importance) now are shown. Next the jump to CP/M is made and upon return the contents of the A register is shown first (status that for example shows a successful disk access, or an already existing file etc.). Only then the program returns to the main program.
Besides on screen the output also can be put to the printer by typing the command SE 0=L, while being in monitor (the printer must be turned ON!).

This program has been developed with the aid of the extraordinary fine CAICOM DEVSYS ROMpack (one of the best ROMpacks available for the Exidy Sorcerer). This pack is well equiped for experimenting with short assembly programs (useful as no separate LOAD/LINK phase is needed). For example when wishing to experiment with CP/M calls to find out the exact way a certain function is operating and what the result is in the registers upon return, this pack is wonderful. The program typed-in remains in memory thus allowing a quick alteration and try-out. With the program hereafter one even can see what BDOS calls are made by the DEVSYS pack. Now one can see that DEVSYS does not perform a close after disk read (in contrary to EXBASIC).

```
; BDOS-call Monitor.   Written by Fred Knottenbelt.
; Date april-28-1984.

; Program to examine which BDOS calls EXBASIC does
; while reading from or writing to disk.

; This program has been created with the aid of the
; CAICOM DEVSYS Pack (this pack contains an Assembler,
; an Editor and a Debugger in ROM and the Source is
; kept in RAM during development).

; First boot CPM and load this program (without star-
; ting it). Then load EXBASIC (or any other program,
; provided it does not disturb the code of this monito-
; ring program). Go to the Exidy Monitor with the
; command BYE and start the monitoring program at 20H.
; EXBASIC is restarted automatically.
; Any BDOS-call is intercepted and displayed: first the
; contents of DE and C, then the status returned in A.

BDOS    EQU  5
CALL    EQU  0CDH

HEXSPC  EQU  0E21CH     ;display space + contents of A
ADDOUT  EQU  0E1E8H     ;display contents of DE
CRLF    EQU  0E205H     ;new line

        DEFS -100H+8    ;set ORG to 8H, relative to
                        ; the standard ORG of 100H
                        ; (see DEVSYS manual)
BEGIN:  CALL CRLF       ;fresh line
        CALL ADDOUT     ;display parameters in DE
        LD   A,C        ;display BDOS function-
        CALL HEXSPC     ; code in C
        DEFB CALL       ;call BDOS and execute
TEMP:   DEFS 2          ; desired function
```

```
NEXT:   PUSH AF          ;save status
        CALL HEXSPC      ;display status returned by CPM
        POP  AF          ;restore status and return
        RET              ; to main program

; The program must be started at this address. After
; the initialization this part of the program is no
; longer needed, provided one does not restart at the
; start-address without prior loading of the program.
; So only the area from 8 to 1AH must be available for
; this Monitoring program.

        DEFS 5           ;skip to address 20H
START:  LD   HL,(BDOS+1);get and save BDOS
        LD   (TEMP),HL   ; entry address
        LD   HL,BEGIN    ;get startaddress of intercep-
        LD   (BDOS+1),HL; tion program and replace
        JP   100H        ;restart BASIC (warm)
```

After having translated one has the next code, to be put in memory from address 0008 (without altering the empty positions!)

```
ADDR     0  1  2  3     4  5  6  7     8  9  A  B     C  D  E  F

0000:                                  CD 05 E2 CD    E8 E1 79 CD
0010:    1C E2 CD 00    00 F5 CD 1C    E2 F1 C9
0020:    2A 06 00 22    13 00 21 08    00 22 06 00    C3 00 01
```

****

EXIDY 30 TRACKS MPI-DISK CONTROLLER (4).

A response to part 3 of this article again has reached us from Henk Warnitz, who had found a bug in the state of adaptations. This one we now publish before starting the next part.

At page 16 (half way) of number 14, with the title 'Solder a wire' there is: 4C-13 / 7C-10. This must be: 4C-3 / 7C-10.

Nothing could have gone wrong, only the write precompensation does not operate correct. I thank mr. Gerards from Venlo who drew my attention to this error.

5. Mechanical problems with BASF 6106 drives.

Problems:
- No booting-up of a drive.
- Hardly noticeable, but a whistling sound on the last tracks, on both of the drives. This whistling sound after some time becomes louder and better noticeable.
- Unable to read disks, in spite of the new data-separator.

Cause:
- The non-booting was caused by the poorly glued spiral-wheel at the stepper-motor. The head moved perfectly from in- to outside, but not in the reverse direction. In short tracks 0, 1 and 2 could not be read correctly.
- The whistling is a mechanical vibration, causing frequency modulation of the signal. The written signal could not be read back by CP/M, that then accordingly gave a BDOS-error.

- Not-being able to read disks was caused by an electronically wrong adjusted drive, which also could have been out of tolerance range.

Cure:
- I had the spiral-wheel glued again by the importer. Without special tools you could not do it yourself.

- Whistling can have several causes. Perhaps filthiness of the pressure felt, although not very likely when you use high-quality disks and only for private use.
  In my drive, the sideways tolerance in the rotation of the felt-holding arm was too wide. I used a mica-isolation ring of a thyristor, to fill up the gap. This was sufficiently thin and very smooth, so it could not cause any additional problems. Anyway, the whistling stopped.
  In another drive, the springs (the one of the felt-arm and the one to pull the head to track 0) started to resound. I contacted the importer, who suggested to fill up the core of the springs with cotton wool. I thought that cotton wool might fluff, so I took a piece of foam-plastic instead.

- I adjusted the badly adjusted or out of range drive myself, it now is working fine since then. A hint for the importer: the adjustment of IC 1A is esier with the scope at test-point TJ1-8 than at pin 9 of the IC. You can adjust R69 till you become a straight line on the scope. If the balance is alright, the signals at pins 12 and 13 are neutralizing another.

6. Disk hang-up while switching disks-drives.

Problems:
- The programs PIP and EXCOPY made the disk hang-up while copying disks or files. Very often the disk could not be read due to hardware errors. Only reformatting made I could use the disk anew.

Cause:
The use of only ONE timer, and the non-switching of the ready signal to the 1793 floppy-controller chip. The chip thinks while switching that the drive is still ready and starts writing before the head of the drive is properly positioned at the disk.

Cure:
- Remove the ready-signal while switching.
- This is very easy with BASF 6106 drives. Each drive has its own timer to generate the ready signal. A fine solution which makes the controller hardware very simple. Cut the track near pin 32 to disable the tier at the controller board. Solder a wire from J2-6 to IC 3C pin 15. Connect IC 3C pin 5 with IC 2D pin 9. Connect IC 2D pin 8 and IC 1C pin 32 (the controller chip) with a wire.
- This is a little more complicated for MPI drives. I have no solution as I do not have such drives. I give the solution in diagram 5 for the 40 track MPI controller-board. This should do the job. There is a spare 74LS74 flip-flop at 7B if you use the data-separator IC. The pin-numbers match the spare flip-flop. The invertor might be found among the unused gates at the controller-board. But I doubt if it is realy needed. The 15 nS delay of the gate is almost nothing compared to the 30-50 mS delay of the headload timer.

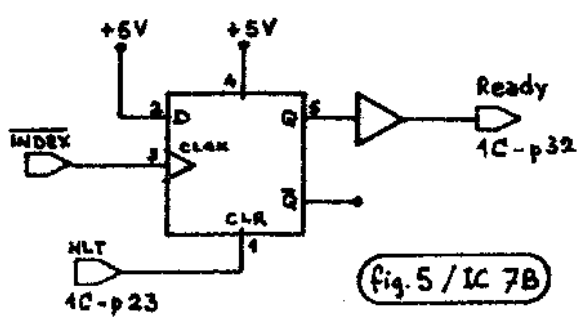


fig. 5 / IC 7B

Comment by the editor:

The mechanical problems with the BASF 6106 drives does not sound to real as we never heard complaints about it. However we do not hear all of course. Henk is right in writing a loose spiral wheel is to be repared by the importer.
As to the adjusting of the drives, I point out that it is a necessity to all to (have) adjust their disk-drives on regular bases. This too is a tricky business that needs quite a lot of special tools, e.g. a scope, a special (expensive) adjusting disk and a drive controller device.

Concerning the hanging of drives while switching we know there are more users complaining. This therefore is a reality. To the given solution I make this remark: for BASF drives this is the solution.

(to be continued)

****

ERIC'S PARTS ADMINISTRATION (2).

You maybe remember that in one of the first issues of the periodical there had been a small program for keeping record of a parts administration? We at that time have asked to show your improved version to us. Henk Warnitz took the trouble to insert some embellishments. Hereafter you can see if it worked out fine.

```
 890 GOTO 1000
 900 CLEAR A:POKE318,237:RV=RND(-INP(59)*2-1):POKE318,219
 910 OT=256*PEEK(-4095)+PEEK(-4096)
 920 IF OT>32767 THEN OT=OT-65536
 930 GOTO 1010
 940 PRINTCHR$(12);:RETURN
 950 04=PEEK(318):05=PEEK(320):POKE318,195:POKE320,224
 960 IN$="":0=INP(9):IF 0<>0 THEN IN$=CHR$(0)
 970 POKE318,04:POKE320,05:RETURN
 980 GOSUB 950:IF 0=0 GOTO 980
 990 RETURN
1000 A=1000:GOTO 900
1010 GOSUB 940
1020 REM * ERIC's parts administration *
1030 REM * A program by Etienne Francois PA3AAR Landsmeer *
1040 REM * extended with a BASICODE 2 routine *
1050 REM * Adapt line 1930 to the number of parts *
1060 REM * The data at the DATA lines 1940 and 1950 *
1070 REM * are fictive, so you need to change for reals *
1080 REM * ------------------------------------------------
1090 PRINT"ERIC's parts administration"
1100 PRINT"==========================":PRINT
1110 READ X
1120 PRINT"Number of parts : ";X:T=X+1
1130 DIM P(T),K$(T),W(T)
1140 FOR Y=1 TO X
1150 READ P(Y),K$(Y),W(Y)
1160 NEXT Y
1170 M=Y-2
1180 PRINT:PRINT"Input list":PRINT
1190 GOSUB 1730:REM * Print not sorted *
1200 GOSUB 1320:REM * Sort at partnumber *
1210 PRINT:PRINT"Sorted at partnumber"
1220 PRINT"=========================":PRINT
```

```
1230 GOSUB 1730
1240 GOSUB 1320:REM * Sort at color *
1250 PRINT:PRINT"Sorted at color"
1260 PRINT"+++++++++++++++":PRINT
1270 GOSUB 1730
1280 GOSUB 1320:REM * Sort at value in Henry *
1290 PRINT:PRINT"Sorted at value in Henry"
1300 PRINT"++++++++++++++++++++++++":PRINT
1310 GOSUB 1730
1320 S=0
1330 FOR I=1 TO M
1340 ON KN GOTO 1350,1370,1390
1350 IF P(I)=<P(I+1) GOTO 1440
1360 GOTO 1380
1370 IF K$(I)=<K$(I+1) GOTO 1440
1380 GOTO 1400
1390 IF W(I)=<W(I+1) GOTO 1440
1400 P1=P(I):L$=K$(I):W1=W(I)
1410 P(I)=P(I+1):K$(I)=K$(I+1):W(I)=W(I+1)
1420 P(I+1)=P1:K$(I+1)=L$:W(I+1)=W1
1430 S=1
1440 NEXT I
1450 IF S=1 GOTO 1320
1460 RETURN:REM * Sorting ready *
1470 PRINT:POKE-16432,240
1480 PRINT:PRINT:PRINT:PRINT"Your choice,  1. Sorteren":PRINT
1490 PRINTTAB(15)"2. Find a value":PRINT
1500 PRINTTAB(15)"3. Stop":PRINT:GOSUB 980
1510 V=VAL(IN$):ON V GOTO1550,1740,1710
1520 PRINT"Like it sorted (y/n)";:GOSUB 980;:PRINT" "IN$
1530 IF IN$="y" OR IN$="Y" GOTO 1550
1540 GOTO 1710
1550 PRINT"Sorteren op:";:PRINT"   1. Part number."
1560 PRINTTAB(16)"2. Color.":PRINTTAB(16)"3. Value.":PRINT
1570 PRINT"Type your choice now";:GOSUB 980;:PRINT" "IN$
1580 KN=VAL(IN$)
1590 PRINT:GOSUB 1890
1600 IF IN$="y" OR IN$="Y" GOTO 1620
1610 GOSUB 940:GOTO 1640
1620 GOSUB 940
1630 POKE-16432,147
1640 ON KN GOTO 1200,1240,1280
1650 PRINT"Part number       color"TAB(28)"Value in Henry"
1660 FOR I=1 TO 44:PRINT"-";:PRINT;:NEXT I:PRINT
1670 FOR Y=1 TO M+1
1680 PRINT P(Y) TAB(18) K$(Y) TAB(34) W(Y)
1690 NEXT Y
1700 RETURN
1710 END
1720 FOR I=1 TO 44:PRINT"*";:PRINT;:NEXT I:RETURN
1730 GOSUB 1650:GOSUB 1720:GOSUB 1470:PRINT:PRINT:RETURN
1740 INPUT"What value do you want :";Q
1750 PRINT:GOSUB 1890
1760 IF IN$="y" OR IN$="Y" THEN GOSUB 940:POKE-16432,147
1770 PRINT"Part number       color"TAB(28)"Value in Henry"
1780 FOR I=1 TO 44:PRINT"-";:PRINT;:NEXT I:PRINT
1790 F1=0
1800 FOR S=1 TO X
1810 IF Q=W(S) GOTO 1850
1820 NEXT S
1830 IF F1=1 GOTO 1470
1840 PRINT:PRINT"This value is not in stock.":GOTO 1470
```

```
1850 F1=1
1860 PRINT P(S) TAB(18) K$(S) TAB(34) W(S)
1870 IF S=X GOTO 1470
1880 GOTO 1820
1890 PRINT"Like a hard-copy (y/n) ";:GOSUB 980;:PRINT" "IN$
1900 PRINT:RETURN
1910 :
1920 :
1930 DATA 8:REM * A number of parts *
1940 DATA15,Green,1000,22,Purple,1235,12,Blue,1800,5,Yellow,250
1950 DATA21,Yellow,250,16,Blue,1800,9,Grey,1550,34,Red,265
1960 :REM * From here you may insert your own data in the *
1970 :REM * DATA area. *
```

****

TO OUR FOREIGN READERS.

* We have received information from Stan Podger of Scarborough, Canada, that he feels our English version of the periodical should also contain advertisements concerning articles/programs etc. for the Sorcerer. This needs some explanation:
In our Dutch version of the periodical we insert advertisements, for which purpose we have an advertiments canvasser. We also did inform the regular advertisers of the possibility to insert their information in the English version too. The only rule was that they had to translate the advert for us.
The cost is as for the Dutch periodical: Dfl. 100,00 to full page;
50,00 to 1/2 page;
25,00 to 1/4 page.
These rates are exclusive 19% VAT (BTW). There also is a possibility to get a discount of 15 or 25% when adverting in successively 3 or 6 numbers of the periodical.
Unfortunately nobody responded to this offer. I assume the reasons to be: 1. Too few readers for the English version.
2. No time to translate/ no ability to translate?
This may explain why you never have read an advertisement in the English version of ESGG. If there is a way to fullfill your wish, it is our pleasure!

Maybe here lies a task for you! There are far more users overseas than we have subscribers to our English version. Try to make them a subscriber to ESGG. With a large number of subscribers we should be able to interest the manufacturers in advertising in the English edition also. We also then have the possibility to obtain from new sources either written material or programs. This in the interest of all of the users throughout the world!
For your information: In the near future we will start a campaign to recrute more subscribers. I expect to come up with approximately a 200 new subscribers, mainly from the ESC or Sorcerer's Apprentice sources, since these magazines ceased to exist.

LET US STICK TOGETHER, SORCERERS!

****

S O R C E R E R - D A Y G O U D A

8 S E P T E M B E R 1 9 8 4

HALL KUNSTMIN BOELEKADE 69 10-16 HR

INFORMATION CONCERNING THE EXIDY SORCERER COMPUTER. Febr. 1984

Maybe you have learned from magazines that the production of the **Exidy Sorcerer** computer will be ceased 1984 by its manufacturer, Compudata from 's Hertogenbosch. This however does not mean that your possession now is going to be worthless!

The **Exidy Sorcerer Gebruikers Groep** (Users Group) is actively engaged in the development of new possibilities for a better use of your computer. Among these developments are not only the developments in the software area, but also those concerning hardware. Besides improvements that correct the existing errors in hardware, there are also improvements that make the use easier and userfriendly, like *extra keys to your numerical pad* (not yet in the service due to the unreasonably high price of original caps from Compudata; you may be able to fullfill the installation yourself following the instruction of this 'luxury').

Regarding the software we mention the improvements of the Basic pack ***extension BEXTB)*** and the through the software service available communication programs *Basicode and Viewdata* (telecommunication, Dutch Telecom Standard) and also a very useful **Pascalversion**.

Besides the hobby-developments there are also several business firms and members handling developments commercially. Here we can mention:
From members:

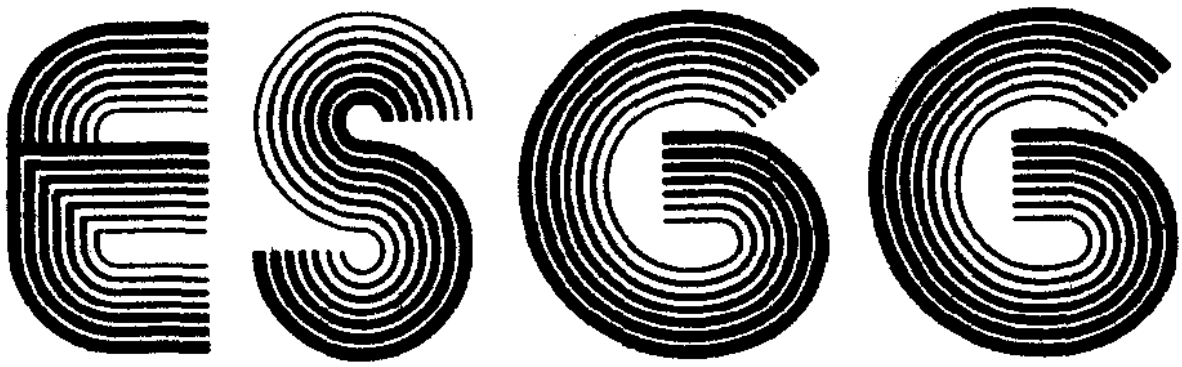
- **parallel cable** for connecting a printer (make and type to be referred to; MX-80 cable available), that then automatically can be controlled *either centronics or parallel (with graphics).* The price: approx. Dfl. 100,=;
  A very fine improved **diskversion of Exidy WP-pack** (this form has been printed using it!). Both articles supplied by:
  A. van Duijvenbode, Gemshoorn 40, 3068 HL Rotterdam.
- Various software (quality!) like the **Van Monfort monitor version** 1.3 with many good options and a good review in ESC. Then there is the program **EXPAN** (a friendly help in correcting and disassembling of ml programs) and the program **Grafplot** (a look-alike of Graftrax), enabling your printer of drawing (together with the afore mentioned cable) hires graphics or single dot printing with a resolution of 960x8 dots; price expan approx. Dfl. 150,=, grafplot approx. Dfl. 180,=; the monitor version 1.3 price approx. f. 165,=; supplied by: Gebr. Van Montfort, Smedestraat 13, 6411 CR Heerlen.

In the commercial area:

- A fine **diskcontrollercard**, capable of handling 40 or 77 tracks diskdrives, supplied by firma Caicom, Nijverheidsstraat 22, 2802 AL Gouda, costing Dfl. 700,=.
- **Diskdrives, make Shugart**, in 40 or 77 tracks outfit. Are built together to a station of two drives, with powersupply and *Caicom controller*, in case for Dfl. 3250,= (40 tracks model). Other and different compositions, or single parts can be supplied. Prices upon request. Supplied by: Fa. A. Netteler, Sumatraweg 13, 3072 ZP Rotterdam.

Remarks: ***In general all prices concern so-called 'collect-prices'. Shipping/transportation freight is extra. Payment is usually in advance; whether C.O.D. is possible depends on the supplier. You are to contact the supplier in that regard.***

The prices mentioned here are subject to unannounced changed and merely indicate the average, current prices. No claims for delivery of goods can be made in reference with the prices mentioned in this information.



The L O G I C partner to a Sorcerer

For whom is the ESGG?
For anyone being interested in the use and the possibilities of the Exidy Sorcerer.

Why the ESGG?
Because the ESGG trys to give as much knowledge to the possibilities of the Exidy Sorcerer and especially to the possibilities in the use of the Exidy Sorcerer, outside as well as inside the Hobby Computer Club of the Netherlands.

What does the ESGG?
Software distribution: We only supply software that is free of COPYRIGHT (so-called Public Domain Software) on collect cassette and on diskette.

For Exidy Standard Basic we supply a Basic EXTension in EPROM, that expands the possibilities of the Basic Pack very much.

Hardware development: Non commercial designs, that is designed by members and put at the disposal of the other members, are judged by ESGG and -if of importance to others- produced (e.g. video inverter).

Sorcerer days: Twice a year (usually in March and September) ESGG organizes these meeting places of many a Sorcerer user. These days meanwhile have become well-known.

Publications: Our bi-monthly issued ESGG-periodical, full of things worth knowing about the Sorcerer and alike matters. For only DFl. 27,50 (in Europe) or DFl. 32,50 for non European countries your can insure yourself of the most recent information concerning your Sorcerer! (see page 2).
In the running subscription year we supply all issued numbers!

Subscribe?... Just remit the fee for the subscription either by money order or by postal check to postal check account number 5368539 of ESGG, Herman de Manpark 41, 3411 ZN LOPIK, the Netherlands, referring to "subscription to ESGG periodical".

You like to know more about the ESGG? Apply to the sectretary, mr. Charles Netteler, Pr. Hendrikstraat 3d, 3071 LG Rotterdam.