THE LORD OF THE RINGS THE FELLOWSHIP OF THE RING GAME PROGRAM INSTRUCTIONS





ATARI, INC., Consumer Division 1195 Borregas Ave., Sunnyvale, CA 94086

Lord of the Rings: Fellowship of the Ring

based on the book by J.R.R. Tolkien and movie by Peter Jackson At ari VCS version by One Of The Bruces

INTRODUCTION

In this game, you play the role of Frodo Baggins, hobbit and inadvertent Ringbearer. Your mission is explained in the introductory screens of the game: you must take the Ring to the Inn of the Prancing Pony in Bree, where you will meet the wizard Gandalf and deliver the Ring into his care.

You may well find the game more rewarding if you've read Lord of the Rings by J.R.R. Tolkien. If that's too taxing for you, at least try to see the movie.

Please note that the Parker Brothers Atari VCS cartridge Lord of the Rings: Journey to Rivendell, although admittedly featuring graphics and actual gameplay, uses twice the memory to get you half as far in the story.

CONTROLLING THE GAME

Instructions for the Stupid

1) Ensure that the Atari VCS is turned OFF. That means "not on." The leftmost switch on the console, the one that says "power," should be in the DOWN position. That's next to the label that says "off." Got it? Just in case:

NOTE: To prolong the life of your Atari Video Computer System and to protect the electronic components, the console should be OFF when inserting or removing a Game Program.

NOTE: The preceding note was taken verbatim from the Adventure instruction manual. I think it's right up there with "Do not expose LaserWriter to open flame" in the "well, duh" category.

2) Now make sure that a Joystick Controller is firmly plugged in to the LEFT jack. LEFT. That's the hand you don't write with. Unless, of course, you're left-handed. Then it's the one that you DO write with. If you don't know how to write, go get someone competent to perform this step.

- Then insert the cartridge gently, but firmly, into the cartridge slot.
 Frankly, if you need help here, you probably ought to go play with something a little less challenging.
- 4) Now turn on the console. I realize this is a stretch, but we're assuming that it has been hooked up to the TV, that the TV is plugged in, turned on, tuned to the right channel, et cetera, et cetera.
- 5) You should now be presented with the opening screen of Fellowship of the Ring. If not, take this cartridge back to wherever you bought it and whine until they give you a refund. Now take the refund money, and invest it all in Enron stock.

Instructions for the Less Stupid

 In each location of the game, you will initially be presented with the "movement" menu. By pointing your joystick in a direction and then pressing the button, you can attempt to travel in the corresponding compass direction.

Compass Direction	ns for the Stupid
Joystick Direction	Compass Direction
Uρ	North
Down	South
Left	West
Right	East

- 2) If the joystick is centered when you press the button, you will be presented with the "action" menu. This menu will let you GO, TAKE, GIVE, USE, TALK, or INVENTORY. Move the joystick left or right to choose among these options, and press the fire button to select the correct action. GO returns you to the "movement" menu.
- 3) If GIVE, USE, or INVENTORY is selected, moving the joystick left or right will cycle through the objects currently held in your inventory, allowing you to choose the one to GIVE or USE (selecting an object from INVENTORY has no effect other than to return you to the "movement" menu).
- 4) HINT: After you USE an object, you should always TALK to trigger the action that lets the story advance.

THE MAKING OF FELLOWSHIP OF THE RING

Why?

The first question anyone asks upon seeing this game is "Why?" I'm not sure I have a good answer, but here goes.

Just before the movie version of Fellowship was released at the end of 2001, the long-lost Parker Brothers cartridge was "discovered" and made available on Atari Age. This in itself is an interesting story and prompted me to wonder, first, how long whoever had the image had been sitting on it waiting until the time was ripe to release it, and second, whether the game was real at all, or whether it was a modern recreation designed to be consistent with the extant Parker Brothers marketing materials.

I suspect that it really is a legitimate prototype of the game; if it were a fake, the same goal could have been achieved with much less work with a far less playable demo. The game itself is not bad, and certainly could be a (somewhat schematic) representation of the first half of Fellowship of the Ring.

About this time I was kicking around looking for another IF project to do. After having the Golden Banana of Discord shamefully snatched from my mouth by The Gostak in the 2001 IF-Comp, I was out for revenge. The name of that revenge, as is well-known, is Mentula Macanus: Apocolocyntosis. However, I bogged down in Latin.h (and am, in fact, still bogged down). For fun I tried playing Greg Troutman's seminal Atari 2600 text adventure, Dark Mage, and discovered that the source code for the 4K version was available.

The source even contained instructions on how to modify the map file to produce a different game. I got to thinking about what the "real" Atari Lord of the Rings game should look like, and how things might have been different in a world in which the Great Video Game Crash had never happened, and in which Infocom had continued to reign supreme as the entertainment software giant. In short, a world in which text adventures on the 2600 were hot-selling titles.

I began fooling around with the map file, creating an Atari text adventure. For details on this, see the "How" section. Around this time, I became aware of the existence of the IntroComp. A two-room version of my game seemed just the thing, and was easy to write.

The rest of the game was created mostly as a way to unwind on business trips; you can only watch so much HBO in interchangeable hotel rooms before wanting to do something a little more creative. After getting the basic plot hashed out, I went back and modified the engine (in z26.asm) to allow me to exert a little more control over the game.

The full version of Dark Mage is 8K. My game, and the source that's available for Dark Mage, are 4K. Obviously, I could have fit a lot more game in 8k. However, moving to 8K was unacceptable to me for three reasons. First, I didn't want to have to figure out how to do the bank switching tricks necessary to do an 8k cart and then how to split memory accesses, although I suspect that the "right answer" is simply to leave the font and default verb stuff in the bottom bank and switch banks whenever you want to read a string from z26.map (thus leaving almost all of the second 4k for user text).

Second (although related to the first), the architecture of the Atari expects a 4k cartridge; although some of the earlier games were only 2k, and many later ones were 8k or even 16k, Adventure, Basic Programming, Yar's Revenge and Pitfall fit into 4k. To use larger carts you need to do some sort of bank-switching technique. The actual architecture of the 2600 expects a 4K ROM, and 128 bytes of RAM. Page 0 and Page 1 are mapped into the same block of RAM, and the bottom 128 bytes is used by the TIA for access to the switches and controllers. The top 128 bytes of that page is both your RAM and your stack.

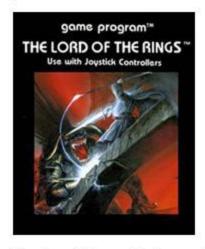
Using more memory therefore struck me as cheating. Once you say that adding a bank of memory to bring it up to 8K is OK, well, then, why not go to a 16K, or a 32K, or a 64K model (all of which existed in actual 2600 carts)? And once you've allowed that, why not posit a 1M extension that works analogously to the 64K but with two layers of indirection (that is, two 4-bit



multiplexers chained together)? Define some pages to be RAM, some to be ROM (as some Atari, CBS, and M-Network games did) and then you could have a whole z8-size game implemented on the Atari (I will buy a case of beer for anyone who implements even a z3 interpreter on the 2600). In short, this removes the restrictions that make it an interesting project. (Although it would add some complexity to make it interesting in a different way.)

The final reason is the most important. I have a 2600, but not an EPROM burner. However, I do have a Supercharger. The Supercharger is a cartridge created by Arcadia (later Starpath) which combined a whopping 6k of RAM with an A/D converter and a 1/8" mono audio plug. You plugged this into a cassette player and played tapes into the system; because the available memory was somewhat larger than the standard Atari cartridge, and all of it was writeable (remember, the Atari VCS only had 128 bytes of RAM!), you

got the opportunity for some pretty astounding (by the standards of 1982) games.



The game is a lot more fun if you play it on the iron. Sure, emulators are convenient, but it just isn't the same. There's no such thing as a standard 6k cartridge size, but the Supercharger is perfectly capable of loading most 2k and 4k cartridge images and playing them. So if I made the game a 4k image, I could develop it for an emulator, but then pipe it into the Supercharger and play it on the actual console. Further, this lets me burn it into a 2532 EPROM if I ever want to actually put the game in a real, honest-to-goodness cartridge. Check Hozer Video:

Randy at Hozer is happy to manufacture cartridges. They will cost you \$11 per cartridge.

GAME DESIGN STUFF

For the curious, what I changed in Dark Mage was the following (some spoilers here, so skip it if you want to remain unspoiled):

- I made USE actually remove the item after use, just like GIVE. This
 was necessary to make Moria work right, so you can't resurrect
 Gandalf by using Sting multiple times. Thanks to Robb Sherwin
 for pointing this out.
- However, USING or GIVING the Ring must not make it disappear. You're stuck with it.
- 3) I made setting a trigger flag clear all other trigger flags, so that you can't go backwards. (Instead of taking the logical OR of the value at the trigger location and the new trigger flag, I simply replaced the value with the new trigger flag.) Poor form in the general case, but given the, er, rather linear nature of the game, dramatically necessary.
- 4) You have to USE the Ring multiple times; thus the flag has to get unset between uses. Since USE is always followed by TALK, TALK was the obvious place to remove the Ring-has-been-USEd flag.
- I changed the colors so the actual scheme looks more like it did on Stella before Stella got colors close to right.
 - 6) I shortened the Introduction by one screen. Whoop-de-do.

My reference for the mods necessary (thankfully not timing-dependent) was Rodney Zaks' marvellous Programming the 6502 (Sybex, 1979).

I actually think that this is about the most faithful interpretation of Fellowship of the Ring that it's possible to do given the following constraints:

4K ROM, 128 bytes RAM. You'll notice that the manual is five times the size of the cartridge.

Classic text adventure format: all program output is text.

Actually a playable game, with meaningful choices on the player's part and puzzles, however lame.

Maximum screen size 9 lines of 12 columns each. (This is now 13 by 12, thanks to Thomas Jentzsch's modifications; however, I didn't want to edit all my text, so I stuck with my original format.)

How?

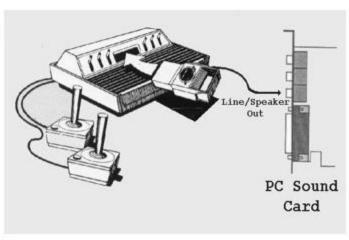
The fundamental component of all of this is Greg Troutman's source to Dark Mage. This is the basic engine for a 2600 text adventure; Greg has done all the work of representing strings, and getting the output engine done (the trickiest part of any Atari game), and implementing the verbs, and so on. It's really a pretty amazing piece of work.

Thomas Jentzsch helped a lot, too, by finding a way to represent strings a little more compactly, a way to squeeze more text on the screen, and a fix so that the game runs at 262 scan lines and is therefore absolutely legal and in-spec NTSC. If you want to take advantage of his fixes, you'll need to base your game off the Fellowship of the Ring source code rather than the original Dark Mage.

Of course, to do anything with it, you're going to need DASM, which is the assembler that understands this syntax. I was able to find DASM 2.12 source, which built with only minor Makefile tweaking under Linux, at this site.

To convert the BIN file to a WAV suitable for playing into a Supercharger, I used Rob Colbert's makewav. I used BladeEnc to rip the file to mp3.

Note that even if you are doing a straight-ahead replacement of z26.map, you will need to change at least one routine in z26.asm. This



is the GameStart routine starting on line 263. You need to put your starting location and your beginning inventory together, and load the appropriate description for the starting room.

Once you've done this, it's really easy. The command to compile the cartridge, for instance, is simply:

dasm z26.asm -f3 -ofotr.bin

The only tricky thing is that the syntax of dasm expects the flags after the filename, which is the wrong way around for a Unix tool. There's also no real documentation for dasm, but then there doesn't really need to be.

HOW TO PLAY, REALLY

Emulator

In all probability you're playing this on an Atari emulator. If you don't have one already, I recommend Stella. There's probably a port for whatever platform you're using. I use stella.x11 in Linux, and it works fine. Please be aware that the text is a lot less flickery if you play either on an actual console or at least on a computer with an LCD rather than a CRT display. For me, all I have to do to run the game is:

stella.x11 fotr.bin

If you're running Windows or DOS, PCAE is also very good.

Cartridge

Playing on an emulator isn't as much fun as playing on the real iron. If you have a real Atari, you can order a copy of Fellowship of the Ring from Hozer Video.

If you're hardcore and have access to an EPROM burner that will let you burn a 2532 or a 2732, which requires 21 or 25 volts, then you can certainly create your own cartridge. Randy tells you how.

Supercharger / Cuttle Cart

Alternatively, if you have a Supercharger or Cuttle Cart, you can convert the game to its sonic representation and play it into the Supercharger. This is how I play it. Robert Colbert has a page about his MakeWAV utility. My Supercharger won't load "fast load" format games, so the WAV of this (or any other 4K cartridge) is about 500K. Under Linux, this is the command I use:

makeway fotr.bin fotr.way

You can cut that file size by about a factor of 4 by ripping it to an mp3. I found the lowest bitrate that would allow reliable loading to be 96kbits (as ripped with BladeEnc and played back through Windows Media Player; I have no idea how this varies with different mp3 encoders and decoders). On my system this means running:

BladeEnc -rawmono -96 fotr.wav fotr.mp3

At least, it would mean that if possession and use of BladeEnc weren't illegal in the Land of the Free. So, um, that's what you'd run on a system that happened to look an awful lot like mine, but in some country like Thailand where BladeEnc was legal to use.

(As an aside, Bob Colbert has also written a utility called Cheetah that is to the VCS/Supercharger combo what the Game Genie is to the NES. Effectively, it's a modified version of the MakeWAV utility that takes a 2k or 4k ROM image and writes a 2k prologue in front of it before converting it into an audio file to play into the Supercharger. This prologue gives you the ability to modify any byte in the image, because it's all loaded into RAM, before you start it. This lets you create new game variations, turn off the timer in games, and all kinds of neat hackery. Of course, since you already have the binary image, you could just zap that directly with a hex editor before making the audio copy of it, but somehow Cheetah is cooler. Just go to Bob Colbert's Atari Development Page)

Ripping Games

I found that, using an mp3 encoding, every 4k-or-smaller Atari game whose ROM image is available on the Web will fit in about 50M. Thus it's quite



easy to burn a CD-ROM with mp3 images of the games and have the ultimate multicart, as long as you have an mp3 player (for instance, a laptop computer) that can read tracks off a CD (or you could put 99 WAV tracks per CD, if you preferred; this would give you something like Worship the Woodgrain).

Only about 70% of games will work with the Supercharger. That percentage can be boosted by modifying the Supercharger. I now have a second Supercharger, but I haven't done the modification yet.

ARTWORK, CARTRIDGE, AND BOX DESIGN

Robb Sherwin put together the magnificent cartridge and box artwork. He is interested in doing the same for other 2600 enthusiasts who have written games. You can contact him at <be a>beaver@zombieworld.com>.

The image of Gandalf fighting the Balrog is a John Howe picture from the 1997 Tolkien Calendar.

DISCLAIMERS

Yes, I'm perfectly aware that the Lord of the Rings properties are zealously and jealously guarded by Christopher Tolkien, New Line Cinema, oodles of money, and Nazgul lawyers.

However, for at least a couple more years (I hope), parody is still protected in the United States by the First Amendment. And it is my contention that this game is parody.

For starters, on the face of it, an Atari 2600 text adventure is ridiculous. An Atari 2600 text adventure that attempts to compress several hundred pages of densely-written prose into a 4K ROM image is even more ridiculous. It should be obvious even to the dimmest that the game is not intended as a serious interpretation of one of the most complex works of fiction ever put on paper, although it may in fact be about the best one can do given the limitations of the medium.

Fellowship of the Ring is intended as a gentle spoof of the retro-gaming community, the mindset that attempts to produce derivative works in woefully inadequate media, fanfic authors in general, and the recarts.int-fiction and IFMud communities in particular. Hence the choice of words used, for example, in the Mines of Moria.

And be thankful that I didn't turn it into a Stiffy Makane interpretation. For that, you'll have to go to The Secret Diaries of Cassandra Claire. Still not King.

Fellowship of the Ring is released as freeware. Feel free to distribute it as widely as you want. Feel free to create derivative works based on it. Just maintain credit and attributions, and don't distribute it for money (not even the cost of distribution) without checking with me first. Of course, I accept no responsibility for any loss or damages you may sustain, not even if you burn the game onto an EPROM and it leaps out of the cartridge, jams itself down your throat, and then punctures your intestines with its pins, thereby leaving you to die a hideous and painful death from peritonitis.

Once Of The Bruces <bruce@fsf.net>
St. Louis, Missouri

April, 2002



SOOper-S3kr 1t WALKTHROUGH

LOOK. GIVE. HEAVY STUFF. EAST. LOOK. USE. THE ONE RING. LOOK. TALK. EAST. LOOK. USE. THE ONE RING. LOOK. TALK. EAST. LOOK. TAKE. LOOK. GIVE. THE ONE RING. SOUTH. LOOK. USE. ELVISH SWORD. LOOK. TALK. EAST. LOOK. TAKE. LOOK. GIVE. THE ONE RING. SOUTH. LOOK. USE. THE ONE RING. LOOK. TALK. EAST.

HOW TO LOSE THE GAME

There is only one way to get the game into an unwinnable state. GO SOUTH from Rivendell before TAKING Sting from Bilbo. You will get stuck in Moria, because you cannot USE Sting to trigger the conversation with Gandalf.

LINK TABLE

AtariAge.com's entry for LOTR:FOTR:

http://www.atariage.com/software_page.html?SystemID=2600&SoftwareLabeIID=2023

The HTML version of this manual is available at: http://www.atariage.com/manual_html_page.html?SoftwareLabelID=2023

Hozer Video sells physical LOTR:FOTR carts. You can order one here: http://webpages.charter.net/hozervideo/atari/section2.html

Greg Troutman's source to Dark Mage: http://www.io.com/~nickb/atari/bin/z26.zip

Stella, an Atari 2600 Emulator: http://www.redlinelabs.com/stella/

PCAE, an Atari 2600 Emulator for Windows or DOS: http://pcae.vg-network.com/

Bob Colbert's Atari Development Page: http://members.cox.net/rcolbert/super.htm



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