LOOSTILLE USERS OP COMHODORE OP RBMTCCXI,NCC.

# P.O. Box 9551 <br> Louisville,KY 40029-0551 



Add a Reset Button<br>By Larry J. Bailey

For years l've heard and listened to people taik about reset buttons and swilches for their commodore computers. But it is usually needed to take your computer apart to have a reset, or lype in a program to do this. Well a friend of mine several years ago helped me pul logether a simple reset button. This button resets your Commodore 64 computer and 1571 disk drive at the same time. The great thing is you do not need to take your computer apart, just plug it into a serial port. So here it is.
liem number one that you will need is a six pin serial port plug. You can use a jumper you may have exira laying around for this. Cut off one end for now. Or you can go to Radio Shack and purchase a six pin Dim Plug, cat\#, 274-020A. Hem number two is a 2 in. by 4 in . ulilily box or smaller in size if you wish. I purchased mine at Radio Shack, cal\# 270-220. This is used to mount item number three. Which is a mini SPST monmentary normaily open pushbution. Now that you have the parts needed, we continue. You need a soldering iron, solder, drill, 1/4in drill bit. pliers and a continunity lester, or mullimeter. If you are using the jumper we were lalking about in the first part of this article, then you need to remove about $\mathbf{1 / 4 i n}$. of the insulation from the wires that you cut the plug off of. After you have done this. Use your lester and lest the wires out in reference with the plug to find oul which one goes to the number four pin, and which wire goes to the number six pin of the serial port plug. It you are using the one that you purchased from Radio Shack. The switch should come wilh a diagram of the pin sellings. If not, see your Commodore Manual it will display a plug drawing of the pins on this plug. You need to connect a wire to the number four and six pins of this plug. You need to have at least two feet of wire coming from your plug, more or less as you like. Now lake the ulility box apart and drill one hole in box for your button and one hoie to run the wire through. Mount your bufton with the bution part stlcking out of the box. Then run the wire into box and solder the fwo wirps to the push button. Now put the utility box back logether. That's it, your project is finished. Was'nt that simple? Now we plug your reset button in and what it work. (Note): On very few Commodore 64. this button will not reset the computer, but on very few.

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## L.U.C.K.Y.'s Officers



## 4 Disk Library By Sleve Grassman

To avold conlusion, plense direct aH questions to He Library Assistanls al the ollier end ol the lable. please do not bollien the computea OPENATOR'I Thls will minhuize mistakes on bnckups being inade. Ilinik youll
to order diskelles. Just fill the order larms provided by the Libinry Assisianls. Make sule you pIINT clently the litommation requested on the lorin. Wis will speeds up lise liling of orders.

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Gener al Meellings are held the second Tuesday of every month al the Jeflerson Main. OUler loop. 630.900 PM, in the Commomy Room Demonstrations are given on boith hardware and software al limse lunclions, with occasional giest speakers and a regular question and answer session Also available lo Members Only are Public Domain Piogram Disks liom lise Chibs Library for a small cooving lee. There is a NO SMOKING, EATING. DRINKING resifiction

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The LUCKY REPORT (Newsiellet) is pitinglved mowity and Is availatile at the Genetad Meeting DEADLINE lor metilication Is two weeks pribr lo tive Geneval Meething II is assembled togellier on an $\mathrm{C}=128,1571 / 1501$ Disk Dive. Super Scind.
 ont in Sim 1020. Espon Aclion Laser 1500 mind a Mand DC ; 435 coplet

The LUCKY BBS is men aled 71 hoons $n$ day and is designed whll live Comencuiot e uspes momend Spectal mecess ta given to UtICKY Mermbers Alliouglo myorve can ent live plrone inmideet is $\mathbf{5 0 2 . 9 3 3}$.5397


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# WORD PROCESSING GLOSSARY 

By: Dale Raw

One of the most common uses of a home computer is as a word processor. As the term implies this involves a series of actions or operations involving words directed toward a particular result. (Merriam-Webster definition of process) The advantage of a word processor over the standard typewriter is the control you have over your output. Prior to printing you can move entire sections of your document around, append from other documents, and even check your spelling.

The following glossary is meant to help you learn some of the terms used in the word processing environment. These terms apply no matter what computer you do your word processing on. Some may use slightly different terms, but don't be intimidated by the jargon.

Alignment - How your text lines up on the paper. Left alignment is normal; This means the text is aligned with the left margin. Right alignment means the text is aligned with the right margin. Right alignment is handy for dates, headers, and footers. Full justification means that the text is aligned with both left and right margins. This gives a neater appearance to the text. Justification is achieved by adding extra spaces between the words.
Append - To add additional material to. The extra can be from another document or a repeated section of the same document.
Blocks - This term 18 usually used in conjunction with a word processor's MERGE feature. This is the feature that
allows you to print form letters or to make repetitious forms easier to deal with. The Blocks mark the locations in your document where information will be added by the program when the document is printed. Blocks can be VARIABLE; which means they have no fixed length or they can be MEASURED; which means that they do have a predetermined length.
Comment - A non printing line in your document. This can be used for the document name, for instructions to yourself, or just as a reminder of what a line of commands do.
Document - What you are typing into the word processor. Document is a generic term that covers letters, forms, etc.
Fill File - This is a file containing the data that the word processor uses to fill in the blanks (blocks) on a document used for form letters. When the program comes to each blank it reads the next item from the fill file and inserts it into the spot where the blank is. Some word processors may call these data files.
Font - The letters your printer puts on the paper can be described by their height (point size) and shape. This is the FONT. The font is simply the name that is given to that particular way of putting the letters on paper. Some word processors are limited to the fonts available on your printer. Others use GRAPHIC FONTS to give more variety and better quality. A Graphic Font is drawn as a graphic would be with your printer in graphics mode. The word processor
(continued on page B)
5 (2)

## The Bared Raom



As the song says: Another rainy night in ... Kentucky.

Another month has come and gone and $1 t$ seems like just yesterday or the day beiore $I$ was doing this same task. Editing a newsletter article for the LUCKY newsletter.

You have asked and whined and now it's back, Empire! Legacy has done it again and re-re-re-vamped the program Empire, which 18 playable on the LUCKY BBS for members only. For those who haven't seen it or heard of it, it's a game in which you are building an Empire. You start with some money in pounds sterling, a few acres of land and a few peasants. Your goal is to create a kingdom, by buying and selling land, raising and selling crops, forming and supplying an army and keeping the peasants happily paying taxes. You can build businesses like shipyards, mills, foundries, etc. Build and protect your castle while you fend off enemies, and try to outlast the bad weather. volcanoes and other natural (and unnatural) happeninge.

We have had a couple of volunteers to assist with the BBS by downloading files and writing descriptions. It's going better as we get more member involvement. working together works for all of us.

Seems like the usage is up somewhat as well. Every time I get set to go to the ofilice to work on it someone is calling. Good deal. I like $1 t$ ! Keep it so busy we can't update it. I'll try staying up till $3: a m$ when it automatically kicks ya'll off and then $I$ can do my work. No problem. It's every Sysop's dream.

If I don't see you on the LUCKY BBS, then $I$ guess $I$ won't be seelng you at all.

Thzs article copyright (C) 1989 by Steve Mitchell
you may use this article as lorg as you leave this copyright notice intaci. I would appreciate a copy of any newsletter that thig article appears in. My address is:

Steve Mitchell
7725 Lincoln Hwy
Crown Point, In. 46307
Programmer's Page 3

Rev/ew: 1671 INTERNALS fPOm Abacus

By: Steve Mitchell

Once you get to the place in your programming that you know your way around basic, the next step 15 to get inside your machine and learn its workings. This book, 1571 INTERNALS by Abacus, is a good place to start. Abacus' series on the C128 is nothing new. Most of us have seen one or more of the 8 books in this series ither in bookstores or at a friend's house. I purchased this book through Briwall (they back ordered it) and only recently found out that $I$ could get it locally at Waldensoft in the River Oaks Mall for 519.95 . As a side note, you should stop in Waldensoft and check out their stuff--like Commodore Computing International Magazine, printed in England, lot's of neat stuff in there (Did you ever hear of a TURBO Dual Tape Drive?? Reportedly faster than a 1541:).

My first impression was that the book had too much white space in it. And it does. I felt that the size and consequently the price of the book could have been held down a little, but since then have observed 2 things: Abacus made all 8 books the same size, presumably to look nice on the shelf (and they do) and
(continued on page 9)
-**SysOp**-
. 5

## FROM THE ROOM DOWM UNDER <br> MORE GREAT PROGRAM HINTS


#### Abstract

I just love finding out about a game or utility that I use, don't you? Especially when what I find out lets me do something different or better than before. That is why I like writting about things that I find out or read about. That is why I have gone through my scratch pads and come up with some more great hints for you.


WINTER GAMES: If you are having trouble getting into the record file, here is a way to cheat. The world records are stored on disk at track 18, sector 13. If you have a track and sector editor and are real handy with it, you can edit the world records. While this is cheating, it is a whole lot easier (and more legal) than finding some goon with a big club to rough up your competitors. I thought that ice hockey was supposed to be the violent winter sport. (WARNING: Don't attempt this unless you are trained to edit disks. Do it only on a backup. One mistake can ruin the disk permanently.)

CAVEMAN UGH-LYMPICS, this is a widd and wooly game. Man, you can do things here to the chicks that you can do nowhere else, because this is cave country. You are cave man, "UGH." When playing against the computer in the Clubbing event, put your athlete right below the end of the energy bar as soon as the event starts. Keeping the joystick up, start giving overhead smashes and pushing the fire button. Your opponent will be defeated in no time!

In the Mate Toss event, twirl your joystick rapidly counterclockwise to pick up speed. If your player starts to bounce, hold the fire button down and release the joystick. Then pick up your mate and continue. "UGH."

DIE HARD, you have watched the movie, so now play the game. As you start the game, don't waste bullets on the two bad guys in the hall: use your bare hands. You'll need the ammo to eliminate the terrorist at the security panel.

In the final confrontation, Hans must be shot many times before he dies. Using an Uzi makes it easier:

Load these up and lets go kick some +Op*;:i~. Go get'em.

Canc4 9. Ballas

## RUMJNATJON: . .

Another month has gone by and this time it's my turn to do the majority of the newsletter. Last month Legacy did most of the work berause $I$ was in the process of moving when newsletter time rolled around. This month Legacy and Becky moved and he hasn't gotten his computer set up in a permanent position yet.

The club seems to be doing quite well as far as membership goes, however, usage on the bulletin board hasn't been what it should be. Log on, people! It's fun, interesting, and who knows, you just may find something useful online. Empire is back and I'm not doing so well this tıme. :

Last month I alluded to the fact that some of our members might be "going IBM". Well, it finally happened. I got a really good deal on an older, basic, IBM computer that I couldn't resist. But as you can see, I'm still going strong with my trusty old Commie. The writing's on the wall though, the big blue machine has kind of taken center stage in my computer room.

For anyone who didn't notice the front page of last month's newsletter, the club is going to need someone to do this newsletter in the future. This will be my last year doing it, and I think I recall Legacy saying that he won't be doing it much longer either. Allow me to take this opportunity to point out that my membership in the club (and Legacy's too) expires in July. I am still debating with myself whether or not $I$ plan to renew it. And even $1 f$ I do renew my membership I beleive that by the end of the year 1t will be time to "pass the torch on" to someone else. For anyone whose curiosity is peeked by this, I would like to point out that becoming more active in the club not only helps others, but it also enhances your own enjoyment of the benefits of being a member.

Well, see you all next month, at least.
LIVE LONG AND PROSPER, L.W.L.H.Y. PKACK AND LONG LIFR, COmmOdore. TANSTAAFi Dan 7nauls

## Thetherswheel in

Welcome aboard! If you are an old user of the BBS, how'ya doin'? If you are a new user, like I said, Welcome. We had a surge of new users, and several of them are still around. Are we making them welcome? Everyone who logs on the BBS is added to the "LC" list. If you type LC at the LUCKY Main Menu: prompt, it will list the last 20 (twenty) callers. If you see someone new, send them a Hiya! or something like that.

What fun is a BBS if nobody wants to talk? Well, we were coming close to finding out. Thanx for the switcheroo: How is Empire going? I haven't played the new one yet, so I don't know anything about it. After all, I just code stuff.

Uploads are coming in quick, and downloads are becoming a little more common as well. Posts, RESPONSES, and even other usage is getting better all the time. When you get on, drop me a line, LU2, LEGACY. Drop Dan-o a line too, Tanstanfl at LU32... give us a ring, you never know... we MIGHT reply.

If you have Internet access, drop me a line there too. My address is LEGACYOIGLOU.COM and I check my mail at least once a day. You never know, I might REPLY to you there also. Lots of people are using Commies on the net, and a lot more are using PCs to contact Commie BBSs, using our own Color/Graphics: Right guys? !

If the REPORT looks good this month, blame Dan-o. I just moved into my new apartment, and only set the computers up Sunday nignt. If it looks bad, it's Dan-o's fault, if it looks good, well... Thanx Dan-o.

C'mon guys, and gals. If there is something you want added to the newsletter, the BBS, or the club, let us know. Dave, Danny, Dan-o and I are constantly looking for ideas. Give us ONE: The worst that can happen is that the club will vote it in... or Dan-o and $I$ veto it (insert grin here).
AND THE WHEEL TURNS VET aMOTHER
TURN... LEr... Leqacy
(continued from page 6)
I find myself using the extra white space in the ROM listings to add comments and notes about what has to be where when a certain routine 15 called, etc.

This Book 15 chock full of vital information. When as a maintenance man, you are called upon to troubleshoot a plece of equipment, the first thing you do is to "develop an understanding of the circuit". That's the first premise in any book on troubleshooting. This book gives you that understanding of the 1751 drive.

Let me give you an example of the type of understanding that this book can develop in you. You know, I'm sure, how slow a 1571 drive is in reading a "flippy" disk? I've always heard that is was a bug in the 1571 roms. Not true!! Here's the real reason why: when you stick a disk in the 71 and call up a directory, it tries to determine what kind of disk it is: 1541, 1570 or 1571. Note: 1570 is the game as a 1571 but single sided. The way it does this is it tries to find sync bytes on the first side, and finding them knows that it is indeed one of the 3 types as opposed to an unformatted or $c p / m$ disk. Then finding that to be true, it checks the back gide for sync marks (40 bits in a row all set to 1) and if it is a "flippy", it will have them, but other bytes that accompany the sync bytes will be before the sync mark not after them since it was turned over when it was formatted and hence turning in the opposite direction. This generates an error and DOS will check 5 times for those misplaced bytes accompanying the sync bytes before deciding that $1 t$ is a single sided diskette. That is what takes a 1571 so long to read a 1541 disk. Not a "bug" at all. And not even all 1541 disks. Just those "flippies" that we economy-minded computerists are so fond of
creating. Will it still work with a flippy? Oh, yes--but be aware that it costs you a little access time. The moral of that story 15 that if you want speed, use single sided disks or format them double sided to begin With (or get Jiffy-Dos since it recognizes double sided disks in 64 (1541) mode as well!).

Now, before someone writes in and says I made a technical error in describing the above, let me state that I paraphrased the whole sequence and left out parts that were mostly irrelevant to the point I was trying to make. Which was that with a proper understanding of what your drive is trying to do, your programming or even just your use of the 1571 will be improved. In any case all of the above information was on just one page of the over 500 pages in the book:

Do I recommend the book? Yes. Parts of it are so technical that I'm still unsure of then, but the parts I've learned 50 far have helped me greatly. 1571 INTERNALS is a reference book and contains stuff for beginners (how to insert a disk in the drive), stuff for intermediate users (breakdowns on the DOS COmmands and stuff that's pretty advanced, too. Want to know just what happens when you format a disk? The ROM routines are here and documented, too! How about formating an IBM-system 34 disk? That rom routine is discussed as well. Someday I want to write a routine that formats out to track 75. Having the documentation on a normal format is a good place to start. Speaking of programs, there are many short example programs scattered throughout the book to illustrate different concepts. All in all, this book has been a worthwhile purchase for me and I recommend it to you.

[^1]
# T R A N S F O R M E R S <br> A REVIEW FROM THE ROOM DOWN UNDER 

Great game, good graphics, action. Be cautious though, being too fast can kill you. Once you learn some on the screen you can move around much better. The one drawback, if indeed it can be called a drawback, is that the robots transform without any help from you at tımes. So stay on your toes.

Transformers - fighting vehicles that transform into robots (and vice versa). Transformers remains true to the spirit of both the toy and tv show. Or at least that is my opinion.

You're faced with the Evil Decepticons, who plan to capture the energy supplies of Earth. As commander of the good guys, the Autobots, you must determine the nature of their plan, with the help of a stolen map, and then do battle to foil them.

You command eight Autobots, each with his own fighting characteristics, and you must deploy them to the eight possible targets. The deployment method is quick and easy. Once deployment is complete, the screen changes to show the selected Autobot in his robot form. In an animated sequence, he then changes into a vehicle and races off toward his assignment.

You can press 'View' to see through the eyes (or sensors) of your Autobot. As you survey the scene, you must search for anomalies. Remember that the Decepticons are also shape-changers and the most innocent-looking structure can erupt into a deadly fighting machine. In the 'Barrage' mode, you can preselect up to eight different targets. When the battle begins, your fire upon these points will be automatic, leaving you and your joystick free to fire at others.

Pick your targets carefully, however. Although almost anything might be a Deceptcon, outright destruction of property is not the Autobot way. Besides, you can earn bonus points for keeping civilian life and property from harm. Since energy is the disputed treasure of Trangformers, it follows that scoring is based on units of energy accumulated.

So lets suit up. Transform, and save the word from the nasty Decepticons. Who out there is with me? Lets go and track them down. Have fun.

FROM THE ROOM DOWM UMDER.
Canry 9. Baller
נم

## (continued from page 5)

tells the printer where to put each dot. Some printers also have a NEAR LETTER QUALITY (NLQ) font which is intended to look more like a typewriter or daisy wheel printer. Graphic Fonts and NLQ fonts take longer to print out than your printers normal fonts, but usually look better.
Footer - Information printed at the bottom of every page of a document is a FOOTER. This can include the page numbers. Some word processors allow you to have different footers on alternate pages.
Forced Page - This is a command that causes the printer to skip the remaining lines on the current page and begin printing on the next page. This is used to cause page breaks to occur at logical places. This enables you to avoid having the first line of a paragraph on the bottom of one page and the remainder on the next.
Header - Information printed at the top of every page of a document is a HEADER. This can include the page numbers. Some word processors allow you to have different header: on alternate pages.
Hunt - Also called SEARCH. This feature allows you to find the occurrences of a particular phrase within your document. You specify the phrase and the program does the looking. A related feature is HUNT (SEARCH) and REPLACE. Here you would specify the search phrase and the replacement phrase and the program would go through your document substituting the replacement for the original.
Linked Files - Because of the limited memory of most home computers you can't have the contents of an entire book in menory at once. Linked files solves the problem of how to write your book on your PC. By telling the word processor which file is next in your chain of files any number of files can be tied together when printing. The command to do this varies from word processor to word processor.
Hacro Typing - This feature allows you to type long phrases in fewer keypresses. You define the phrase to equal something else and when the substitute is typed the program expands it into the phrase you want. There are other terms for this feature.


Margins - The space outside of your text on the page is the margin. Word processors give you control of the TOP, BOTTOM, LEFT and RIGHT margine.
Range - This is an area you specify in your document. Usually it is defined by cursor movements after giving another command. You can then manipulate the RANGE you have specified. Most word processors allow you to DELETE, COPY, or MOVE ranges. This is how you can rearrange you paragraphs after writing your story or article.
Soft Hyphen - This is a way to tell your word processor where it is OK to break a word in two if it is near the right margin. This is used to make your documents look better. It is usually used with long words to prevent too much white space at the end of a line or in the line if justification is used. The word will only be hyphenated if it is at the end of the line. Some word processors allow the opposite: telling the word processor not to split a phrase. This is used to keep two word terms or titles together for readablity.
Tabs - Tabs allow you to move in leaps and bounds around your document with single keypresses. They also allow you to line up you text in neat rows and columns. In most word processors a TAB must be defined then you can move the cursor to it with a press of the key that your word processor uses for the TAB key. All a tab is is a pre-defined location in your document. HORIZONTAL tabs occur in each row. VERTICAL tabs move you down the page. NUMERIC tabs line up a row of numbers at the decimal point. Pressing the TAB KEY usually takes you to the next defined TAB.

This list is by no means comprehensive. It is intended just as an overview. If you have never sat down and read your word processor's instructions, I suggest you do so! There are features lurking there you don't even know about.

The best way to do this is to read the docs once cover to cover away from the computer. Mark any sections you have questions about. Then sit down in front of the computer with the docs and fire up your word processor. Go thru the docs again trying EVERYTHING. If there are any tutorials in the manual do them.

Happy Word Processing!

## $A R C h O \quad n$

The first time I played this game, I thought "you got to be kidding me"? I can play chess. If I must brag, I am decent player. With this game you need these skills, plus whatever else you can muster. It is a great game. Full of action.

Archon is a depiction of the forces of good and evil, of light and darkness, in their timeless strugele to annihilate each other and conquer the five "power points". Both sides are equal in number, although the play pieces are not identical: their strength, however, is balanced. Play action is achieved through the joystick and fire button.

The game pieces are steeped in mythology, with such Gnostic charcters as phoenizes, djinnis, trolls, basilisks, dragons, manticores, goblins, banshees, unicorns, golems, valkyries, knights, archers, shape shifters, wizards and sorceresses abounding.

Music, sound effects, eraphics and play-action are all superb. There are several factors that contribute to winning a game. Among them are luminosity cycles, power points, skill in the combat arena, attack intervals, barriers and wounds. Additionally, there are several spells including teleports, healing, time-shifts, summoning elementalg, revival spells, imprison spells and others.

Read your manual and documentation.
A great game for medieval combat.
Get your stick, pick up your magic book, take alone your Ouifi board. Got ahead of myself, and clear the way. I am behind you all the way. Be brave. Let's go cast a SPELL.
fROM THE ROOM DOWI UMDER ------- Carm 9. Balles

## POMER PLUS TRICKS

Hey you crazy ACES of the skies. Lat $s$ talk about some tricks that may keep you alive a little longer when you are up there saving the world, ok?

Everyone likes flying the F-15 Strike Eagle. Weapons and speed controls are layed out on the keyboard. Pressing $B$ arms your $F-15$ for a boming run, $E$ activates electronic contermeasures to jam and decoy radar-homing missiles. F releases a flare, which can fool a heat-seeking missle. S arms your craft with a short range missle $(1 / 2$ to 10 miles distancel, and $M$ with mediumrange missile (10-40 miles). There is even a bail-out option if the mission goes badly. I have found that if you somehow note these functions where you can tell them in a hurry. It makes a judgement call quicker, and may save your life.

MIG ALLEY ACE, split screen that allows two pilots to play simultaneously, either against each other or in a cooperative effort against the computers.

You may add additional computer controlled wingmen to each squadron, up to a total of four planes. By teaming up with two computerized allies, for instance, and taking to the skies aftar a single enemy, you're almost assured easy victories in the early battles.

Lets get to the skies and kick some booty, Have fun and stay alive.
MAY THE PEOPLE OF COMMODORE LIVE FOR EVER.
Carr4 2. Balle4
ع

## 

## "DISTORTED GRAPHICSZ"

Printers. (such as the Epgon fx-80. CITIZENS, AND THE LATEST VERSION Panasonicb), may leave a one pixel horizontal line between graphic rows. IF ANNOYING, YOU MAY WISH TO ADJUST YOUR PRINT DRIVERS TO ELIMINATE THIS PHENOMENON. TWO SOURCES CLAIM THAT the new panabonic's problem stems FROM THE PLASTIC PAPER HOLD DOWN, WHICH DISTORTS PAPER FLOW. IF SO, THIS WOULD REOUIRE A MECHANICAL ADJUSTMENT TO THE PRINTER.



- LANK PIXEL SHOULO APPERR, UITHOUT
- TYPICAL GRAPMIC PATTEAN - THAT HAY OCEUR LITM A ENS, AND MEUER PRNESONPC. (F1G. E)

It was difficult to trace the reason FOR THE SKIPPED PIXELS ON OTHEF brands, but I think I have found the PROBLEM. TO DUPLICATE THIS ON A STAR PRINTER REOUIRED THAT SOME FONT Characters be re-defined as solid SOUARES IN BOTH ASCENOER AND DECENDER position. plus the vertical line SPACING WAS MANUALLY ADJUSTED TO 9LINES PER INCH TO SIMULATE GRAPHIC PRINTING. APPARENTLY, (IN THE TEXT MODE ONLY). THE PRINTER ADDS ONE acoitionnil fixel aftef each caraiage RETURN. PROBA日LY TO PROVIDE SPACING for the 9th-pin of the printhead that IS USED ONLY WHEN THE CHARACTER selected is designated as a decender. When the Star printer is actually in THE GRAPHICS MODE. THIS OISTORTION IS not present. Thus, it is concluded that Epion and Citizen printers also ERRONEOUSLY AOD THIS EXTRA PIXEL WHILE IN THE GRAPHICS MODE:

TO ELIMINATE THIS, THE PRINT DRIVER LINE SPACING GHOULD BE SET TO 21/216 inch instead of the usual g-lines per INCH SETTING OF 24/216". GRAPHIC ORIVERS IN PROGRAMS SUCH AS

FUnGraphics are easy to change, but OTHER PROGRAMS MAV REOUIRE THAT YOU MANUALLY ADJUST THE GRAPHICS SPACING OF YOUR PROGRAM EY ADOING:

OPEN4,4,4:PRINT\#4, CHRS (27) CHRS (51) CHR (21):CLOSE4:REM SET LINE SPACINGI

CHECK YOUR PRINTER MANUAL TO INSURE THAT THESE PRINTER CODES ARE CORRECT FOR YOUR MACHINEI

## "DEFINING STAR PRINT CHARACTERS"

TO RE-DEFINE THE FONT CHARACTERS IN the problem above. I had to go into the manuals and try to determine the EXACT METHOD TO DO SO. I FOUNO THE EXPLANATION TO BE DIFFERENT IN EACH of the $N X-1000$. NX-1000C, and the NX1020 manuals. Their samples were WRITTEN FOR MICROBOFT's BASIC AND DID NOT WORK PROPERLY WITH COMMODORE'S BASIC. I PONDERED THE INSTRUCTION:

DEFINE DRAFT 2OWNLOAD CHARACTERB $\langle 27\rangle\langle 38\rangle\langle 0\rangle\langle N \mid\rangle\langle N 2\rangle\langle M O\rangle\langle M 1\rangle \ldots\langle M \mid 1\rangle$

A EIT CONFUSING AND COMPLICATEO TO say the least. If you are interested. and own a star NX-10xX series printer WITH INTERNAL FONTS. I WILL FURNISH YOU WITH A SAMPLE PROGRAM ON HOW TO ACCOMPLISH THIS TASK. JUST INCLUDE YOUR PRINTER/INTERFACE TYPES. AND A RETURN POSTAGE STAMP, (ENVELOPE NOT NECESSARY), TO THE ADDRESS BELOW:

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JOHN C. BLEWITT 6162 PARISH PL ROCKFORD IL 61109-4128
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I have used this procedure to define special characters, such as the logo CHARACTER FOR COMMODORE AND THE COPYRIGHT SYMBOLS. IT HAS ALSO PROVED TO BE AN EXCELLENT METHOD TO PRINT POSTAL BARCODES ONTO ENVELOPES WITHOUT USING GRAPMICS AT ALL. DEFINING NLQ FONTS IS MORE COMPLICATED ANO THE DEFINITION PROCEDURES VARIES WITH EACH MODEL OF the STAR PRINTER.



[^0]:    for the people who has a computer and a disk drive. Plug the plug into the open male plug on the back of your disk drive. For the ones with (wo disk drives and a printer. Plug it into the other dpeh male plug on the back of your printer. Now for computer user with only the computer plug in the resel button into the six pin plug in the back of your computer. Either way, make sure your equipment is off before you do this. Now that the reset is plugged in turn on your equipment. Type something on the screen. Now reach over and push in the spst bullon, watch your screen come in a litle and back out again. The print that you just put on your screen should be gone and you should have a new screen. When you push this bulton you should of noticed that for a second or so your disk drive light on the right should of came on and your disk drive run a litte. You just resel your computer and disk drive.

    I hope you have enjoyed putting together your resel butlon. This will kept you from wearing out your on and off button on your computer. See you next time.
    Lamy J. Bailey

[^1]:    Happy Computing! Steven mutchell

