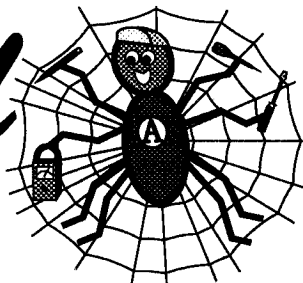


Arachnid Tech. Tips



SUMMER 1994

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A Publication Especially for Operators and Technicians who service Arachnid Products

This publication is provided as an aid for field technicians and operators who troubleshoot, repair, and maintain Arachnid games. It is a technical tool designed to keep all the latest updates, service bulletins, suggestions, and ideas together in one neat package.

Your input is welcome. If you have a special idea or tip you would like to share, send it to: It will be reviewed and considered for publication.

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HAVE A TECHNICAL QUESTION OR PROBLEM? Call us at 1-800-435-8319 and ask for Technical Service. We'll be happy to assist you in any way we can.



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SPIDER WRITER SCREEN CONTEST!!!
Your Creativity Could Win a Prize!

Are you an artist trapped in a league coordinator's job? Well here's a chance to show your stuff! Announcing the Arachnid Spider Writer Screen Contest - the first of its kind. The winner will receive a Dart King home electronic dart game!

The Spider Writer feature allows you to use your dart games for advertising and promotions. If you have come up with clever ways to accomplish this, why not be rewarded for your efforts, and share those ideas with others? Operators have used the screens to advertise leagues, tournaments, prize promotions, special events, and holidays. Some have even traded advertising with other businesses, such as air time on a radio station or tournament prizes in exchange for a visual ad on dart games.

Send us your most clever and/or artistic screens - they will be judged as they appear on a Galaxy dart game monitor, for originality, creativity, and practical application. A panel of judges from Arachnid's Sales, Advertising, and Engineering departments will make the final decision.

The best entries will be published in the Winter issue of Tech Tips, along with the winning entry. All entries will become the property of Arachnid, Inc., and after the contest is over, they may be made available in file form for downloading from the Arachnid BBS. We reserve the right to use the screens for promotional or advertising purposes.

How to Enter

There are two ways you can send your screens to us. You can either save the file on a 3 1/2" or 5 1/4" diskette, and send it by mail to the address listed at the top of this page, or you can download the file to the Arachnid Bulletin Board System (See the BBS article on

page 2 for information on downloading files). If you have any questions, call Arachnid and speak with the Tech Tips Editor, Connie Groves, or the BBS Sysop, Mark Helmer.

How do I Find the File?

When you make and save a Spider Writer Screen using Dartman II, it is stored in the \DM2\DATA directory. The file will have the name you gave it, with the suffix ".SPC". (For example, the Christmas screen above would be found in C:\DM2\DATA under the file name of XMASTREE.SPC.) To save it to a diskette, load a blank diskette in your designated drive, go to your DOS prompt, and type:

COPY C:\DM2\DATA\filename.SPC A:
(change the drive letters to match your drives if necessary)

The file will be transferred to the diskette.

To download the file to the BBS, use the same path to find the file.

Don't forget to include your name, company name, address, and phone number when sending in your entry. If yours is a winner, you will be notified by letter or by phone.

Deadline for sending entries is October 30, 1994. The winning screen will be announced on or before November 30, 1994.

Let your creativity flow, and GOOD LUCK!!!



Contest Rules

This contest is open to all persons, except Arachnid, Inc. or TBI Games employees or affiliates, and their family members. All entries become the property of Arachnid, Inc. They may be made available to the general public, or used for advertising and/or promotional purposes. Entries must be in good taste to be considered. Entries will not be returned. Deadline for entries is October 30, 1994. Winner will be published in the Winter 1994 issue of Tech Tips.

Technical BBS: Lesson Two - Main Menu Functions: Message Menu and Files Menu



This is Lesson Two in a series designed to teach novice Bulletin Board users how to access and use the Arachnid Technical Bulletin Board System (BBS). The BBS phone number is 1-815-654-7985.

Lesson One went through logging in. Now we will take a look at the two most used selections on the Main Menu: The Message Menu and the Files Menu.

When you call back to the BBS after being logged in as a user, you will be greeted differently. It will ask you for your name and password. After confirming your entries, it will welcome you to the BBS and inform you if any bulletins have been updated since your last call. It will then ask if you wish to view the Bulletin Menu. For this exercise, let's say "Yes".

The Bulletin Menu gives you three choices:

1. Information on the BBS software (general information)
2. Echomail conference guidelines (for using the E-mail)
3. Glossary of terms (very useful to first-time BBS users)

You may browse through any or all of these selections as you wish. When you are finished, press <Enter>. The BBS will tell you if there is any personal E-mail for you. Press <Enter> again to get to the Main Menu.

The Message Menu

Once the Main Menu is listed, press <M> to go into the Message Menu. This menu provides you with the tools to read and send messages to other users.

Leaving a Message for Another User

From the Message Menu:

1. Press <E> to enter a message.
2. Select the desired conference area. Areas of the BBS used to store messages are called "Conferences". The default area is "Private E-Mail" (it may be the only one available).
3. Enter the name of the person that the message is intended for. You can list all users from the Main Menu if necessary. This list can be downloaded for a hard copy. (See the next section for help on how to download a file.)
4. Enter the subject of the message.
5. Do you expect a response? (yes/no)
6. Enter your message.
7. When done, press <Esc>.
8. Press <S> to save the message.

You can leave messages to the following Arachnid service personnel if you have a technical question or suggestion:

1. Mark Helmer - Tech. Service, Dart Games/BBS Sysop
2. Connie Groves - Tech. Service, Dart Games/Tech Tips Editor
3. Gene Harlan - Technical Service Manager
4. Pat Rice - Dartman II Software Development/Support
5. Brad Bennehoff - Tech. Service, VGD

It is possible to leave messages for other Arachnid personnel as well, but the ones listed above are those who have direct contact with the BBS on a daily basis. Our own field reps also use the BBS system to communicate with us. We hope that this system will become a valuable tool for many people in the field. You can communicate with each other as well as with Arachnid, sharing ideas and tips to make everyone's jobs easier.

Reading Messages from other Users

You have three options to choose from:

- Read Messages
- Search Messages
- Check Personal Messages

Select the desired function by pressing the highlighted letter. You can then Search, Snoop, or View New Mail. When finished, press <Enter> to quit.

The Files Menu

The Files menu can be accessed from either the Main Menu or the Message Menu. Press <F>, and the Files Menu will be displayed. From the Files Menu, you can upload, download, read, list, and search files, change your help level, and look at your own personal statistics.

Changing your Help Level

Changing your help level from novice will cause the menus to disappear. It is recommended that you leave the help level on novice for the time being. As you become more familiar with the BBS, you may wish to eliminate the menus to shorten your calling time.

Uploading a File

When you attempt to upload a file, it will first ask you what protocol to use. You may want to look at "File Transfer Info" or the Glossary in the Bulletin Menu before uploading a file. These functions will explain the available protocols to help you determine which one to use.

1. Select protocol - if not sure, select "O" (X-modem 1K).
2. Enter the file name that you would like to upload.
3. Follow the uploading procedures provided with your specific modem software.

The file will be uploaded from your computer to the BBS.

Downloading a File

Downloading is similar to uploading:

1. Select protocol - if not sure, select "O" (X-modem 1K).
2. Enter the file name that you would like to download.
3. Follow the downloading procedures provided with your specific modem software.

The file will be downloaded to your computer.

Reading, Listing, Searching, and Viewing Files

These functions are self explanatory from the Files Menu. Select the option you want by pressing the highlighted letter, and follow the screen instructions.

Personal Statistics

When you select Personal Statistics, you will be able to see what you've been up to. It will list how many files you have uploaded and downloaded on the BBS, with totals for the day as well as cumulative totals.

This concludes the Technical BBS lesson two. Remember, you have 60 minutes of user time for every 24 hour period. Also, if there is no activity after 5 minutes, the BBS will automatically log you off. This feature helps prevent you from using up all your time if you are called away from your computer. You can log back in whenever you like if this occurs.

If you are nervous about using the BBS, call Arachnid, Inc. at 1-800-435-8319 and speak with the Sysop, Mark Helmer. He will be happy to take you step by step through all aspects of the system.



Doing Backups...Simple, but Important

Every time you exit Dartman II, it asks if you want to back up your data. Are you the type of user that says "yes" to this question religiously, or are you the type that puts it off -- and never quite gets around to it? Or maybe you are new to computers and don't really understand what it involves on your part, or what to do with the backups once they're done.

First and foremost, doing backups is always a good idea, whenever data is entered into a program that would be difficult or impossible to reconstruct later. In reference to Dartman II, this would be any stats which you do not have a paper copy of (for most of you, this is all your stats). Therefore, it is important to know what you need to back up, how to do it, and how to retrieve it if ever necessary.

Backups for Beginners

For those of you who are new to doing backups, here are some guidelines for getting started. If your computer uses DOS 3.2 to 5.0, Dartman II makes this very easy. We have included a batch file to automatically back up all of your data files (the files which contain all your league information and stats). When you exit Dartman II, it prepares to set up this batch file for you, if you answer "yes" to backing up your data. However, if your computer uses DOS 6 or higher, the "yes" will be ignored, and you will return to your DOS prompt. To remedy this, see "But I Have DOS 6..." later in this article, or call Arachnid for assistance.

What you will need: Have on hand 2 or 3 blank, formatted diskettes, of the type that will fit into your floppy drive B. If you only have a floppy drive A, then the batch file must be changed. See "Changing the Backup Batch File" later in this article, or call Arachnid for assistance. Dartman II will instruct you to insert diskette #1 in drive B. Insert the first disk, and press Enter (or any key). The data files will be backed up onto the diskette. If there isn't enough room on one diskette, the program will ask you to insert diskette #2, and will continue asking for diskettes until all files are backed up. When finished, store the diskettes in a safe place, preferably in a different room (in case of fire).

Note: Label each diskette as they are made, such as "Dartman II backup #1, 8/8/94". If you ever have to restore the backups, you will need to know the correct sequence in which they were made.

Restoring a Dartman II Backup

If in the unlikely event you need to restore your backups, this is how its done.

From the root directory that Dartman II resides in, type:

```
RESTORE B:\DM2\DATA\*.*
```

DOS will ask you to insert Diskette #1 in drive B: and strike any key when ready. If more than one diskette was backed up, you will be prompted when to insert the other(s).

All files in your DATA directory will be restored to what they were when you did the backups.

Changing the Backup Batch File

The most common reason for changing the backup batch file is so that you can use a drive other than "B" for backing up your data.

Changing the file is a fairly simple procedure. Go to the root directory that Dartman II resides in, and type: CD\DM2. Your prompt should read C:\DM2> (or whatever letter drive you use).

Now, type EDIT DMBACKUP.BAT

The following screen should be displayed:

```

File Edit Search Options DMBACKUP.BAT Help
Becho off
cls
rem      NOTE: Change b: in the backup command below
rem      to the desired floppy drive if needed.
echo    This batch file will backup the
echo    Dartman II data files to a floppy
echo    disk in drive B:
backup data\*.dbf b:

MS-DOS Editor <F1=help> Press ALT to activate menus  | 00001:001

```

Notice the two lines with "rem" in front of them. These lines are not shown when the file is activated. They are comments which tell you to do the same thing described in this section. The line they are referring to is the last one, "backup data*.dbf b:". Using your mouse or arrow keys, locate the cursor at the end of this line, next to the b: and backspace 2 spaces. Now type in its place, a:. The line should now read: "backup data*.dbf a:".

You may also wish to change the second from the last line in a similar fashion. This line is text and appears when you run the file, but does not affect the actual backup. If you like, change this line to read: disk in drive A:

To exit the EDIT function, click on File in the upper left-hand corner. A menu will be displayed. Click on Save, then on Exit. The revised file will be saved. To check for correctness, type: TYPE DMBACKUP.BAT from your DOS prompt. The file will be printed on your screen. The next time you try the DM2 automatic backup, it should work for drive A.

Backing up Spider Writer Screens

If you would also like to back up any Spider Writer screens you have made and saved along with your data files, you can add a line to the DMBACKUP.BAT file above to do it. Below the last line shown, type a similar line which reads:

```
backup data\*.spc b: /a (or a: /a)
```

When you do the backups, the .dbf (data) files will be backed up first, then a message will be displayed which says: "Insert last backup diskette in Drive B: (or A:)". Your last backup diskette is already inserted, so just press Enter. The ".spc" (Spider Writer screens) files will now be backed up onto the diskette. If necessary, it will prompt you for a new diskette, just as before.

But I have DOS 6...

DOS 6 will not recognize the old DOS backup commands. Therefore DMBACKUP.BAT will not run. From your DOS prompt, type: MSBACKUP. The microsoft backup screen will appear. Follow the directions in your DOS 6 manual for doing a backup. You want to back up all files with the suffix ".dbf" in your \DM2\DATA directory (if saving Spider Writer screens, also back up all files with the suffix ".spc"). If you need assistance, call Arachnid, or a software expert in your area.

You can modify DMBACKUP.BAT to display the Microsoft Backup screen if you like, by removing the last line, and replacing it with MSBACKUP, in the same manner as described above.

The Archives: Service Information, Past and Present... for Galaxies and Older Dart Game Models



Service Calls caused by Summer Weather

Some service problems can be caused or amplified by summer weather conditions. Heat, humidity, dust, and storms all contribute to the workload of the service technician. These service calls are common to almost any type of dart game, be it an old 5000 or a new Galaxy.

HEAT

Scoring problems, warpage - A dart game that sits near a window or outside, where the heat from the sun beats down upon it for periods of time each day is susceptible to plastic warpage. The black outer web (dart catcher) surface is the most prone to warpage, and the bowing surface can put pressure on the darthead and cause stuck segments or no scores. **Remedy** - if the warpage is not too severe, you may be able to scrape or file the darthead opening to relieve the pressure (also see Tech Tips Spring '93 Archives). This will improve scoring. Severe warpage or breakage will require replacement of the black web.

Hot conditions may shorten component life - It is normal for various electrical components in the dart game to produce heat. High ambient temperatures will decrease the components' ability to dissipate heat. When possible, keep the dart game away from intense heat such as ovens, direct sunlight, or unventilated rooms.

HUMIDITY

Sticky segments - Humidity can cause segments to become sticky, because they may have a buildup of dirt and nicotine on them. **Remedy** - Clean segments and wipe the matrix and cushion with a mild degreasing soapy solution, such as Dawn dishwashing liquid and water. Do not soak the parts, because the plastic may expand. Allow all parts to dry thoroughly before reassembling.

Wood expansion - Humidity can cause wood cabinet parts to swell. If the darthead back swells, it may interfere with scoring. **Remedy** - loosen the darthead bolts a bit, until the humidity decreases.

DUST

Scoring and performance problems - Some areas of the country are dry instead of humid in the summer, with dust and sand storms causing problems. Dirt and dust buildup will decrease heat dissipation and increase friction on moving parts. Dart games near beaches or deserts should be cleaned more often in the summer to remove sand, dust, and dirt. Use a vacuum on the monitor, main board, and power supply. The darthead should be disassembled and vacuumed or wiped clean regularly to keep the game performing well. Connector contacts and stat card contacts can be cleaned with a pink pencil eraser if their function becomes intermittent.


ELECTRICAL STORMS

Probably the biggest source of headaches are electrical storms. They can cause more damage than dry air static, but many of the associated problems are very similar to problems caused by static.

Proper grounding - This is the most important thing to check when trying to prevent static and storms from damaging a dart game. Check the outlet the game is plugged into for proper ground with an outlet tester or meter. Use only grounded extension cords or outlet strips. Check the coin door for proper grounding - there should be good continuity between the green wire attached to the coin meter mounting nut and the coin mechanism housings. Use star terminals to attach a small jumper from the existing ground wire to the top mounting nut on each coin mech if necessary.

Power outages - These don't normally cause permanent problems, but the game may have to be reset when power returns.

Loss of memory/game setup - When this happens, you will have to reset the game parameters. In the case of a lightning strike, you may need to replace the Eprom and/or Static Ram chip if the game won't reset or lights come on but the game doesn't function.

Blown fuses and regulators - Replace any blown fuses with proper rated replacements, then check the power supply for correct voltages. Repair as necessary. 

Correction: In the last issue of Tech Tips, it was stated that in Wild Card Cricket, the unmarked numbers changed between rounds. In actuality, the unmarked numbers change between player turns. We apologize for any misunderstanding this may have caused.

IN THE NEXT ISSUE OF ARACHNID TECH TIPS: What's New for Fall Leagues // Service Tips on Galaxies and Networks // Using the Arachnid BBS // and Much More !!!


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