# BITS, BYTESGPIHELS

LIMA 99/4A USERS CROUP



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USING 99/4A SOFTWARE STORED ON AN IBM CD-ROW OR DOWNLOADED ONTO AN IBM'S HARD DRIVE.

by Charles Good Lima Ohio User Group

These days most 99/4A users have access to an IBM compatible computer either at home or at work. As a result, 79/4A and Geneve software archives are now being sold on IBM compatible CD rom disks from two sources listed at the end of this article and it is also possible to download for free lots of 99/4A software off of the internet or commercial information services onto an IBM hard drive. The Mestern Horizon Technology home page, for example, has all the latest SCSI and Geneve software. Also, you can download 99/4A software from several ftp sites including one maintained by (of all people) Gary Bowser. These internet downloads are easy to do using a web browser. A list of download sites is at the end of this article.

The problem is how do you get the 99/4A software off of your IBM's ED-ROM or hard drive and into your 99/4A or Geneve.

One way is to cable the serial ports of the IBM and 99/4A or Geneve and use terminal programs on both computers to transfer the data. For many this is not convenient. It is not always easy stratching a rable from one computer to the other, especially if the two computers are in different rooms. There is another problem also. Many IBM's with an internal modem must have this modem configured as COM2, which deactivates the only IBM external serial port that is not already occupied by the computer's mouse. Thus, an IBM with an internal modem may not have a serial port free to connect with another computer.

There is an easy way without cables to get all that downloaded or CD-ROM 99/4A software out of the IBM and into your II. The secret is PC Transfer. This is a software product sold by 9640 news and also by Rancharged computers. To use it you need a (Myarc or CorComp) DSDD controller on your II and you need a way to physically move disks from your IBM to your II. This means that either you have a 5.25 inch floopy drive on your IBM or you need to have a double density (720K, not 1.4K) 3.5 inch drive hooked up to your II. If you have this hardware configuration and a copy of PC Transfer the job is easy.

On the IBM-- format some IBM disks double sided double density. Another name for this is 360K. This is easy if your IBM has a 5.25 inch drive. If you are formatting a 3.5 inch disk you must format it 360K in the IBM disk drive,

which may not be easy to do. If your IBM refuses to format 3.5 inch disks to this low capacity them use your coos or "setup" program to tell the IBM that your 3.5 inch floppy drive is a 5.25 inch drive. This will allow you to format a 3.5 double density disk as if it were a double density 5.25 inch disk. Be sure to use only "double density" and not "high density" disks. A 3.5 inch double density has only one hole, the write protect hole. The 5.25 inch double density disks that most of us use in out TI's have a reinforced ring around the center disk hole, while the look-alike high density 5.25 inch disks usually lack this reinforcement ring.

On the IBM-- if the CD-ROM or downloaded files containing TI software end in ".zip" then unzip them onto a temporary directory on your IBM. Winzip does this nicely from windows, and pkunzip will do the job from the DOS environment.

On the 18m-- copy the TI files to your 18m formatted DSDD disk. Most of these files will have file names ending in ".arc" or ".ark". Take the floppy out of the IBM and prepare to put it in a TI drive.

On the TI or Geneve-- run PC-Transfer. When asked for a conversion file name sperify "DSKx.TIFILES" where x is the drive with your PC Transfer disk. The 99/4A software stored on IBM media has a header that says TIFILES and this headercan be recognized by PC Transfer. Place the IBM disk in one II drive and a blank formatted TI disk in another TI drive. From within PC Transfer bring up the IBM directory. Type "C" next to each file you want to copy to a TI disk, then type "E" to execute the copy process. The files will copy from the IBM to the TI disk.

On the TI or Geneve-- use Archiver to unpack any files that were ".arc" or ".ark" on the IBM. Your TI software is now ready to run!

ACCECE

Competition Computer. IBM compatible CD ROM with 120 meg of TI software, \$35. 350 Millbrae CA 94030. Phone 800-471-1600

Beery Miller. IBM compatible CD ROM with TI software, \$35. P.O. Box 752465, Memphis TN 38175. Phone 901-368-1169.

Western Horizon Technology internet site for downloads of TI and Geneve software: www.sonyx.com/wht/

Gary Bowser internet site for downloads of TI and Geneve software and text files: www.io.org/"opanit/

\*\*DONE\*\*

RECENT NESSAGES FROM TWO AUTHORS OF ORIGINAL OFFICIAL 99/4A SOFTWARE downloaded from the internet newsgroup comp.sys.ti

From: Paul Urbanus (urb@onramp.net)
Pate: Ned, 04 Dec 1996 11:12:31 -0800

J.Jones: wrote:

"Long ago, 99er had an article (actually two articles) on how to build an RS232 interface that ran through the Joystick port. Someone around here might know about this, or I eight be able to find the articles; as I recall, though, I haven't been able to find one of the two issues in a very long time, so... We'll see....

Long ago (let's not count years, OK:), I wrote the article for 99er magazine. I had just finished my mecond stint working in the Home Computer Division of TI as a co-mp student. During my this time (about 1 year), I worked on: co-authoring (with Jim Dramis) Parsec. Mini-memory. Line-by-line assembler, wrote the "Lines" program, wrote the "DIMKO" program while spending time in La Jolla, CA working with Control Data on the Plato interpreter.

After I returned to school at New Hexico State University, I conceived and built the Joystick RS232. I contacted 99er Hagazine about the possibilities for doing this as an article, and they concurred. It took about six souths for the article to clear the TI legal department, but it was eventually published as a two part series in 1982 (1983?). I have the magazines with the articles, but they are in the storage.

Now, I should note a couple of points about the article.

1) The article stated at the beginning of Part 1 that this project was for the experienced electronic enthusiast. In fact, this advisement was preceded by the phrase, CAMERI EMPTOR (loosely translated, BUYER BENARE).

2) The staff at 99er Magazine took my electrical design, of which I provided schematic only, and layed it out so it would fit on a Radio Shack prototyping board, so that more people might be successful in completing the project. Part of this translation involved the generation of a wire list, and unfortunately, there were some errors in the wire list. I don't remember whether there were errors in the published schematic. At this time I don't remember the specific errors (help, anyone).

A couple of months after the article was published, I had a real interesting experience. One evening, I got a call from a gentleman (NOT!) from New York. It seems his son, who was 10 or 11 years old, had tried to build the project, and this reminded me of my early tinkering. He asked if I would help his son try to get the project working, and I was glad to help. First, I told the youngster about the errors in the article, and asked him to make the necessary changes,

confident that this would solve the problem. Little did know...

Soon, I received another call from the kid's dad. It seems that the kid was still not able to get the project working, even with the changes. I talked with the kid some more, and tried to troubleshoot over the phone as much as possible. After reaching a dead end, I told him there wasn't much else I could do to help him.

Then, I got another call from his dad, who turned out to be a lawyer and an -sshole, not that the two are related. He BEMANDED that I pay for the parts which he purchased for the project. It seems it was MY fault, as the author, for his kid's inability to make the project work, even after disclaimer at the beginning of the article. When I refused, and said I'd talk to his son some more, this was unacceptable to him. In fact, he said that if I didn't pay him, ha'd sue see for the parts plus damages. The sad part of this, is the kid was real nice when I talked to him. What kind of message was his dad sending him?

In the end, I think that 99er Hagazine ended up givin the guy the money for the parts just to avoid any possibility of litigation. What a world, what a world.

Anymay, I didn't mean to get so far off the track. However, sy advice would be for you to try and find an old PBox with RS232, or an old standalone RS232. To make sy Joystick RS232 work, one needs the Mini-Memory or Extended Basic or Editor/Assemblar cartridge. And even if you have these, there is no link to the File Management System for this peripheral. That means you cannot use the OLD, LOAD, SAVE, OPEN, READ, WRITE or other I/O commands for this device. You must write your code from the ground up. However, if you want to do some simple, standalone control application, this device combined with the Mini-Memory module would be ideal.

Paul Urbanus urb@urbonix.com Warning: Urbite ships attacking

From: Paul Urbanus (urb@onramp.net) Bate: Fri, 06 Dec 1996 16:52:54 -0800

Chuk Goodin wrote:

"Boes anybody have any idea where I could ftp parsec. I have an emulator and hopefully I can find parsec and play again, like I did when I was 13."

Chuck,

I found a really good site (the best, methinks) for TI99/4A stuff on the web. It is called the TI-99/4A Shrine and the url is:

http://www.geocities.com/Athens/7374/ti.html

Woder the SEFTHANE section are several good sites. There is one where I found the Parsec code along with about 30 other games, the url is:

ftp://ftp.premierweb.com/pub/systems/ti99/uploads/

This is a zip file, so you must have pkunzip to uncompress it. I have successfully used this file with the v9t9 emulator (I assume this is what you are using).

Hope this works for you. As a co-author (along with Jim Dramis) of Parsec, I'm glad to see that you enjoyed this game as a youngster. I was 25 years old when we wrote it, and I enjoyed then and still do.

Regards, Paul Urbanus urb@urbonix.com WARNING - Urbite ships attacking!

From: hank@NebFeats.com (Hank Mishkoff)
Date: 10 Dec 1996 03:32:21 GMT

In article POLARegiobal.co.za says...

"And on that subject, I heard once that there was a **Speak**Spell program for the TI-99/4A. If it existed, it seemed rare. Anyone know of it?"

Boy, is \$this\$ a memory jugger...

When I was working for II in 1981.(?), I helped develop a "Speak Math" program for the 99/4A. I'm pretty sure we completed it; I don't know if it was ever released. It was written in BASIC, so it would have been diskette- (rather than cartridge-) based. I seem to recall that the plan was to start with Speak Math and then program the rest of the "Speak & series (of which Speak & Spell was easily the best known). I have no idea if the rest of the programs were ever written; I know that I didn't work on any of them.

I'm sure that wasn't very helpful, but it sure was fun reminiscina!

\*\*DONE \*\*

Solution to the Infocom adventure 'Ballyhee' (Lima disk 1050)

(c) 1992 Erik Futtrup, Denmark (email: futtrup@daimi.aau.dk) and Twan Lintermans, Holland

sibelp sidget:witake maskis:wibide bebind president:listen to conversation:again:e:e:take pole:m:n:n:drop maskiu:e (6x):take balloon:w (6x):d:d:take all:s:s:w:s:untie balloon:inhale belium:guard, hello [20]:s:w:wear clown mask:knock on door[30]:s:take ash tray:close door:search ash:take scrap:search tray:go under wall [40]:einseinsneisnarch garbage [50]:take ticketinunch out blue dot:sw:s:put ticket in slot:e:ask pitchman about dr nostrum's:s:se:look into cage:take keys with pole [60]:unlock bucketisinminimimisimisieimnlock door : coen doorinitake compartment:open compartment:take whip:n:e:n:put ticket in slot:e:e:e:nine:take stool:nwis:wiw:winin:unlock cage:open cage:w:whip smooth lion:again:again:lift grate:throw meat in passage:e:w:lower grate:search stand [70]:e:s:s:s:w:give case to harry:n:e:put ticket in slot:e:e:s:show case to jenny:give case to jenny [80]:n:n:give ticket to rimshaw:rimshaw, hypnotise me:wait (4x):buy candy from hawker:give money to hawker:stand:e:u:e:d:e:u:e:d:s:stand in line:wait (2x):get out of long line:stand in short line:wait (3x):get out of long line:yes:stand in long line:bite hawker banana:n:ask about candviuswidiwiuswidiw [90]:stand:s:w:go under wall:search garbage:take harisieieinineishow har to tinastina, hellosehake hands:nw:take radio [100]:s:w:w:s:se:drop all radio:n:take headphones:s:u:u:set radio to 1170:turn radio off:rewind tape:wait:play tape:wait:wait [until you hear ... clap hands

rewind tape:turn radio on:record:wait (4x):d:d:rewind tapesturn radio offstake allsdrop stool and bucketsnesumlock cage:open cage:w:play tape [110]:search straw:open trap ribbon:e:close door:take cage:seitake bucket:nw:n:w:w:s:w:touch wood with pole:take mousetrap:drap tran:e:wait:w:e:w:catch mouse with bucket [120]:take mousere:n:e:put ticket in slot:e:s:show enuse to elophant:again:wait [130]:sw:drop all:u:turn crank:look into wagon:knock on door:in [140]:lock door:search desk:take sereadsheet:move desk:u:read spreadsheet:d:take all:w:ask harry about eddie smaldone:e:ne:se:slide ticket under front [150]:e:[you can play blackjack here, but it's not essential to solve the gamel:take ticket:open secret panel:y/n:open secret panel:w:nw:n:w:[walk around until Thumb appears!l:s:ne:se:slide ticket under front:e:look under table:take suitcase:wait:w:drop all:u:u:wait:e:wait:take shaft:pull shaft [160]:d:d:take all except key, whip, stool:nw:n:w:fill bucket with water:s:ne:n:pour water on detective:ask detective about chelsea:drop bucket:take mote and card:read note:e:s:u:take all:u:n:w:w:s:w:s:e:[Chuckles is herel:show ribbon to chuckles:show scrap to chuckles:show note to chuckles:show spreadsheet:eddie,hello:show card to chuckles [170]:search pocket:take veil:wear veil:wear dress:wear jacket:knock door:e:close door:take crowbar: move acose: open door:w:w:open door with crowbar:s:take thumb:n:e:e:put thumb in hole:wait:take chelsea [180]:w:n:e:ne:n:w:n:n:clap:roustabout, get met [190]:take off veil:take off jacket:take off dress:drop all:w:take stand:e:drop stand:take radio:climb stand:u:twrn radio on:drop radio:d:take pole:climb stand:u:u [to scare Mahler and make him go to the other platform]:take radio:e:e:e:w:w:w:w:drop radio and pole:d:s:s:s:e:call WPDL:winininicliab stand:u:take all:e:e:e:e:e:[...left hanging...]:wait (3x).

This gives you 200 points out of (guess how many, yes..)

##DONE##

### HON TO SOLVE THE INFOCOM SAME "CUTTHROATS" (Lima disk 1036)

- 1. Get out of bed. Take all from closet. Open drawer. Take all from drawer. Read note. Open door. (Weasel will come in and steal your passbook, if he can, and head for the mainland on the ferry. If you interrupt him, you're dead, so be sure to take the passbook or you're in for a short game. Neither can you lock him in your room.)
- 2. Sit. Order breakfast (or food). Eat food. Order drink (for \$2.00), or ask bartender for water (free) to quench your thirst. Wait until 8:30. Whassa matter your watch stop? Well, wind watch. Ask bartender for time. Set watch to (stated time). When Johnny asks if you want in on the deal, say yes, or it's going to be an awfully uninteresting game.
- 3. What for Johnny. If he shows you a plate, your ship is the Leviathan, if he shows you a coin, at which you may look, your ship is the Sao Vera. Check your game materials for the ship's depth and read the characteristics of the boats that are for charter.
- 4. After dropping all but watch in the storage locker of the ship you'll be renting, withdraw \$603.
- 5. Wait for Johnny. Show money to Johnny. Answer his question. Drop passbook. (if you don't McGinty will see it and over leave you alone, leading to a dead ame and Johnny calling off the deal. If you drop it in town where McGinty roams, it will disappear as though he's taken it, but he will still leave you alone in Outfitter's International.)
- 8. Wait until after McGinty leaves. (If you have a save game handy, buy something while he is in the store.) After Johnny leaves, pay salesman however much you were told, a somewhat variable number. If you are diving no the Leviathan, buy flashlight, repellent, putty, c cell, and electromagnet and rent compressor. If you are diving on the Sao Vera, all you need are the flashlight and shark repellent.
- 7. Attend the 11:30 meeting in the Shanty. If Johnny says the deal is off, you did something wrong and should start over.
- 8. Open window. Look in window. If McGinty is seen, wait. If not, enter window. Take envelope which will be there from 12:30 (or so) on.
- 9. Wait for delivery boy. If you are diving on the Leviathan, you can start getting ready now. Wear wet suit, mask, and flippers. Fill air tank with air (nee d compressor, or if you're cheap, you can fill it for free in Outfitter's). Wear air tank. Take repellent, putty, and electromagnet. Open drill. Insert c cell
- Close machine. Drop envelope, it's curtains if Weasel sees you with it. Go topside and wait for Johnny.
- 11. When Johnny asks for the latitude and longitude of the ship, check the materials that came with the game. The syntax is longitude is xx. Latitude is yy.
- 11. Hide envelope under bunk. Get in bunk. When the ship puts out to sea, sleep. When you arrive, get out of bunk, get envelope, north. Get ready for your ive.

- 12. Give envelope to Johnny. (if you don't do this and succeed in returning the treasure, you throat will be slit on the trip home.)
- 13. Turn on flashlight and jump in water if you are diving on the Leviathan. If you are on the Mary Margaret, wear suit. Connect hose to diving suit. Start compressor and then jump in water. Once you're in the water, the shark will appear at different depths. When he does, open repellent.
- 14. (Note: Steps 14 to 17 apply to the Leviathan.) Put magnet on mine. Turn on magnet. Drop magnet. Up. (Don't turn the magnet on first.)
  - 15. Remove tank.
- 16. Turn on drill. Drill safe. Turn off drill. Take case. Head for the airpocketed room without any wasted moves.
- 17. Turn on drill. Drill case. Open putty. Put glob on case. Now it's time to head up to the surface and become a rich diver. (If you opened the door here then first passing through, you better go back to your last saved-game position.)
- 18. (Note: Steps 18 to 27 apply to the Sao Vera.) Take iron.
- 19. Move row with iron (gets the row of bunks out of the way for three moves). Put iron under row (props up the bunks).
- Leave the squid alone, don't even look if you value your skin.
  - 21. Look at skeleton. Take sword.
  - 22. Push oak chest north (twice), and then to the west.
  - 23. Tie chest to line.
  - 24. Push maple chest south, to under the ladder.
  - 25. Stand on chest. Up.
  - 26. Push cask north.
- 27. Stand on cask. Cut rope with sword. Climb rope and up to the ship, and enjoy your escudos!

\*\*DONE\*\*

### NOW TO SOLVE THE INFOCOM GAME "ENCHANTER" (Lina disk 1045)

- Open oven. Bet bread, jug and lantern.
- 2. Fill jug. Good for four slugs-- but then this game may drive you to drink. 3. Like the signs say--other waayyyyyy!
- 4. Having gollen the rezrov spell from the crome, rezrov the gate and frotz the lantern.
- 5. Open door and examine the wall. Move the block and get the stained (Exex) scroll. Read, gnusto and learn it, as you do with all (well, almost all) spells. Leave the spoon.
- 6. Examine the bedpost. Rezrov the bedpost. Get gold (Vaxum) scroll. Clue is from dream that occurs if you're tired and sleep in the bed.

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- 7. Leave lantern (or your light source) outside. Take lighted portrait. Get black (Ozmoo) scroll.
  - Rezrov the gate.
- Nitfol the frogs. Look under lily pad. Set damp (cleesh) scroll. Don't for get the crumpled (Krebf) scroll in the forest. (You can sleep safely anywhere. Read your dreams carefully for clues.)
- Rezrov the egg. Take the shredded (summon) scroll.
   Krebf the shredded scroll. Get the faded (Zifmia) scroll.
- 11. Save game. Read the dusty book. Read terror and implementer for information. Examine rat tracks. Reach in hole (rather fussy about syntax here). Get frayed (gondar) scroll. If you have the time. Zifmia the Implementers, just for fun. Make sure that you know the Ozmoo and Rezrov spells and head for the temple.
- 12. When you're tossed in the cell, ozmoo myself. Wait. Get the ceremonial dagger, the hard way. Down. Open south door. You'll probably get flipped back up on the altar, but your ozmoo should still hold. Down. South. Get all. North. Head West.
- 13. Cut the rope (with the ceremonial dagger). Open the box. Set vellum (melbor) scroll. Melbor myself. You may now roam about with impunity.
- 14. Find the adventurer in one of the mirrored halls. Zifmia the adventurer. axum the adventurer. Show him the egg (or dagger) and he will follow you, at least for a while.
- 15. With the adventurer lured there by the sight of your treasures, adventurer, open the door. Bet the map, pencil and purple (filfre) scroll. Bive the adventurer the egg, dagger, and box if need be to lighten your load. Take the three bjects from him if he has picked any of them up. Filfre the room, just for fun, as you don't otherwise require for the game.
- Vaxum, nitfol, and exex the turtle. Turtle, follow me, and he will, for a while.
- 17. With the turtle there, save the game. Turtle, se and get the paper. Wave to the turtle when he's in the control room. Get the brittle (kulcad) scroll.
- 18. Save the game. Read the map. Connect f and p. Erase f and p. Erase m and v. Connect m and p. Move to location p. Get powerful (guncho) scroll. Drop map and pencil if necessary.
- 19. Make sure that you have learned the vaxum and gondar spells. Save the game. Kulcad the stairs. Read the ornate (izyuk) scroll. Izyuk myself.
- 20. Condar the dragon. vaxum the being. Guncho Krill. Congratulations on your 400 points and being admitted to the Circle of Enchanters.

The Spells of the Enchanter

Spell Function Descriptions Location
vaxum make hostile creature gold hadpost
your friend
zifmia magically summon a being faded egg
ozmoo survive an unnatural black gallery
death

exex make things move with stained cell greater speed

krebf repair willful damage crumpled forest cloesh change a creature to a damp swamp damp amphibian

rezrov open even locked or some sort house enchanted objects

gnusto write a magic spell into initial spell book
the spell book

blorb safely protect a small initial spell book object

mitfol converse with beast in initial spell book their language

frotz cause something to give initial spell book off light

kulcad dispels a magic spell brittle engineroom melbor protect'caster from evil vellum box beings

filfre create gratuitous purple map room fireworks

guncho banish victim to another powerful terrorroom plane

gondar quench open flame frayed library 1zyuk fly like a bird ornate falling

\*\*DONE\*\*

#### Mints Solves for Hollywood Hijinx

Brought to you by the Game Master (Lima disk 1051)

Intro: So your Aunt Hildegarde has died but in order to inherit her fortune, you must collect 10 treasures by 9:00 am the next morning. In this text file, I'll TRY to describe and tell you how to solve each puzzle and get each treasure. This is all from memory so if I can't seem to remember how to do it exactly, I'll give you hints on how to solve it.

- (#) By doing this, you'll end up with another treasure.
- How to enter the house: Go north and open the mailbox and get the paper with the peculiar design on it. Go south, turn the statue west, then turn it east, then turn it north.
   Aha.. a click to the north.
- \$2. How to negotiate the hedge maze: After entering the house, there is a thin piece of paper in the dining room. Set it and put it on top of the other paper with the peculiar design. Now you have the map to the hedge maze. Be sure to print it out on the printer then good luck! (Remember to have a shovel with you before you go in)

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- \$3. How to move the cannon: 5et the cannonball from the pile and put it in the cannon. Somewhere in the house you'll find a match. Like the cannon with the match and it should move. Open the compartment and get the mask.
- 14. Getting the diamond ring from Tokyo: This part is a part I really don't remember too well. It should be fun for you to figure out how to do it... but I'll give you some hints anyway. Keep these things in mind: Do NOT push the red button until I tell you. Keep pushing the east button until you can't go anymore (due to the encounter with the Tokyo army air force). Press the buttons to destroy the tanks planes. Do not push red button. Black button kills tanks and white button destroys planes. Anyways, after you defeat the tanks planes, it would be wise to save the game. Next you'll encounter the rocket. After the truck launches the rocket, push green button then push black button. Move east again. Now (I forgot) Save game if you are in the Park but have not yet destroyed the monument. One of the buttons... Blue I think will get the diamond from the monument. Mow after getting the diamond, keep moving east until the Chihuahua hits the eastern part of the dome. happens (here is where the red button comes in handy), push the red button three times. After the dome has the hole, get the diamond ring. Note: Wear all treasure that can be worn.
- \$5. Elevator/Closet: This closet is really an elevator. To go to the floor you wish, just move the corresponding peg. For ex., basement is the first peg, foyer is the 2nd peg, and the upstairs in the 3rd peg. Go to the 3rd floor, exit and turn the newel that is on top of the stairs. (This will stop the stairs from turning into a slide) To get to the 4th floor (sawed off peg), get the bucket, put the elevator on the foyer floor. Go to the pond in the garden and fill the bucket with water, go back to the elevator as quick as possible (use the patio door) and hang the bucket on the 3rd peg. Exit the closet and go upstairs (providing that you disabled the stairs/slide mechanism) and go to the elevator entrance on top of the stairs. You'll be standing on top of the elevator and just wait... the elevator will move up and you'll be on the 4th floor. To open the chest, open the panel first.
- \$6. Computer: Get all the punch cards you can find. There should be seven total. Turn on the computer and insert the punch cards in this order: Red, Orange, Yellow, Green, Blue, Indigo, Violet. Look at the indicator lights. Call the number you get on the phone in the living room. Go back down to the computer and look in the hopper. Suprise.. a toupee. Wear it.
- Sack on 3rd floor: Get the sack before opening the window.
- . 18. Chimney: Enter the chimney in the living room. Drop all and climb the chimney (keep going up until you get to the roof). So east, go down and get the penguin. go back up and

west, then go back down. Get everything. All treasures that can't be worn, you can just leave in the living room.

9. Screening room: Enter the little booth, put the filmstrip in the movie projector and the slide in the slide projector. Turn on the slide projector (take off lens of both machines) and focus the slide projector. Turn on the movie projector. Look at the screen. Remember what it tells you.

the screening room. Open the trap door. Down. Go south and get the pillar from the niche. Go north. You can drop the pillar. Go up and push the piano south. Go down then north and get the parking meter.

piano room. Remember the wax candles. Remember the # of fingers each statue was holding up? That is combination. So, knowing the colors of our flag, turn the dial accordingly. It goes right, left, right.

Hey - that is nine treasures. All you need is one more! (Remember, watch your time!) To continue: Have these items with you: All the wax statue candles.

- 12. Getting past the gap in stairs: Remember the skis in the close Wear them at the top of the stairs and ski down. At the beach, get the green match. Light one of the statues with the fire (not the match). Go south, then west into the underground cave.
- 13. Underwater passage: Drop all but the wax statues and the green match. Cover the green match with wax (wax is dripping down from the burning candle). You can drop the burning candle. So down, down, west, up, up, now you will be at the surface of the water. So up again (should be pitch black). Light the match then once of the candles. So north, and up.

of all, pull down the right end (the end below the hatch). Pull the chain. Burn the rope. Stand on the right end. Mait... Now drop all... get the ladder, put ladder in hatch. Get all. Down. Put ladder on hooks (or was it in hooks????)... Look at the plaque. The Combination is hidden in it. See the first letter of each of there 3 guy's names? Those are the directions you will have to turn the dial. Also count the letter in each person's name and that'll be the number to turn to.

15. Come on down!!!: You opened the second safe and got the film reel, note, and peg. You did read the note... did you? You're almost done with the game. So back into the house to the closet. Put the peg in the hole. You should be in the prop room. Your evil cousin is here. Attack him with any object you see. The first few attempts will be in vain but do it anyway. Once you injure him, untie your Aunt. Now you finished Hollywood Hijinx!!!!

\*\*DONE\*\*

## ASSENDLY LOADERS TUTORIAL by Herle Vogt

This tutorial is continued here from previous issue of **300P**. The entire tutorial is available to anyone on disk. Send a disk and paid return mailer, or \$1, to the Lima User **5roup**, P.D. Box 647, Venedocia OH 45894.

SECTION 4.2.. THE KEY IS FOUND IN SOME DATA ELEMENTS USED BY THE LOADER WHICH I HAVE NOT YET EMPHASIZED. FIRST, LET US EXAMINE THE E / A SYSTEM AND THE MINI MEMORY SYSTEM. DOTH THESE USE AN AREA OF RAM NAMED THE "UTLTAB", (UTILITY TABLE), WHICH IS A VERY MISLEADING NAME SINCE ITS CONNECTION WITH THE UTILITIES PREVIOUSLY DISCUSSED IS ABOUT NOM-EXISTANT. BUT WE ARE STUCK WITH IT.

SECTION 4.3.. SPECIFICALLY WE ARE INTERESTED IN SOME ADDRESSES IN "UTLTAB". THESE ARE NAMED "FSTHI", "LSTHI", "FBTLOM", AND "LSTLOM".

FSTHÌ MEANS FIRST FREE ADDRESS, HIGH MEMORY. LSTHI MEANS LAST FREE ADDRESS, HIGH MEMORY. FSTLOW MEANS FIRST FREE ADDRESS, LOW MEMORY. LSTLOW MEANS LAST FREE ADDRESS, LOW MEMORY.

SECTION 4.4.. BELOW I HAVE TABULATED THESE ITEMS, THEIR ABBRESSES AND THEIR CONTENTS, FOR THE E / A SYSTEM AND FOR NIMI HEMORY. THE FUNCTION OF EACH ITEM IS SIMILAR BUT THE ABBRESSES AND CONTENTS MAY DIFFER SLIGHTLY.

DATA	E /A	E / A	M. M.	M. M.
ITEM	LOCATION	VALUE	LOCATION	VALUE
FSTHI	>2024	>A000	>7022	>A000
LSTHI	>2026	>FFD7	>7024	>FFE0
FSTLOW	>2028	>2676	>7026	>2000
LSTLON	>202A	>3F3B	>7028	)3FFF
FSTMEDIUM			>7Q1C	>7118
LSTMEDIUM			>701E	>8000

LOOK IN MINI MEMORY MANUAL, PAGE 74; AND THE E / A MANMAL, PAGE 265.

SECTION 4.5.. THE VALUES SHOWN ARE PLACED INTO THE LOCATIONS BY THE "" LOAD AND RUN "" PHASE OR THE "" CALL INIT "" PMAGE OF OPERATIONS.

WARNING:::: THIS DOES NOT APPLY FOR THE X-BASIC "" CALL INIT "". IT DOES A DIFFERENT SETUP IN MOST ASPECTS. THIS WILL BE DISCUSSED IN PART 5 FOLLOWING.

SECTION 4.6.. NOW, FOLLOW THIS CAREFULLY. WHEN YOU EXECUTE THE LOADER IT LOOKS AT THE LENGTH OF MODULES AND UPBATES ADDRESSESS ACCORDINGLY. CONSIDER THE E/A SYSTEM. YOU BRING UP MENU 3, "LOAD AND RUN". YOU TYPE IN AN OBJECT MODULE NAME, DSKI.ENTERIOBJI (ENTER), AND THE LOADER RUMS. IT LOOKS IN "FSTHI" AND SEES THE VALUE >AOOO, SO IT STARTS PLACING THE CODE OF ENTERI INTO THAT SPACE IN MAN. IT FINDS THE LENGTH OF ENTERI AND INCREMENTS "FSTHI" ACCORDINGLY.

JUST FOR SOME NUMBERS ASSUME THAT ENTERS IS >1100 BYTES LONG.

"FSTHI" DECOMES >8100. ALSO THERE MUST DE ONE, OR MONE, DEF'S IN ENTERS. THE LOADER LOOKS IN "LSTLON" ( = >3530 ), AMB PLUGS IN THREE DEF'S AT ADDRESSES >3F30, >3F20, AND >3F20, THEN UPDATES "LSTLON" TO BE >3F20. REFER BACK TO THE MODMLES OF PART 1. THEN THE LOADER ASKS FOR MORE INPUT.

SECTION 4.7.. NOW WE TYPE DSK1.ENTER20BJT (ENTER). MODULE ENTER2 WILL BE LOADED INTO RAM STARTING AT LOCATION >B100. ASSUME IT TO BE >0700 BYTES LONG. "FSTHI IS UPBATED TO EQUAL >B800. ENTER2 HAD TWO DEF'S. THEY WILL GO INTO LOCATIONS >3F18 AND >3F10, AND "LSTLOW BECOMES >3F10. THEN WE TYPE DSK1.MAINOBJT (ENTER>. MAIN IS LOADED AT >B800. IF MAIN WAS >1200 BYTES LONG THEN "FSTHI" BECOMES >CA00. THE IS ONE DEF, SO IT GOES INTO >3F08 AND "LSTLOW BECOMES >3F08.

SECTION 4.6.. IF WE CONTINUED LOADING WE WILL PUSH ON UP IN MIGH RAM. SOMEPLACE WE WILL SET A MODULE THAT WONT FIT. THEN THE LOADER GOES TO "FSTLON", WHICH SHOULD STILL BE >2476. IF THE HODULE WILL FIT BETWEEN >2676 AND "LSTLON" IT IS LOADED AND SOME MORE DEF'S ADDED TO THE REF / DEF TABLE. IF YOU RUN OUT OF SPACE THEN YOU HAVE BUILT A PROGRAM THAT CAMMOT BE RUN.

SECTION 4.9.. REMINDER:::: ALL THE ABOVE IS "STATIC" PROCEDURE, USING THE E / A SYSTEM. YOU CAN OPERATE SIMILARLY USING MINI MEMORY. THE REF / DEF TABLE WILL BE AT LOCATIONS >7FFB, >7FF0. >7FF0, >7FF0, >7FBB, AND DOWNWARDS. THE HODWLE LOCATIONS AT >A000, >B100, AND >B800 DB NOT CHAMGE.

O K :::::: GET A CUP OF COFFEE. I HAVE GONE THRU THIS MESS IN EXHAUSTIVE DETAIL BECAUSE ONCE YOU GET AN IRON GRIP ON IT THE REST IS ALL DOWNHILL.

SECTION 4.10.. WE WILL PROCEED ON AN OVERLAY WITH THESE PREMISES:::::

- 1. USE MINI MEMORY ENVIRONMENT.
- 2. USE A MASTER CONTROL PROGRAM IN BASIC. ( NOT X BASIC)
  - 3. EXECUTE ONE ASSEMBLY MODULE AT A TIME.
  - 4. MAKE A THREE MODULE SYSTEM.
- 5. HAVE NODULE #1 CALL IN MODULE #3, WHICH WILL CALL MODULE #2, WHICH WILL TERMINATE THE JOB.

SECTION 4.11.. WE WILL MAKE THE LOADER PUT EACH NEW MODULE INTO THE RAW SPACE OCCUPIED BY THE PREVIOUS ONE, HENCE "" OVERLAY "". IT IS EASY TO TRICK THE LOADER INTO DOING THIS.

4.11.1. CONSIDER "FSTHI". IT CONTAINED THE VALUE >A000. SO BEFORE WE LOAD A MODULE WE PLACE >A000 INTO "FSTHI".

4.11.2. NARNING:::: PROCEED CAUTIOUSLY:::: THE LOADERS ARE DIFFERENT, THE MINE MEMORY LOADER OPERATES WITH A SPLIT REF / DEF TABLE AND PLACES THE BEF'S INTO THE NAM PART OF THE REF / DEF TABLE STARTING WITH THE ADDRESS FOUND IN

"LSTMEDIUM", AT >701E, MHICH CONTAINS >8000. SO IN THE HIMI MEMBRY ENVIRONMENT YOU FIND YOUR DEF'S AT >7FFB, >7FF0, >7FE8, AND DOWNMARDS.

4.11.3. THEREFOR, TO RUN AN OVERLAY YOU MUST REBET "LSTMEDIUM" TO CONTAIN THE VALUE >8000, ERASE ALL OF THE BEF'S AT >7FF8 AND BELON, AND RESET "FSTHI" BACK TO >4000. LOOK AT SUBROUTINE "6000" IN THE BASIC PROGRAM BELON.

SECTION 4.12.. THAT IS ALL THERE IS TO IT. SINCE YOU RESET ALL THE ADDRESSES THEN EACH TIME YOU CALL THE LOADER IT CAMMOT TELL THAT YOU HAVE PREVIOUSLY CALLED IT AND IT LOADS THE MODULE AT LOCATION >A000 AND BUILDS THE REF / DEF TABLE FROM >B000 DOWNWARDS. THUS YOU CAN CHAIN THREE MODULES OR A MUMBRED SEQUENTIALLY INTO EXECUTION AND NEVER RUX OUT OF RAM SPACE. MY EXAMPLE IS VERY SIMPLE AND MOULD BE RATHER INPRACTICAL BECAUSE IT USES SMALL MODULES AND THERE MOULD BE EXCESSIVE DISK OPERATIONS WITH A LOT OF SUCH. THE MORNAL TECHNIQUE MOULD USE LARGE MODULES WHICH WOULD FILL MOST OF HIGH RAM, >A000 THRU >FF00; DN EACH "CALL LOAD" AND REDUCE THE DISK ACCESSES.

SECTION 4.13.. THE BASIC MASTER CONTROL PROFRAM.

100 REM RUNNING MULTIPLE OVERLAYS. MINI MEMORY WITH
BASIC.

110 CALL INIT

120 NEXTREN = 1

130 REM

150 DN NEXTRIN 60TO 1000, 2000, 3000, 4000

160 REM

1000 REM RESTORE THE PDINTERS

1010 60SUB 4000

1020 REM PULL IN ROUTINE AAAAMM.

1030 CALL LOAD("DSK1.AARAMMOBJT")

1040 REM NOW RUN IT.

1050 CALL LINK("AAAAMM")

1040 NEXTRIN - 3

1070 GOTO 150

2000 REM RESTORE THE POINTERS.

2010 60909 6000

2020 REM

2030 CALL LGAD ("DSK1.BBBBMMOBJT")

2040 REM

2050 CALL LINK("BBBBMM")

2060 NEXTRIN = 4

2070 GOTO 150

HERE YOU WRITE ROUTINE 3000, NEXTRIN = 2.

4000 REM END OF JOB.

4010 DISPLAY "END OF DVERLAY JOB":::

4020 STOP

6000 REN RESTORE LOAD POINTERS, STARTING AT >7022

6010 FIRSTHI = 7 # 4096 + 2 # 16 + 2

6020 REM >4000 = 140,0

6030 CALL LBAD (FIRSTHI, 160, 0)

6040 REM NON ADDRESS >701E

6050 LASTMED = 7 % 4096 + 16 + 14 6060 REN NON MEED >8000 6070 6 = 8 % 16 6090 CALL LOAD(LASTMED,6,H) 6100 REN NOW CLEAR 3 ENTRIES FROM REF / DEF TABLE. 6110 DEFF = 7 % 4096 + 15 % 256 + 15 % 16 + 8 6120 FOR LOP = 1 TO 3 6130 CALL LOAD(DEFF,0,0,0,0,0,0,0,0) 6140 DEFF = DEFF - 8 6150 NEXT LOP 6160 DISPLAY " READY TO LOAD NEXT MODULE"::: 6170 RETURN 6180 END

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NEWS PHOTO BY KEN MCGAGH
Stapleton third-grade teacher Jack Sughrue, dressed as a 19th-century schoolteacher, shows Vanessa Ramos, left, and Vanessa Earle, how to compete in an egg and spoon race yesterday.