TOMORROW'S HEROES
RETROGAMING
TIMES
The Newsletter for the Retro Gamer in All of Us

June 1998

RETROTIMES #10

Ten months ago, when I started this newsletter, I never envisioned that it would have made it to ten issues. But here we are with the big one, at least until the first anniversary issue in two months! Anyway, I will try to do a good job to make this issue extra special. I will try to put all the regular features in there and some extra ones. Hope you enjoy it and as always, I love to hear your comments, whether they are positive or negative. Enjoy!

TO BOLDLY PLAY AGAIN AND AGAIN!

One day at my favorite arcade (Pleasure Time Arcade), I came in to find a big surprise. Instead of the usual arcade full of different machines, I found a huge row of Star Trek machines. There must have been about 20 machines set up. I quickly asked the owner what was up? He simply explained to me that since this was a test site, they wanted to get the customers feedback on this new game. So for this day only, we could play all we wanted for free! Free! Needless to say, he didn't have to twist my arm. Well, there were two minor provisions as is always the case. First provisions is that we had to fill out a questionnaire about the game. The second provision was that after we finished playing a game, and if someone was waiting for the machine, we had to let them play. We just then had to move to another machine. Besides this, we could play until we were blind. So I spent the majority of the day playing and mastering Star Trek. I played and played for hours until my eyes went blurry. By the end of the day, I was so sick of that game that I didn't play it again for weeks. I wasn't the only one who was sick of the game as it was rarely played in our arcade. Guess you can get too much of a good thing.

I am happy to say that now that the years have gone by and I have the opportunity to play it on MAME, it has become one of my favorite games. I can look back fondly at my all day marathon of Star Trek.

The MAME Most Wanted Ten

As I have stated in previous issues, I am quite content with the huge volume of games available for MAME. There are already more than any one person can play. But like most Americans, I am greedy and want more. Actually, after thinking of what games haven't been ported (and there aren't that many) and which ones I would actually want to play, I came up with ten games I would like to see added to the already huge list of MAME games. So here is my wish list:

10. **Slither**-Not the best game, but one I would enjoy playing. Right now the Coleco version is the only one out there.
9. **Turbo**-I am not a big fan of racing games, but I used to enjoy this one at the arcade. Bring it home!
8. **Armor Attack**-One of the many missing Cinemaware games. This is a fun two player game and MAME can always use a few more two player games.
7. **Joust 2**-While not as enjoyable as the original, still a fun little game. Plus we all want to be Completist.
6. **Star Castle**-Another Cinemaware game that is a fun old game. I was enjoying this game at Cedar Point when I visited there.

5. **Space Harrier**-Not exactly a classic, but a game I really enjoy. Killing dragons can be fun!
4. **Rampart**-One of those games that takes alot of my time on the Nintendo.
3. **Pacmania**-We need all the Pacman games and this is one of the best.
2. **Munchmobile**-One of those little gems that I really enjoy on the TI 99/4A. Unfortunately that is the only place to play it.
1. **Ripoff**-While it isn't much of a single person game, it is a blast as a two player game. One of my favorites for the Vectrex and a welcome addition to MAME.

MAME Reviews

Since the V-Stick is here, two games have preoccupied my free time. These are the two main reasons I bought the V-Stick. These two games are the ones that require two joysticks to play them accurately. That should be a dead giveaway. Anyway, here are the reviews of two games that probably don't need any reviews. Anyone familiar with classic games is familiar with these two games.

Crazy Climber

I think I can honestly say that this is my favorite arcade game of all-time. It is one of two arcade games that I will own one day (the other is Discs of Tron, possibly one of the toughest and most desired of the classic games). Of course, I won't be lucky enough to find one at thrift store for $5.00 (someone has been making some major sacrifices to Bira Bira). How much do I love this game? I sold off my Super Nintendo version to raise some of the money to buy a V-Stick in order to play it the right way. How much do I love this game? I spent over $5.00 on it at Videotopia and if it weren't for my wife, put another $5.00 or even $10.00 in that bad boy. But why do I love this game so much? Insanity? Possibly, I mean it is hard to think rational after getting pelted by a dozen or so flower pots. Great gameplay? Maybe, but it really isn't that incredible. I tried to rationalize why I am so ga-ga over this game. The answer must be the machismo of it. I mean what is more manly that climbing up a building, against all the odds. Plus, with the two joystick configuration you can really get into the game. You really begin to feel like you are climbing that building (it is a workout). In an era of one joystick games, this was different. You could, with much practice, move around that building and impress your friends. I think part of it was the amazement people have when you are effortlessly moving around as they end up street pizza. Excelling at Crazy Climber is anything but easy. It takes practice and patience to do well. The two joystick configuration is awkward and it is hard for people to coordinate their two hands to work in sync. But once you get it down, you have great movement and can really get around.

But what about the gameplay? For anyone who doesn't know, your objective is to climb up skyscrapers and reach the top. You may ask why would you want to climb up a skyscraper when an elevator would be much quicker? I answer, because it is there (and if you want to ride in elevators, check out Elevator Action). But this is no simple crawl up the side of a building. This building must be a asylum or something as the people are crazy. You would think they would be cheering you on or

something, but no they would rather knock your sorry butt off. These antisocial people instead would rather drop flower pots on your noggin. Can you say "ouch!". You will as they bounce off your head. But as long as you keep two hands on the window ledges, you will survive. Of course on the next level, they are also throwing bottles and cans at you. I really wish you could just once, punch these yahoos in the face and send them a crying. But yours is a non-violent character and all you can do is dodge them.

But the object dropping cretins is only the start of your problem. Next you have a bird that would dwarf Big Bird. This monstrous Roc (actually it looks like a sea gull, but I have never seen one this big) is also a bit of jerk. Seems he is mistaking you for a freshly washed car and headed over to do his business on your head. Sure it is supposed to be eggs, but we all know the truth. I do get worried when I see the red, bloodstain droppings. That cannot be good to have land on your head.

Next on the list of foes is the ever famous, crossed eye King Kong clone. This ape is about as dumb as he looks and a bit of timing will always get you past him. But one slap from his paws and you are heading down a little too fast. There is also a neon sign on the second level that zaps you and changes your body color pretty well. A few hit of this and you are fried.

But the worst of all the obstacles is easily the falling girders and barbells. Who the heck is up there tossing these items at you and why? Nothing is worse than being stuck by a closed window and seeing a barbell headed at you. This really stinks and is enough to drive a man to drink.

Overall, it is a fun game and it will keep you coming back. But to be honest, playing it on MAME without a V-Stick is nothing short of an exercise in frustration. You have fingers going everywhere and will die more deaths than a cat before you can figure out what you are doing. But with a V-Stick, this game is awesome and one that will keep you busy.

Robotron 2084

This is the best all-time game for people who want pure action. Forget Doom, get real Quake, they cannot hold a candle to this classic. Robotron is nothing short of pure action. Mix that with the V-Stick and the two joysticks and you have nirvana. This is one of the few games that you can get so immersed in that your house could be burning down around you and you wouldn't know it.

The gameplay on Robotron is as simple as any game ever made, shoot everything. If it moves shoot it, if it doesn't move shoot it. Nothing should be spared from your endless rain of bullets. Don't worry about the survivors you are supposed to save, they are bulletproof. But everything else kills them, so you must try to save them before the robots crush them. Making them bulletproof is probably the biggest stroke of genius in this game. This way you don't have to worry about being careful with your guns, so not to kill some innocents. Instead you can concentrate on mowing

down those buckets of bolts and making the world a better place.

There are many different enemies from the straightforward grunts to the devious brains that transform the innocents into vicious weapons of war. Each level has a new challenge and get faster, harder and more crowded. After about ten levels, things are real hairy and you survive on a combination of skill, luck and pure instinct. On some of the higher levels, you don't think, you react. You just shoot and move and some little part of your brain takes over and keeps you going. There is no planning, no rationalizing, just pure instinct. This is when you become oblivious to the outside world.

I really don't need to say anymore about this game as it is well known and well respected. It is probably the best pure action game ever and they will be hardpressed to ever top it. Nuff said!

Why?

by Fred Wagaman

It's a sunny and warm Saturday Morning. A perfect late spring/early summer day. The grass needs cut and there's that porch that needs painted. So what do you do ? You hop in your car and drive away from all that work to find video games. Flea Markets, thrift shops and every garage sale in a 3 county area are your destinations. No opportunity is passed to possibly add just one more game to that burgeoning collection of plastic, paper and silicon that has taken over your house. Somebody, somewhere has to ask the question.

Why ?

Why do you do this ? Why spend what little of your income that is disposable on objects that are obsolete ? Dated ? Worthless to just about everyone else ?

Perhaps I should make this a little more personal.

Why do I do this ?

First I should explain a little about me and my game collection. I'm no newbie to this. My game playing dates back over 20 years. I have more games than I could reasonably play in a year; 2 years; a lifetime. I have almost every system from RCA Studio II through Nintendo 64. I have some games 6 times on 6 different machines. Don't I have enough ?

Well, no.

Aside from enjoying playing the games and having a hobby I can share with other people, there is something else that a collector of any type will tell you about. It's not something that is a recent innovation either. It's been around since the times of the caveman.

What is it you ask ?

It's the thrill of the hunt.

Any deer hunter will tell you of the adrenaline rush that occurs when the buck is in the sights and they are just about to pull the trigger. Watch how animated an angler gets while describing landing the big fish. I get some of the same feelings when I do my "hunting".

I have almost all of the U.S. released Odyssey 2 games. The only two games I need to complete my collection are the elusive Power Lords and Electronic Table Soccer. Now I've seen the Table Soccer on internet auctions over the last two years. It always went for more than I was willing to pay, but I knew that if I got desperate enough, I could get it. But I never did. Last month I wandered into my local Goodwill, a place I visit at least once a week. In the past they had more than a dozen loose O2 carts in a box. This time the box was gone.

Had someone (maybe that elusive "Someguy") raided my private stomping grounds ? Could that Flea Market dealer come this far to restock his over-priced tables ? Who knows ? But in a pile of 2600 carts was the familiar looking handle of an O2 cart. Imagine my surprise when it was:

Electronic Table Soccer

Ah yes, the feeling washed over me. YES ! One more ! Whoo Hoo ! One step closer to getting them all ! Bwah ha Ha HA HA !

But as good as it felt, the feeling tempered because one of the voices in my head said "Dig through and be sure that Power Lords isn't in there too". Needless to say, it wasn't.

Why isn't the feeling of accomplishment quite as great when I buy a title over the internet ? I think it's sort of like buying your food at the grocery store as opposed to growing it or catching it yourself. Sure, I _have_ the game, but where was the fun is sending the check and having it mailed to me ? Where was the challenge ? I guess part of the enjoyment of the hobby is the search, the hunt, the kill.

Maybe the getting is just as much fun as the having ?

What do you think ?

(Fred has been a playing games for over 20 years and actively collecting them for almost 10. The 2000 + games that he has takes up most of his home office and living room. He lives in Denver, PA with his understanding wife Jennie and his 2 year-old, button-loving son, Max. He can be reached at fcw3@postoffice.ptd.net. Please contact him if you have any comments or an extra copy of the elusive Power Lords for the O2. He's not sure why he has written this section in the third person, except that the voices thought it sounded pretty cool.)

EXPOSING VIDEO GAME MYTHS

There have been alot of myths that float around about different video game characters and games. Well, this section is to squash these little buggers before they affect the gaming industry and its mascots anymore. So tune in to be completely shocked!

Question-Why does Frogger die when he hits the water?
Myth-Piranhas, acid water, programmer had fear of water.
Truth-The darn frog never learned to swim (at least until the sequel).

Question-Why does Donkey Kong steal Mario's girl?
Myth-Heh! Heh! Heh! (add your own comments)
Truth-He was a washout with the female gorillas.

Question-Why was Jungle King changed to Jungle Hunt?
Myth-A lawsuit due to copyright infringement on Tarzan.
Truth-Atari bought a huge supply of pith helmets and were trying to start a craze.

Question-Why does Q*Bert swear when he is hit?
Myth-Programmers thought it was clever and it would make him look cool to the teenagers.
Truth-Let me smack you upside the head with a big ball and we'll see what you say.

Well, hope this helps explain some of those things that needed explanation. If enough of you enjoy this, let me know and we will uncover more of the great myths of the video game world.

A Deeper Look at....

After a month hiatus, the column is back and we have two more games to check out. I have noticed that most of the games I check out are from the big three (Atari, Coleco, Intellivision), so I decided to take a deeper look at games from some of the other systems. Keep in mind that I never owned or played a few of the systems out there like RCA Studio II or Emerson Arcadia (I did pick one up at a thrift store, but it was DOA), so I cannot do reviews on them. I will get around to downloading more emulators to allow me a greater amount of games to review. But here are two games from other systems.

A Deeper Look at...Space Fortress

This is probably my second favorite game on the Bally system. Sure it is quite basic and there isn't alot to it, but it is still a fun little twitch game that is fun to pull out every so often. The basic premise of the game is that you are a space ship in the middle of the screen. You have the ability to shoot in four directions; north, south, east and west. Of course like most games of the era, you can only shoot in one direction at a time. Simple enough. Well, as you sit out there and guard space or whatever, meteors come hurtling at your ship. While your ship is pretty well armed, it did that at the sacrifice of any defense. So if even one little meteor or asteroid or whatever they are, hit you it is all over. You lose one of your bases and you must start anew. But when you have four highly powerful lasers at your disposal, you can take out any threat.

Like most games of the era, it starts off slow, painfully slow and then begins to pick up speed. After a few boards, you get the addition of space ships that fly around and have to be picked off. While this doesn't add alot to the game, it does keep things a little more interesting. While this game isn't one you will play often, it is fun to pull out once in awhile and see if you can top your highscore.

A Deeper Look at...Quest for the Rings

This is probably one of my all-time most memorable games that I ever owned. I can still remember how much in awe I was of this game. Being a huge Dungeons & Dragons fan in my youth, I used to dream about such a game. Sure Intellivision had the licensed version of the game and Coleco was supposed to have Tunnels & Trolls, but this was the real thing. This game came closer to capturing the feel of the game than anything else until the computers really got rolling.

Some of the big advances in this game was the ability to not only play two people at the same time, but be able to choose from four different characters. While this may seem commonplace today, it was nothing short of revolutionary back then. The thought of having four different characters, let alone being able to freely choose which one you wanted to be, was just amazing. Plus, the different characters were actually different. You had a warrior, a wizard, a changeling and a phantom. Each had their own strengths and weaknesses. Plus both characters could be the same one if they wished. So the different combos you could come up with added to the replayability.

But a dungeon game is only as good as the foes and this one had some tough ones. There were spiders, orcs, wraiths and the ever vigilant and vicious dragon. This huge beast would go back and forth, just waiting for a hero sandwich. I still remember the first time I came in contact with him, talk about scary. I did not want anything to do with him.

This was one of those board/video game hybrids that Magnavox was so keen on. While the video part was great, the board game part made no sense to me. Was I supposed to stop in mid action to fool around with this nonsense? Of course not! I never even used the board and don't think I ever will. Interesting concept, but totally useless. I must say the packaging on a whole was great and the box and especially the artwork is great. While many of the Odyssey games are nothing to write home about, the boxes are always nice.

If you own an Odyssey II, then this game is a must have. It is not only a very innovative game and went on to inspire games like Gauntlet, but it is a fun game to play. Hats off to the Odyssey for this one, if only they could have made more such games, they may have had more success.

The Many Faces of.....Pitfall

by Doug Saxon

Pitfall! is one of the all-time classics and probably Activision's most popular release back in the day. This game was so popular that it is included in four different classic systems' libraries and even its sequel made it to three of the systems. Not only that, but Pitfall! is fairly common for all four systems. The systems in the race are the Colecovision, Intellivision, Atari 2600, and Atari 5200.

Disqualified: Intellivision

Though it was decided this game was the worst of the four, it's by a small margin. All four were very close. Unfortunately, this version is the same graphically and visually, if not slightly worse than the Atari 2600 version. It is also a bit awkward to play with the thumbpad controllers. It's a shame, because the Intellivision has more capability than the Atari 2600.

Bronze Medal: Colecovision

The Colecovision version is a bit of a disappointment. Even though it has pretty colors and a cool introduction, this game is rough to play. Even with your favorite controller, this game is awkward. For one thing, it's too easy to jump to the rope, miss it somehow, and then die. All that keeps this game from maintaining the last spot is its cool intro. and good graphics.

Silver Medal: Atari 5200

This version has by far the best graphics and sound. If you have the infamous Masterplay Interface that allows one to use an Atari 2600 joystick to supplement the 5200 controllers this version would be the best by a landslide. Unfortunately, play with the analog controllers keeps it from the receiving the gold. Play is fine on all but one screen. The screen where Pitfall Harry jumps onto the alligators to cross the lake is unnecessarily difficult and frustrating, because often the player has to precisely steer Harry onto the heads of the alligators. You can imagine how difficult this could be with those controllers!

Gold Medal: Atari 2600

It's amazing the Atari 2600 version received the gold medal considering it was the first release and it is the simplest piece of hardware. A game like this requires only decent graphics, sound, and control, with the last being the most important. From this perspective, the Atari 2600 version seems to be the best overall. Since I've gotten back into classic gaming, I can easily say I've played this version more than any other version and something tells me most other classic gamers have done the same.

(Doug is an engineering student who is also a big time game collector. His main systems are the Atari 2600 and Atari 5200. He can be reached email at saxondj@email.uc.edu).

Creative Marketing or Cheap Ploy?

I was recently told about a new Atari game that was coming out. While this is nothing new as there are new games coming out at least every few months. But this one was different. Not due to gameplay or anything like that. Instead it was due to the marketing of the game. While I will not name the game here, I think most of the die hard gamers will know which one I am talking about. This game was a limited edition of something like 50-60 copies, each being signed and numbered. Also interesting, there was a limit of 5 copies that could be purchased by any one person. Well, immediately it brings to mind Cubicolor and the Starpath CD, both of which were limited and numbered releases. I can guess that this is the author's intention. But will this be the next high priced game? Will it command the top dollars that the other two have? My guess is no.

One might wonder why would one limited game command big money and another will not. Well, it is quite simple, Cubicolor was done by a prominent person in the video game market, while this game is done by a regular person. Would you rather have something done by Rob Fuhlop, the author of Missile Command, one of the most known games in the history of video games or a game done by someone who may be a talented programmer, but it an amateur, nonetheless.

So why would this person make a limited edition, signed and numbered version of his game? I can only think of two reasons for doing it. One reason would be to hopefully inflate the value of them and keep a few for himself to cash in later. The second reason would be that he isn't very sure of his game and may be worried that it wouldn't sell on its own and that it needs a gimmick like this to sell it. I guess it could also be an ego thing, something about having created a highly sought after game, even if people aren't after it for the gameplay, but the value.

It is kinda sad actually as the game looked quite promising. The gameplay looked quite fun and it probably would have sold on its own. There are many instances where a game would sell without any gimmicks. If you make a quality product and price it fairly, people will buy it. But if you just push a game on its scarcity, instead of the gameplay, then you are selling yourself and your fans short. What happens if it is a really popular game? Will the programmer do another issue? What guarantee do you have that it will have any value? My biggest fear is that if this does well, then we will see more of the same. People and possibly even companies will start doing limited edition versions of games and start charging outlandish prices. This practice has already infiltrated and ruined enough hobbies. Just ask coin or stamp or sports card collectors about this. Has it helped any of these industries? No, it has led to ruin as the people began to worry more about the value of the collectible and less about the fun of collecting it.

While I don't want to say anything negative about this game or the programmer, as the game looks good, I cannot help but be disappointed by the cheap ploy he used to sell the game. Was it necessary? I don't think so. Will others follow him and do the same thing? Most likely. Will this ruin a good hobby and turn it into the wasteland that most the other hobbies have become? Probably. But in all fairness, eBay is already doing that and I guess this is just one more sign of the impending doom on the horizon. Our small little hobby is headed towards mainstream and all the kicking and screaming won't stop it. :(

Question of the Month

I am trying my darndest to do all the regular features for this landmark issue. That meant not forgetting one of the most popular of the regular features (I found that out when I forgot to do one a few months back). So here is another installment of the "Question of the Month". This month we will ask the question "Which game that didn't have a sequel would you like to see a sequel made for it?" If you are adventurous or bored, you can also add in what kind of gameplay you would like to see.

This was a tough one as I came up with so many good ones. A second Tapper would be nice. Congo Bongo with more levels would be pretty cool. But after much thought, I think I would have to go with Jungle King/Jungle Hunt. I just really enjoyed this little game. But only having four levels limited the replayability. of the game. I would love to see more levels, a few added dangers and maybe some improved graphics and sound. Plus, maybe if you save Jane...err the heroine quicker or slower, you would see different endings. If you took too long, she may yell at you, and if you did it really fast, she would shower you with kisses. Just something to give you more encouragement to go faster.

Questions to a Game Programmer

This will hopefully be a monthly feature. This will be a wonderful chance for us gamers to get a behind the scenes look at video game programming. Andrew Davies, a programmer with an extensive resume, has agreed to give us some info about being a programmer. I will ask a different question every month and he will do the best to answer it. If you wish to send in questions that you would like to see answered, we will consider them. While some of his responses are bit technical, I decided to do little editing. This way the aspiring programmers out there can really enjoy it and maybe even learn something.

Question-What was the most impressive or outrageous thing you ever did to get a job on a game you wanted to do?

Well perhaps the best technical thing I ever did was a split-screen independent 8-directional scroll (with dual panel) on the NES, without any hardware support (that is, using a stock-standard NES cartridge). This was something that a few of us had been discussing one night, and our boss -Fred - overheard us. I told him about the idea, and he scoffed and said forget it - can't be done. I took that as kind of a personal challenge, and over the next week or so got a demo up and running which showed that it was, in fact, possible.

The system I programmed had a split-screen display with 8-directional independent scrolling areas top and bottom and a static panel in the middle (it was used in only ONE title - Bigfoot - specifically, the hill-climb event). I know allllll about scrolling and how it works! This WAS about 8 years ago, but I do remember my stuff on this one! We called the horizontal/vertical scroll register V5; I believe it was ctrl5 in Nintendo's documentation. Excuse any errors, but I'm doing my best. We reverse-engineered the machine, so were kind of whacky with our register names. It was good in a way, though, because we really knew that machine. Even better than Nintendo - their documentation was in that appalling Japo-English, which was almost too funny to be true. On the NES, you only could write the scroll register if the screen was switched off (blanked?). In mid-screen, the hardware would take notice of the horizontal scroll (1st write of v5 - at the start of the next scan line) but not the vertical scroll. I seem to remember waiting for the horizontal blank before writing. The really tricky bit was achieving split-screen vertical scroll given that the hardware wouldn't accept any vertical scroll update except in the vertical blank. And I got around that by rewriting v6 (the screen base address, I seem to remember). V6 could be written at any time, but the display would start at the top of a character, wherever the current scan line was on the screen, THAT would be the start of the new character when you wrote V6. Finding that out, actually, was the germination of the entire scrolling idea. So, to get that fine-scrolling bit, I had to vary the line on which I wrote V6!!! We are talking very tricky timing here. My first efforts worked, but of course there was an annoying jumping area where the screen change occurred. Then it occurred to me that to blank the screen, but not actually turn it off, could achieve what I was trying to do.

I blanked the screen using a sprite 0 collision, waited for a 1-8 (=n) scan lines, wrote

v6 (and hence "display" commenced at that scan line), waited for (8-n) scan lines, then turned the screen back on; voila... scrolling updates for mid-screen, with a constant visible top line of the scrolling area! What you effectively had was a 12 character scrolling area, an 8 pixel black area, a 4 character panel (two selectable panels viewable), another 8 pixel black area, and a 12 character scrolling area - giving 30 lines of display overall. An interesting side-note to this one - it was only possible to have the single sprite 0 collision, for starting the screen-switching - so from the bottom of the top area to the top of the bottom area was all CONSTANTLY TIMED CODE. That is, about 48 scan lines of it. And, things were so tight that it wasn't just delay loops. I pity the poor sod (Hi, Rod!!) who put that code in there, as I just delivered the scroll with delay loops. In the end, he did a magnificent job, even if he did swear at me a lot.

It all worked like this: There were two "screens" available - and these could be joined together (hardware wiring of the cartridge) either horizontally or vertically. Bigfoot used vertical join. Each screen was 28 characters deep. The panel used 4 lines on each of the screens, leaving 24 lines for playfield. Of course, one screen was used for the top independent scrolling window, one for the bottom. Either panel could be shown in the middle of the screen. (Andrew sent this correction, but not being a programmer, I didn't want to change things and mess them up, so I just put this here and it should be self explanatory - Actually, the first thing you'd see would be the PANEL on that playfield. Thinking about it, the screens must have been joined for a HORIZONTAL scroll, not vertical as I initially mentioned).

One screen column was blanked, so horizontal scrolling was fairly simple - simply rewrite a 24 character column whenever warranted - this limited our scroll speed to 8 pixels/frame, but that was plenty. The vertical scroll was tricky, though. There were 12 rows of characters visible at any time, but the scroll was limited to showing only within that 24 row area. If it went outside that bound, we'd see some of the OTHER playfield - definitely not what we wanted. Thus, we couldn't update a single row at a time, like in horizontal scrolling - screen wrap killed that idea. What I came up with was this: When we scrolled (up, for example), we can let the scroll go to the very top of the playfield - line 0. But when we want to go further up - we can't - as we'd see the other playfield. But at this stage, the entire LOWER 12 character rows of the playfield we're showing is invisible, and the entire UPPER 12 character rows are being displayed.

So, if you're following me... yes, while we're displaying the upper 12 rows, a copy of the upper 12 rows is made in the lower 12 rows. Then, once that is done, the display flips to show the lower 12 rows (player sees NO difference), and the next 12 rows above where we're currently at are built into the (now offscreen) upper 12 rows. This was kind of tricky - took a lot of processing time - because you couldn't write the screen data on the fly - you had to do it all in the VB (and you had scant cycles to do it in) - so it took me 3 entire frames to achieve this flipping process. In the end, the scroll was slightly jerky. But it worked. Once you've done the copy/flip/build, you could continue scrolling as if nothing happened. And, of course, scrolling down was the reverse of this process.

In Bigfoot; I also multiplexed the 64 sprites to get 128 on screen by reloading the sprite page in the period when the screen was switched off for the scroll area (that 8 scanline area, remember)!! Nintendo would get the 1st 8 sprites a bit flickery, but we ended up with 120 useable sprites. This was also kind of unheard of, at the time.

At about the time this was going on, I fell in love with a girl in America (remember this was pre-internet) so we did all our stuff by fax :) Yeah, she was a great fax. To cut a long story short, in the middle of Bigfoot, I quit (for the 5th time, no less! - each time they hired me back with whacking great pay rises) and flew to Chicago (from

Melbourne, Australia) to meet her. As it turns out, the scroll proved intractable to the programmers back at BEAM, and I was asked to work on it from Chicago - which was quite handy, really, as I was broke :) Took me a couple of weeks to get everything sorted out, but in the end, it worked magnificently.

Before I came up with this one, everyone said it was impossible to do. Our company used the fact that we could do this to win lots of extra business. Check out Bigfoot sometime if you can, and look at the hill climb event; that scroll is mine, and its one of the neatest things I've ever done!! The ironic thing is that, for the next year or so, my bosses touted this technology as showing just how good the company was at creating innovative technology - and it all started because I was in a huff at being told I COULDN'T do it, by those very bosses :) I miss those days, sometimes. But then I remember the late nights, stress, hard work, poor tools... and common sense kicks in, and I realize that I don't miss them at all!

But, without a doubt, the NES independent 8 directional split screen scroll with dual panels... was one of my finest hours :)

Cheers!
Name: Andrew Davie
Years in the industry - well, been doing games since around 1983.

worked for Melbourne House / Beam Software 1985 - 1995
SEGA Australia 1995 - present
(though we're now called Brilliant Digital Entertainment)

Titles (in approximate date order)
Atari 400/800: Cubie (shareware)

C64:Mugsys Revenge, Asterix and the Magic Cauldron, Street Hassle / Bad Street Brawler
Super Pacman, Pacman Junior

NES: Bad Street Brawler (first Mattel Powerglove title), The Hunt for Red October
Bigfoot (systems, particularly that split screen scroll), The Three Stooges

SNES
MechWarrior / Battletech, WCW Superbrawl Wrestling

Finale

Hoped you enjoyed the tenth and in my opinion, the best issue yet. I would like to thank the contributors and hope that they will return to do more articles. In closing, all I can say is feel free to email me and any of the contributors and let us know what you think, either positive or negative. Look for us back in another month with yet another issue of Retro Times, the free monthly newsletter that covers all the dead games systems and even a few live ones.

Tom Zjaba

(All pictures provided by the Digital Press CD. Possibly one of the best deals out there. To get your own copy, go to http://www.xnet.com/~skelly/ or http://digitpress.com and order one).