MG Interview: Andrew Welch

by Kevin Savetz

Andrew Welch is the author of the successful (and addictive) shareware game Maelstrom. Andrew, 22, is a photography student at Rochester Institute of Technology. Besides Maelstrom, he has written shareware and freeware programs—15 or so—including FlashWrite][, Easy Envelopes Plus, and a plethora of others. Maelstrom garnered the 1993 Shareware Industry Award for Best Macintosh Program.

IMG: Is Maelstrom your first shareware venture? What else have you done programming/gamewise?

Welch: I've done lots of shareware products before, and I've worked on a number of commercial softwares as well.   Maelstrom is my first real game though.

IMG: Why did you decide to write Maelstrom?

Welch: I started Maelstrom about August 1992. Maelstrom was my attempt to prove to the nay-sayers that fast–action, pulse-quickening arcade games are a natural for the Macintosh. Writing games was something I had long wanted to do, but never managed to get around to it for lack of attention to my inner voice. I also had long desired to try my hand at revamping the classic Asteroids game, while adding a few unique twists of my own—and with Maelstrom I had my chance to kill quite a few birds with one stone.

There was a pervading philosophy that the Macintosh is not a good game machine; many DOS publishers snubbed the Macintosh game market by providing terrible ports of their DOS games, and then wondered why the sales were abysmal. Macintosh users are an indignant bunch who expect software to meet certain standards. Making them feel like they were using a DOS machine was one of the few first-class tickets to failure in the fledgling Macintosh game market.

So I set out to try and write a fun, fast–paced action game to please my own secret desires, and to say, "Look here, it can be done: stop festering in excuses." I feel Maelstrom is a success largely due to the talents of Ian Gilman and Mark W. Lewis—the folks who did the

fantastic artwork. I am indebted to them, as well as to the team of play testers I assembled to put Maelstrom through its paces and suggest ideas to improve the game.

The development of Maelstrom was truly a fly-by-night affair that took place entirely on the electronic information service America Online. I'd get new artwork to put into the program, add a few features, and send it out electronically to the play testers to see what they thought of it. This happened numerous times; the game developed in fitful steps until finally, mercifully, the game was ready for public release. I've actually never met any of the people who were involved with Maelstrom in person; a situation I hope to remedy in the near future, because it seems somehow too impersonal.

Regardless of the returns financially, I consider Maelstrom a success in my own terms: I think it is an enjoyable game, and I've finally got my version of Asteroids running on the big screen. I've even got quite a few requests for a DOS version of Maelstrom, which shows that there is some justice in this world. But I must admit that Maelstrom has gotten an excellent reception; good enough that I surely plan on writing more games. I enjoy it, and it seems other people do as well, so we've got a good match—until I remember something else I've always wanted to do.

IMG: Is the game "done," or do you envision future changes for it?

Welch: There comes a time when you must consider a work finished, put it behind you, and move on to other projects. I definitely plan to continue issuing updates to Maelstrom if any bugs are found, but other than that, I think it is time to declare the game done and move on. Otherwise I'd spend all my time tweaking Maelstrom instead of doing something more intriguing such as working on a new game.

IMG: Are people actually paying their shareware fees?

Welch: Yes, people have been great in supporting Maelstrom. Of course I have no way of knowing how many people are playing the game without paying for it, but overall I'm happy with the response.

IMG: What language is Maelstrom written in?

Welch: I used THINK C. Maelstrom is composed of 18,000 lines of C code and 9,000 lines of inline assembler for the speed-critical portions of the game.

IMG: You are a self-taught programmer? Do you think most people should do it that way, or take classes?

Welch: I taught myself everything I know about programming—no comments from the peanut gallery please! I wouldn't necessarily recommend this approach to anyone else, it depends on your personality.

I've taught myself far more than I've ever learned through a structured environment such as the classroom; it's a lust for knowledge and excellence that drives me. I like to blaze my own trail; others may do far better taking formal classes. It really depends on your inclination.

IMG: Anyone who has played Maelstrom is familiar with the "Yorp!" new life/begin game noise. What is "Yorp!?"

Welch: That sound is simply a bark from a Marine friend of mine. Sounds inhuman, doesn't it?

IMG: What's with the little ditty you see when you hit the X key (from the title screen)?

Welch: It is a lyric from a Red Hot Chili Peppers song, Blood Sugar Sex Magic. Great band. You should listen to them sometime.

IMG: A lot of people (myself included) have released their own sound files for Maelstrom. Do you like that sort of thing, or are they violating your artistic integrity?

Welch: Absolutely not! I love the fact that people are interested in Maelstrom enough to devote their creative energies towards giving the game a parcel of their personality.

I designed Maelstrom to be modular; the sounds are in one file, sprite graphics in another, title pictures in a third, and finally the game itself. The reason I did this was to make updates more convenient for people who get Maelstrom on an information service such as America Online.

Instead of having to download the entire suite of files for a minor bug fix, all that people would need to do is download a small update package consisting of the Maelstrom application; I figured that there was no need to make people pay for downloading the entire Maelstrom package just for minor bug fixes.

A great side-effect to the strategy that I did not anticipate is that people started creating their own versions of the Maelstrom Sounds and/or Maelstrom Sprites files. So you can drop these alternate files into Maelstrom's folder to give Maelstrom a whole new look and sound. I think it's great; some of the alternate files have been excellent diversions!

IMG: What did you find more difficult: the animation, hit detection, or the game "logic"?

Welch: Hmm… that is a tough call. I would say the most time consuming part was getting the animation done correctly because there was no source I could go to in order to find out how to do it right.   It was a lot of trial, error, and timing. There were a lot of pieces that had to fall into place before the game itself was playable. That was the most frustrating part—a very high curve before I could even see if Maelstrom was turning out OK.

IMG: Are you planning to write another game soon, or do you have other projects in mind? Care to give some hints as to what you might have planned?

Welch: Oh yes — I really can't give anything about it away, because I'm not exactly sure myself what my next project will be. I've been working hard to build a killer set of core routines that will not only make my next game really cool, but will also allow me to churn out games much more quickly. Once those are done, the game that gets done is up in the air.

IMG: Have you considered making Maelstrom a commercial product?

Welch: I've had several offers (from good companies) to take Maelstrom commercial, but I've decided against it for several reasons, not the least of which is that I think we need decent shareware games for the Mac.

I also truly enjoy "marketing" the game myself; the old maxim of too many cooks spoil the brew is definitely true in my opinion. I think I'm doing a pretty good job providing what people want, so I decided to keep going it alone in this respect. My only regret is that Maelstrom will reach fewer people as shareware than it would if it were distributed

commercially.

IMG: What was your first shareware program? Was it a success?

Welch: My first shareware products were typefaces, not programs. I enjoyed designing typefaces, and the fact of the matter is that I couldn't do much more; I simply didn't have the programming know–how to do anything significant. But then I decided that I wanted to make a complete package wrapped around the typefaces I created, so I stumbled into programming quite accidentally.

The typefaces actually went over quite well in my opinion—but then again if I got a letter a week I was ecstatic, because it meant that I had succeeded in reaching out to the world at large. Every letter was a success, because it meant that someone had judged my work as worth paying for on their own terms, after using the product. This is akin to reading a book and then sending the author payment if you deemed it worth your while; quite a different world indeed!

IMG: Why do you write shareware?

Welch: When I was first exposed to the idea of shareware, I was quite impressed. From the practical side, the entrepreneur in me was awakened to the possibilities: here was a way to beat the system, venturing out with a little luck and a lot of hard work to pave my own way. I also looked on existing shareware authors with a degree of respect, because if you depend on the honesty of others for your livelihood, you must have substantial faith in the human nature—it goes with the territory.

That isn't to say that idealism was the only driving force that lead me into the shareware market; necessity was here too the mother of invention: I didn't have much choice. It is quite hard to get a program written—let alone published—with little experience behind you. Shareware was a way for me to learn, create, and market all at the same time.

When I think of the shareware market, I am reminded of the open markets in Mexico where vendors sell their hand-made wares in improvised booths. You must participate more, hunting through a myriad of products to find your diamond in the ruff, as there are no slick advertisements or poster girls pointing the way. But I found this somehow refreshing, dealing with an individual instead of a trademarked logo, and taking active participation in barter rather than being spoon-fed information from ad agencies. Quality does not depend on the packaging, but rather on the product. Electronic networks are a new frontier, with shareware vendors tending trading posts along the way.

I have worked on a number of commercial projects before, but I've never really been satisfied with most of my publishers. I have a perhaps inordinate amount of faith in myself and my vision, and when that conflicts with a publisher's direction, I get discouraged. So I also enjoy writing shareware software because I have creative control over the product, whether that means success or failure.

IMG: How did you start in the shareware business? How does a beginning programmer "make it" in the shareware market?

Welch: Here are the rules I've learned (some the hard way) if you want to "make it" as a shareware author:

1. Provide a quality product. This seems like common sense, but I see many programs out

there that are complete garbage and the author is asking $25 for it!   Then he or she is disappointed when it doesn't go over well.

2. Maintain the product by listening to what people want and improving it. People will be much more likely to support you if they see that you are actively working on improving your products. Free updates are a must.

3. Make it easier for the person to register. I think the reason many people don't register for shareware programs isn't because they are dishonest, they just don't get around to it for one reason or another. With the number of things we all have to deal with in our daily lives, this is understandable.

IMG: Do you think shareware, as a method of selling, will prosper?

Welch: I think there will always be a place for shareware, just as there will always be a place for the farmer's market and "mom & pop" businesses.

Shareware is an excellent proving ground for the budding programmer, and it is also a real grassroots method of doing business. You are very close to your customers, and you have complete control over your product and prosperity.

I also think that as we move towards a worldwide network—like Clinton's ubiquitous "information highway"—the electronic method of distribution will be a much more important player. A person at home can tap a few keys to find a program that suits their needs, use it for a while to verify that it really does work for them, and then pay a reasonable price for the product (because of the low-overhead nature of electronic distribution).

The more people jump on the bandwagon, the greater the potential for shareware authors. Without getting too sinister, there might well be opposition to this user-centric method of software distribution from those who profit from the current distribution channels.

Magazines get much of their revenue from their advertisers; and while there will always be a need for magazines (electronic or otherwise), if people can find the software they need themselves, advertising in the traditional sense may not be so important. Instead of basing their purchases on glossy advertisements, people could try the programs that might potentially fit their needs and decide for themselves.

Traditional software publishing firms that are geared towards shipping a physical product will likely need to rethink their distribution strategies. Likely much to the detriment of the companies that provide packaging and printed documentation for their products.

Mail order software vendors and computer stores would also have similar challenges to overcome in this brave new world of electronic software distribution. If the commodity is no longer a physical box containing software, what will they keep on their shelves and ship to their customers?

All of this depends on high quality software being available electronically, and of course that the majority of computer users have access to an easy to use electronic network. But I do see the industry moving in this direction; hopefully the companies that will be affected by such a change in the method of software distribution will bend to the winds of change instead of oppose them.

IMG: Are you strictly a Mac-person, or do you program/use other machines as well?

Welch: Just the Macintosh. I'd never been much interested in computers until I played with a Mac. Although I must admit that I play Ultima Underworld II on my roommate's DOS box.

IMG: Why the Mac? What attracted you to it over other platforms?

Welch: My first experience with a Macintosh was my freshman year in high school, and it was one of those instantaneous connections that defy explaining; words are too constrictive and trite to suffice. I was designing a two-battery electrical system for a 1969 MGB that I was planning to restore, drawing the layouts and schematics with MacPaint on a Fat Mac—not many of us remember those machines, I'd imagine!

No matter that a few quick sketches on a pad of paper would have sufficed; I relished in the creative power that the Macintosh offered, and ended up spending at least 10 times the time it would normally have taken to do the drawings. But they looked great, and I enjoyed every wasteful minute of it.

Our abilities are infinitely more advanced than our capability to express them—there is always a barrier between what we think, feel, and imagine and what we do, express, and create. Perhaps it is nature's way of keeping us humble.

For me, the Macintosh was a tool that broke through some of these barriers, creating a connection between man and machine that eliminated some of the awkwardness I'd felt when working on other computers. With other machines, I was always painfully aware that I was using them; with the Macintosh, I forgot about the tool and concentrated on the ideas.

Ultimately I believe that computers will be literally linked directly to our minds, eliminating the most of the physical barriers altogether. Consider: our evolution as a species is stagnant. We save the infirm that would normally die out, preventing natural selection from taking its course to dispassionately improve the breed. We also live significantly longer, slowing down any changes that may manage to occur.

Our evolution and progression is no longer in ourselves, it is in our knowledge and consequently in our tools. Since it seems our primal stuff will not change much or soon—and since we are a notoriously impatient beast—my best guess is that we will continue to improve and integrate the tools we use, to a point that they will become a literal extension of our minds. Personally, I am pleased with using my Macintosh—and I do hope that in our lust for life, we temper our knowledge with wisdom, not hubris.

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