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FREE SOFTWARE FOR YOUR ATARI

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ENRICH/OHAUS San Jose, California

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ABOUT THE AUTHORS

Dorothy and David Heller believe that computers can be understandable and accessible to everyone! They specialize in books that help people get more enjoyment and utility from their computers. David is co-author of *Dr. Wacko's Miracle Guide to Designing and Programming Your Own Atari Computer Arcade Games* (Addison-Wesley, 1983); *Space Knights* a science fiction novel with nine interactive games for the Atari computer (Reston, 1983); and is a frequent contributor to *Hi-Res, Atari Connection*, and *InfoWorld*.

Dorothy is co-author of Computer Confidence: A Guide for Women (Acropolis, 1983); PET Games and Recreation (Reston, 1981); and is a frequent contributor to Hi-Res, Atari Connection, InfoWorld, Compute, and Interface Age.

ACKNOWLEDGEMENTS

The generous and enthusiastic help from many Users' Group officers, educators, and the people at ATARI Computers, has made this book a reality. Thank you very much for your support and words of wisdom.

We'd like to say a special "thank you" to Mr. Steve Weintraub, operator of the Penn RCP/M BBS for his telecommunications technical help and advice.

Mr. Harvey Checkman, Technical Editorial Consultant, helped make our "Free Software By Phone" section easy to use by all ATARI computer owners...whether they're beginners or experts.

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INTRODUCTION

ENRICH YOUR ATARI COMPUTING EXPERIENCE WITH FREE SOFTWARE FOR YOUR ATARI

• Shows you where to find valuable free resources for you and your ATARI computer.

Users' Groups

• Introduces you to the exciting world of ATARI Users' Groups. There are more than 250 of these groups WORLDWIDE offering extensive Free Software libraries, courses, informative newsletters, and help.

Inside ATARI

• Takes you inside ATARI, with two informative interviews with ATARI executives.

Free Software by Phone

• Shows you how to get hundreds of FREE programs by phone, without leaving your home!

Directory lists over 500 phone numbers to get Free Software

• Gives you a starter ATARI phone directory of over 100 phone numbers that puts you in contact today with other ATARI users and a wide variety of exciting FREE services...And, as a bonus, we've included an additional 500 phone numbers for you to explore!

Start your own Bulletin Board Service

• An "electronic Bulletin Board" operator tells you how to start your own "base" station, and how to get the software you'll need, absolutely FREE!

Attention—Parents and Educators

• Shows you where to find the support you'll need to expand the use of your ATARI computer at home and in the classroom. We also show you how and where to get FREE educational software, and how to network with other parents and teachers to solve teaching problems, and to share ideas and programs.

Looking for the right magazine?

• Gives you a directory of magazines for ATARI computer owners, with subscription information.

*** AND MUCH, MUCH MORE ***

A WORD AGAINST PIRACY

This book has been written to show you how to obtain free software without resorting to piracy or obtaining pirated software.

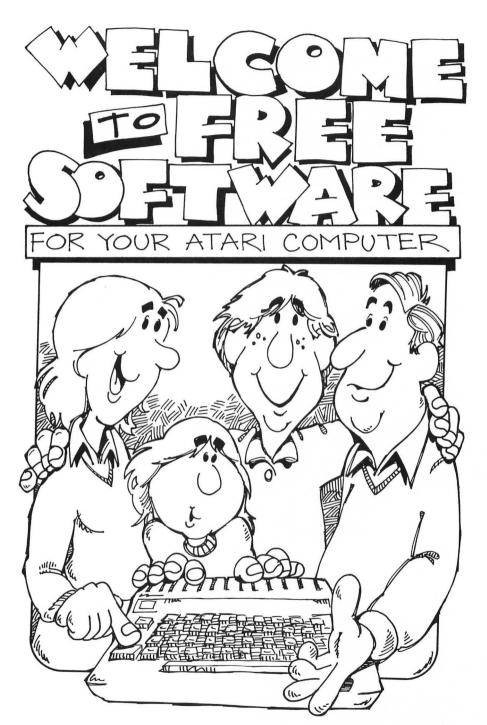
Piracy is the theft of copyrighted software by unauthorized copying and distribution.

Piracy is not only illegal and immoral...it can actually drive a small software house out of business, destroy individual creative incentive, and make larger companies unwilling to make the investment required to produce high quality software.

Piracy can deprive you of a large software selection at the marketplace, and make it hard for you to pursue a career as a professional programmer.

The overall result of piracy is to punish those who produce excellent software and encourage those who produce quick and dirty software.

When you buy programs from a reliable software house, you'll get the support you need to get the most out of their product. Customer service, documentation, updates, and revision notices all cost money. The pirate can't offer any of these services. A thief can only sell you what has been stolen...then you're on your own.



WELCOME TO FREE SOFTWARE FOR YOUR ATARI

NO MATTER WHERE YOU LIVE

No matter where you live, in the U.S. of A., Canada, England, Europe, Australia, or even the Azores...we'll show you how to get FREE software and access many valuable resources for you and your ATARI computer.

USERS' GROUPS: ONE GREAT RESOURCE

The first section of *Free Software* introduces you to the exciting world of ATARI Users' Groups. There are more than 250 of these groups WORLDWIDE offering extensive Free Software libraries, courses, informative newsletters, and help for ATARI owners. Many of these groups have special interests. Our detailed profiles of selected groups introduce you to clubs that specialize in EDUCATION, AMATEUR RADIO, ENGINEERING, COMPUTER ART, COMPUTER HARDWARE, SCIENCE, BUSINESS, HOME PLANNING, and much, much more!

We've listed ALL the clubs, WORLDWIDE, and we tell you how to become a member of many of these groups without leaving your home! Or, if you'd like, we show you where your nearest group is, and the right person to contact, so you can attend their next meeting and get FREE software and support from other ATARI owners.

AN EXCLUSIVE INTERVIEW WITH ATARI

We even show you how to start your own ATARI Users' Group, and we have included an exclusive interview with the people at ATARI Home Computers to show you the depth of support provided by ATARI.

FREE SOFTWARE BY PHONE

The Free Software By Phone section shows you how to get hundreds of FREE programs by telephone without leaving your home! This detailed section begins by explaining the terms used in computer telecommunications, gives you a comprehensive equipment buyer's guide, and includes a FREE program listing to turn your computer into a telecommunications terminal today!

We show you how to get FREE software by phone, and include instructions for four of the most popular FREE terminal programs. Handy 'Quick Reference' charts are provided to help you send and receive messages, get FREE software, send your programs to others or chat with distant computer owners.

SET UP YOUR OWN BASE STATION WITH FREE BBS SOFTWARE

In an exciting interview, an "electronic Bulletin Board" operator tells you how to start your own "base" station, and how to get the software you'll need absolutely FREE!

OVER 500 FREE EXCHANGES TO CALL

A starter ATARI phone directory of over 100 phone numbers puts you in contact today with other ATARI users and a wide variety of exciting FREE services. And, as a bonus, we've included an additional 500 phone numbers for you to explore!

ATTENTION—PARENTS & EDUCATORS FREE EDUCATIONAL SOFTWARE

Free Software is particularly valuable to parents and educators who use the ATARI computer in a learning environment. Our comprehensive section on Educational Software and Resources shows you where to find the support you need to expand the use of your ATARI computer at home and in the classroom. We also show you how and where to get FREE educational software and how to network with

other parents and teachers to solve teaching problems, and to share ideas and programs.

ALMOST FREE SOFTWARE

A directory of magazines for ATARI computer owners, with subscription information and a synopsis of the type of material and FREE ATARI software listings each magazine provides, is in our "Almost Free Software" section. Knowing which publications are best for your needs saves you time and expense while increasing the enjoyment and utility you'll get with your ATARI computer.

ENRICH YOUR COMPUTING EXPERIENCE

Regardless of your age, interests, or where you live, the valuable information in *Free Software* will expand and enrich your ATARI computing experience!

WHAT'S PUBLIC DOMAIN SOFTWARE?

As ATARI Users' Groups have grown, many members have become increasingly familiar and proficient with their computers. An outgrowth of this experience is an abundance of user-written public domain programs for your ATARI computer.

Public domain software is a user's gift to you...software that has been donated to the public by its creator.

WHERE IS IT? HOW CAN I GET IT?

These valuable programs are in the libraries of ATARI Users' Groups throughout the world and are available to members and non-members alike for the cost of the disk or cassette, reproduction, and handling. No profit is built into this cost; the charge for a typical disk loaded with as many as fifteen programs is usually between six and eight dollars.

You can get public domain software by mail, by visiting a neighborhood club, or by using a modem to "ask" an electronic

Bulletin Board to send the program to you over the phone lines. (Our "Free Software By Phone" section shows you how to do this.)

WHAT IS IT WORTH?

What's free public domain software worth? the answer is...a lot! Public domain software allows you to build a useful and diverse software library without spending a fortune or resorting to piracy.

Most public domain software can't replace the skills and expertise that professionals bring to heavy business application software. There are times when you'll be happy to spend what a commercial software company asks...their product will justify your investment.

Programs like VisiCalc[™], ATARI Writer[™], and Data Perfect[™], are examples of professional work that would be difficult to find in the public domain arena.

But what about all those other applications? Some of the best communications software is available free, and if you're a computer programmer the choice of excellent public domain programming aids and utility software is almost endless.

Then there are those times when your kids want ten new games a month, or you need more software for your classroom than your school district can afford, or you want to take a look at a program's listing to learn more about programming. Public domain software to the rescue!

Public domain software:

- is useful, and enjoyable...there are free programs that range from games to home management to education.
- is really valuable. Although most public domain software is not quite as polished as their commercial counterparts, many programs are just perfect for *your* special application. And, they're free!

- enables you to take advantage of the special applications knowledge and experience of different users—like programs that another parent has developed for a special learning disabled kid, or a VisiCalc template that another store owner developed that's perfect for your needs.
- teaches you how to judge commercial software. After you've been exposed to a variety of public domain programs, you'll know the difference between a good commercial product and one that really isn't worth your money. When you do decide to invest in a commercial product, you'll be an educated buyer; you'll get the best value.

NO MATTER WHERE YOU LIVE

No matter where you live, you'll be able to get free software by mail by simply writing to many of the clubs listed in our ATARI USERS' Club Directory.

Ask for their catalog of public domain software. If they have one, they'll be happy to send it to you.

One club, the ATARI Computer Enthusiasts (ACE) in Eugene, Oregon publishes the *ATARI Computer Enthusiast Exchange Library*; a list of public domain software that's available by mail.

The ACE Exchange Library is designed to allow the sharing of user-written programs. There are two ways to get programs from the ACE Exchange:

- (1) Order the disk(s) and enclose the appropriate amount of money (between six and eight dollars per disk).
- (2) Send ACE a program(s) you've written and want to share with other enthusiasts. In exchange, ACE will send you any library disk of your choice. ACE strongly supports this second way of adding programs to their library, and will go out of their way to help you share your programs with others.

ACE is representative of the many clubs that will send public domain software to you by mail.

WHAT TYPE OF SOFTWARE IS AVAILABLE?

A wide variety of FREE software is now currently available. No matter where your interests lie, there's something for you!

- **GAMES**
- **BUSINESS**
- **EDUCATION**
- **HOME MANAGEMENT**
- **COMPUTER UTILITIES**
- **GRAPHICS DEMONSTRATIONS**
- **COMPUTER COMMUNICATIONS**

The following list, compiled from the ACE Exchange Library, is representative of the many choices available to you. New programs are being added daily, and this list only shows a fraction of the public domain software available.

HELPFUL HINT

If you are a parent or educator, be sure to read our "Education" section to discover more FREE software and valuable resources.

Read our "Free Software By Phone" section if you'd like to get public domain software by phone from the comfort of you home.

Business

BARGRAPH: Display data in bar graph form.

CALENDAR: Displays calendar...any month...any year.

FINANCE: Use to keep books up to date.

MICROTXT: Test editor in basic.

Communications

JONESTRM: Excellent communications terminal prgm.

MODEM: Improved downloading program.

SEPARATOR: Program separator for downloaded prgms.

Computer Demos

ADSHOW: Put message on moving marquee.

APPLEATR: Atari worm eats bytes out of apple. BACKWARD: Use POKE to print upside down.

BOTCH: Acronym-laden programming language.

BOXDEMO: Draws nested colored boxes. CARDS: Graphics only, for card game.

CHOPSTIX: Single-tone music demo.

CHU: Demo of VERY FAST player-missile graphics.

CIRCLES: Draws circles—learn plotting.

CLOCK.DIG: Computer-controlled digital clock.

DIALOG: Conversation with computer psychologist.

DIATONIC: Sound demo. ELLIPSE: Draws ellipses.

EPSHAND.DEM: MX 80 printer demo.

ERTHQWAK: Shakes house...or is the TV? ETCHSKCH: Draw on screen with joystick.

FUGUE2: Music anyone?

GIGGLE: Electronic light show.

GRAPH: Demonstrates the 9 text & graphic modes.

HORSEV: Variable speed horse demo.

HORSES: R-rated horse runs across screen.

HORSE: Graphics display of running horse.

JAZZ: Multiple voice computer-generated Jazz.

LOGO: 128 color Atari logo on screen.

MAGIC: Pick a letter; the computer guesses.

MARQUEE: Put your name in lights.

MESSAGE: Use your Atari as a message board.

MOON: Moonscapes.

MOVEABOX: Move a box around the screen. NITEMARE: The day your computer took over!

NOTEIN & NOTEOUT: Random access note and point demo.

NUMBERS: Random number generator, with sounds.

OCTADRAW: Creative and reflective shapes.

OXYGENE: Computer-generated random sounds. PMGDEMO: Superfast-player-missile graphics demo.

PUFF: Puff the Magic Dragon...music demo. ROCKET: Demo using print statements & sound.

SCROLL: Scrolls video display. (40K req.).

SHADING: 3-D box changes colors with keyboard. SOUNDSTK: Experiment with sound using joystick.

STARSHIP: The Enterprise in full color. STARWARS.MUS: Music from the movie.

STAR: Plots star with colors in GR. 7.

STRINGAR: Computer generated display. VEGAS: Slot machine, by Matt Loveless.

XMASTREE: Good music selection for Christmas.

Computer Utilities

ALTUSE9: Write and read to entire screen. AUTORUN.BLD: Make AUTORUN files.

AUTORUN.CAS: Autorun boot for your cassette programs.

BUBLSORT: A simple but slow sorting algorithm.

CLOAD.AUT: Automatic CLOAD routine for your program. DATAMAKER: DATA statement programming generator. DATASTMT.GEN: Data statements for any memory location.

DECIDUMP: Memory dump in decimal. DECODE: Unscramble variable names.

DISASM: Convert memory to 6502 assembler.

DISKTAPE: Dump from disk to tape.

ERRTRAP: Error trapper...describes errors. EXAMINE: Look at any file stored on disk.

FORMAT: Help in formatting disks.

GR7HELP: Software tool.

HELP.WRT: Write text to disk.

HELP: Read msgs placed on disk by next program.

HEXADEC: Convert hex to decimal.

HOTSTUFF: World's largest directory-printing menu.

LABELDSK: Generates small disk directories.

LISTER: Lists programs in column-widths for 825. LOADERC: Object code reader, character version. LOADERD: Object code reader, data statement.

LPDIR: MX 80 printer utility.

MEMDUMP: A memory dump utility.

MX80.IN1: Tests printer's cable.

PEEKER: Looks at memory at specified locations.
PLOT825: Use your 825 printer as Plotter/Printer.
PMHELD: Tool for designing Player Missile graphi

PMHELP: Tool for designing Player-Missile graphic.

PRINTEST.EPS: Tests Epson printer cable.

QUESTION]FMT: Random question/statement retrieval. RENUM: Best BASIC renumbering program available.

ROMANCLOCK: Ceasars digital clock.

SCEEN: Graphics tool for BASIC programs. SCREENPR: Prints screen to 825 printer.

STRING.CRE: Create data statements from strings.

SUPRCOMP: Lists differences between 2 BASIC prgms. TIMECLOCK: Real time clock runs as you program/play.

TVTEST: Generates TV test patterns.

UPDNLOAD: Data transfer from 850 Interface. VARIABLE.LST: List variables in programs.

Education

ALCOHOL: Computes % alcohol consumed.

AMERICAS: Geography quiz for Western Hemisphere.

ASTRONOM: Astronomical computation. BEGINTYP: Introduction to touch typing. BIGLETRS: Helps youngsters learn alphabet.

BIORYTHM: Popular charting program/demo.

BOW: Graphics plot. Good trigonometry.

ELLIPSE: Draw the ellipse of your choice.

FUNCTION: Math function machine...numeric relation.

HANGMAN: Popular word-guessing game.

KEYBOARD: Piano simulation.

LIGHT: Demonstrate the properties of light.

MADLIB: Computer-generated literature.

MATH2: Math calculation and conversions.

MATHDRIL: Addition, Subtraction & multiplication.

MATHPKG: Math routines and practice.

METRICS: Metric to standard conversion program.

MINUTE.MTH: Timed math drill.

MULT: Multiplication drills.

NUMBER.LI: A number progression educational game.

PLUSZERO: Test of hand-eye coordination.

POEM: Atari generated poetry.

POWER2: Exponential math tutorial.

REMGAMES: Remainder game; makes division fun.

SLIDE: Competitive & creative addition game.

SPELLBEE: Spelling Bee.

STATES: Geography quiz for United States.

Games

ADVENTURE: Play and write your own adventures.

ALIEN: Protect your cities from attack.

ALIEN: Shoot down alien ships...simple graphics. APITUDE: A cute quiz; test your programming skill.

BALLOONS: Can you burst the pretty balloons?

BANKSHOT: Pool, anyone?

BATS: Can our radar get you through tunnels?

BLACKJACK: A fairly good game of blackjack.

BOMBERS: Simple game; shoot bombs as they fall.

CASTLE: Discover the secrets of Castle Hexagon.

CHICKEN: Why does the chicken cross the road?

CIPHER6: Fun with codes.

CIVILWAR: Do better than the generals. Text only. CLEWSO: Detective game—who murdered the host?

CONCEN: The game of Concentration.

DARKSTAR: Destroy darkstar before it nova's.

DDHELPER: Design characters for Dungeons & Dragons.

DOGBITE: Deliver mail without getting bit by dog. DOGGIES: A thinking man's puzzle by Stan Ockers.

DOGGIES: A think puzzle.

EGGS: Try to put all your eggs in one basket. ELEC: Make electric Co. decisions. Simulation. ENEMY: Get them before they get you...action!

FROG: How good are you at catching flies?

GALLERY: Shooting gallery; good graphics tutorial.

GOBBLER: Action maze game.

GRUBS: Fast action game from Australia. HORSERAC: Bet on your favorite horse.

LANDER: Land your space ship on alien planet.

LUNAR LANDER: Land your craft in the Moon's craters.

MATCHES: A variation on Nim.

MISSILE: Protect cities from missiles (40k req.). MOBSTERS: Shoot before the mobsters get you. MUNCHERS: Don't let them gobble you up!

PRICE: Guess the right price and win. ROBOT: Challenging arcade game.

ROBOTWAR: Escape from ROBOTS. Two levels.

RUNWAY: Landing simulation game; difficult fun.

SEARCH: Takeoff of the treasure matrix game.

SIMON: Repeat after SIMON...great party game.

SLOTS: Silver dollars not required. SMASH: All text car racing game.

SPY: Find the spies hidden in 10 x 10 grid.

STARDSTR: Shoot out the stars.

STARWARP: All-text starwars adventure game.

STOPSOUN: Sound recognition game. TIGER: Where will he turn up next?

TIMETRIAL: Great racing game.

TOWERS: Towers of Hanoi; good thinking game.

TREASURE: Map-search for treasure clues.

TTT: Tic-Tac-Toe game.

Home Management

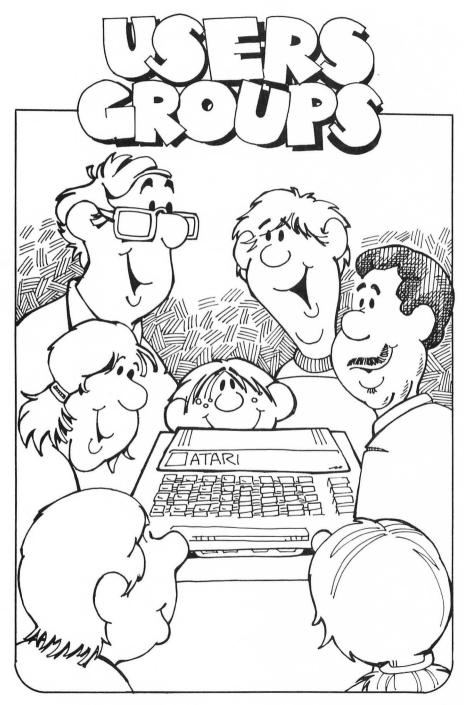
BOOKLIST: Library inventory system.

CALCNT: Calorie counter—figures your calories. DAYOWEEK: Determines day of week, given date.

HOMELOAN: Calculate mortgage payments.

INVENTORY: Home inventory using cassette files.

TINYTEXT: A.C.E.'s own text editor.



USERS' GROUPS

WHAT IS AN ATARI USERS' GROUP?

An ATARI Computer Users' Group is an organization of people who own ATARI computers. Their main purpose is to share information about ATARI related programs and products, and to help each other expand the usefulness and enjoyment of their computing experience.

DO YOU NEED A USERS' GROUP?

Would you like to increase your software library with free public domain software?

Would you like to know where to find a commercial software package just right for your application?

Would you like to know what peripherals will work best with your ATARI computer?

Do you need help in hooking up the new hardware you've just bought?

Would you like to learn BASIC, FORTH, PILOT or assembly language?

Do you have a program or idea that you'd like to share with other ATARI enthusiasts?

Would you like to work with others to develop software?

Would you like to get involved in community help projects?

Would you like to help your children learn from your computing experience?

Are you interested in computer telecommunications?

If your answer to any of these questions was YES...you need a User's Group.

A User's Group can provide the solution to all of your computerrelated questions. These questions represent only a small sampling of the wide range of services and support you can get from an ATARI Users' Group.

HOW CAN I FIND A LOCAL USERS' GROUP?

We've provided a State-by-State ATARI Users' Group listing, accurate as of December 1982. Browse through this list, find the club nearest you, then call or write.

BUT, THERE'S NO CLUB NEAR ME!

If there isn't a club near you, or if the local club doesn't seem to fit your needs, you might consider starting a new Users' Group.

The key ingredients for a successful group are:

- 1) Five or more people who want to share information about their computers.
- 2) Two or more people willing to get things started.

STARTING A NEW USERS' GROUP

During your planning stages, it's a good idea to write to the people at the ATARI Users' Group Support Program or call 800-672-1404 and ask for their "Users' Group Starter Package".

Atari, Inc.
Computer Users' Support Program
60 East Plumeria
San Jose, CA 95134

The information we've provided here summarizes some of the material you'll receive.

FOUR IMPORTANT STEPS

- 1. Make contact with other computer users.
- 2. Announce your intention to start a Users' Group.
- 3. Hold your first meeting and keep meeting on a regular basis.
- 4. Ask for help, share ideas and stay informed.

1. MAKING CONTACT

Contact the nearest existing group and see if anyone there would like to join you, or know of others who might. If there is no group of ATARI computer owners nearby, you'll have to develop your own contacts.

Retailers

Check in with local ATARI dealers, software stores, or general computer retailers in your area. Ask if they will:

- 1. Mail a notice to their customers for you, if you prepare it and pay for the postage.
- 2. Allow you to post a bulletin announcing your new group.

Schools and Colleges

Most schools and colleges have a newspaper, bulletin board, or public address system that will carry your message.

Local Companies

Contact the personnel director and ask to have your announcement circulated. Companies with engineering departments are likely to have computer hobbyists among their ranks.

Post Notices

Post notices on bulletin boards at the library, supermarket, and bank.

Use your modem

If you have a modem, you can post a bulletin on a number of local BBS's. (See our "Free Software By Phone" section for more information.)

Advertise

A small ad in your local newspaper can bring big results. Also, consider contacting local radio and televisions stations and ask if they'll run your announcement as a public service.

2. THE ANNOUNCEMENT

Be sure to include the following information in all your announcements:

A NEW GROUP is forming for those owning, using or interested in ATARI PERSONAL COMPUTERS.

FIRST MEETING: Date

TIME:

LOCATION: Address of the meeting

PHONE: Please call (Name) at this number for further

information... come to our first meeting!

When you add your phone number to the notice, be sure to indicate the times you'll be available to chat...you don't want people calling you at any hour of the day or night.

3. MEETINGS

You should plan to hold meetings on a regular basis. Meetings can range from formal lectures to loosely moderated open discussions. It is always important to keep your meetings active, interesting and fun.

For many members, attending meetings will be their major form of participation...you must make sure that it's a rewarding experience for them.

YOUR FIRST MEETING

Make your first meeting an ACTIVE one. Most members will have just come from work and they'll want something INTERESTING!

Your first meeting should show your prospective members the value of your ACTIVE group. Demonstrations are the most convincing form of proof. You might invite an interesting speaker, demonstrate software, or show off an interesting project. You could also invite a local manufacturer to demonstrate an interesting software product or peripheral device.

SOME THINGS YOUR NEW GROUP CAN DO

There are no set rules about what your group can or can't do. Most groups do some or all of the following:

HOLD MEETINGS
OFFER COURSES
PRESENT SPEAKERS
EVALUATE PRODUCTS
PUBLISH A NEWSLETTER
ANSWER MEMBERS' QUESTIONS
SHOW OFF MEMBERS' PROJECTS
MAINTAIN A SOFTWARE PUBLIC DOMAIN LIBRARY
PARTICIPATE IN COMPUTER CONFERENCES
ARRANGE GROUP PURCHASES AND DISCOUNTS

4. ASK FOR HELP

Ask for help from other Users' groups. Share ideas and exchange information. Subscribe to other groups' newsletters...stay in touch...stay informed.

ATARI WILL HELP

ATARI User Group Support Program can provide your club with invaluable support. Read our interview with Mr. Earl Rice, the director of this program, to learn what ATARI will do to help make your club a success.

ATARI Supports Users' Groups:

An Exclusive Interview with Earl Rice

We interviewed Earl Rice, of ATARI Users' Group Support, to find out more about the relationship between ATARI and its enthusiasts. Earl estimates that there are currently 20-25,000 active User Group members worldwide—and more are joining every day.

What ATARI Does for Users' Groups

"We stimulate the formation of groups and help them along. We refer people to the nearest group in their area via our 800 toll-free telephone number. If an individual wants to start a group, we send them our Starter Package. This includes complete guidelines on how to start a group, a piracy agreement, and information on trademarks.

"In order to become an authorized group, they have to sign and return the piracy agreement, which states that they will keep their software library and activities clean of pirated software. Groups that are committed to the anti-piracy agreement get our full support."

Once a group becomes authorized, ATARI sends them a complete technical library, including hardware and software manuals; DOS manuals; Chris Crawford's "De Re ATARI"; and selected demo disks.

Users' Groups also receive a disk with AMIS BBS software and a manual so they can communicate with our ATARI Users' Group BBS. Club officers get a password enabling them to access the BBS.

Groups can also borrow videotapes and other support props "to help hobbyists and programmers teach less experienced users." These videotapes provide overviews of the major ATARI computer custom chips plus instructional aids.

Groups also get promotional easels that they can use to exhibit their club meeting announcements. On a case by case basis, ATARI also provides promotional materials that groups can display at computer fairs.

ATARI hosts a hospitality suite every year for club officers at the West Coast Computer Faire, where club officers can preview new products and exchange information.

Earl travels to visit all of the major groups. "We discuss their needs and how we can best support their projects. We also work out problems together. I give advice on handling questions about piracy, and mediate squabbles between Users' Groups and dealers and other disputes that may arise."

New BBS for Users' Clubs

Earl is in the process of developing a BBS for Users' Groups. "Right now, our BBS is pretty low-key—people chat and download some software. Within the next six months, we're opening up a public domain software library for Users' Groups, which club officers will access via our BBS using special passwords. We'll sponsor contests, a 'techie' corner and a section on robotics.

"We would love to have a special section for ATARI educators—interested club members, please get in touch!

Earl will also make available on the BBS press releases, new product information, and other material that clubs can use in their newsletters. Earl says that the text files will be formatted on ATARI Writer, a new word processing package available on cartridge "that even beats Bank Street Writer for simplicity and ease of use."

What Users' Groups Do for ATARI

"Users' Groups are the best means of support for new users," states Earl. "Users' Groups are changing as more consumers buy ATARI computers. Many more women are involved, and groups now represent a cross-section of the community. Although some 'techies' are unhappy about being flooded with new users, most groups are now offering introductory courses and lots of support for beginners."

ATARI users let the company know how they're being perceived by the general public; inform ATARI of new trends; and review new products. "Users' Groups aggressively encourage dealers to carry ATARI products and help them sell machines. Many Users' Groups also provide sales training and are very active in community relations and community projects."

Earl points out that many ATARI-related businesses have developed from Users' Groups, such as *Antic Magazine*, David & Sandy Small's software distribution business, and a great deal of APX (Atari Program Exchange) software.

No Pirates Need Apply

Earl pledges support to "any group that wants our help"—with one exception. "We won't support pirates. We give groups the chance to sign the piracy agreement and stop any illegal activities. We are really helping them—groups that permit pirating can be sued and get into serious trouble. If kids are doing the pirating, we call their folks and explain the situation. All we want is that groups keep their official software library clean."

Earl says that pirating is a serious problem, "but it's manageable. More people are becoming aware of the problem. News travels fast on the grapevine and most members want to keep their clubs clean. The law and concerned members eventually catch up with pirates."

"Local and Autonomous"

Earl emphasizes that ATARI Users' Groups are "completely local and autonomous.

"There is no monitoring or centralized control. We realize that Users' groups know best what is needed in their own communities."

USERS' GROUPS

Mini-Profiles

We phoned ATARI Users' Groups across the country and around the world to gather profiles of typical and not-so-typical clubs. The response from *all* club presidents and officers was both enthusiastic and extremely helpful. Without their help this book would not be possible. THANK YOU!

We wanted to include profiles of all two-hundred-and-fifty ATARI Users' Groups in FREE Software. However, our schedule and the voluminous amount of data gathered, would not permit us to do this.

We have profiled eight clubs that demonstrate the spectrum of services and support you can expect to find as you explore the world of the ATARI Users' Groups.

Mini-Profile I

A.C.E.
ATARI Computer Enthusiasts
Eugene, Oregon

EMPHASIS: EDUCATION & PROGRAM WRITING

ADDRESS:

ATARI Computer Enthusiasts 3662 Vine Maple Drive Eugene, OR 97405

OFFICER: Mike Dunn, Editor of the A.C.E. Newsletter.

PHONES: 503-344-6193 (H); 503-687-6061 (W)

ELECTRONIC BULLETIN BOARD: 503-343-4362—ARMUDIC—24 Hrs.

NEWSLETTER:

A.C.E. Newsletter, monthly, \$10 yr.U.S./20\$ yr. Overseas Airmail

MEMBERS: 100 locally, thousands of members world wide.

MEETINGS:

Second Wednesday every month at the Lane Community College.

FREE SOFTWARE

The A.C.E. club's library of FREE public domain software is one of the most extensive in the country. A.C.E. members are continually writing new programs and sharing them with other ATARI enthusiasts. Although A.C.E. offers a strong educational selection, it is also world-renowned for its excellent arcade game software. For example, CHICKEN (where a chicken crosses a road dodging speeding cars) was developed at A.C.E.

The "What's Free Software" section lists a sample of the many excellent programs available from A.C.E. This software is available to enthusiasts around the world by mail from the A.C.E. Exchange Library, by modem/phone (503-343-4352), or from listings in the A.C.E. Newsletter.

OVER 200 PROGRAMS

Over 200 FREE public domain programs are available from A.C.E. in a wide assortment of categories:

GAMES
BUSINESS
EDUCATION
HOME MANAGEMENT
COMPUTER UTILITIES
GRAPHICS DEMONSTRATIONS
COMPUTER COMMUNICATIONS

A TRULY INTERNATIONAL CLUB

A.C.E., the "first ATARI Computer Enthusiast Group", is truly an international club. In addition to its local and domestic membership, A.C.E. boasts members from Germany, Sweden, Great Britain, Canada, and South America, and is extremely active in the cities of Melbourne, Perth, and Sidney, Australia.

BULLETIN BOARD AND INFORMATIVE NEWSLETTER

The informative A.C.E. Newsletter and the club's electronic Bulletin Board are the vehicles that link all these members together.

A.C.E.'s electronic Bulletin Board, open twenty-four hours a day, is loaded with helpful ATARI information, messages from members around the world, and valuable software of all kinds. Read the "FREE Software by Phone" chapter of this book to learn how you can become an electronic pen pal with the people at A.C.E.

The March 1983 A.C.E. Newsletter contains both hardware and software reviews, information for HAM radio operators that own ATARI computers; and the "Game Writers" Column loaded with advanced arcade game programming help, plus two exciting program listings, one written in PILOT and one in Assembly language.

EDUCATION IS EMPHASIZED AT A.C.E.

The membership at A.C.E. is equally balanced between men and women, and education is of prime concern to all its members. This club is ideal for the parent who wants to help his or her child learn more with their ATARI computer.

Ms. Ruth Ellsworth contributed the ATARI PILOT program, "A Song is a Wonderful Kind of Thing", to the March '83 Newsletter. This program is designed to use sound in ATARI PILOT to encourage children to program. Ms. Ellsworth says in her program introduction that "it is often difficult to get children to take the time to actually sit down and program. Sound in ATARI PILOT is easy enough that, with a little encouragement, even elementary age children can be

helped to experiment with writing programs. This is possible because music in ATARI PILOT requires the mastery of only two commands..."

This type of encouraging and helpful information is representative of the commitment to educational support from the A.C.E. club.

E.R.A.C.E.

E.R.A.C.E. (Educational Researchers of A.C.E.) is a special interest group within the club that specializes in evaluating and writing specifications for ATARI educational software and operates a LOGO language test facility.

More information on E.R.A.C.E's exciting projects can be found in the "Education" section of this book.

COURSES FOR LOCAL MEMBERS

A.C.E. offers a number of courses and special interest groups for its local members. In addition to E.R.A.C.E., there is a Beginners' Group, a group that specializes in FORTH language, and one that delves into the complexities of machine language programming. New groups are formed as the membership sees a need for them.

AT A TYPICAL A.C.E. MEETING

At a typical A.C.E. meeting you might find its members reviewing software, discussing hardware problems and solutions, exchanging programming tips, or just having fun playing games.

GOING ON TRIPS

The members of the local A.C.E. group like to get out and travel. They take yearly group trips to ATARI headquarters in Sunnyvale, California, and are always on hand at the major computer shows and faires. They enjoy visitors too, and sponsor an annual regional ATARI Users' meeting.

Mike Dunn aptly summed up this group's main focus when he said, "We're the original ATARI Computer Enthusiasts, our name speaks for itself!"

Mini-Profile II

The ATARI Microcomputer NET Users' Group Washington C.H., Ohio

EMPHASIS: AMATEUR RADIO OPERATORS' GROUP

ADDRESS:

The ATARI Microcomputer Network 4749 S.R. 207 N.E. Washington C.H., Ohio 43160

OFFICER: Jack McKirgan II (WD8BNG), President

PHONE: 614-869-3597

NEWSLETTER: AD ASTRA, every other month, \$10 yr. U.S.

MEMBERS: 500 locally and internationally.

MEETINGS: Once every week on the radio network.

FREE SOFTWARE & HARDWARE TIPS

The ATARI Microcomputer Network Group (A.M.N.) prides itself in offering both FREE public domain software and valuable hardware design tips to its many members. The club's software library is based in Texas and includes public domain programs in all categories with a strong communications emphasis.

To obtain a listing of library programs, send your request with \$1.00 to

cover preparation and mailing, to:

LIBRARIAN—ATARI MICRO-NET John Adams, <u>KC5FW</u> 17106 Happy Hollow San Antonio, Texas 78232

After you've selected the software you'd like, just send the media, tape or disk, to the librarian along with a self-addressed envelope with enough postage to cover return of the media. The librarian will load your disk or cassette with FREE software and mail it back to you.

FREE software is also available to ATARI users around the world from listings in *AD ASTRA* or via radio teletype.

A.M.N. IS TRULY UNIQUE

A.M.N. links together ATARI enthusiasts/HAM operators from around the world during weekly "radio meetings". Each meeting is structured like a radio talk show, moderated by Jack McKirgan II. A typical meeting begins with announcements of interest to ATARI owners. New products and services are discussed, and software is critiqued. Then everyone gets the opportunity to express his or her ideas and pass along valuable information to many listeners.

LISTEN IN ON A MICRO-NET MEETING

Here's the ATARI Microcomputer Net's schedule...listen to one of their meetings, then join in!

National Net:	14,325Mhz@1600 Zulu, Sundays
Midwest Regional Net:	7,235 Mhz@1830 Zulu, Sundays
Southeast Regional Net:	7,235 Mhz@1800 Zulu, Sundays
Southwest Regional Net:	7,230 Mhz@1800 Zulu, Sundays
Pacific NW Regional Net:	7,230 Mhz@1800 Zulu, Sundays
East Coast Regional Net:	7,230 Mhz@9 A.M. EST, Sundays
West Coast Regional Net:	7,235 Mhz@11 A.M. PST, Sundays
International Net:	21,400 Mhz@2330 Zulu, alternate
	Thursdays

Thursdays

Dayton Ohio Local Net: Open channel daily on 146,445 Mhz.

Simplex

Chicago, IL Local Net: Open channel daily on 147,570 Mhz.

Simplex

If you'd like to start a regional or local Net, contact Jack McKirgan II (WD8BNG) for a net coordinator's packet.

AD ASTRA

The club's magazine, AD ASTRA, is loaded with valuable information for the hardware oriented ATARI owner. Modifying and improving the ATARI computer is an ongoing pursuit of A.M.N.'s membership.

A recent issue of *AD ASTRA* includes schematic diagrams and instructions that show how to add an audio amplifier to an ATARI 800TM, modify the 810TM Disk Drive, and make your own cable to connect a printer to the 850TM Interface.

In addition to the wealth of hardware do-it-yourself information, AD ASTRA provides both hardware and software reviews, program listings, HAM radio information and excellent editorials.

The magazine is well worth the minimal donation of ten dollars per year. But, as Jack McKirgan II was quick to point out, "you don't have to subscribe to AD ASTRA to become a Net member."

MEET THE PEOPLE FROM A.M.N.

The ATARI Microcomputer Network hosts a hospitality suite at the annual "HAMVENTION" in Dayton, Ohio. You are welcome to stop in. Write for detailed information.

SATELLITES & MORE TO COME

"Ad Astra" means "to the stars" in Greek. With the advent of Amateur Radio satellites the ATARI Microcomputer Network is using

synthetic stars to share ideas and help other ATARI enthusiasts around the world.

Mini-Profile III

P.A.C.E.
Peninsula ATARI Computer Enthusiasts
Hampton, Virginia

EMPHASIS: SCIENCE, ENGINEERING & EDUCATION

ADDRESS:

The Peninsula ATARI Computer Enthusiasts (P.A.C.E.) 109 Five Forks Lane Hampton, Virginia 23669

OFFICER: Dr. Olaf Storaasli, President

PHONES: 804-851-4936 (H); 804-827-3401 (W)

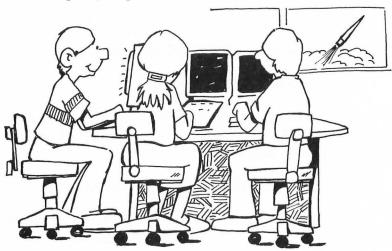
ELECTRONIC BULLETIN BOARD: "OXGATE RCP/M": 804-898-7493

NEWSLETTER: PACE WORLD

MEMBERS: 120

MEETINGS: Third Friday every month at NASA headquarters

in Hampton, Virginia.



FREE SOFTWARE

The P.A.C.E. library contains over twenty disks and tapes (200 + programs) loaded with valuable FREE public domain software.

GAMES
SCIENCE
BUSINESS
EDUCATION
ENGINEERING
HOME MANAGEMENT
COMPUTER UTILITIES
GRAPHICS DEMONSTRATIONS
COMPUTER COMMUNICATIONS

ATARI enthusiasts who have a modem can call the OXGATE BBS and access more than 75 FREE public domain ATARI programs. You can also subscribe to *PACE WORLD* and receive valuable program listings by mail, or if you're in the Hampton, Virginia area, stop by at their next meeting.

SCIENCE, ENGINEERING & EDUCATION ARE EMPHASIZED AT P.A.C.E.

Many P.A.C.E. members work at NASA headquarters in Hampton, Virginia, and much of the software in the club's library is written by NASA scientists and engineers. The P.A.C.E. library boasts a number of sophisticated programs designed to enable professionals to use their ATARI computers to ease their workload and solve complex scientific problems.

The members of P.A.C.E. always attend the NASA Science Fair, and other local computer shows, to present the ATARI computer in action.

A CIVIC MINDED GROUP

The group takes pride in working with the local Poquson School District. Members help introduce the ATARI computers to students

and have just completed a project to expand the RAM of the school's ATARI 400 computers.

SPECIAL COURSES FOR MEMBERS

In addition to using the ATARI computer for scientific and engineering pursuits, P.A.C.E. has a number of special interest groups that cater to ATARI beginners and experts alike.

Courses are offered in "Introduction to the ATARI Computer", "How to get the most out of VisiCalcTM", "Assembly language" and even "Player Missile Graphics".

THE TRUE MEANING OF "USERS' CLUB"

During a phone interview, Dr. Storaasli (P.A.C.E.'s president) said that "the true focus of the P.A.C.E. group is ATARI User support."

Dr. Storaasli went on to add that "the ATARI is a great computer, but many people buy their machines from mass retail outlets that offer very little, if any support.

"Where can a new ATARI owner find out which commercial software package is right for his or her application? What peripherals will work best with the ATARI? How to hook them up? What's the best printer for the price? The best modem? Who can this new owner turn to for help with programming problems? Where can a new owner get the chance to evaluate and learn from free public domain software?"

Dr Storaasli's conclusion: "The ATARI Users' Group!"

Mini-Profile IV

M.A.C.E. Michigan ATARI Computer Enthusiasts Southfield, Michigan

EMPHASIS: BROAD BASED SUPPORT AND SERVICE

ADDRESS:

The Michigan ATARI Computer Enthusiasts P.O. Box 2785 Southfield, Michigan 48037

OFFICER: Marshal Dubin, President

PHONE: HOTLINE—313-338-6837

ELECTRONIC BULLETIN BOARDS:

- 1. M.A.C.E.: 313-544-0885 (AMIS)
- 2. M.A.C.E. WEST: 313-274-3940 (AMIS)
- 3. A.R.C.A.D.E.: 313-978-8087 (AMIS)

MAGAZINE/NEWSLETTER: M.A.C.E. JOURNAL

MEMBERS: 1200 local and international

MEETINGS:

Third Tuesday every month, 7 P.M. at the Southfield Civic Center

FREE SOFTWARE

GAMES
SCIENCE
BUSINESS
EDUCATION
HOME MANAGEMENT
COMPUTER UTILITIES
GRAPHICS DEMONSTRATIONS

BY PHONE

M.A.C.E.'s three electronic Bulletin Boards are among the most active in the country. Their files are filled with a wide variety of everchanging programs selected from their thirty-disk library and accessible to ATARI enthusiasts the world over by modem/phone.

The people at M.A.C.E. are pioneers in computer/modem communications. In addition to creating many excellent computer terminal programs, (see *FREE Software by Phone*) M.A.C.E. developed the "A.M.I.S." electronic Bulletin Board (ATARI Message and Information Service). This extensive program, which turns *your* computer into a electronic Bulletin Board, is available for downloading (313-544-0885) at selected times during the week. It takes approximately one hour to receive the program's many sections. Write to M.A.C.E. or leave a message on one of their three bulletin boards to learn when "A.M.I.S." is available for download.

BY MAIL

Public domain disk and cassette software is available to M.A.C.E. members via the U.S. Mail.

For a catalog of available software, send \$1.00 to M.A.C.E., P.O. Box 2785, Southfield, MI 48037, Attention Dept. MC (cassette). or MD (diskette). Include membership number and allow up to four weeks for delivery.

Once you've selected the volume(s) of your choice, the cost is a reasonable \$6.00 for the first fully-loaded disk or cassette and \$5.00 for each addition.

JOINING M.A.C.E. & THE M.A.C.E. JOURNAL

A \$20.00 annual membership fee includes access to the M.A.C.E. public domain software library, service and support from the club, and a subscription to the M.A.C.E. Journal.

The *Journal* is a slick monthly magazine that includes product reviews, program listings, M.A.C.E. information and 'how to do it' articles for all ATARI computer owners.

COURSES AND SPECIAL INTEREST GROUPS

M.A.C.E. offers its members the opportunity to explore specific applications of ATARI Computing in its many Special Interest Groups (SIGS).

ASSEMBLER: Manager-Tom Hunt, Secretary-Phil Heavin, 313-939-6213

BASIC: Manager-Jim Spitzer, 313-543-0961

BUSINESS SYSTEMS: Manager-Douglas Perenchio, 313-776-7626

EDUCATION: Manager-Mark Davids, 313-774-9709 FORTH: Manager-Todd Meitzner, 313-542-7152 GAMES: Manager-Stephen Tobias, 313-979-5740 GRAPHICS: Manager-Ken Hein, 313-254-1761

HARDWARE: Manager-Chris Ratkowski, 313-432-5421 NEW USERS: Manager-Michael Winters, 313-645-2193 UTILITIES: Manager-Charles Godfrey, 313-559-1272

M.A.C.E. HAS A LOT TO OFFER

A M.A.C.E. Journal editorial calls this club the "most important peripheral you'll ever own".

It goes on to say that "There are special interest groups in FORTH, 6502 Assembler, BASIC, Games, Education, Business Applications and more. Our monthly meeting offers exciting and informative presentations in the latest hardware and software products, games, and techniques. Our 24 hour electronic Bulletin Board System is a standard for other ATARI groups across the nation. (We have) a diverse local and international membership and award-winning proprietary software...all dedicated to providing you with the finest ATARI user support system anywhere."

Mini-Profile V

B.U.G.
The Birmingham User Group
Birmingham, England

EMPHASIS: THE FASTEST GROWING ATARI CLUB IN ENGLAND

ADDRESS/INFORMATION:

The Birmingham User Group c/o Les Ellingham Editor, PAGE 6 18 Underwood Close Parkside, Stafford England

PHONE: 0785-41153 (Eves., local time) NEWSLETTER/MAGAZINE: *PAGE 6*

MEMBERS: 120

MEETINGS: 2nd & 4th Thursday each month at the Matador Public House, in the Bull Ring, Birmingham City Centre.



SPECIAL REPORT FROM ENGLAND

The Birmingham User Group, formed in October 1982, is the fastest growing ATARI group in England, according to Les Ellingham, editor of *PAGE 6* magazine.

ATARI user groups are in their infancy in the U.K., with most owners only just beginning to learn programming and seek support.

Membership in B.U.G. includes a free magazine, access to their public domain software library, discounts on hardware and software, program listings, expert advice, contests, trips to exhibitions and more.

This group offers all ATARI owners the ideal opportunity to share ideas, problems, and skills, and to make friends with other ATARI enthusiasts.

PAGE 6

PAGE 6, "The U.K.'s first ATARI magazine", is an independent magazine acting as B.U.G.'s official newsletter. The magazine was originally put together by a group of ATARI enthusiasts to encourage ATARI users all over the U.K. to explore their computers and share knowledge with others.

The magazine, now published independently six times a year, contains product reviews, program listings, club news, and helpful tips for ATARI owners.

Subscriptions, covering 6 issues per year are:

- Ł 4.00 U.K.
- Ł 7.00 Europe—Airmail
- Ł 7.00 U.S.A.—Surface
- Ł 14.00 U.S.A.-Airmail
- Ł 7.00 Elsewhere—Surface
- Ł 14.00 Elsewhere—Airmail

Single copies (U.K. only): 70p includes postage.

OTHER GROUPS IN ENGLAND

1. Mersyside ATARI Computer Club (MACC)

c/o Roy Gibson

3 Dunning Close

Upton, Wirral

Merseyside, England

Tel: 051-606-9553

Meetings are held every other Tuesday at 7:00 P.M. at The

Bradford Hotel, Tithebarn Street, Liverpool.

2. Preston ATARI Computer Enthusiasts

c/o Rowland Taylor

Tel: 0253-738192

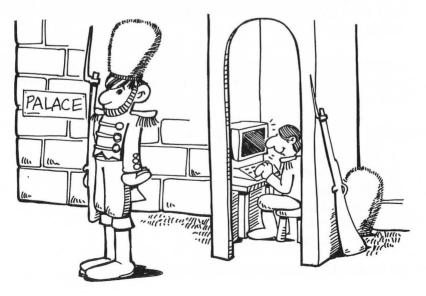
Meetings are held on the 3rd Thursday of every month at 7:30 P.M. at Knights of St. Columbia, off Blackpool Road, Beech Grove, Ashton, Nr. Preston.

3. Edinburgh and Lothians ATARI User Group

c/o Silicon Centre

Tel: 031-557-4546

Meetings are held on the 1st and 3rd Thursday each month at 7:30 P.M. at The Aston Hotel, Aston Crescent, Edinburgh.



Mini-Profile VI

J.A.C.G.
Jersey ATARI Computer Group
High Bridge, New Jersey

EMPHASIS: CIVIC INVOLVEMENT

ADDRESS:

Jersey ATARI Computer Group 58 Dewey Avenue High Bridge, New Jersey 08829

OFFICER: Richard Kushner, President

PHONE: 201-638-8732 (H)

ELECTRONIC BULLETIN BOARD: 201-377-4084 (9 P.M. to

6 A.M. EST and all day Sunday)—AMIS

NEWSLETTER: JACG

MEMBERS: 400

MEETINGS: Second Saturday every month at Bell Laboratories in

Murray Hill, New Jersey.

FREE SOFTWARE

GAMES
SCIENCE
BUSINESS
EDUCATION
HOME MANAGEMENT
COMPUTER UTILITIES
GRAPHICS DEMONSTRATIONS
COMPUTER COMMUNICATIONS

AN 80 DISK SOFTWARE LIBRARY

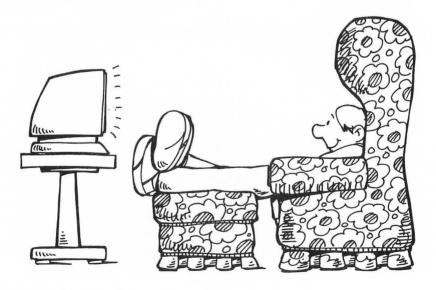
J.A.C.G.'s 80 disk public domain software library is one of the largest in the country.

The software library contains J.A.C.G. member contributions plus a compilation of public domain programs written by other users' groups and from magazines. Many of J.A.C.G.'s members work in engineering and related fields and have contributed a number of excellent technical-aid programs to the club's ever expanding library.

Club members choose from programs in all categories, and receive a fully-loaded disk containing up to 15 programs for the minimal cost of only \$5.00. (This charge covers the disk's cost plus loading time.)

J.A.C.G.'s electronic Bulletin Board (201-377-4084) is becoming more active. The public domain programs in its download section are rotated to offer a mix of the club's library selections and are available to all callers.

The J.A.C.G. monthly newsletter is chock full of program listings, reviews, and club news. It is available to all members as part of their \$15.00 annual dues package.



COURSES AND SPECIAL INTEREST GROUPS

Whether you are a computer expert or neophyte, J.A.C.G.'s special interest groups have something for you. Their list of groups grows and changes to fit the needs of its members. When we wrote this book, twelve SIG's were meeting on a regular basis:

LISP
BASIC
PILOT
FORTH
PASCAL
GRAPHICS
EDUCATION
HAM RADIO
ARCADE GAMES
GAME CONSTRUCTION
ASSEMBLY LANGUAGE
TELECOMMUNICATIONS

"WE LIKE TO GET OUT AND WORK IN THE COMMUNITY"

Ed Picciuti, J.A.C.G.'s secretary, told us that the group "likes to get out and work in the community." Club members have helped the Occupational Training Center in Cedar Knolls, New Jersey, to set up a computer system to aid the physically and emotionally handicapped. The club's members also attend and exhibit at local computer shows where they display their programs and share ATARI help and ideas with show visitors.

J.A.C.G. embodies all that is good in a users' group. Active participation in civic projects, knowledgeable help for its members, trading and swap meets, and trips... a wealth of activities to help the ATARI computer owner do more with his or her home computer.

Mini-Profile VII

The Downtown Washington ATARI Computer Users' Group Arlington, Virginia

EMPHASIS: BUSINESS & TELECOMMUNICATIONS

ADDRESS:

The Downtown Washington ATARI Computer Users' Group 1206 North Stafford Street Arlington, VA 22201

OFFICER: Frank Huband, President

PHONE: 703-527-4700 (H)

ELECTRONIC BULLETIN BOARD:

202-276-8342—ARMUDIC—24 Hrs. NEWSLETTER: *Current Notes*. monthly.

MEMBERS: 80
MEETINGS:

Third Tuesday every month in northwest Washington D.C.

FREE SOFTWARE

GAMES
SCIENCE
BUSINESS
EDUCATION
HOME MANAGEMENT
COMPUTER UTILITIES
GRAPHICS DEMONSTRATIONS
COMPUTER COMMUNICATIONS

The club's expanding library now contains 20 disks full of public domain software, divided into categories, and available to members. They share this wealth of FREE software with any ATARI enthusiast who owns a modem and is willing to call their ARMUDIC Bulletin Board.

ARMUDIC

The ARMUDIC type electronic Bulletin Board (discussed in "FREE Software by phone") was developed at the Downtown Washington club. The name "ARMUDIC" was derived by transposing the board's phone number into letters—"276-8342" = "ARM-UDIC".

This excellent Bulletin Board system, which offers a breakdown of software on file by category, is available commercially to those who want to start their own base station. Write the club for details.

During a recent call to the club's ARMUDIC BBS we found sixty-eight public domain programs in its download section. These were listed in nine categories:

- 1. Communications-related
- 2. Utilities
- 3 Games
- 4. Other
- 5. User-submitted
- 6. New text
- 7. VisiCalc
- 8. Forth
- 9. New

The club's business orientation was apparent by the many VisiCalc templates offered. These member-created templates help you calculate mortgage payments, prepare your tax return and estimate your working capital and net worth.

CURRENT NOTES

Current Notes, the club's newsletter, links a number of Washington D.C. area groups together. Articles and software listings developed by members of the local groups are compiled and printed in *Current Notes*. In addition, the newsletter prints club news, product reviews, and editorials.

"HELPING MEMBERS..."

Frank Huband, the group's president, said that "Our club helps its members get the most out of their machines." They do this by offering lectures and classes on such topics as BASIC, the disk operating system, and FORTH. The club's members also take advantage of mass hardware and software discount purchases, and receive excellent manufacturer support and backup.

GETTING DOWN TO BUSINESS

Meetings are held in the evenings, after work, in downtown Washington D.C. and attract many business people and professionals. Sharing ways to use the ATARI computer in a professional environment is always high on the list of topics discussed.

Mini-Profile VIII

Artists Who Use Computers Fresh Meadows, New York

EMPHASIS: COMPUTER ART

ADDRESS:

Artists Who Use Computers 48-30 189th Street Fresh Meadows, NY 13365

OFFICER: Jerry Pozniak PHONE: 212-357-7670 (H)

ELECTRONIC BULLETIN BOARD:

212-357-7670—AMIS—Limited hours: 11 P.M. to 9 A.M. EST.

MEMBERS: 10

MEETINGS: First Wednesday every month at the School of Visual Arts in Manhattan, N.Y.

A NEW AND EXCITING GROUP

"Artists Who Use Computers" is typical of the many new groups we spoke to that are doing exciting things with their ATARI computers.

As the group's name implies, these folks are artists exploring new and creative uses for their computers. Their meetings are held at the School of Visual Arts in Manhattan, and focus on visual presentations, computer graphics, and joint art projects.

WE'VE PROVIDED A LIST

We've provided a list of all ATARI Users' Groups world wide. There's one near you that can help you expand your ATARI computing experience. Call or write to one today!

Official ATARI® Computer Users' Groups

(As of 3/1/83)

ALABAMA

HUNTSVILLE ATARI (COMPUTER) USERS' GROUP Harold R. Blevins, President 514 Jeffrey Drive N.W. Huntsville, AL 35806 205 837-2437 (H) 205 453-3809 (W)

ARIZONA

COMPUTER WIZARDS Frank Barajas, President 530 S. Dobson Road #359 Mesa, AZ 85202 602 966-4275 (W) 602 969-9502 (H)

ARKANSAS

501 753-2499 (H)

OBU ATARI COMPUTER USERS'
GROUP
Bryan Harmon, President
Box 689
Ouachita Baptist University
Arkadelphia, AR 71923
501 246-6238 (H) 501 246-4531 X518 (W)
LITTLE ROCK ATARI (COMPUTER)
ADDICTS
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BATON ROUGE AREA ATARI COMPUTER USERS' GROUP Randy Peairs, President Route 2, Box 134 Zachary, LA 70791 504 654-5405

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AURA George Perantonakis 9433 Georgia Avenue Silver Springs, MD 20910 301 588-6565 301 587-2132 (BBS)

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ATARI COMPUTER USERS' CLUB Mike Deschenes, President 565 Main Street Cherry Valley, MA 01611

Richard Galaska 43 Chestnut Hill Road South Hadley, MA 01075 413 534-7349

MICHIGAN

GRAND RAPIDS ATARI (COMPUTER) SYSTEM SUPPORT Ron Kramer 3829 Marlboro N.W. Grand Rapids, MI 49504

SOUTHEASTERN MICHIGAN ATARI (COMPUTER) USERS' GROUP-SMAUG Doug Mitchell 38476 Annarbor Trail Livonia, MI 48150 313 464-6502

MUSKEGON ATARI COMPUTER USERS' GROUP Tom Garzelloni, President 4835 Wilfred Muskegon, MI 49444 616 739-8629

ATARI COMPUTER PROGRAMMERS OF PORTAGE Jim Crowley 5649 Tiffin Portage, MI 49081 616 327-8166

Wayne J. Kladder Computer Solutions 1047 S. Airport Road Traverse City, MI 49684

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Roger L. Brenizer RR1-Box 105 B Belton, MO 64012 816 331-0096

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JOHN MEKSA'S ATARI (COMPUTER) GRAPHICS CLUB OF SOUTH JERSEY John Meksa, President 409 Melvin Avenue Glendora, NJ 08029 609 939-4933 Phil Dambola 6 Green Village Road Madison, NJ 07940 201 377-4084

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THE TEANECK ATARI COMPUTER USERS' GROUP Mark Hirmes, President 331 DeMott Avenue Teaneck, NJ 07666 201 836-2222

NORTHERN NEW JERSEY ATARI COMPUTER GROUP Ken Roser, President 1907 Arbor Lane Union, NJ 07083 201 688-3546

Steve Banko, M-113 Supermarkets General Corporation 301 Blair Road Woodbridge, NJ 07095 201 499-3958 (W)

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A.C.E. OF SYRACUSE Tom Karkowski, President 5728 Paisley Place East Syracuse, NY 13057 315 656-2228 SPECTRA-SEVERAL PEOPLE ENROLLED AT CORNELL THAT RESPECT ATARI Craig Patchett, President 109 McGraw Place Ithaca, NY 14850 607 273-0916

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Robert M. Jancie 35 Memphis Avenue Staten Island, NY 10312 212 967-2735 212 948-3902

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DAY-TARI Steven M. Schoemann 5579 Maefel Lane Dayton, OH 45415

BEACHWOOD FALLS PROGRAMMERS Ronald Luks 3001 Wiltshire Road No. Royalton, OH 44133 216 524-6210 (W-Ohio) 216 582-1955 (H-Ohio) 212 938-2250 (W-New York) 212 777-2218 (H-New York)

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ON LINE ATARI COMPUTER FUN GROUP George Cummings On Line Computer Center 10944A N. May Avenue Oklahoma City, OK 17120 405 751-2796

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ATARI COMPUTER USERS' CLUB Dietmar Meyfeldt Scharnhorstr. 35 62 Wiesbaden West Germany 040/51180 91-99

OTHER

TSGT Tom G. Dunavold PSC Box 2192 APO NY 09860

BY PUONE

READ BEFORE DIALING



READ BEFORE DIALING

The MODEM (MOdulator/DEModulator) is an inexpensive device that allows you to use your ATARI computer to communicate with other computers through regular telephone lines. It has brought the age of telecommunications and FREE software within your reach.

A diverse network of services and recreations is now as close to you and your ATARI computer as your telephone. Hundreds of information services and electronic bulletin boards (BBS) are standing by at this moment waiting for you...and the ones you'll learn about in this book cost no more than the price of an ordinary phone call.

IN THIS SECTION WE WILL SHOW YOU:

- The FREE software and services that are available to you.
- Representative FREE software lists available from Bulletin Board Services.
- MODEM terms fully explained.
- A complete MODEM buyer's guide including brands, features and costs..PLUS, the names and addresses of major MODEM manufacturers.
- Starter programs...Just type these two short programs, save them to DISK or CASSETTE and begin communicating with all the FREE resources available to you, TODAY!
- How to get sophisticated communications programs FREE.
- Complete operating instructions for the three most popular communications programs; AMISTERM, JONESTERM and AMODEM.
- The three most common types of ATARI related BBS systems, AMIS, ARMUDIC and RCP/M are explored, including operation, features and commands.

- Special recreational systems like the "Living Tree" and "DIAL-YOUR-MATCH" are fully covered.
- A comprehensive phone directory of over 500 numbers that puts you in touch TODAY with BBS and recreational systems.
 ATARI BBS phone numbers are listed by type of system and alphabetized by State, to help you reach the system closest to you.
- How to set up your own BBS. .featuring an interview with the founder of the Itsy Bitsy Bulletin Board Service.

Free Bulletin Board Services (BBS)

ATARI Users' Groups, hobbyists, and entrepreneurs throughout the world are operating electronic Bulletin Boards and information terminals that are loaded with easy-to-access features that allow you to increase your software library and expand the usefulness of your computer.

The FREE Electronic Classified Ad

The Message Center is the heart of each electronic Bulletin Board. Do you have information to share with other ATARI enthusiasts?...something to sell?...looking for some programming help or some new or used equipment? You'll probably find what you want listed in the "computer classified ad department": the electronic Message Center.

Later in this section you'll learn how to retrieve and place messages on a wide selection of electronic bulletin boards. Here's what a

typical message looks like:

MSG#0326 DATE: 02/02/83 TIME:18:26:49 FROM: Mary Dillon; Cupertino, CA Educators TO: All SUBJ: Classroom reading programs

Looking for (Atari) reading skills programs for 1st grade Students. Please leave message on this BBS if you can help.

Using this FREE service offers many exciting possibilities...You can advertise a product or service, find out the latest ATARI news, or leave a message for a friend.

FREE Public Domain Software

Public domain software is either uncopyrighted software that has been contributed by a fellow ATARI enthusiast, or copyrighted software that has been put on a BBS with the author's approval.

SAVE PROGRAMS TO DISK OR CASSETTE

You'll find 'Terminal Software' in this section that allows you to call a BBS, check its list of available software and *download** public domain programs to your computer. We'll also show you how to save your newly acquired programs to DISK or CASSETTE..adding it to your software library.

All types of programs are available: utility programs that ease your programming chores; adventure and arcade games; educational software; business software; communications software; home management software...there are even public domain programs available that allow you to set up your own BBS!

^{*} Download: To receive a program over the phone line, temporarily capture it in your ATARI's memory, then permanently save it on cassette or disk for later use.

For example, sixty-eight (68) programs are offered FREE from Washington's ARMUDIC BBS, sponsored by the Downtown Washington ATARI Users' Group. Their selection of Communications programs, Computer Utilities, Games, Text Files, Business Programs and FORTH language programs is *typical* of the wide variety of software available FREE from BBS systems throughout the world.

When we contacted the Washington BBS by calling 202-276-8342 and "asked" what type of software was available for downloading, this list of categories was presented on our screen:

- 1. Communications-related
- 2. Utilities
- 3. Games
- 4. Other
- 5. User-submitted
- 6. New text
- 7. VisiCalc
- 8. Forth
- 9. New

To see what Utility programs were available, we pressed "2" [RETURN] and were presented with this screen: (If you own a disk drive you'll recognize this format...it's very similar to the DOS display.)

#File Name SIZ #File Name SIZ
1:DISKDUP 007 2:DISKPEEK 019
3:DISKRPM2 007 4:DKSTOCAS 016
5:MAILABEL 007 6:NEATLIST 016
7:SCRNDUMP 005 8:SET AUTO 009
9:SETAUTO2 012

Item 1 "*DISKDUP" is a Disk Duplication utility that speeds up the process of copying nonprotected disks. The number, 007, to the right of this program's name, is the number of sectors the program will occupy on our disk. The asterisk (*) indicates that we'll have to set our terminal to receive ATARI ASCII information. (This only requires pressing a button on the computer console.)

We quickly reviewed the other programs listed in this category. "SCRNDUMP", a screen-dump utility used to transfer screen images to a printer and "NEATLIST", a program renumbering utility, both looked interesting.

(Many BBS's provide a description of each program so you don't have to decipher the shortened program names, and are able to download only the programs you are interested in.)

We decided to *download* "DISKDUP". Minutes later, by following a few simple steps (fully explained in the Terminal Operating chapter) we had added this great utility to our permanent software library.

This BBS also offers a VisiCalc Forms file...selection 7. If you have a VisiCalc electronic spread-sheet program, these ready-made forms will help you keep track of your automobile expenses, calculate your mortgage loan, figure out your net worth or help you prepare your income tax return.

Some BBS's offer "computer posters"...graphic designs and portraits of famous people like Albert Einstein and Raquel Welch. These posters can be printed-out using a standard printer, then displayed proudly on the wall of your computer room.

Other BBS's offer PILOT language programs, ideal for student programmers. One BBS (GRAFex in Cupertino, California) offers programs in ATARI Basic, Basic A+, posters, text and VisiCalc files, and Ham Radio information. The software available from GRAFex covers the spectrum from games like BLASTER, to educational programs like TYPER, a typing tutorial.

A complete word processing program can be downloaded from some BBS's. Now, you can write the great American novel on your computer...using FREE software!

When you call a BBS, you can also get an updated listing of other ATARI BBS's; talk via the keyboard to the SYSOP (System Operator); upload* your programs to the system; get the current time and date; or take part in a BBS experiment...One BBS offers its callers a short quiz, and awards prizes for the correct answers.

The BBS network has software and features for every ATARI computer owner...it's all FREE, and as close as your telephone!... This section will show you where it is and how to get it.

Other Free Services

Once you've been bitten by the "computer communications bug" you'll discover many new and interesting recreations and services.

THE LIVING TREE

Later we'll show you how to access and actively participate in the growth of a "Living Tree" system.

As its name implies, a "Living Tree" service is a vast and everexpanding information bank structured like a living tree. After making contact with your local "Living Tree", you enter the system's data base at its "top". By inputting commands like "down", "up", "left" or "right", you slide down its "trunk" or climb onto its various "limbs" and "branches".

Personal Mail Boxes reside in one branch of the tree, Classified Ads in another, and a "Living Story" in yet another.

In the "Living Story", you'll be able to contribute your own continuation to the existing narrative. If you're a budding writer, this

^{*} Upload: To send a program from your ATARI Computer to a distant computer via phone lines.

may be your chance to vent your literary talents. Many youngsters who participate in this activity have measurably improved their writing and reading skills while using their creative talents.

Most "Living Trees" don't offer free software...but they do give you the opportunity to add to their ever-expanding structure and access lots of valuable information.

DIAL-YOUR-MATCH is another good example of the many FREE services available to ATARI communicators. This confidential "find-a-mate" by modem service is available FREE in more than 25 locations throughout the U.S. You enter a code name, answer a brief questionnaire, and check back periodically to see if you've been matched with the romance of your life.

A complete phone directory of available DIAL-YOUR-MATCH terminals can be found on page 131.

THE LIST IS GROWING

The list of FREE services available to ATARI computer owners is growing daily. Entering this exciting world is as easy as buying a modem, hooking it up, and dialing your phone.

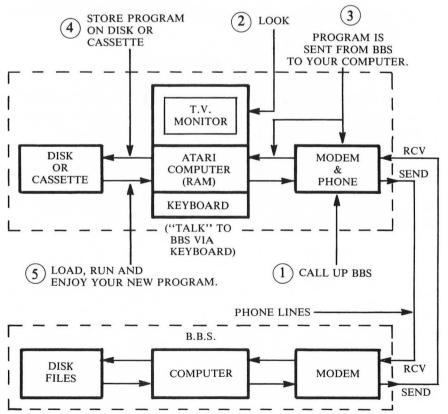
READ ON!

Read on, and learn how you can enter this exciting world of computer communications.

Downloading a Program from a BBS

FIVE EASY STEPS TO FREE SOFTWARE

- 1. Call up a friendly BBS.
- 2. Look over the BBS's files and choose the public domain program you'd like to download.
- 3. "Tell" the BBS to send the program to your computer's (RAM) memory.
- 4. Store the program on your disk or tape.
- 5. You have now added a new program to your permanent software library...ENJOY!

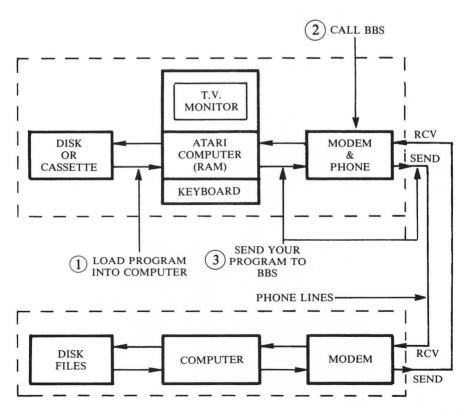


Uploading Your Program to a BBS

SHARING YOUR PROGRAM WITH OTHER ATARI ENTHUSIASTS

- 1. Transfer your program from disk or cassette to your computer's (RAM) memory.
- 2. Call up a friendly BBS and "ask" to upload your program.
- 3. Send your program to the BBS.

Your program is added to the BBS's public domain software file for use by other ATARI enthusiasts.



MODEMS

Now that you have an idea of all the FREE services and recreations available to ATARI communicators, it's time to start thinking about buying a MODEM. Before you run down to your local computer store, take a few minutes to read this short chapter. It will familiarize you with MODEM telecommunications terms and help you select the *right* MODEM for your needs.

Modem Terms & Features

MODEM

"MODEM" is the abbreviated combination of the two words MOdulator and DEModulator, (Modulator = Transmitter and Demodulator = Receiver).

A MODEM is used to connect your computer to a telephone line. It enables your computer to communicate with other computers.

ACOUSTIC or DIRECT-CONNECT?

When you're shopping for a modem you'll be presented with two basic choices: an acoustically-coupled modem or a direct-connect type.

ACOUSTIC MODEM



An acoustic modem is equipped with two soft rubber cups that accept a telephone's handset and form a tight seal around both the mouthpiece and earpiece. This type of modem can only be used with "standard" business type telephones. Fancy phones with odd shaped mouth and earpieces, like the "Princess" model, won't fit securely into the specially designed rubber cups. A tight, sound proof fit between telephone and modem is critical for proper operation... extraneous noise can distort the data transmission.

Acoustic modems are generally less expensive than direct-connect modems and are quite suitable for up and downloading information to your computer. (We've used the ATARI model 830™ acoustic modem to do the research for this book.) However, acoustic modems do not have the ability to automatically answer the phone, and are therefore not suited for BBS terminal use.

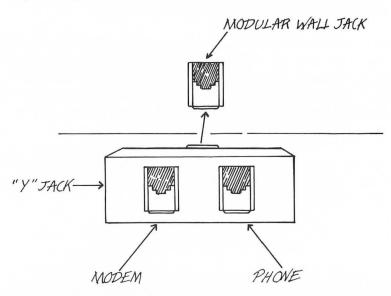
To use an acoustic modem you pick up the phone, dial a BBS number, listen for the tone and insert the phone's headset into the two rubber cups to establish contact.

DIRECT-CONNECT MODEM



Auto-Answer

A direct-connect modem plugs directly into a telephone wall jack. This eliminates any possible noise problems and allows for the "automatic answer" feature, necessary for operating your own BBS. Make sure that your home is equipped with a modular phone jack... you'll probably need this for connection.



A phone is usually plugged into a modular wall-jack with the direct-connect modem via an inexpensive "Y" jack. (You can purchase a "Y" jack at any phone store and at most department stores.) This dual hookup lets you manually dial up the BBS or service of your choice. When connection is made you will hear a tone, an indicator will light on the modem, and communications can begin.

Automatic Dialing

Some direct-connect modems offer an automatic dialing feature. You store frequently called phone numbers in the modem's terminal software. When you turn on your system, your screen displays a menu listing of these BBS's or services. By typing the number to the left of a listing, the modem will automatically dial the phone number

of your choice. Here's what a typical autodial menu list might look like:

AUTODIAL

- 1. I.B.B.B.S.
- 2. G.F.X.B.B.S.
- 3. DATA BANK
- 4. S.C.B.B.S
- 5. STUART-S'VALE
- 6. SANTA CLARA PMS
- 7. CRISIS TIMESHARE

SELECT

Data/Voice Switch

Most direct-connect modems allow you to select either Data or Voice operation by pressing a switch.

The Data selection lets you automatically dial out using your computer's keyboard.

The Voice selection allows you to use your phone to dial with.

Other Options

Other options available on some direct-connect modems include automatic disconnect, and unattended automatic dialing and passing of data with other systems.

BAUD RATE

A baud rate is simply a measure of how fast a modem communicates. All the BBS services available to ATARI computer owners operate at 300 Baud. This translates to a rate of 30 characters per second.

Modems are also available that are capable of transmitting and receiving at 1200 Baud (120 characters per second), or even faster. You might consider one of these faster units *if* you are planning to do *a lot of communicating* with commercial main-frame computer networks such as The Source or Dow Jones Services.

The faster the baud rate, the higher the cost of the MODEM.

DUPLEXING

Most modems have the switchable ability to operate either in full-duplex or half-duplex mode.

Full-Duplex

Full-duplex communication is similar to a telephone conversation, where both parties can talk simultaneously.

When you contact a BBS, make sure that the "Duplex" switch is set to "Full". The BBS will echo the characters you've sent back to your computer for display on your screen as it receives your information. This requires full-duplex operation.

Half-Duplex

Half-duplex can be compared to Ham radio communications, where only one party can talk at a time. Use this mode for ATARI to ATARI computer communications.

EXTRA FEATURES

Self-test

A test switch is provided with some modems that allows you to determine if your system is functioning correctly or if there is a problem at the other end of the connection.

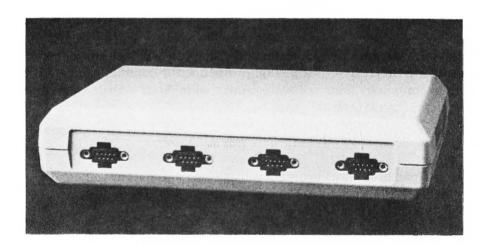
Carrier Detection

When you make contact with another computer, it responds by transmitting a carrier tone. Most modems let you know that you're in contact by emitting a tone or turning on a light or LED.

Helpful Modem Buying Tips

The "ATARI Modem Buyer's Guide" on page 90 lists ATARI computer compatible modems and many of their features. It has been designed to give you an overview of each manufacturer's product(s), and an idea of each modem's cost. There are, however, a few additional considerations you must make.

Do you need an 850™ Interface Module?



Many modems will only work when plugged into the ATARI 850™ Interface Module. This connection provides what is called an "RS-232" interface.

If you have an 850^{TM} , then you're all set. Your modem plugs into Port 1 at the rear of the ATARI Interface Module. (If you have a printer, you have the Interface Module.)

If you don't own an 850^{TM} , this Interface Module might cost you more than the modem. Consider purchasing a modem that operates without an Interface Module. This type of modem is typically more expensive than a standard unit, but in most cases it will be a direct-connect type. This kind of modem connects either to a controller port at the front of your ATARI, or to the input/output connection on the computer's side, or to the parallel connection at the rear of a disk drive.

Some of the modems that don't require the 850™ Interface Module are equipped with a special serial port that allows you to connect a serial printer. (The Microconnection A2A from the Microperipheral Corp. is an example of this type of modem.)

I have an 850™ Interface Module. What else do I need to know?

If you have an 850^{TM} Interface Module you will also need special software to "boot up" this unit...open it for communication with your computer. This software comes with Atari's Disk Operating System... $DOS\ 2.0S$.

I don't have this software!

Don't panic! A short program is listed on page 95 that will create an "AUTORUN.SYS" program on your disk to automatically "boot up" your Interface Module.

What about terminal software?

Terminal software is needed to turn your computer into a communications terminal.

There are many commercially available software packages that will do the job. Some allow you to upload and download programs from distant computers. However, some commercial software only allows you to "talk" with other computers...you should avoid these.

FREE Terminal Software

We have provided a starter Terminal program listing and instructions on page 97. This short software package will get you on-line in a few minutes.

We will also show you how to use the starter package to get other FREE Terminal Software, and how to use these sophisticated programs to upload and download programs. You may find that this FREE Terminal Software will fill all your needs. They are all easy to use and offer features found in software packages that cost \$50.00 or more.

Does My ATARI have enough Memory?

The FREE starter Terminal program we provide in this book is designed for 16K ATARI operation. However, it and other Terminal programs use valuable memory space within your computer. Some commercial software requires that your computer have a minimum of 24K Random Access Memory. BEFORE YOU BUY A MODEM, CHECK WITH THE MANUFACTURER OR DEALER TO INSURE THAT ANY SOFTWARE THEY OFFER WILL WORK WITH THE MEMORY YOU HAVE AVAILABLE.

Cables and Connectors

Before you leave the store with your new modem, make sure that it comes supplied with all the correct cables and connectors. It could be extremely frustrating to get home with your modem and find that you've got the wrong cables!

Talk to the Manufacturer

Below is a listing of modem manufacturers whose products are summarized in our "ATARI Modem Buyer's Guide". Additional manufacturers of interest to ATARI computer owners are also listed. It's a good idea to send each manufacturer a short letter requesting information on their line of modems compatible with your ATARI Home Computer. Ask them to send their brochures, then sit back in the comfort of your home and make your selection. You might also ask where their nearest distributor or retail outlet is...this can save you a lot of leg work. All the manufacturers we spoke to were extremely helpful and responded with literature within a few days.

Modem Manufacturers Listed in the ATARI Modem Buyer's Guide

ATARI, Inc.
Consumer Division
1195 Borregas Avenue
Sunnyvale, CA 94086
800-672-1404 (Consumer Hot Line)

Hayes Microcomputer Products, Inc. 5923 Peachtree Industrial Blvd. Norcross, GA 30092 404-449-8791

Microbits 434 W. 1st Street Albany, OR 97321 503-967-9075

The Microperipheral Corporation 2643 151st Place N.E. Redmond, WA 98052 206-881-7544

Novation, Inc. 18664 Oxnard Street Tarzana, CA 91356 213-996-5060 Prentice Corporation 266 Caspian Drive Sunnyvale, CA 94086 408-734-9810

Racal-Vadic 222 Caspian Drive Sunnyvale, CA 94086 408-744-0810

Universal Data Systems 5000 Bradford Drive Huntsville, AL 35805 205-837-8100

More Modem Manufacturers

Anderson Jacobson, Inc. 227 Devcon Drive San Jose, CA 95112

ESI Lynx 123 Locust Street Lancaster, PA 17602

Kesa Company 774 San Miquel Avenue Sunnyvale, CA 94086

Leading Edge Products, Inc. 225 Turnpike Street Canton, MA 02021

Lexicon Corporation 1541 N.W. 65th Avenue Ft. Lauderdale, FL 33313

MFJ Enterprises, Inc. 921 Louisville Road Starkville, MS 39759

Micromint, Inc. 917 Midway Woodmere, NY 11598

TNW Corporation Modem Department 3444 Hancock Street San Diego, CA 92110

U.S. Robotics, Inc. 1035 West Lake Chicago, IL 60601

ATARI MODEM BUYERS GUIDE

	Atari	Hayes	Hayes	Microbits	The Microperi- pheral Corp.	The Microperi- pheral Corp.	The Microperi- pheral Corp.
Model:	830	Smart Modem 300	Smart Modem 1200	MPP-1000	A1	A1A	**A2
Type:	Acoustic	Direct Connect	Direct Connect	Direct Connect	Direct Connect	Direct Connect	Direct Connect
Compat- ability	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	No 850 required Plugs into Joystick Port 4	RS-232C 850 Int required	RS-232C 850 Int required	No 850 required Plugs into I/O Port
Baud Rate	300	0-300	0-300/ 1200	0-300	300	300	300
Duplex	Both Switch	Both Switch	Both Switch	Both Switch	Both	Both	Both
Voice/ Data Selection	N/A	No	No	Yes	Yes	Yes	Yes
Auto Answer	N/A	Yes	Yes	No	No	Yes	No
Auto Dial	N/A	Yes	Yes	No	No	Yes	No
Self Test	No	Yes	Yes	No	No	No	No
Carrier Detection	Light	LED	LED	Tone	LED	LED	LED
Cables & Connector Included?	Yes	No	No	Yes	Yes	Yes	Yes
Terminal Software Included?	No	No	No	Yes Tape/Disk	Yes	Yes	Yes
Warranty	90 days	2 years	2 years	1 year	90 days	90 days	90 days
*Price	\$199.95	289.00	\$699.00	\$199.00	\$199.00	\$239.00	\$249.00
Special Features				*	*Optional " terminal s available for all Microperi- pheral modems: \$80.00		Serial Printer Port Included Optional Software: \$19.95 "Typer A"

ATARI MODEM BUYERS GUIDE

	The Microperi- pheral				Prentice	Prentice	Prentice
	Corp.	Novation	Novation	Novation	Corp.	Corp.	Corp.
Model:	**A2A	J-CAT	103	103/212	STAR	P212	212TCM
Type:	Direct Connect	Direct Connect	Direct Connect	Direct Connect	Acoustic	Direct Connect	Direct Connect
Compat- ability	No 850 required Plugs into I/O port	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required
Baud Rate	300	0-300	0-300	300/ 1200	0-300	0-300/ 1200	0-300/ 1200
Duplex	Both	Full Only	Full Only	Full Only	Both Switch	Both	Both
Voice/							
Data Selection	Yes	No	Yes	Yes	N/A	Yes	Yes
Auto Answer	No	Yes	Yes	Yes	N/A	Yes	Yes
Auto Dial	Yes	Yes	Yes	Yes	N/A	No	Yes
Self Test	No	Yes	Yes	Yes	Yes	Yes	Yes
Carrier Detection	LED	LED	LED	LED	LED	LED	LED
Cables & Connector Included?	Yes	Yes	Yes Except RS-232	Yes Except RS-232	No	No	No
Terminal Software Included?	Yes	No	No	No	No	No	No
Warranty	90 days	1 year	1 year	1 year	1 year	1 year	1 year
*Price	\$279.00	\$149.00	\$249.00	\$595.00	\$199.00	\$695.00	\$795.00
Special Features	Serial Printer Port Included. Optional Software: \$19.95 "Typer A"	Small size: 5x1.9x1.3 Inches					

ATARI MODEM BUYERS GUIDE

	Racal- Vadic	Racal- Vadic	Racal- Vadic	Universal Data Systems	Universal Data Systems	Universal Data Systems
Model:	VA103	VA212LC	VA212PA	103JLP	212A	212A/D
Type:	Direct Connect	Direct Connect	Direct Connect	Direct Connect	Direct Connect	Direct Connect
Compat- ability	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required	RS-232C 850 Int required
Baud Rate	0-300	0-300/ 1200	0-300/ 1200	0-300	0-300/ 1200	0-300/ 1200
Duplex	Full Only	Full Only	Full Only	Full Only	Full Only	Full Only
Voice/ Data Selection	Built In	Yes	Yes	Yes	Yes	Yes
Auto Answer	Optional	Yes	Yes	Yes	Yes	Yes
Auto Dial	Yes Optional	Manual Only	Yes	No	No	Yes
Self Test	No	Yes	Yes	No	Yes	Yes
Carrier Detection	Tone	Light	Light	LED	LED	LED
Cables & Connector Included?	No	No	No	No	No	No
Terminal Software Included?	No	No	No	No	No	No
Warranty	1 year	1 year	1 year	1 year	1 year	1 year
*Price	\$250-380	550.00	\$795.00	\$195.00	\$675.00	\$745.00
Special	This mode built into a Touch-tone opt.	a phone.				

N/A: Not applicable

NOTE: Atari, Inc., is planning to release a model 835, direct connect modem during the Spring of 1983. Specifications for this unit were not available at the time this chart was compiled.

^{*}Price: Manufacturers recommended retail price. 3/15/83

^{**}Microperipheral Models A2 & A2A: Only manufacturer supplied terminal software (TSMART) will work with these modems. Public domain terminal software is not currently available. 24K RAM required.

FREE TERMINAL SOFTWARE

Congratulations...You have a modem, it's hooked up to your ATARI computer and you're ready to call up a friendly BBS and get FREE software by phone! But, you need TERMINAL SOFTWARE to turn your ATARI into a communications terminal.

Fortunately, some very dedicated individuals and groups have developed a number of *public domain* Terminal software packages. In this chapter, we'll show you how to get and use this excellent FREE software.

You are going to encounter some strange new words in this chapter. Words you've never heard before. Some of the text *may* look "technical". Don't panic! You are an explorer entering a new world. A world filled with exciting, educational, and rewarding experiences. All those "technical" sounding words will become second nature after you've made your first calls from your computer terminal.

We've found that "diving right in" is the best way to get comfortable with this new way of communicating. Don't worry about making mistakes while you are on-line with another computer...IT'S ONLY A MACHINE!...you can't hurt it...and it can't hurt you!

To help smooth your way, we've included complete operating instructions for four Terminal Software packages. Read them over and familiarize yourself with each program's features, then use the instructions with the program up-and-running on your computer.

We've also provided you with "Quick Reference Charts" that summarize each Terminal's operating feaures. These easy-to-read charts will help you while you're on-line with that other computer.

Interface Module Software *Disk Only*

If you are using a disk drive, and your modem requires the ATARI 850TM Interface Module, you'll have to use special software to open it up for communications before you begin. This software (RS-232 Handler software) is commercially available from ATARI...it comes with the purchase of their Disk Operating System... DOS 2.0S.

The program listing shown below has been provided for those of you who don't have this special "850 open em up" software.

Step 1

Format and write a DOS 2.0S file to a blank disk. (You can get DOS 2.0S from a friend, commercial ATARI software in your library that uses DOS 2.0S, or your ATARI Users' Club.)

Step 2

Label this disk. It will become your "Communications Terminal" software package.



Step 3

With the BASIC cartridge plugged into your computer, type and enter the program exactly as shown below. Check it carefully to prevent typing errors.

850 Open 'Em Up Program

10 . *850 OPEN 'EM UP PROGRAM 20 OPEN #1.8.0."D:AUTORUN.SYS"

30 FOR I=1 TO 88 40 READ D 50 PUT #1.D 60 NEXT I 70 CLOSE #1 80 END 100 DATA 255,255,0,56,75,56,169,80 110 DATA 141,0,3,169,1,141,1,3,169 120 DATA 63,141,2,3,169,64,141,3,3 130 DATA 169,5,141,6,3,141,5,3,169

140 DATA 0,141,4,3,141,9,3,141,10 150 DATA 3,141,11,3,169,12,141,8,3 160 DATA 32,89,228,16,1.96,162,11 170 DATA 189,0,5,157,0,3,202,16,247

180 DATA 32,89,228,48,6,32,6,5,108

190 DATA 12,0,96

200 DATA 226,2,227,2,0,56

Step 4

Assign the name "AUTORUN.BAS" to this program and save it to your disk.

Step 5

RUN the program. It will automatically create an "AUTORUN.SYS" file on your disk.

CASSETTE USERS

Cassette users don't need this software. The 850™ will boot up when you turn your ATARI on.

How to Use Your New AUTORUN.SYS

- 1. Turn on your disk drive and wait until the "busy light" goes off.
- 2. Insert your "Communications Terminal" disk.
- 3. Turn on both the modem *and* the ATARI 850™ Interface Module.
- 4. Turn on your ATARI computer. The AUTORUN.SYS software you've created will automatically open your interface unit. You'll hear a tone from your T.V.'s speaker and the word "READY" will appear on your screen to tell you that your Interface unit is up and running.
- 5. Note: If you go to DOS to check your files, you'll have to repeat steps 1 through 4.

GET ON-LINE TODAY! WITH **MINIATRM** YOUR FIRST TERMINAL PROGRAM

Thanks to Mr. Jim Steinbrecher, of the Michigan ATARI Computer Enthusiasts, we're able to provide you with MINIATRM, an easy-to-use *public domain* Terminal Software program.

Jim Steinbrecher also wrote "AMODEM", a more advanced Terminal program and, with Craig Chamberlain, coauthored "AMISTERM" a Terminal program designed specifically for communicating with ATARI BBS's. You'll learn how to use these and other sophisticated Terminal programs in this chapter.

Type this valuable program. (Don't worry how it looks on your screen...It does work!)

MINIATRM

- 10 . * MINIATRM.BAS:REM BY JIM STEINBRECHER, ARCADE BBS 313-978-8087
- 20.* For a new or 16K user to DOWNLOAD Terminal software or other programs.
- 30.* Run in present form when connected to BBS using ATASCII <EOL=155>
- 40 . * To use on CIS or ASCII BBS change Line 70 XIO-38 to "XIO 38,#2,0,0, etc."
- 45.* CASSETTE/48K Atari: Change first statement in line 50 to: 'C=FRE(0)-2200'
- 50 C=FRE(0)-100:DIM D\$(15),BUFF\$(C):BUFF\$="
 ":BUFF\$(C)=" ":BUFF\$(2,LEN(BUFF\$))=BUFF\$:?
 "BUFFER=";C
- 60 OPEN #1,4,0,"K:"
- 70 SAV=0:CLOSE #2:XIO 34,#2,192,0,"R:":XIO 38,#2,32,0,"R:":OPEN #2,13,0,"R:":XIO 40,#2,0,0,"R:"
- 80 SETCOLOR 2,7,4:? "* TERMINAL MODE *"
- 90 STATUS #2,C:IF PEEK(747) THEN GET #2,C:? C H R \$ (C); : I F S A V T H E N P O K E ADDR:C:ADDR=ADDR+1;GOTO 90
- 100 IF PEEK(764)<255 THEN GET #1,C:PUT #2,C:GOTO 90
- 110 IF PEEK(53279)=7 THEN GOTO 90
- 120 IF PEEK(53279)=6 AND SAV=0 THEN SAV=1:ADDR=ADR(BUFF\$):SETCOLOR 2,2,4:? :? "* SAVE ON *":GOTO 90
- 130 IF PEEK(53279)<>5 OR SAV=0 THEN 90
- 140 CLOSE #2:? :? "SAVE DEVICE";;INPUT D\$:IF LEN(D\$)=0 THEN 70:REM ENTER C.P.D:FILENAME.TYP
- 150 TRAP 140:OPEN #2,8,0,D\$:TRAP 160:? #2;BUFF\$(1,ADDR-ADR(BUFF\$)):GOTO 70
- 160 ? !? "BUFFER EMPTY":GOTO 70

48K ATARI WITH CASSETTE

If you are using MINIATRM with a cassette and a 48k Atari, change line 50;

FROM: "C=FRE(0)-100"
TO: "C=FRE(0)-2200"

MINIATRM will turn your computer into a communications terminal. Used with your modem, it enables you to communicate with distant computers to download any program, then add it to your disk or cassette FREE software library.

MINIATRM is often used to download and save sophisticated Terminal programs . . . you might only use it one time, to capture and save AMISTERM for example, but it will get you on-line today!

SAVE this program to your "Communications Terminal" disk.

DISK

SAVE "D:MINIATRM"

CASSETTE

SAVE "C:"

Let's Get Some Free Software!

Now you have everything you need to begin your adventure in computer communications: a computer, a modem, 850 AUTORUN.SYS software, and the MINIATRM Terminal program!

Using MINIATRM

First, insure that both the AUTORUN.SYS program and MINIATRM are saved on the same disk.

Step 1

Turn on your disk drive, modem, and 850™ Interface module.

Step 2

Insert the BASIC cartridge into your computer.

Step 3

Insert your "Communications Terminal" disk into your disk drive and turn on your computer.

Step 4

Type: RUN"D:MINIATRM"[RETURN]

CASSETTE

If you are using a cassette, turn on the 850TM Interface, your computer and type: RUN"C" [RETURN].

YOUR COMPUTER IS NOW A COMPUTER COMMUNICATIONS TERMINAL! You are ready to begin accessing all the FREE software and services available to you!

Here's a typical example of what you'll see on your monitor's screen after RUNning MINIATRM:

BUFFER=29213
* TERMINAL MODE *

"BUFFER = 29213" shows that you can download and save programs that are as long as 29213 bytes.

The screen also tells you that you are now in the TERMINAL MODE of operation.

DOWNLOADING

IMPORTANT

Review the BBS section prior to calling a BBS.

After you've established contact with a BBS and are ready to download a program, press the START key.

When to press START

Once you are in the download section of a BBS, it will ask you for your selection. Your screen will look something like this:

ENTER FILESPEC?

Now press [START] then hit [RETURN].

After pressing START, your screen will turn red and "*SAVE ON*" will appear to tell you that your computer's buffer memory is storing the program being sent to you by the BBS.

STORING YOUR NEW PROGRAM TO DISK OR CASSETTE

Press the SELECT key when you are ready to save your newly acquired program.

After you press SELECT, "SAVE DEVICE?" asks if you want to store your program to disk or cassette, and what you'd like to name it.

CASSETTE

If you'd like to store your new program on cassette, answer the "SAVE DEVICE?" prompt by typing:

C:[RETURN]

Put a cassette in your Program Recorder, depress the RECORD and PLAY buttons on the recorder, hit RETURN, and your new program will be transferred automatically from your computer's buffer memory to your tape.

DISK

To store your new program on disk, answer the "SAVE DEVICE?" prompt by typing:

D:FILENAME[RETURN]

Your new program will be transferred automatically from your computer's buffer memory to your disk, using the FILENAME you typed.

THAT WAS EASY!

That's all there is to it! If you'd like to use MINIATRM to get some great FREE Terminal software, just look for abbreviations like "JTERM", "AMISTRM" and "AMODEM" on a BBS's list of available software. When you find one of these Terminal programs, simply download and store it on your disk or cassette.

Building a great FREE software library is really easy!

More Free Terminal Software

The three most popular Terminal programs, AMISTERM, JONESTERM and AMODEM are available for downloading from most BBS's. Some BBS terminals also offer downloading files that include operating instructions for these programs. We've included these operating instructions and summaries to give you a head start. Use these step-by-step instructions while you're using each new Terminal program.

MAKE YOURSELF COMFORTABLE

Make yourself comfortable with computer communications by first reading these instructions to get a "feel" for each Terminal's capabilities...then refer to these instructions when you have the actual Terminal program up-and-running on your computer and displayed on your screen.

QUICK REFERENCE CHARTS

There's a "Quick Reference Chart" for use with each Terminal program. It will help you while you're communicating with that distant BBS or computer. (Page 201)

IMPORTANT: BEFORE USING ANY TERMINAL SOFTWARE, MAKE SURE THAT YOU'VE "OPENED UP" YOUR 850 INTERFACE MODULE WITH YOUR AUTORUN.SYS.

AMISTERM

AMISTERM is an easy-to-use program designed specifically for communicating with other ATARI computers and AMIS (ATARI Message and Information System) BBS terminals.

USING AMISTERM

After you RUN AMISTERM your screen will look like this:

SEND - Press the SELECT key plus the "S" key

RECIEVE - Press the SELECT key plus the "R" key

<u>DUPLEX</u> - Press the SELECT key plus the "D" key to toggle between Half-Duplex and Full-Duplex operation.

After a few seconds, the words "R1 PORT" will appear at the bottom of the screen.

Press RETURN and you'll enter the TERMINAL mode.

A. TO CHOOSE EITHER FULL OR HALF-DUPLEX

Press the SELECT key plus the "D" key to switch back and forth between Half-Duplex and Full-Duplex operation. AMISTERM starts out in FULL-DUPLEX...the standard mode of BBS communications.

B. TO DOWNLOAD A PROGRAM FROM A BBS

- 1. Before contacting a BBS, press the SELECT key plus the "R" key to enter the Receive/Download mode.
- 2. After you've contacted a BBS and are ready to download a program, press the START Key. After you press START, AMISTERM will store the program to your computer's buffer memory. AMISTERM is pretty smart...it knows when the program has finished downloading! When the program ends, AMISTERM will "ask you" to type in a device (C: or D:) and the name you've selected for this program.

3. To transfer your new program to cassette, simply enter: C:[RETURN].

To transfer your new program to disk enter: D:FILENAME[RETURN]

C. TO UPLOAD YOUR GREAT PROGRAM TO A BBS

- 1. Before contacting the BBS, press the SELECT key plus the "S" key. This will prepare your Terminal to upload your program.
- 2. AMISTERM will ask for the name of the program you'd like to send.

If your program is stored on cassette, type: C:[RETURN] and your program will be loaded from your Program Recorder into the computer's buffer memory, ready for uploading.

If your program is stored on disk, type: D:FILENAME [RETURN] and your program will be loaded from your Disk Drive into the computer's buffer memory, ready for uploading.

- 3. Once your program is stored in the computer's buffer memory, AMISTERM will return to Terminal mode so you can contact the BBS.
- 4. Press START after you've contacted the BBS and are ready to upload your program. AMISTERM will automatically transmit your program to the BBS. When it has finished, it will return again to the Terminal mode.

JONESTERM (JTERM)

JTERM is a Download/Upload Terminal program that lets you communicate with many different types of BBS's, computers and services.

GETTING STARTED, STEP-BY-STEP

1. After you RUN JTERM your screen will turn black for a few seconds, then the first of three menu's will appear:

Operation Mode:

Download

Upload

Type "D" to enter the "receive/download" communications mode. This is the most frequently used selection.

Type "U" if you'd like to upload a program to a BBS.

2. After you've made either selection, your screen will display the second menu: Translation Mode:

None

Light

ATASCII

Type "A" to communicate with another ATARI computer or an AMIS BBS terminal.

Type "L" to communicate with an ARMUDIC BBS, "Living Tree", "DIAL-YOUR-MATCH", or BBS's that are designed to work with other personal computers, like the Apple, TRS-80 or Commodore.

Type "N" if all else fails!

3. After selecting the Translation Mode, some versions may display a third menu: Parity:

None

Odd

Even

Set

This menu asks you to select the *outgoing* Parity. Always select *None* by typing "N", unless the terminal you contact "tells you otherwise".

4. Now that you've set up your terminal's parameters, JTERM will enter the terminal mode and you can call up your friendly BBS.

If you had initially opted to Upload a program to a BBS, JTERM will now "ask" you for the name of the program you'd like to send. After you respond with the device the program is stored on (C:Cassette or D:Disk) and supply its name, your program will be loaded into the computer's buffer memory, ready for uploading. Then you will enter the Terminal mode.

YOU'RE IN THE TERMINAL MODE

The word "TERMINAL" appears at the top of your screen when you've entered the Terminal mode. You can now call a remote computer of your choice and start having some fun!

HALF OR FULL-DUPLEX?

Press the OPTION button to switch back and forth between Full-Duplex or Half-Duplex operation. JTERM is preset to operate in the most common mode; Full-Duplex.

DOWNLOADING

Press the SELECT button to switch the memory save function On or Off.

"MEMSTORE ON" will appear on your screen in inverse letters when you have the memory save function On. JTERM will store *all* information transmitted by a BBS until you switch the memory save function Off or the memory buffer is full. If the buffer fills, the words "MEMORY FULL" will appear on your screen in inverse letters.

"MEMSTORE OFF" will appear on your screen in inverse letters when you turn the memory save function Off.

STORING YOUR NEW PROGRAM

Turn off the memory save function after you have downloaded the program of your choice, by pressing the SELECT button once.

You can continue to communicate with the BBS (leave messages on the bulletin board, or talk to the SYSOP), but you won't be able to "capture" any more programs until you store the one that's in the computer's buffer to either disk or tape.

It is best to sign off from the BBS before you store your program. It's not a good practice to use up the BBS's time while you're storing a program...it prevents other users from contacting the BBS and it can also cost you money.

Press the START button to enter the STORE mode. JTERM will now "ask" you to assign a device and name to the program you're going to store.

If you want to store the program on your Program Recorder, enter: C:[RETURN] and your newly acquired program will be transferred to your tape.

If you want to store the program on your Disk Drive, enter: D:FILENAME[RETURN] and the program will be transferred to your disk.

JTERM will also allow you to transfer the data saved in the buffer memory to the printer (P:) or the screen editor (E:).

The buffer will be empty when this operation is completed and JTERM will return to the Terminal mode. You can now call another BBS.

UPLOADING

Press START when you are ready to upload and JTERM will send the program you placed in your computer's buffer memory to the remote computer. When the upload is complete, JTERM will reenter the Terminal mode in a download configuration.

MORE JONESTERM GOODIES

Suppose that you've pressed START and decide that you don't want to store the program you've captured on any of the available devices. Just press START again to clear the buffer memory and return to Terminal mode.

You will also be able to "see" what programs are already stored on your disk by typing the number 1 for Disk Drive 1 or 2 for Disk Drive 2, etc.

Terminal Software Tradeoffs

Each Terminal program offers its own special features and each has some limitations.

- MINIATRM is a great "get started" Terminal program, but it can only be used to download information from AMIS BBS's.
- AMISTERM provides both up and downloading options, but it is also only truly effective with other ATARI computers and AMIS BBS's.
- JONESTERM is extremely versatile. It allows you to up and download information to almost any computer, system or BBS.
- BUT...all of these Terminal programs have one limitation; They can't up or download machine language or SAVEd (tokenized) programs.

If you're a new computer owner, and haven't reviewed your ATARI Operator's Manual, now's the time to review terms like ENTER, SAVE, LIST, and LOAD!

If you know what a "SAVEd (tokenized) program" is you're ready to discover the most **POWERFUL** FREE Terminal program available today...**AMODEM.**

When you download FREE software using MINIATRM, AMISTERM or JONESTERM, your computer receives the program in "LISTED" format. It must be "ENTERed" into your computer when you want to use it. This means that you can only download programs written in BASIC, PILOT, FORTH and other simple languages.

AMODEM-The Most Advanced Terminal Software

An RCP/M BBS (see the BBS chapter for more on RCP/M BB Services) or other BBS's that transfer programs using what is called "Christensen XMODEM protocol", can send you some extremely advanced programs. Once you've added the AMODEM Terminal program to your library of FREE Terminal software, you'll be able to download machine language programs, SAVEd (tokenized) programs, binary load files, and lots more.

The AMODEM Terminal program is versatile; it can also be used to communicate with ATARI BBS's and other ATARI computers.

AMODEM, written by Jim Steinbrecher, is by far the most advanced FREE Terminal Program available today.

AMODEM offers features and options not available on other FREE Terminal programs. You'll find it externely "friendly" and easy to work with, after you've used it a few times.

As with all Terminal programs, AMODEM is constantly being revised and updated; we've been using AMODEM4. You'll see it

listed as "AMODEM", "AM34", AMDM" or with another similar name in the Download directories of most BBS's.

Greg Leslie, of the ATARI Computer Club of Oklahoma Inc., has the latest AMODEM software and other helpful information on the Download file at his GREKELCOM ARMUDIC BBS: 504-722-5056. You might also want to try calling the A.R.C.A.D.E. AMIS BBS – 313-978-8087 for helpful hints from the man who wrote this program, Jim Steinbrecher.

Call these, or another BBS and download and save this valuable Terminal program...We'll show you how to get the most out of it!

Using AMODEM

RUN AMODEM

This is what you'll see on your screen after you RUN AMODEM:

OPTION = TOGGLE MEMORY SAVE SELECT = (C,D,M,P,R,S,T)? START = START TRANSMISSION FILE =

ASCII TERMINAL MODE

Setting-up AMODEM

1. TO CHOOSE EITHER FULL OR HALF-DUPLEX (SELECT+ "P")

Press the SELECT key plus the "P" key to choose between Full-Duplex and Half-Duplex operation. AMODEM is preset to Full-Duplex, but since AMODEM doesn't send an echo, you'll have to use the Half-Duplex setting for ATARI-to-ATARI communications.

One time we were on-line with a BBS when our computer appeared to be stuttering. Every time we typed in a letter, it would appear two times on the screen. We typed in "David" and it appeared as "DDaavviidd". To remedy this type of problem, simply press the SELECT and "P" keys to switch to the proper Duplex setting.

2. SELECT ATARI OR ASCII TERMINAL MODE (SELECT+"T")

Press the SELECT key plus "T" to choose between ASCII TERMINAL MODE and ATARI TERMINAL MODE.

Use the ATARI mode to communicate with ATARI AMIS BBS's or with another ATARI computer.

Use the ASCII mode to communicate with an RCP/M BBS or other BBS's that require light translation such as ARMUDIC, "Living Tree", and "DIAL-YOUR-MATCH".

3. CHECK YOUR DOS FILES (SELECT+ "M")

This option lists the programs currently stored on your ATARI disk file, and displays the number of free sectors available. Use SELECT+"M" to insure that there is enough space on your disk to accept a new downloaded program.

Downloading From an RCP/M BBS

The download and upload portion of an RCP/M BBS is controlled by a program called "XMODEM". Follow these simple steps to "tell" XMODEM to send a program to you.

- 1. Press the SELECT key plus "R" to prepare your terminal to receive a program.
- 2. The prompt "***RECEIVE FILESPEC?" will appear on your screen. Respond by typing the ATARI Device you'd like to store your new program to, and assign a name. For example you might type in—D:GREAT.BAS[RETURN]. You don't have to use the same name as shown on the RCP/M's directory of download programs.

You may store a program on any ATARI Device.

D: (Disk)

C: (Cassette)

P: (Printer)

E: (Screen Editor)

3. Type the command: "XMODEM S" followed by the filename and extension as listed on the RCP/M's Directory. Here's what your entry might look like:

XMODEM S BASEBALL.BAS

Press RETURN and the XMODEM will "tell" you that it has opened its file and is ready to transmit the BASEBALL.BAS program to your ATARI.

- 4. Press the START key and the XMODEM program at the RCP/M will send you the program. Your screen will turn red as the program is being downloaded.
- 5. When the download is complete, your ATARI will automatically store your new program to the device you've selected. When this process is finished, your screen will turn blue and yourATARI will automatically reenter the Terminal mode.

Uploading

Read these step-by-step instructions if you have a great program to send to an RCP/M.

- 1. Before calling the BBS, press the SELECT Key and the "S" key. The prompt "***SEND FILESPEC?" will appear on your screen.
- 2. Respond by typing the ATARI Device that your program is stored on, plus its name. For example, you might respond by typing—D:GREAT.BAS[RETURN]. If your program is stored on cassette just type—C:.
- 3. The words "LOADING INTO BUFFER" will appear on your screen while your program is loading into your computer's memory buffer. When this process is complete, your computer will return automatically to the Terminal mode.
- 4. Call the RCP/M and access its upload section. (More on this in the BBS Chapter.)
- 5. Type the command: XMODEM R followed by the filename and extension. In this example you would type:

XMODEM R GREAT, BAS

then press RETURN.

- 6. Press the START key and your program will be sent to the RCP/M BBS. Your screen will turn green while your program is being uploaded.
- 7. When the upload process is finished, your screen will turn blue and your computer automatically reenters the Terminal mode.

Capture Some Great Programs

Follow these simple steps to use AMODEM to capture FREE software from a BBS (other than an RCP/M BBS).

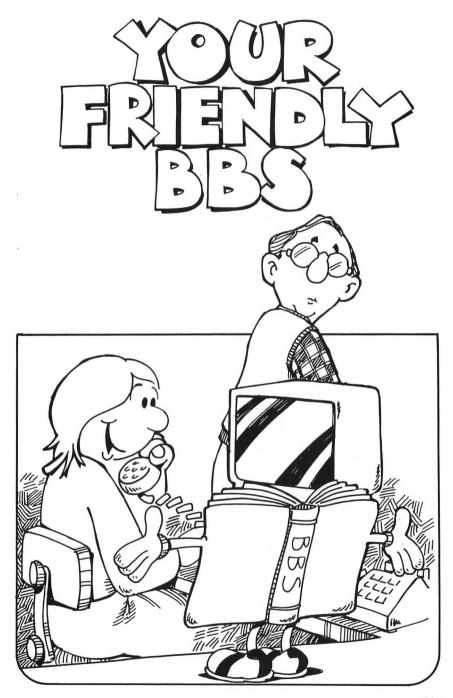
When you are ready to capture a program from a BBS:

- 1. Press the SELECT key and the "C" key.
- 2. The words "***RECEIVE FILESPEC?" will appear on your screen. Respond to this prompt by typing the ATARI Device you'd like to save your new program to, and assign a name. This procedure is identical to RCP/M Step 2.
- 3. When you're ready to capture a program or file, just turn on the Capture feature by pressing the OPTION key.
- 4. When you're done, or the buffer is full, press the OPTION key to switch the Capture feature off, then press SELECT and "D"to "Dump" the information stored in your computer's buffer memory to your storage device.

You are now well prepared to use the best FREE Terminal Software packages available. Remember, if you ever need help it's as close to you as your telephone. Just call up the System Operator at a nearby BBS and chat via modem...or leave a message on the BBS's message board.

We've found that the people who use and operate the FREE BBS systems are ready and willing to give a hand to a newcomer. (We've gotten plenty of help.) Don't be shy...get on line today and start experiencing this exciting new communications medium. And,

Have fun with your new FREE Software!



YOUR FRIENDLY BBS

ATARI Bulletin Boards

Many types of Bulletin Board Services cater specifically to the ATARI computer owner. They can provide you with FREE ATARI software, message centers, and helpful ATARI related tips and information. In this chapter, we'll explore three types of popular Bulletin Board Services; AMIS, ARMUDIC, and RCP/M. You'll learn how to get in touch with these BBS's and how to get the most out of each BBS once you've made contact. We also provide you with an ATARI BBS Telephone Directory so you can call these BBS's today!

We'll also introduce you to some FREE and interesting recreational services that are waiting for your call.

More Bulletin Boards

There are more than 500 other Bulletin Board Services located throughout the country that you can contact using the FREE Terminal software provided in this book.

Even though many of these BBS's are designed to operate with other computers (Apple, PET, TRS-80 etc.) with FREE software formatted for those computers, you can still get on-line with them to leave a message, chat with the System Operator (SYSOP) or review the latest computer news and events.

To help you explore this fascinating world, we've included a directory of these Bulletin Boards. Call them up and take advantage of the services they have to offer...it will expand your horizons. You might discover that some of these BBS's have special ATARI download sections...we did!

BBS TRIVIA

AMIS—ATARI Message and Information Service. Developed by the Michigan ATARI Computer Enthusiasts.

ARMUDIC—Developed by the Downtown Washington, D.C., ATARI User's Group. "ARMUDIC" was derived by transposing the Washington Groups' phone number into letters. (276-8342)

You've Made Contact!

You've just made your first contact with a BBS. Your heart beats faster, your fingers poise over your computer's keyboard ready to respond to any question that might appear on the screen. You want to call in friends and family to show them this marvel of communications, but a cold sweat breaks out on your forehead as the question: "How many nulls?" scrolls onto your screen. "What do I do now?" you ask, "What's the right answer?... What's a 'null' anyhow?"

Your first contact with a BBS can be exciting instead of traumatic. We've done it before and we'll help guide you through your first BBS experience.

DIFFERENT BULLETIN BOARDS HAVE A LOT IN COMMON

First, you should know that most BBS's ask the same kinds of questions at sign-on and accept the same types of commands when you're past the sign-on stage. This makes it easy for you to call up and "talk" to virtually any type of BBS.

We'll show you how to sign-on to a typical BBS, share a few helpful hints, then list the commands of some of the more common BBS's and explain each command's function. Then you can make your first contact with confidence!

SIGNING ON

After you "dial" a BBS, you will hear a few rings followed by a steady tone...You've got 'em! If you are using an acoustic modem, plug your headset into the two rubber cups. If you have a direct-connect modem, communications will begin automatically, or at the flip of a switch.

HELPFUL HINT 1

If your screen remains blank after you think that contact has been made, press RETURN a few times...that usually gets the BBS's attention!

Now that you've got the BBS's attention, it will start bossing you around. The first thing that most BBS's will tell you to do is: PRESS RETURN. After you've done that, the BBS will start bragging about itself. The Itsy Bitsy Bulletin Board Service (IBBBS) of San Jose, California, begins each transmission by drawing a picture of a rocket ship followed by a short introductory message that tells you how great it is! Have patience, the BBS operators (SYSOPS) are providing you with a great FREE service and get a kick out of showing off a little.

HELPFUL HINT 2

Some BBS's...RCP/M's for example...might ask the intimidating question: "How many *nulls?". The answer is simple: "0".

You might also be asked: "Do you need line feeds?". Just answer "NO".

When asked what your screen size is, answer back with a resounding "38".

If you are asked "Can you receive lower case letters?", answer, "YES".

^{*} Null: A null creates a pause that allows a printer with no buffer memory to keep pace with transmitted data. Most modern printers have built-in buffer memories and don't require nulls.

WHAT'S YOUR NAME?

If you know your name, this part is really easy! After you press RETURN, most BBS's will ask for your name, then the City and State you are calling from. Answer these questions and your screen will say something like: "WAIT A MINUTE, I'M LOGGING YOU TO MY FILES." So...wait a minute!

WHAT'S THIS "PASSWORD" STUFF?

Some BBS's seem downright impertinent. Instead of asking for your name, they'll ask you for a Password! Don't panic! The reason some Bulletin Boards want their users to have Passwords is so they can keep out the "riff-raff". Since you're not "riff-raff" you qualify for a Password...getting one is usually very simple and straight forward.

You'll be asked to enter up to seven or eight characters. My Password is my birthdate...41793 (April 17, 1893). Every time you call this BBS, use your Password to move into its system. If you use a different Password for each BBS that requires one, things could become a bit confusing, so don't forget to write it down next to the BBS's phone number. It's like remembering your Secret Code for your friendly ATM (Automated Teller Machine) at the bank...use something simple.

YOU'RE NOW INSIDE THE BBS!

You've made it! You've seen the BBS's grand opening show, you have "logged-in", and are ready to start using all the FREE services this BBS has to offer.

You will now be asked something like: "IS THIS YOUR FIRST TIME HERE?". Answer "YES" and you'll be given complete instructions. To Stop these instructions as they whiz by on your screen, you usually press the CONTROL key plus the "S" key. To allow the message to continue to scroll, just press CONTROL plus the "Q" key.

ALPHABET SOUP

If you are a smarty and answered "NO", this is what you might see: A,B,C,D,E,F,G,H,K,L,O,Q,R,S,T,U,W,X,Z

Looks like alphabet soup! Actually, these letters represent the keys you press to communicate with the BBS.

For example, if you press the letter "F", you might be shown the complete download File. If you press the letter "R", you may be able to Retrieve messages from the bulletin board.

Remember, most systems are very similar. Almost all of these letter abbreviations will work on any system. Just to play it safe, answer "YES" to review the instructions when the Bulletin Board asks if this is your first visit.

HELPFUL HINT 3

You can download BBS instructions by turning on your JONESTERM MEMSTORE, for example, and print them out later for relaxed reading.

If you've saved a text file or computer poster on your disk, the best way to print it out is to:

- 1. Go to the DOS directory and press "C" COPY FILE.
- 2. Enter the name of the file, a comma, and P:. Example: TEXT.FIL,P:[RETURN]

Here's what pressing each of these letters will do on a typical AMIS BBS:

Typical BBS Instructions (Downloaded from the GFX BBS)

A—ASCII/ATASCII switch. Changes control character sets between ASCII (non-ATARI) and ATASCII (ATARI)

- **B**—Reprints System Operator's bulletins to users.
- **C**—Lists the name and address of prior callers to the system.
- **D**—Download program. Downloads programs on this system to your terminal. You must be in the ATASCII (ATARI) mode. We suggest using the AMODEMIV program for best results. The file's name must be entered in caps. Enter the filename only...do not use **D**: or any file extenders.
- E—Enter a message to the system. After inputting "E" all other commands are self explanatory.
- F—Lists programs and files available for download. Choose the Section # of the type of file you want to download. We are currently offering: ATARI BASIC, BASIC A+, and ATARI MICROSOFT BASIC programs. We also have TEXT FILES, DOCUMENTATION (for this BBS, as well as for some of the programs on the system), AMATEUR RADIO, and The GRAFex Company's files.
- G—Goodbye. This is the command used to exit the system.
- H-Help. Prints this list.
- **K**—Kill a message. Deletes your message from the system.
- L—Toggles linefeed after carriage return (on/off).
- O—Lists other ATARI BBS's you might want to contact.
- Q-Quick scan. Scans message titles only.
- **R**—Retrieve a message or messages from system. You may retrieve more than one message at a time by separating message numbers with a comma, or a group of messages by separating with a hyphen (-).
- S—Scan messages. Scans message titles; shows you who the message is to and who it's from. You may scan more than one message at a time by separating message numbers with a comma. A *group* of messages should be separated with a hyphen (-).

T—Shows you the current time (PST), day of week and date.

U—Upload your program to system. Uploaded programs are put into a special section until they can be reviewed. If you have a program to upload, please leave a message with the System Operator describing your program.

More Upload instructions can be found in the documentation files.

W—Repeats welcome message seen when user first logs on system.

X—Shifts to and from the Expert User Mode. After pressing "X" you qualify as an Expert User, and will *not be shown* the menus at each input prompt.

Z—Leave a message to the System Operator. Your message will be printed on our printer.

OTHER COMMANDS YOU MIGHT ENCOUNTER ON OTHER SYSTEMS

?—the question mark is often used to ask for help in place of the "H" command.

C—is very often used to allow you to "Chat" with the System Operator.

I—when you type "I" on some systems, a description of the programs they have on file will be listed.

BYE-replaces "G" to say "goodbye".

Q—is also sometimes used to say "goodbye".

The goin' is easy once you're in contact with a BBS. If you're ever in trouble, just type "?" or "H" to review the operating instructions... if that doesn't help type "C" and chat with the System Operator.

Instructions for downloading and uploading, and compute instructions for using your Terminal software are found on most BBS's. As we said before, "Dive in," get on-line today and start communicating!

A LITTLE ABOUT RCP/M SYSTEMS

HELPFUL HINT 4

Use your AMODEM Terminal software when contacting an RCP/M BBS. Keep the "Quick Reference Guide" handy while you're on-line.

RCP/M BBS's have a slightly different "look" to them than AMIS or ARMUDIC BBS's. Their list of commands is very similar, but their Down/Upload and message sections work a little differently.

After you sign-on and get past the RCP/M's introductory messages, you can move right into the heart of the RCP/M operating system. When you arrive you'll see something like this: "A0"

"A0" means that you are in touch with Disk Drive A0. If you want to see a list of Download files on Disk Drive A0, just type in "DIR". If you'd like to move on to another of the RCP/M's disk drives simply type in "B0:" for example, and you'll be in touch with Disk Drive B0.

After you've selected a program for downloading, simply follow the "AMODEM Quick Reference Chart" and type in: "XMODEM S FILENAME.EXT[RETURN]." It's a good idea to review the AMODEM operating instructions and have your "Quick Reference Chart" in front of you while communicating with an RCP/M.

Most RCP/M BBS's can accept unabbreviated commands. For example, type in the word "CHAT" if you want to chat with the System Operator, or "HELP" if you need instructions. "BYE" will log you off the system. You can type in the word "MESSAGE" plus the message number to automatically retrieve a specific message.

SO, WHERE'S ALL THAT FREE SOFTWARE?

In The Download File!

We've printed the file of FREE software available from the Washington D.C. ARMUDIC BBS to give you an idea of the large quantity and wide variety of FREE software available once you get in touch with a BBS.

This BBS lists 68 Public Domain programs and is typical of the hundreds of BBS's waiting for your call. PICK UP THAT PHONE!

CATEGORIES AVAILABLE

1. Communications-related

2. Utilities

GamesOther

5. User-submitted

6. New text

7. VisiCalc

8. Forth

9. New

WHAT'S IN EACH SECTION

1. Communications Related Software

#File Name SIZ
1:AMDM4DOC 014
2:*AMODEM4 033
3:*ATERM 011
5:*ATERMPT2 023
7:MINITERM 004
9:SEPRATR2 019

#File Name SIZ
2:*AMODEM4 033
4:*ATERMHLP 013
6:JTERM35 029
8:RS232SET 003

2. Computer Utilities

#File Name SIZ #File Name SIZ
1:DISKDUP 007 2:DISKPEEK 019
3:DISKRPM2 007 4:DKSTOCAS 016
5:MAILABEL 007 6:NEATLIST 016
7:SCRNDUMP 005 8:SET AUTO 009
9:SETAUTO2 012

5. User Submitted Software

#File Name SIZ
2:AUTOMATE 008
4:CAVRNMOD 007
6:JTRMSRC2 015
8:LOANPRT2 020
10:*PURGE 006
12:*STATS 017
14:TIMEDATE 005
16:*UTIL3 014

6. Text Files

#File Name SIZ	#File Name SIZ
1:TECHMEM1 016	

7. VisiCalc Worksheets

#File Name SIZ	#File Name SIZ
1:AUTOEXP 031	2:AUTOXTXT 010
3:DAYSHEET 006	4:MORTLOAN 008
5:NETWORTH 015	6:TAX1981 042
7:TRANSACT 014	

8. FORTH Language Programs

#File Name SIZ	#File Name SIZ
1:*FORTHCON 016	

3. Games

#File Name SIZ	#File Name SIZ
1:BANKSHOT 021	2:TAG 023

4. Other-Miscellaneous Software

#File Name SIZ	#File Name SIZ
1:CLOK 009	2:MSGGEN 015

9. New Additional Programs

#File Name SIZ	#File Name SIZ
1:*CORALPMG 013	2:HOLLYMED 031
3:*FILLERUP 021	4:JTERM36 021
5:*BANNER 013	6:*RUNFILL 006
7:*KEYPAD 007	8:AUTOBBB 014
9:*MASTRMAZ 014	10:*JTERM40 021
11:JTERM4TX 004	12:*JTERM40P 011
13:RABBITBU 015	14:PMGDMO 020
15:FILLER2 016	16:*SETCOLOR 002
17:DATA36 011	18:DATAGEN 005
19:*JTRM36MD 002	20:*CRICKET 044
21:*CORAL2 011	

Pick up your phone now! Leave a message on a BBS and Download FREE software.

DIRECTORY OF ATARI BULLETIN BOARDS*

These Bulletin Boards are loaded with FREE public domain ATARI software.

SYMBOLS USED

*—24 hour operation L—Limited hours

R-Ringback. Call, let phone ring then call back again

(No symbol indicates that information was not available.)

AMIS

STATE NAME & PHONE NUMBER

- CA GFX 408-253-5216 *
- CA IBBS 408-298-6930 *
- CA SOFTWARE CITY 408-866-4224
- CO DENVER 303-758-6233 L
- FL APOGEE 305-238-1231 RL
- FL ST. PETE 813-577-0048 L
- IL INTERFACE 312-296-3883 L
- IL CHICAGO 312-789-3610 *
 MA BILLERICA 617-667-7388 *
- MA STAR BASE 12 617-876-4885 L
- MA NORTH SHORE 617-595-0211 *
- MA YANKEE TRADER 617-937-1976 *
- MI M.A.C.E. WEST 313-274-3940 *
- MI ARCADE 313-978-8087 *
- MI M.A.C.E. 313-544-0885 *#
- MI ——— 313-868-2064 R
- MI GRASS 616-241-1971 *

^{*}Every effort was made to insure that the information provided in this directory is current and accurate. Because Bulletin Boards may change their phone numbers, we cannot accept responsibility or be held liable for any errors.

A.U.R.A. 314-894-9243 MO NJ J.A.C.G. 201-337-4084 NI BAYONNE 201-339-7407 * L.V. 702-733-9488 L NV NY ABB USERS 212-699-0293 L OH——— 614-866-8869 OK TEBBTOWI 405-681-6929 L PA STARCADE 215-432-9848 L PA F.O.R.T.H. 215-435-2418 L. PA CARNIVAL 215-250-9471 * PA ——— 412-372-0616 RL WA S.P.A.C.E. 206-228-9401 * A.S.H. 509-575-7704 L WA A2-D2 509-582-5217 L WA MIL-ATARI 414-352-2772 * WI WI ——— 414-782-9041 R WI MAGIC LANTERN 608-251-8538 *

ARMUDIC

CA SYNAPSE 415-527-8276 L DC WASHINGTON 202-276-8342 *# MD COMPUTER AGE 301-587-2132 I. MD ——— 301-468-6686 L OK GREKELCOM 405-722-5056 * PA PACE 412-655-2652 * TXACUGD 817-589-1254 * VA FUTURE TECH 703-360-5439 * A.C.E. 503-343-4352 * OR

ATABBS

GA ROD ROARK 404-252-9438 *#
GA GEORGIA 404-434-1168 L
HI HONOLULU 808-833-2616
WA WASHINGTON 509-575-7704 L

TARI BOARD

CO	POOR RICHARD	303-221-1779 L
MD	SEVERNA PARK	301-544-2460 L
NJ	ELEC. CANDY	609-924-5875 L
NJ	BOB ALLEGER	609-267-7825 L#
OH	BCHWOD FLS	216-582-2797 L

RCP/M

IL	——— 309-794-6166
LA	B. ROUGE 504-273-3116
MA	BOSTON BLLT 617-266-7789
MI	——— 312-789-0499
MI	ROYAL OAK 313-759-6569 *R
NY	——— 516-561-6590
PA	CHELTENHAM 215-836-5116 *
PA	ALLENTOWN 215-398-3937
PA	TRADE80 814-898-2952
TX	HAWKINS 214-769-3036
VA	OXGATE 804-898-7493 *
WA	——— 206-352-7530

LIVING TREE

CA	STUART 408-749-1872 *
CA	LVNG VIDEOTEXT 415-327-8876 *#
CA	FAR WEST LABS 415-565-3037 *
CA	COMPUTER PLUS 408-735-8181 *

FOREM

MD A.M.U.S.E. 301-881-3007 MD RICKY MOOSE 301-871-5370 L

DIAL-YOUR-MATCH

CA	DIAL-YOUR-MATCH #26	209-298-1328 *
CA	DIAL-YOUR-MATCH #1	213-842-3322 *
CA	DIAL-YOUR-MATCH #11	213-242-1882 *
CA	DIAL-YOUR-MATCH #4	213-783-2305 *
CA	DIAL-YOUR-MATCH #9	213-345-1047 *
CA	DIAL-YOUR-MATCH #22	213-990-6830 *
CA	DIAL-YOUR-MATCH #17	415-991-4911 *
GA	DIAL-YOUR-MATCH #3	912-233-0863 *
MA	DIAL-YOUR-MATCH #18	617-334-6369 *
NC	DIAL-YOUR-MATCH #20	919-362-0676 *
NE	DIAL-YOUR-MATCH #23	402-571-8942 *
NJ	DIAL-YOUR-MATCH #14	201-272-3686 *
TX	DIAL-YOUR-MATCH #24	713-783-4136 *
TX	DIAL-YOUR-MATCH #12	713-556-1531 *
WA	DIAL-YOUR-MATCH #16	206-256-6624 *

MISCELLANEOUS

CA	408-289-9151
CA	——— 408-988-4032
KS	——— 913-843-4259
MA	NW-II TYMCOR 617-738-5051 *
MD	——— 301-871-1027
MD	GAS-NET 301-344-9156 L
ME	——— 207-839-2337
NY	GRAPHICS BBS 212-505-6068
OH	ATRPOST DEMO 614-476-2035
OR	——— 503-967-9075
VA	——— 703-560-9555

PUBLIC ACCESS MESSAGE SYSTEMS

We have included this valuable list of Public Access Message Systems to allow you to explore the many types of BBS's and services available to you.

This directory was downloaded from the People's Message System, of Santee, California using the JONESTERM program. Call this, and other Bulletin Boards, to get their latest list of active Bulletin Boards and services.

PUBLIC ACCESS MESSAGE (and file transfer) SYSTEMS (P.A.M.S.) last updated 02/10/83

Compliments of Peoples' Message System, Santee CA (619) 561-7277

Compiled and maintained by Bill Blue (with a lot of help from his friends)

Please send updates/corrections to: PMS Santee, TCB117, 70315,1305 or BBLUE

*24 denotes 24-hour operation #1 denotes original system of that type -rb denotes call, let ring once and call back -rl religious orientation ! new system or new number to existing system \$ Supports VADIC 1200 baud operation & Supports 212A 1200 baud operation % Supports BAUDOT operation

Regular updates of this list may be found on CompuServe MAUG XA4, The Source PUBLIC 112, and most participating independent PMS systems.

Current filesize is 36,252 bytes.

ABBS ABACUS II, Toledo, OH(419) 865 1594
ABBS AGS, Atlanta, GA(404) 733 3461*24
ABBS Akron Digital Group, Akron, OH(216) 745 7855*24
ABBS Apple Crate I, Seattle, WA(206) 935 9119
ABBS Apple Crate II, Seattle, WA(206) 244 5438
ABBS Apple-Med, Iowa City, IA(319) 353 6528
ABBS Apple-Mate, New York, NY(201) 864 5345
ABBS Baileys Computer Store, Augusta, GA(404) 790 8614
ABBS Baton Rouge, LA(504) 291 1360
ABBS Byte Shop, Ft. Lauderdale, FL(305) 486 2983
ABBS Byte Shop, Miami, FL(305) 261 3639
ABBS Calvary Mission Church, Mnpls, MN(612) 471 0252-rl
ABBS CCNJ, Pompton Plains, NJ(201) 835 7228
ABBS Century Next Computers, St. Louis, MO(314) 442 6502
ABBS Charlotte, NC(704) 364 5254
ABBS CODE, Glen Ellyn IL(312) 537 7063*24
ABBS Colortron Computer, WI(414) 637 9990*24
ABBS Compumart, Ottawa, Ontario, Canada(613) 725 2243
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ABBS Pacific Palasades, Los Angeles, CA(213) 459 6400
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ABBS Phoenix, AZ	<u>′</u> 4
A-C-C-E-S-S Annapolis, MD(301) 267 7666*24 A-C-C-E-S-S Olympia, WA(206) 866 9043*24 A-C-C-E-S-S Phoenix, AZ#1 (602) 996 9709*24 A-C-C-E-S-S Phoenix, AZ(602) 957 4428*24 A-C-C-E-S-S Phoenix, AZ(602) 274 5964 A-C-C-E-S-S Scotsdale, AZ(602) 998 9411*24 A-C-C-E-S-S Wyckoff, NJ(201) 891 7441*24	
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HOW TO START YOUR OWN BBS

Interview with Jeff Bell of the Itsy Bitsy Bulletin Board

Itsy-Bitsy isn't a business or institutional system—it's an electronic bulletin board that one ATARI user—Jeff Bell—operates from his home. We interviewed Jeff to find out why he began his own BBS, how he did it, and what you need to know to start your own electronic bulletin board.

A Home-Grown BBS

"I named my BBS 'Itsy Bitsy' because I wanted people to know that it's not a big system with main frames or 30 MB hard drives. It started as a one-drive system that was itsy and had lots of bitsies."

Jeff bought a modem for his ATARI computer system and received one free hour of time on the commercial CompuServe timesharing system. Jeff enjoyed networking so much that his one free hour quickly escalated into a large phone bill plus timesharing charges. "Time really flew when I was networking. I wanted to play more with my modem. How could I do it more economically?"

Jeff consulted with a few friends who also had modems and began calling up BBS's. "I made lots of mistakes and talked to a lot of SYSOPS. Then I decided to set up my own BBS for one weekend—just for fun and to see what would happen."

By Sunday evening, lots of people had called. "I had to answer the phone all weekend at all hours, plugging my phone into an acoustic modem—but it was fun!" Jeff realized that he badly needed an autoanswer modem if he was going to operate his own BBS...he was hooked.

Why Start Your Own BBS?

We asked Jeff why he did it. "Running your own BBS is a lot like being a ham radio hobbyist," Jeff answered. "But you don't need a 300 ft. tower in your backyard—in fact, I don't even have a backyard!

It's a fantastic educational experience . . . I've learned so much about my ATARI system, programming, and telecommunications.

Running the BBS has also helped me with my job. Now, I can communicate electronically between work and home.

I've had lots of hobbies. Having a BBS is relatively inexpensive, after the initial investment. It's a clean hobby, semi-portable, and it doesn't leave glue on the kitchen table!"

How to Get Started

If you share Jeff's enthusiasm for electronic bulletin boards, here's how you can get your own BBS on-line.

First, you need the necessary hardware. Jeff recommends a 48K ATARI computer with at least one disk drive. A printer is optional, but it's a valuable peripheral for downloading software and recording messages. Look for a printer that "runs cool" for 24-hour operation, such as the ATARI 822 thermal printer.

"Your modem is your biggest hardware consideration," Jeff says. "Realistically, you need a direct-connect, 300 baud modem with auto-answer and auto-hang up capabilities." (See our "ATARI Modem Buyer's Guide, p. 90.)

The next step is to download BBS software. "You can get lots of different versions of starter BBS programs from other AMIS BBS's such as MACE (Michigan ATARI Computer Enthusiasts). I can also send you 'Clone' diskette BBS software through the mail. Just leave a message for me on the Itsy Bitsy Board (408-298-6930)."

Do you need lots of technical or programming experience to run your own BBS?

"You don't really need technical expertise to run a BBS," Jeff says. "If you are already communicating with other BBS's, you know how to access lots of help from SYSOPS and other users.

"You don't have to be a programmer, but you'll soon find yourself learning about programming by leaps and bounds as you go along. When you download software, you'll find yourself looking at code and figuring out how it was written. You'll also feel challenged and want to change something or add a special feature to your bulletin board."

At first, programming seemed "mystical and mathematical," Jeff recalls. "But all you need is your common sense. Sit down and analyze the situation. I've actually learned more about both mathematics and programming by just working on the BBS. You should have your ATARI BASIC Manual handy for quick reference."

A Day in the Life of a BBS Operator

What other factors should you consider before you start your own BBS?

The first consideration is time. "You have to decide if you want to dedicate your ATARI system and a phone line full-time to the BBS." There are many levels of involvement, Jeff explains. "Lots of people do it part-time for fixed hours. You can also set up your own private BBS for friends or work with private passwords. You can move the system around and do call-forwarding to a friend's house or other location."

Jeff does recommend that any potential BBS operator take a serious interest in the system. "Once you put your number up, people will go on calling you forever."

The actual investment in time and energy need not be great, however. "If you have the right hardware, you can leave the BBS operating for several weeks without touching it. If you have four drives, for example, you only have to compress the caller and message files to make more room every few weeks; pay the phone bill; and keep paper in the printer."

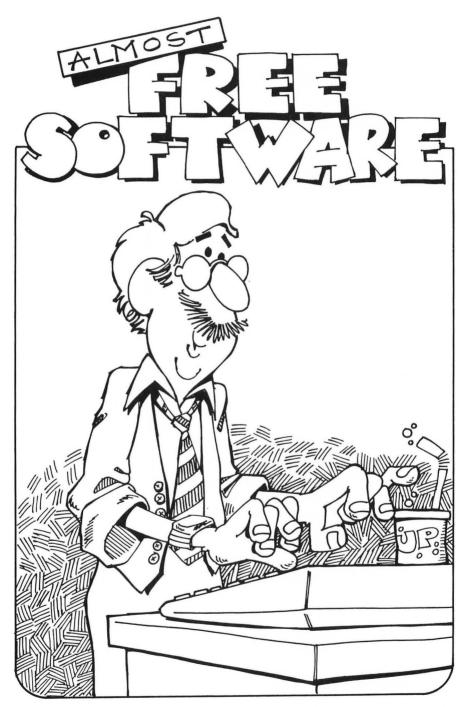
A second consideration is dealing with offensive callers and "nuts". "I'm very strict about keeping the BBS clean. I don't allow 'range

wars' on my system or slanderous messages. Offensive material gets purged from my message files immediately—lots of kids and nice people want to use the BBS without being exposed to that stuff. If nuts like 'Adolf Hitler' call up the system, I've fixed my software so the BBS hangs up on them."

BBS operators also have to decide how to handle software piracy. "When people ask me why I don't start a pirate BBS, I ask them why they need one. Pirating software is a good way to get yourself taken off the air, or even get a jail sentence.

If you're looking for good free software, you can legitimately reach out to the public domain software libraries of other BBS's and users' groups."





ALMOST FREE SOFTWARE

Magazines

Magazines are a valuable resource for the ATARI computer owner. The ones we've listed offer program listings to turn your computer into anything from a word processor to a game machine. Informative articles designed to help you get more use from your computer and help you make intelligent software, hardware and book buying decisions are also found in these publications.



Some of the magazines are available on the news stand, some only on a subscription basis...but regardless of where you get them you'll find a wealth of ATARI information and "Almost Free Software".

Write to these publications for more information.

USERS' GROUP PUBLICATIONS

ACE NEWSLETTER 3662 Vine Maple Drive Eugene, OR 97405

AD ASTRA
The ATARI Microcomputer Network
for Amateur Radio Operators
4749 SR 207 NE
Washington C.H., OH 43168

MACE NEWSLETTER Box 2785 Southfield, MI 48037

PAGE 6 18 Underwood Close Parkside, Stafford England

ATARI INC. PUBLICATIONS

ATARI CONNECTION Atari, Inc. Box 50047 San Jose, CA 95150

*APX ATARI Program Exchange Atari, Inc. P.O. Box 3705 Santa Clara, CA 95055

*Catalog of software available from the ATARI Program Exchange.

SPECIAL INTEREST PUBLICATIONS

THE COMPUTERIST'S DIRECTORY 15350 River Road Guerneville, CA 95446

ON-LINE COMPUTER TELEPHONE DIRECTORY Box 10005 Kansas City, MO 64111

TURTLE NEWS 1208 Hillsdale Drive Richardson, TX 75081

ATARI ONLY PUBLICATIONS

ANTIC 297 Missouri Street San Francisco, CA 94107

A.N.A.L.O.G. COMPUTING 565 Main St. Cherry Valley, MA 01611

HI-RES Longwood Business Center, Suite B 755 West Sanlando Springs Drive Longwood, FL 32750

ATARI PLUS OTHERS PUBLICATIONS

COMPUTE! PO Box 5406 Greensboro, NC 27403

CREATIVE COMPUTING Call toll free 800-801-8112 ELECTRONIC GAMES Box 1128 Dover, NH 07801

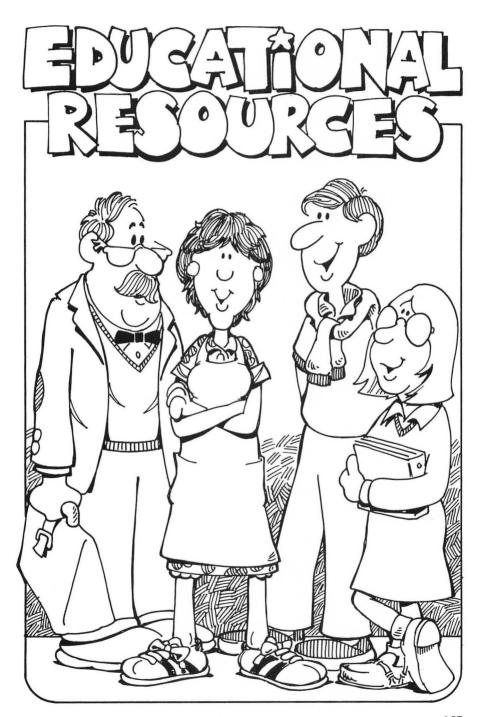
INFOWORLD 275 Cochituate Rd. Box 837 Framingham, MA 01701

KEEPING PACE 466 Rosewood Pittsburgh, PA 15236

POPULAR COMPUTING 70 Main Street Peterborough, NH 03458

SOFTLINE 11021 Magnolia Blvd. North Hollywood, CA 91601

SOFTSIDE 100 Pine Street Holmes, PA 19043



FREE (AND ALMOST FREE) SOFTWARE & EDUCATIONAL RESOURCES

For Parents and Educators

Welcome to Free Educational Software

If you are a parent, you want your computer to be more than a game machine—you want it to be a significant part of your child's education. If you are a teacher, you may already have some ideas about the potential of the computer as a learning tool in your classroom. How can parents and educators reach their goals effectively and economically?

One answer is by taking advantage of the public domain educational software and expertise available—for free or at a nominal charge—from educational BBS's and Users' Groups that are springing up all over the world.

Included in these resources are people and organizations that are using the computer to benefit learners of all ages who have physical or learning disabilities. With modified equipment and software, computers can enable blind people to "see" and deaf people to "hear". Physically limited individuals can learn to program, do word processing, and "telecommute" to their jobs—even if they can't use the computer keyboard! Learning disabled students can study at their own pace, with computers as an infinitely patient teaching tool.

This is an exciting time to be a parent, educator, or child. There are lots of people willing to share their enthusiasm, specialized knowledge, and software with you and your family—for FREE or for a nominal charge!

Computers Help Children Learn

Children learn from every contact with a computer. Even when they're playing an arcade game, they're getting comfortable with the machine,

developing game-winning strategies, and improving eye-hand coordination.

WHAT'S SPECIAL ABOUT EDUCATIONAL SOFTWARE?

Educational software is software that has been designed for educational uses. It teaches subject matter, improves sequential learning skills, and/or provides a planned learning experience.

1. Computer-Aided Instruction

Computer-Aided Instruction (CAI) was the first educational application for computers. CAI software teaches through question/answer drills. The ATARI game, "States and Capitols", is one example of CAI. CAI software can be boring or lively, judgmental or supportive, depending on the person who wrote it.

Good CAI programs take advantage of sound and graphics and provide children with an appropriate reward. Well-written CAI software also encourages children and gives them lots of chances to get the right answer. Avoid any program that puts children down or tells them they're "stupid" if they don't get the right answer!

CAI isn't the most creative application for computers in education, but it can be very useful. Your children or students can practice skills and drill themselves on subject matter at their own pace. Computers have lots of patience!

2. Learning Games

Learning games are programs that combine recreational features with sequential learning skills. Their philosophy is to present learning as a game with the kind of sound, graphics, action, challenges, and rewards you would find in a program written for entertainment. Learning games are the hottest new development in commercial educational software. If you want to see examples of learning games, look for products by Spinnaker Software, The Learning Company, and Sesame Street Children's Workshop (among others). You can also find less sophisticated, but highly enjoyable, learning games in public domain software libraries.

3. Simulations

Simulations are programs that "simulate" a real situation, where the child has to make decisions and see the consequences of his or her actions. In "SCRAM" by Chris Crawford, the player must make the best decisions to prevent the "melt-down" of a simulated nuclear reactor. "Hammurabi" is a public domain simulation that puts children in the role of the ruler of ancient Sumeria. They must make important decisions about economics, crops, and feeding their subjects—or risk an uprising.

4. Programming Languages

A fourth kind of educational software is programming languages designed for children and beginners. ATARI PILOT is a programming language that is simple and easy to learn. Children can write stories, create dialogues, and draw colorful graphics with its "Turtle Graphics" feature, while learning to program. ATARI LOGO (to be released in the Fall or Winter of 1983) also offers kids easy, Englishlike commands and a friendly environment for learning math concepts.

5. Classroom Management Software

Teachers can also use software that is designed for classroom management—to create their own lessons, keep a data base on grades and student information, or to do routine recordkeeping.

How Can You Get Free Educational Software?

Now that you know what kinds of educational software are available, how can you get it—for FREE or for a minimal charge?

The rest of this chapter is devoted to organizations and resources that disseminate public domain software to parents and educators. Just as valuable are the bulletin board services, Users' Groups, and publications that allow you to communicate directly with other educators.

These resources will also help you to evaluate software, so you get only

the best in public domain or commercial software. You can also share special needs and experiences in teaching and learning with computers.

ATARI Users' Groups

Your first resource for educational software and information is your ATARI Users' Groups. Almost all of the users' groups listed in this book include educational software in their libraries. ATARI is also very interested in including a special educators' section in their Users' Group BBS (see interview with Earl Rice, p.28)!

ATARI Computer Enthusiasts

ATARI Computer Enthusiasts (ACE) is an international users' group that emphasizes education. Their large library of public domain software includes many excellent educational programs. Their newsletter features programs and advice for parents and educators, such as Mrs. Ruth Ellsworth's PILOT program that teaches kids about PILOT while they design a song. (See ACE's mini-profile on page 31, "A Song is a Wonderful Thing".) A.C.E.'s newsletter is published monthly and costs \$10/year in the United States or \$20/yr. overseas airmail.

E.R.A.C.E.

E.R.A.C.E. (Educational Researchers of A.C.E.) was formed in September 1982. The group is based in the university town of Eugene, Oregon and made up of parents, teachers, students, psychologists, researchers, and programmers.

E.R.A.C.E.'s goals are to catalogue and evaluate educational public domain software; "discover existing gaps in educational software"; develop specifications and designs for educational software; and write documentation. "There is a wealth of material being developed out there," says Mrs. Ali Erikson, one of E.R.A.C.E.'s active members.

E.R.A.C.E. also reviews and critiques commercial educational software. They are soon to be a test site for ATARI LOGO.

Disks loaded with ATARI programs

E.R.A.C.E. has developed a software evaluation form and a software exchange library. They offer three ATARI educational disks loaded with programs, and a PILOT disk.

A typical member of this enthusiastic, active group is Mrs. Ali Erikson, a parent and school psychologist. Mrs. Erikson took her Ph.D. comprehensive exams on the ATARI; "I simply brought my ATARI system, word processing software, and printer to school. When I finished answering the questions, I ran off copies for everyone. I almost brought 'PacMan' with me to play during breaks!"

Mrs. Erikson has a special interest in educational software for physically limited and learning disabled students, uses her ATARI to score Wexler intelligence tests, and is learning to program. "Education is really changing," she says, "and the potential is fantastic!"

You can get in touch with A.C.E./E.R.A.C.E. by mail:

ATARI Computer Enthusiasts 3662 Vine Maple Drive Eugene, OR 97405

By electronic bulletin board:

503-343-4352 (ARMUDIC 24-hours)

or by phone:

503-344-6193 (H); 503-687-6061 (W); ask for Mike Dunn, A.C.E. President.

Good contact people for E.R.A.C.E. are:

Mrs. Ali Erikson Mr. Larry Gold Mrs. Ruth Ellsworth (PILOT)

They can be reached via mail or BBS.

YPLA (The Young People's LOGO Association)

YPLA is an educational resource organization that supports ATARI PILOT, versions of the LOGO language on several machines, and other machines or languages that feature "Turtle Graphics". They also encourage the formation of YPLA Learning Centers all over the world and actively support people and organizations who are using computers to help the handicapped.

YPLA is not completely free—but it's an excellent value. Membership in the organization costs \$25 for adults and \$9 for students.

Turtle News & Free Software

Once you become a member, you receive the monthly "Turtle News", which includes programs in ATARI PILOT and LOGO. YPLA also offers a program exchange, so you can exchange software that you've developed at home or in school for a free tape or disk of member-contributed programs. Or you can send \$10 for a cassette or a disk full of public domain PILOT and LOGO programs. YPLA now offers a 45-page catalogue of public domain software for members—and their library is growing all the time!

YPLA doesn't have a BBS—yet. They're actively pursuing this project so "turtles" all over the world can get on-line with each other.

For more information about YPLA, contact:

James H. Muller 1208 Hillsdale Drive Richardson, TX 75081 (214) 783-7548

ICCE (International Council for Computers in Education)

ICCE is a "grass-roots umbrella organization" dedicated to furthering instructional computing and "the effective and proper use of computers in education". Currently, thirty-three educators groups

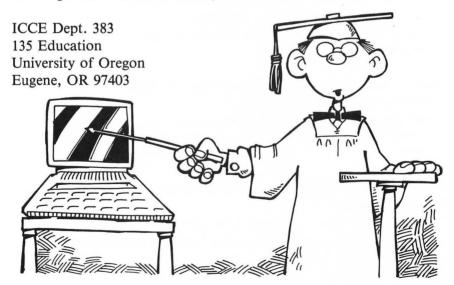
belong to ICCE with over 15,000 individual members world-wide. Member organizations will soon be linked by a BBS that group officers can access.

ICCE organizes educational conferences and publishes *The Computing Teacher* and many informative and low-cost booklets for parents and educators.

The Computing Teacher

The Computing Teacher is a valuable journal that is published nine times a year. Each issue is full of application stories by every kind of teacher who uses computers; programs; reviews; conference announcements; and news. A recent issue featured an in-depth article on how to teach programming; "Some Logo Drawing Ideas"; articles by computer-using teachers of learning disabled and handicapped students...and more!

ICCE's booklets (in size and contents they are more like small paperback books) cost from \$1.50-3.00 for individual copies. They are packed with useful information for parents and educators. To become a member of ICCE, subscribe to *The Computing Teacher*, and request ordering information for books, write:



Want to form an Educators' group?

ICCE supports the formation of educators' groups and provides assistance and guidelines. If you would like to form an educators' group, or if you're involved in a group that would like to join, write or call:

David Moursund, President ICCE 135 Education University of Oregon Eugene, OR 97403 503-686-4414

ICCE does not disseminate public domain software as an organization, but many of their members do. (See CUE/SOFTSWAP, p.171). There may be an ICCE member group near you!

ICCE Organization Members

Alaska Association for Computers in Education (AACE)

Contact: Kathleen L. Castle, Adult Education Coordinator, The Northern Institute, 650 W. International Airport Rd., Anchorage, AK 99502 907/563-3174

Alberta Association for Educational Data Systems

Contact: Ann Brebner, President 838 Education Tower, University of Calgary, 2500 University Dr. NW, Calgary, Alberta, Canada T2N 1N4 2061

Association for the Development of Computer-Based Instructional Systems (ADCIS)

Contact: Dr. Gordon Hayes, Executive Director ADCIS—Miller Hall 409, Western Washington University Bellingham, WA 98225 206/676-2860

Computer Education Society of Ireland

Contact: Mary Devlin

85 Limetrees Road East, Douglas, Cork, Ireland

Computers, Learners, Users, Educators Association (CLUES)

Contact: Henry J. Petersen, Executive Director 50 Nellis Drive, Wayne, NJ 07470

30 Nellis Drive, wayne, NJ 0/4/0

201/696-3157

Computer-Using Educators (CUE)

Contact: Don McKell

P.O. Box 18547, San Jose, CA 95158

408/288-7642

Computer-Using Educators of British Columbia (CUEBC)

Contact: Barry Underwood

509 Alder St., Campbell River, B.C., Canada V9W 2N9

604/287-8346

Computer-Using Educators of Kentucky (CUE-KY)

Contact: Janet Parker

School of Education, University of Louisville

Louisville, KY 40292

502/588-6431

DIDACOM

Contact: Inno Broekman

Avenbeeck 98, 2182 RZ Hillegom, The Netherlands

Educational Computing Consortium of Ohio

Contact: Ellen Richman, Coordinator

4777 Farnhurst Road, Cleveland, OH 44124

216/291-5225

Educational Computing Organization of Ontario (ECOO)

Contact: Robert E. Drake, President

252 Bloor Street West, Toronto, Ontario, Canada M5S 1V6

Educational Microcomputer Users Group of Central New York (EMUGCNY)

Contact: Jane McCrohan

Roxboro Middle School, Mattydale, NY 13211

315/457-4618 (H)

Educators Interest Group of the San Diego Computer Society

Contact: Melvin L. Zeddies

P.O. Box 81537, San Diego, CA 92138

Florida Association of Science Teachers (FAST)

Contact: Carol Collins, President

15817 Country Lake Drive, Tampa, FL 33624

Idaho Computer Educators' Association (ICEA)

Contact: Jay Larson

Lewis Clark State College, Continuing Education, 8th Avenue and 6th Street, Lewiston, ID 83501

Illinois Association for Educational Data Systems (ILAEDS)

Contact: Lyle B. Smith, President Computer Science Department, Northern Illinois University, DeKalb, IL 60115 815/753-0378

Indiana Computer Educators

Contact: David A. Flowers

Ft. Wayne Community Schools, Adm., Cwt.

1230 So. Clinton St., Ft. Wayne, IN 46802

219/425-7228

Manitoba Association for Educational Data Systems (MAN-AEDS)

Contact: E. Boorsma, Secretary-Treasurer 1577 Wall Street, East Winnipeg, Manitoba, Canada R3E 2S5

Michigan Association for Computer Users in Learning (MACUL)

Contact: Lary R. Smith, Communications Sect.

33500 Van Born Road, Wayne, MI 48184

313/326-9300, ext: 562

Minnesota Association for Educational Data Systems

Contact: Sue Talley

1925 W. County Rd BS, St. Paul, MN 55113

612/638-2340

National Institute for Microcomputer Based Learning (NIMBL)

Contact: Stanley Silverman, President

348 Plymouth Ave., Brightwaters, NY 11718

New Hampshire Association for Computer Education Statewide (NHACES)

Contact: Anne Knight, Acting President University of New Hampshire, Computer Services Durham, NH 03824

603/862-3527

Northwest Council for Computer Education (Oregon, Washington and Northern Idaho)

Contact: Howard Bailey

Computing Center, Eastern Oregon State College

La Grande, OR 97850

503/963-1582

Oklahoma Educational Computer Users' Program (OECUP)

Contact: Richard V. Andree

Department of Mathematics, 601 Elm St., Room 423

The University of Oklahoma, Norman, OK 73019

405/325-3410

Pennsylvania Learning Resources Association (PLRA)

Contact: George H. Zook, Director, IMS

Lancaster-Lebanon I.U./IMS

P.O. Box 5026, Lancaster, PA 17601

717/569-8561

Saskatchewan Association for Computers in Education

Contact: Duncan Campbell

Mt. Royal Collegiate, 2220 Rusholme Road

Saskatoon, Saskatchewan, Canada S7L 4A4

The Science Teachers' Association of Ontario

Contact: Warren Sirrs 1032 Harness Ave., Ottawa, Ontario, Canada K1V 6P2 613/733-6552

Society of Data Educators (SDE)

Contact: Robert Behling Bryant College, Smithfield, RI 02917 401/231-1200

Texas Computer Education Association

Contact: Vicki S. Smith 201 Kinkaid School Drive, Houston, TX 77024

The Utah Council for Computers in Education

Contact: Dr. Larry C. Christensen 1295 North 1200 West, Mapleton, UT 84663 801/798-2151

West Australian Computer Educators

Contact: P.C. Farrell, President 12 Lilac Place, Dianella, 6062, Western Australia 276-5891

Wyoming Educational Computing Council

Contact: Robert L. Morissette, President Laramie County School District #1, Administration Bldg. 2810 House Ave., Cheyenne, WY 82001

Young People's LOGO Association (YPLA)

Contact: James H. Muller 1208 Hillsdale Drive, Richardson, TX 75081 214/783-7548

CUE/SOFTSWAP

Computer-Using Educators (CUE) is a California-based group of educators that has over 5,000 members in 49 states, 4 provinces, and 12 nations outside the United States. Because of their active membership and strategic location in "Silicon Valley", California, CUE is in close contact with new developments in the industry, evaluates new educational software, and frequently influences decisions of manufacturers about educational issues.

CUE also publishes a bi-monthly newsletter and organizes several major conferences per year. CUE's many volunteer workers make it possible for the organization to offer membership and a bi-monthly newsletter for the unbelievable price of \$6.00!

Public Domain Software from SOFTSWAP

A joint project of CUE and the San Mateo County Office of Education is the SOFTSWAP project. SOFTSWAP is dedicated to the dissemination of public domain educational software for all the major personal computers, including the ATARI. About one-fourth of the programs are drill and instruction (CAI), but their large software library also includes many creative simulations and learning games. Each "dissemination" disk contains from five to twenty-eight programs for grades K-12.

SOFTSWAP is staffed by four part-time employees, student aides, and lots of volunteers. The project's Chairperson, Ann Lathrop, is a leader in the area of educational software evaluation.

SOFTSWAP's ATARI Library

SOFTSWAP currently offers four disks for the ATARI. A fifth disk is nearing completion and their library is growing all the time. The disks are loaded with useful software—for example, classroom management programs like "Homework and Test Averages", an imaginative "Frog Race" that teaches fractions in game format, and the "Hammurabi" simulation.

How to get SOFTSWAP Software

There are two ways to get software from this terrific educational resource (if you can't visit their Microcomputer Center in Redwood City, California). One way is to "swap" software by sending your *original* program to SOFTSWAP on disk or cassette tape in exchange for any disk or cassette of your choice. SOFTSWAP welcomes program exchange and is happy to add your original contributions to their ever-expanding library.

Or you can send \$1 for their software catalog and order the ATARI dissemination disks of your choice for \$10 per disk. The cost of the disks pays for copying, mailing, and more free software for educators.

SOFTSWAP is happy to share their software. You are welcome to copy and give away all the software you receive—as long as you give it away for free.

Find out more about SOFTSWAP

To find out more about this wonderful library of free educational software, write:

Ann Lathrop, Chairperson Microcomputer Center, SMERC Library San Mateo County Office of Education 333 Main St. Redwood City, CA 94063

Send \$1 for each software catalog (listings of new acquisitions are also published in CUE's newsletter and *The Computing Teacher*).

Send \$10 for each ATARI dissemination disk.

CUE's Newsletter

CUE's newsletter is also a gold mine of programs, teaching ideas, software and book reviews, news items, product announcements, and discussions of educational issues and policies that are relevant to

educators anywhere. To become a member of this dynamic organization and receive their newsletter, write:

Don McKell Computer-Using Educators CUE Membership P.O. Box 18547 San Jose, CA 95158

and send a check to CUE for \$6.00 for U.S. membership; \$8.00 for Canada; \$16.00 for other countries; and \$20.00 for institutional subscriptions and memberships.

CUE Welcomes Editorial Contributions

CUE welcomes your editorial contributions. If you would like to contribute announcements, letters, programs, teaching ideas and curricula, reviews of software or hardware, humor, quotable quotes or anything else of interest to computer educators, submit material to:

Dr. Sandy Wagner, Editor CUE Newsletter 127 O'Connor St. Menlo Park, CA 94025

(Also see p. 183 for Far West/CUE's joint BBS for educators.)

The ATARI Institute

We interviewed Dr. Ted Kahn, Executive Director of The ATARI Institute for Educational Action Research, to see what kind of support ATARI provides for educators.

Ted is an enthusiastic educational programmer and researcher whose background includes a Ph.D. in Psychology, and experience in educational research and development at Lawrence Hall of Science, Xerox's Palo Alto Research Center, and consulting for ATARI.

Interactive Education

Ted sees telecommunications as the next step in education. "We need to share educational computing resources with everyone—regardless of their race, economic class, or geographic location. With telecommunications, students and teachers can share resources anywhere in the world. Learning can become an interactive educational experience."

Ted is in the process of finalizing a BBS for ATARI-using educators, which he plans to have in operation by the Fall or Winter of 1983. The BBS will also link ATARI summer camps and a planned PILOT Center with the ATARI Institute and educators all over the world.

Grants

The ATARI Institute also supports and funds conferences and educational projects that turn ideas into action. The projects range from a grant of equipment to an elementary school instructor who teaches music on the ATARI computer (Mrs. Carolyn Pugh of the Cupertino, California Elementary School District) to funding for a catalogue of microcomputer applications at Harvard University. Other ATARI Institute projects provide computing resources for minority students; develop ecology software; and test educational software for nursery-school-age students.

ATARI ACTION

The ATARI Institute also publishes ATARI Action, an informative newsletter about Institute grants and activities. Write to the ATARI Institute to get on their newsletter mailing list and keep in touch with the exciting projects of ATARI-using educators.

Bring Computing to your school!

Two ATARI Institute projects bring computing directly to your school! A grant to the Industry Education Council of Santa Clara County, California equipped a mobile computer van. This van travels all over the country to bring computer literacy workshops and handson experience directly to students and teachers.

To find out more about the ATARI IEC Mobile Van, contact: Ernie Hickson/Ann Branch Industry Education Council of Santa Clara County 100 Skyport Drive San Jose, CA 95110

or write or call:
ATARI Institute for Educational Action Research
Atari Inc.
P.O. Box 427
Sunnyvale, CA 94086
408-745-2666

COMPUTERS: Expressway to Tomorrow

A project of ATARI Educational Marketing also brings computing to schools and educational sites all over the United States. "COMPUTERS: Expressway to Tomorrow" is a 30-minute multimedia production that illustrates the role of computers in daily life, industry, and the creative arts and discusses the role of computers in society

The production features two 16-millimeter films; computer-generated music and graphics; and a live, human actor. Teachers and students previewing the show loved it. It is already booked one year in advance. In its first year of operation, the presentation will visit 2,000 schools and reach over 20 million students and teachers. To find out about scheduled showings of "COMPUTERS: Expressway to Tomorrow" or to reserve a visit for your school, call:

800-523-2310 (toll-free)

The Sister School Project

The Sister School Project links "Little Sister Schools" that are just beginning their computer programs with "Big Sister Schools" that have computer experience. The ATARI Institute provides all the necessary equipment and communications software for all the schools in the project and pays for the special phone installation and communication costs between the schools. The pilot project began in September 1982 and links "Master Computer Teachers" with beginning teachers via modem.

With programs like the Sister School Project, even schools in rural and isolated locations with limited resources can take advantage of the experience and technological expertise of sophisticated computer programs.

Sister schools now include:

Sister School Project

Sara Armstrong Terra Nuova Montessori School 628 Schafer Road Hayward, CA 94544 (415) 783-7640

Graham Rankin Foresthill Union Elementary School 24750 Main Street Foresthill, CA 95631 (916) 367-2211

Ross Snow S.F. Community Alternative School 3630 Divisidero St. San Francisco, CA 94123 (415) 922-6195

Ellen Keener Children's School-Maharishi University Fairfield, Iowa 52556 (515) 472-4128 George Amy
Our Lady of the Rosary
666 B Street
Union City, CA 94587
(415) 471-3765

Janet Lederman Gazebo School Esalen Institute Big Sur, CA 94920

Anthony Campilongo Pelton Middle School 5 Conklin Street San Francisco, CA 94124 (415) 648-5932 If you would like more information about this project, write or call:

Sandra Williams
Sister School Project
ATARI Institute for Educational Action Research
1196 Borregas Ave.
Sunnyvale, CA 94086
408-745-4192

School Counseling by Modem

The Home-School Computer Network Project links the ATARI Institute, Picodyne Corporation, and the Mountain View-Los Altos Union High School District to provide school counseling and guidance information to students and parents.

The system is based on a central microcomputer (attached to a high-speed printer) that stores pupil personnel records and guidance information. Each counselor's office is linked to the system so they can review transcripts, change students' schedules, check attendance records, and access information quickly for parents.

Parents who have access to a computer and modem can call the system directly. When parents dial the system via modem, a menu of choices appears on their computer screen at home. They can ask for information about college entrance and graduation requirements, financial aid, career guidance, and the school's curriculum.

Analyze Student Records

In appropriate areas, the system also provides analysis. For example, a parent can ask for an analysis of the student's records and how they match up to entrance requirements of the University of California. The analysis reports courses completed; courses the student still lacks to meet admission requirements; and the grade point average needed.

For more information about the *Home-School Computer Network*, write to:

Dr. Ted Kahn
Executive Director
ATARI Institute for Educational Action Research
1196 Borregas Avenue
Sunnyvale, CA 94086

Mr. Dean Brown President Picodyne Corporation 3000 Alpine Road Ladera, CA 94026

Mr. Paul Sakamato Superintendent Mountain View-Los Altos Union High School District 1299 Bryant Avenue Mountain View, CA 94040

Other noteworthy Institute projects involve computer literacy, ecology, telecommunications, and technological education for minorities.

For Children

The Future Center at the Capital Children's Museum in Washington, D.C., creates a "hands-on" computer museum for children and their families where children "learn by doing".

Contact:

Ann Lewin, Executive Director Communications Project Capital Children's Museum 800 3rd St. N.E. Washington, D.C. 20002

Computer Literacy

ComputerKid, USA! is a pilot project for peer-teaching and community-based computer literacy education. ATARI equipment and software gives hands-on experience to members of community groups, including Boys' Clubs, Brownie and Scout Troops, and the Recreational Center for the Handicapped.

Contact:

Bob Albrecht/Tim Finger

P.O. Box 310

Menlo Park, CA 94026

Math & Computer Education

The Math & Computer Education Project of the Lawrence Hall of Science features ATARI computers in classes and exhibits for public education, including "Ms. Math" and "PILOT Your Own Computer".

Contact:

Twila Slesnick, Director

Math & Computer Education Lawrence Hall of Science University of California Berkeley, CA 94720

Electronics, Music, Art, History & more

The Model Math and Computer Program of George Washington High School uses ATARI computers to do research and develop computer curriculum on electronics, music, art, history, math, and home economics.

Contact:

Irwin Hoffman

George Washington High School

Denver Public Schools 655 S. Monaco Blvd. Denver, CO 80224

Early Childhood Computer Literacy

The Center for the Development of Non-Formal Education in Austin, Texas, is using the ATARI computer to work with the Hispanic barrio community in early childhood and parent education. CEDEN will also produce a videotape documentary of the project.

Contact: Emily Vargas Adams/Alan Adams

CEDEN

2109 East 2nd St. Austin, TX 78702

Communications Network/Computer Literacy

The New Mexico Research Education Enrichment Foundation is studying technological education opportunities for Hispanic and Native American students in selected schools throughout New Mexico. They will develop a communications network between schools and develop computer literacy information.

Contact: Jeff Nathanson/Juan Abeyta

NMREEF

Science Education Division 8812 Fourth Street N.W. Alameda, NM 87114

Computer Ecological Studies

The Coastal Ridge Research and Education Center is developing educational games and materials about allocation of energy resources for use in appropriate technology courses.

Contact: Herbert

Herbert Kohl

Coastal Ridge Research & Education Center

P.O. Box 243

Point Arena, CA 95468

Ecology Simulations

The Greenfield Community College uses ATARI equipment in a model that applies principles of ecology and effective group process in combination with computer-integrated simulation. The project will develop a curriculum guide for teachers and coordinators; a student guide; a user's guide; and a TEME (Totally Enclosed Modular Environments) Shuttle-Orbiter computer software series.

Contact: Dan Larose/Greg Vouros

Greenfield Community College

Project TEME 1 College Drive

Greenfield, MA 01301

Interactive Telecommunications

The Interactive Telecommunications Program at New York University focuses on new applications of interactive telecommunication systems, especially teletext and viewdata.

Martin Elton/Red Burns Contact:

School of the Arts-Alternative Media Center

Interactive Telecommunications Project

New York University 725 Broadway, 4th Floor New York, NY 10003

Microcomputer Applications

The Center for Interactive Technologies at Harvard University will build a collection of computer equipment and software; do research and development on software; and publish a directory of microcomputer applications.

Contact:

Inabeth Miller

Harvard University School of Education

Monroe C. Gutman Library

Appian Way

Cambridge, MA 02138

Early Childhood Education

The Bing School at Stanford University is a permanent field testing site for early childhood education software.

Contact:

Carol Lou Young-Holt

Bing School

Stanford University 850 Escondido Road Stanford, CA 94305

Children & Programming Languages

The Bank Street College of Education is researching children's use of programming languages; issues involved in microcomputer use in the schools; and how children can collaborate and benefit from electronic technology.

Contact:

Karen Shiengold/Janet Kane Bank Street College of Education Center for Children and Technology 610 West 112th St.

New York, NY 10025

ATARI Institute Info

If you want to receive the ATARI Institute's newsletter, ATARI Action, or want guidelines for grant applications, write to:

Sandra Williams Manager of Program Development, ATARI Institute Atari Inc. 1196 Borregas Ave., P.O. Box 427 Sunnyvale, CA 94086

An Electronic Bulletin Board for Educators

The Far West Laboratory for Educational Research and Development has teamed up with Computer-Using Educators to create an electronic Bulletin Board specifically for educators. Users can ask questions, exchange ideas, leave messages, and share news about computers in the classroom

The system is a "Living Tree" BBS. You climb a "tree" of information, branching out to explore areas of special interest to you. To give you an idea of what it's like to talk to a "Living Tree", we called up Far West's BBS for you. Following is a transcript of our conversation with the BBS for educators.

A Conversation with Far West Laboratory's LIVING BBS (415/565-3037)

We used our modem and phone to contact the FarWest Laboratory (Computer-Using Educators) LIVING BBS. We've included a transcript of our conversation, exactly as it appeared on our monitor's screen.

The Living BBS displays its options like this:

"LIVING BBS(Q ? S M N @ X):"

The user responds by typing a one character response after the colon (:). Here's an example:

LIVING BBS (O ? S M N @ X):S

In this case I entered the letter "S" to move one level up on the data base.

Don't forget to read "FREE Software by Phone" to learn how to contact Far West's educational electronic Bulletin Board!

AN ACTUAL CONVERSATION WITH THE FAR WEST LABORATORY BBS

—TRANSCRIPT—

INTRODUCING THE LBBS

WITH THE LIVING BBS BEING SUCH A NEW PRODUCT, IT'S LIKELY THAT THIS IS YOUR FIRST VISIT WITH US.

BEFORE GOING FURTHER, YOU SHOULD LEARN HOW TO FREEZE THE ACTION ON THE SCREEN. TO STOP THE ACTION TEMPORARILY, HOLD THE "CONTROL KEY" DOWN AND PRESS "S", FOR STOP. PRESSING "CONTROL-S" AGAIN WILL START THE ACTION.

NOW YOU ARE READY TO BROWSE AROUND THE DATABASE...

WHEN YOU SEE AN ITEM OF INTEREST, TYPE THE NUMBER THAT IS NEXT TO IT, FOLLOWED BY [RETURN]. FOR EXAMPLE, TO SELECT ITEM #3, PRESS "3" THEN [RETURN]. THAT'S HOW YOU GO DEEPER, BUT HOW DO YOU COME BACK OUT?

THE "S" OR SURFACE COMMAND WILL MOVE YOU OUT ONE LEVEL. IF YOU TYPE "7S", YOU WILL MOVE OUT SEVEN LEVELS. THE "S" COMMAND IS VERY IMPORTANT.

THE "M" COMMAND DISPLAYS THE CORRECT MENU. THIS IS USEFUL WHEN THE MENU HAS SCROLLED OFF THE TOP OF YOUR SCREEN.

TO MAKE A NEW MESSAGE, USE THE "N" COMMAND. TRY IT ON THE QUESTIONNAIRE."

READ THE QUESTIONS AND RESPOND USING THE "N" COMMAND.

IF YOU WISH MORE DETAILED INFORMATION, LEAVE YOUR NAME AND ADDRESS IN THE "SYSOP'S" MAILBOX. WE WILL SEND YOU A HELPFUL BROCHURE, EXPLAINING ALL THE COMMANDS.

1:STOP THE ACTION
2:COMMAND MENU
3:THE HELP COMMAND—?
4:TALK TO AN EXPERT
5:HINT: REMEMBER THE "S" COMMAND!

LIVING BBS (Q ? S M N @ X): @

[TERMINAL MODE, @@@ TO EXIT]

@@@

[TERMINAL MODE OFF]

LIVING BBS (Q ? S M N @ X): S

→SUMMIT OF THIS LBBS

1:INTRODUCING THE LBBS
2:MISCELLANEOUS SECTION
3:QUESTIONS & ANSWERS
4:SPECIAL INTEREST GROUPS
5:BITS & BYTES
6:USER MAILBOXES
7:USER PASSWORDS

LIVING BBS (Q ? S M N @ X): 4 → SPECIAL INTEREST GROUPS

IF YOU'D LIKE TO START A NEW SPECIAL

INTEREST GROUP ON THIS BULLETIN-BOARD...LEAVE A MESSAGE HERE!

1:OSBORNE 1 USERS AND HOBBY GROUP 2:MORE COMPUTERS IN PUBLIC SCHOOLS!

LIVING BBS (Q?SMN@X): 2

→ MORE COMPUTERS IN PUBLIC SCHOOLS:

FROM: JOHN ALLAIN MSG #28, 23-FEB-83

I HAVE A FRIEND, HE GOES TO HIGH SCHOOL (SOPHOMORE).

HE IS INTERESTED IN COMPUTERS AND WOULD LIKE VERY MUCH TO HAVE MORE COMPUTERS IN SCHOOL, BUT THEY WON'T LET HIM USE THE COMPUTERS UNTIL YOU GET TO BE A JUNIOR. HIS TALENTS ARE GREAT, BUT THE SCHOOLS WON'T GIVE HIM A CHANCE. I REGRET THIS; I THINK HE SHOULD USE HIS TALENT TO THE TOP OF HIS ABILITY. WHAT DO YOU THINK ABOUT COMPUTERS AND PUBLIC SCHOOLS?

LIVING BBS (Q ? S M N @ X): S → SPECIAL INTEREST GROUPS

1:OSBORNE 1 USERS AND HOBBY GROUP 2:MORE COMPUTERS IN PUBLIC SCHOOLS!

LIVING BBS (Q?SMN@X): S

→ SUMMIT OF THIS LBBS

1:INTRODUCING THE LBBS 2:MISCELLANEOUS SECTION 3:QUESTIONS & ANSWERS 4:SPECIAL INTEREST GROUPS 5:BITS & BYTES 6:USER MAILBOXES 7:USER PASSWORDS

LIVING BBS (Q?SMN@X): 3 → QUESTIONS & ANSWERS

WHEN A PROBLEM OR ISSUE ARISES IN THE CLASSROOM, PRESENT THE TOPIC HERE. POSE YOUR QUESTION AND, PERHAPS, ONE OF OUR OTHER READERS CAN OFFER SOME HELP.

REMEMBER—YOU CAN BE ANONYMOUS. SIMPLY EDIT YOUR MESSAGE, DELETING LINES 0-2 WILL REMOVE YOUR NAME.

WE WANT THIS BULLETIN BOARD TO BE A SOURCE OF HELP TO ALL EDUCATORS. TAKE ADVANTAGE OF THE TECHNOLOGY TO CONVERSE WITH OTHER EDUCATORS. ASK QUESTIONS...OFFER SUGGESTIONS. THIS IS WHAT IT IS ALL ABOUT.

1:WHAT KIND OF GRADEBOOK? 2:EQUIPMENT UNIFORMITY 3:BANK STREET WRITER

4:OUESTIONNAIRE

LIVING BBS (Q ? S M N @ X): 4 → QUESTIONNAIRE

WE WOULD LIKE TO KNOW MORE ABOUT THE PEOPLE WHO USE OUR BBS. PLEASE RESPOND TO SOME OF THE QUESTIONS.

1:WHERE ARE YOU CALLING FROM? 2:WHAT IS YOUR TITLE/ROLE?

3:DO YOU USE COMPUTERS IN SCHOOL?

4:IF SO, IN WHAT APPLICATIONS? 5:HOW DID YOU LEARN ABOUT THE LBBS?

LIVING BBS (Q?SMN@X):S

→ QUESTIONS & ANSWERS

1:WHAT KIND OF GRADEBOOK?

2:EQUIPMENT UNIFORMITY

3:BANK STREET WRITER

4: QUESTIONNAIRE

LIVING BBS (Q ? S M N @ X): S

→ SUMMIT OF THIS LBBS

1:INTRODUCING THE LBBS

2:MISCELLANEOUS SECTION

3:QUESTIONS & ANSWERS

4:SPECIAL INTEREST GROUPS

5:BITS & BYTES

6:USER MAILBOXES

7:USER PASSWORDS

LIVING BBS (Q ? S M N @ X): 2 → MISCELLANEOUS SECTION

GOT A MESSAGE, BUT YOU'RE NOT SURE WHERE TO PUT IT? THEN PUT IT HERE IN THE "MISCELLANEOUS SECTION"!

1:WHAT IS SOFTSWAP?

2:OTHER BULLETIN BOARDS

3:REMINDERS

4:COMPUTER EVENTS

LIVING BBS (Q ? S M N @ X): 2 → OTHER BULLETIN BOARDS TWO ADDITIONAL BULLETIN BOARD SYSTEMS FOR EDUCATORS:

EDUCATIONAL TECHNOLOGY PEOPLES MESSAGE SYSTEM IN SAN DIEGO (619/265-3428)

THE MEAD SCHOOL FOR HUMAN DEVELOPMENT IN GREENWICH, CT (203/629-4375)

LIVING BBS (Q ? S M N @ X): S → MISCELLANEOUS SECTION

1:WHAT IS SOFTSWAP?

2:OTHER BULLETIN BOARDS

3:REMINDERS

4:COMPUTER EVENTS

LIVING BBS (Q ? S M N @ X): 4 → COMPUTER EVENTS

HERE ARE SOME DATES YOU MAY WANT TO REMEMBER:

MARCH 10-12—THE USE OF MICROCOMPUTERS IN SPECIAL EDUCATION, HARTFORD, CT (703/620-3660)

MARCH 14-15—MACUL '83, DEARBORN, MI (313/326-9300)

MARCH 17-19—FORWARD TO THE 3 C's, TEMPE, AZ (602/965-7363)

MARCH 18-19—COMPUTERS: EXPANDING HORIZONS, AUSTIN, Tx (512/475-2479)

MARCH 18-19—COMPUTERS IN EDUCATION CONFERENCE, SEATTLE, WA (206/334-6965)

MARCH 18-20—WEST COAST COMPUTER FAIRE, SAN FRANCISCO CIVIC AUDITORIUM & BROOKS HALL (415/851-7077)

LIVING BBS (Q?SMN@X): X

IF YOU ARE COMFORTABLE WITH THE BASIC LBBS COMMANDS, THEN YOU SHOULD TYPE "Y" (FOR "YES"), OTHERWISE, TYPE "N". IF YOU'RE HESITATING...GO AHEAD AND GIVE IT A TRY!

ARE YOU AN EXPERT USER (Y/N) ?N

LIVING BBS (Q?SMN@X): Q

CALL IT A DAY (Y/N) ?Y

CALL AGAIN SOMETIME. OUR PHONE NUMBER: 415/565-3037

HANGING UP NOW.

Any interested educator or parent who has access to a modem can use the BBS.

Dial:

415-565-3077

If you want to talk to the SYSOP, call: Kendra Bonnett 415-565-3221

For more information on the BBS, write: Carolyn Cates/Kendra Bonnett Far West Laboratory 1855 Folsom Street San Francisco, CA 94103

FREE RESOURCES FOR HANDICAPPED AND LEARNING DISABLED STUDENTS

Computers offer a wonderful opportunity to people who have physical or learning limitations. As teaching tools, computers are endlessly patient. Modified equipment and software can compensate for physical limitations. Computer software can also be used in novel ways. Word processing software, for example, can enable students who lack fine motor skills to easily express their ideas in print.

California Department of Rehabilitation

The ATARI Institute has a special group of grants for vocational and special education. Two of these grants feature employment placement and new product development.

The Institute granted a computer system to *The California Department of Rehabilitation* to provide work experience and placement for physically limited individuals. The project is directed by Ed Roberts, who is totally paralyzed except for one hand. Ninety percent of the project's graduates have been placed in jobs!

Contact:

Ed Roberts California Department of Rehabilitation 830 "K" Street, Suite 221 Sacramento, CA 95831

Contest Aids Handicapped

The ATARI Institute also granted equipment to award as prizes to winners of the first national competition on *Personal Computing to Aid the Handicapped*. The competition encourages the creative development of hardware and software programs to aid handicapped people of all ages.

For more information about the contest and its participants, contact:

Paul Hazan Johns Hopkins University Applied Physics Laboratory Johns Hopkins Road Laurel, MD 20810

ICCE Has Handicapped Resources

ICCE (International Council for Computers in Education) publishes several excellent booklets on computing resources for handicapped and physically limited students.

A Teacher's Guide Book

Learning Disabled Students and Computers: A Teacher's Guide Book is available from the ICCE for \$2.50/copy.

A Comprehensive Resource Guide

ICCE also publishes a comprehensive resource guide on *Computer Technology for the Handicapped in Special Education and Rehabilitation* for \$7.00/copy. The guide categorizes and summarizes the available literature on computer technology for special education and rehabilitation.

For ordering information, write:

ICCE 135 Education University of Oregon Eugene, OR 97403.

Networking

There are also several networks for learning disabled and handicapped teachers and students.

SpecialNET (Special Education Community Network)
National Association of State Directors of Special Education
1201 16th St., N.W.
Washington, DC 20036
202-833-4218

HEX (The Handicapped Educational Exchange) Richard Barth 11523 Charleton Drive Silver Springs, MD 29092 301-681-7372

Community Health Information Project

The Community Health Information Project is about to go on-line with an electronic BBS for handicapped computer users in cooperation with the Center for Independent Living and organizations for the physically limited and victims of cerebral palsy. For more information contact:

Joel Yudkin Community Health Information Project 415-968-8798 (voice)

Deafnet

Deafnet, a government-funded project, can provide selected community organizations with public domain software for setting up an electronic message center for deaf people.

Deafnet is a pilot project to develop and disseminate software for computer communications to deaf people.

Deafnet Brings Computers to the Deaf

"Previously, the whole world of computers—or anything else that uses the ASCII code— was closed to deaf people. One of the goals of our project is to open up that world," states Hal Huntley of SRI International. Many TTDs (devices that enable deaf people to use the telephone) were designed to use a BAUDOT code. One of DEAFNET's challenges has been to develop software that translates Baudot into the ASCII code that computers and computer telecommunications use.

The project's goal is to introduce the Deafnet system and train community leaders to use it in 20 major cities in the United States before the project's grant ends in October 1984.

Deafnet can make its public domain network software for the deaf available to selected community groups by special arrangement. For more information, contact:

Hal Huntley DEAFNET SRI International 333 Ravenswood Ave. Menlo Park, CA 94025 415-326-2816 (voice)

or

415-326-1802 (TTD)

Educational, Almost Free Software

Several publications and organizations offer program listings and software at reasonable costs.

The ATARI Connection includes program listings and features on PILOT, LOGO, BASIC and educational software. For information on the ATARI Connection, write:

ATARI CONNECTION PO Box 50047 60 E. Plumeria San Jose, CA 95150

The APX Program Exchange catalogues user-written software. APX includes a good selection of reasonably-priced software by ATARI-using parents and educators.

All APX software is available by mail or phone order or through many ATARI retailers. To receive the latest APX catalog, send \$2.00 to:

ATARI Program Exchange Atari, Inc. P.O. Box 3705 Santa Clara, CA 95055

APX would also like the opportunity to review your software! For an APX Program Submission Packet, call:

800-538-1862 (toll-free) 800-672-1850 (toll-free within California)

ATARI, Inc. also publishes the *ATARI Computer Educational Software Directory*, which describes commercial educational courseware from kindergarten to college. The packages range from very reasonable (\$7.95-\$19.95) up to \$59.95 or more.

For a catalogue, contact your ATARI retailer, or:

Educational Marketing Home Computer Division Atari, Inc. P.O. Box 50047 San Jose, CA 95134 800-538-8543

The Minnesota Educational Computing Consortium (MECC) is an organization dedicated to assisting Minnesota schools and colleges that use computers. MECC has developed classroom-tested educational software that is available free for educators in the state of Minnesota and for reasonable prices to parents and educators elsewhere.

Their ATARI courseware includes computer literacy/science programs, language arts, mathematics, music, science, and social studies. To request a MECC catalogue, write:

MECC Distribution Center 2520 Broadway Drive St. Paul, MN 55113

Parents and educators within Minnesota should request the catalog for MINNESOTA RESIDENTS.

ATARI UPDATE '84

ATARI UDATE '84 2325 Paragon Drive San Jose, CA 95131

We're planning to update *Free Software* regularly...but we can't do it without your help!

Please help us keep this valuable resource book current and meaningful for all ATARI computer users.

USERS' GROUPS

If you've started a new ATARI Users' Group please let us know the details. We'd also like to know more about activities and developments in your club. If your club publishes a newsletter, please put us on your mailing list!

TELECOMMUNICATIONS

New BBS phone numbers, new products, new telecommunication software...any information that will give future readers the most upto-date information about this rapidly growing field.

EDUCATION

Please let us know about your new ATARI educational project(s)... we want to publish this information in the next *Free Software*.

CORRECTIONS

Events change rapidly in the computer field. If you've found any inaccuracies in this issue, we'd like to know. We'll make sure to correct it in our future revised edition.

NEED HELP?

Write to us at "UPDATE '84" and we'll try our best to answer your questions.

YOUR NAME IN PRINT

All contributors to the next issue of *Free Software* will be listed in the acknowledgement section of the book.

* JONESTERM * QUICK REFERENCE CHART

1. SETUP OPTIONS (Choose one)

		(Onoose one)	
FUNCTION	PRESS	SCREEN SAYS	WHEN PROGRAM PROMPTS, ENTER:
Download from an Atari AMIS BBS	"D" "A" "N"	Operation Mode: Translation Mode: Parity:	_
Download other types of BBS	"D" "L" "N"	Operation Mode: Translation Mode: Parity:	_
Upload to an Atari AMIS BBS	"U" "A" "N"	Operation Mode: Translation Mode: Parity:	_
Upload to other types of BBS	"U" "L" "N"	Operation Mode: Translation Mode: Parity:	_
	2	. UPLOADING PREPARA	ATION
FUNCTION	PRESS	SCREEN SAYS	WHEN PROGRAM PROMPTS, ENTER:
Transfer Upload file from storage device to com- puter's buffer memory	_	ENTER UPLOAD FILE NAME	C:[RETURN] (Tape D:FILENAME [RTRN] (Disk)
		3. TERMINAL OPERATI	ION
FUNCTION	PRESS	SCREEN SAYS	WHEN PROGRAM PROMPTS, ENTER:
Choose either Full or Half Duplex	OPTION (Toggle Switch)	FULL DUPLEX or HALF DUPLEX	_
Begin Downloading	SELECT (Toggle Switch)	MEMSTORE ON (Displays info. being Uploaded)	_
End Downloading	SELECT (Toggle Switch)	MEMSTORE OFF	_
Transfer data stored in buffer memory to a device	START	ENTER DOWNLOAD FILE NAME	C:[RETURN] (Tape) D:FILENAME[RTRN] (Disk) E: (Screen Editor) P: (Printer)
Begin Uploading	START	Displays info. being Uploaded	_
End Uploading	_		Program automatically returns to Terminal mode when Upload is complete

* AMODEM * QUICK REFERENCE CHART

FUNCTION	TYPE OR PRESS	SCREEN SAYS	WHEN PROGRAM
Choose either Full or Half	SELECT + "P" Toggle	FULL or	PROMPTS, ENTER:
Duplex Choose either ATARI or ASC Terminal mod	CII	ASCII TERMINAL MO or ATARI TERMINAL MO	
Check your DOS files	SELECT +"M"	Displays a list of progon your Atari disk file number of sectors av	grams e, and the
Prepare to Download/ Receive a file or program	SELECT+"R"	***RECEIVE FILESPEC?	C:[RETURN] (Tape) D:FILENAME[RTRN] (Disk) E: (Screen Editor) P: (Printer)
Step 1: Download a file or program	Type: XMODEM S + [Filename & extende EXAMPLE: XMODEM S BASEBALL.BAS	er]	
Step 2: Download a file or program	START	Screen turns red and program as it downloads. AMODEM auto stores program when is complete.	matically
Prepare to Upload/ Send a file or program	SELECT+"S"	***SEND FILESPEC? followed by LOADING INTO BUFFER After you enter Filesp	C:[RETURN] (Tape) D:FILENAME[RTRN] (Disk)
Upload a file or program	Type: XMODEM R + [name & extender] EXAMPLE: XMODEM R BASEBALL.BAS	Screen turns green ar displays program as it uploads. AMODEM automatically returns returns to Terminal mode after Uploading	
Step 1: Capture a program or file	SELECT + "C"	***RECEIVE FILESPEC?	C:[RETURN] (Tape) D:FILENAME[RTRN] (Disk) E: (Screen Editor) P: (Printer)
Step 2: Capture a program or file	OPTION (Toggle switch) Turns Capture func- on or off.	tion	
Step 3: Capture a program or file	SELECT + "D" (Dumps information appeared on screen Device you've selec	to	

* MINIATRM * QUICK REFERENCE CHART

FUNCTION	PRESS	SCREEN SAYS	WHEN PROGRAM PROMPTS, ENTER:
Begin Download	START	*SAVE ON*	_
End Download	SELECT	SAVE DEVICE?	C:[RETURN] (Tape) D:FILENAME [RETURN] (Disk)

* AMISTERM * QUICK REFERENCE CHART

FUNCTION	PRESS	SCREEN SAYS	WHEN PROGRAM PROMPTS, ENTER:
Choose either Full or Half Duplex	SELECT + "D" (Toggle Switch)	FULL or HALF	_
Set up Download/ Receive	SELECT+"R"	RECEIVE	_
*Download	START	Displays Info. being downloaded Then asks for File name	C[RETURN] (Tape) D:FILENAME [RTRN] (Disk)
Set up Upload/ Send	SELECT + "S"	SEND LOAD DEVICE?	C:[RETURN] (Tape) D:FILENAME [RTRN] (Disk)
Begin Upload	START	Displays Info. being Uploaded	_

^{*}Download: When downloading is completed, AMISTERM will automatically return to the Terminal mode.



Computer Books

ENRICH/OWNS®

\$9.95

The Illustrated Computer Dictionary & Handbook

\$8.95

Free Software for Your ATARI
Free Software for Your Commodore
Free Software for Your Apple
Free Software for Your TI

Apple for the Beginning Beginner ATARI for the Beginning Beginner PET for the Beginning Beginner TRS-80 for the Beginning Beginner TI for the Beginning Beginner

Ask for these books wherever good books are sold!



\$8.95

FREE SOFTWARE for your ATARI

Helps You

- Get in touch with educational, entertainment, and business resources.
- Access large libraries of FREE public domain software.
- Be in touch with 250 ATARI Users' Groups worldwide.
- Contact electronic bulletin board services (BBS's).
- Purchase the right MODEM.
- Get FREE communications software.
- Communicate with other MODEM users.
- Obtain FREE computer recreational services.

"This fascinating book takes the mystery out of telecommunications. Kids will love Free Software....they'll soon be trading BBS phone numbers like baseball cards!" Richard Pugh, Educator, Cupertino, CA

"This valuable resource turns your computer into a link with today's electronic universe."

Steve Weintraub, Hobbyist, Cheltenham, PA

"Telecommunications is the next step in education. This book is a very valuable resource."

Dr. Ted Kahn, ATARI Institute, Sunnyvale, CA

"I never dreamed I could get so much FREE help and software."
Ida Brodsky, Author, Philadelphia, PA



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