SPECIAL REPORT

THE MAKING OF A COMPUTER

By PERRY GREENBERG

here's an old expression, "Build a better mousetrap and the world will beat a path to your door." In the home computer industry, the axiom seems to be build a better Apple and every lawyer in the world will track you down. Franklin Computer Corp. of Cherry Hill, NJ, has created a very successful line of computers by taking advantage of the huge market out there for the Apple Computer. So it's had its share of pursuit by lawyers, too.

Apple started the desktop computer revolution practically singlehandedly. Because of the company's initial predominance, and the usability of the machine (I've yet to meet anyone who owns an Apple and who is not pleased as punch with it), there are now over 15,000 programs manufactured by legions of software companies for the Apple.

Franklin Computer Corp. was started by three enterprising men with vast personal computer experience: R. Barry Borden, Russ Bower, and Joel Shusterman, who is now president of Franklin.

Before Franklin was founded, Borden was the founder and president of Delta Data, a computer terminal manufacturer. Bower and Shusterman were engineers together at Burroughs. Later they established a company called BAI Data Products that manufactured paper tape equipment.

As the demand for their paper-tape products began to diminish—around 1977 or so-they decided they needed to get into something new. Microcomputers seemed to be a product with tremendous potential. So Shusterman opened a computer store called the Computer Emporium.



JOEL SHUSTERMAN, president of Franklin Computer Corporation, faces the EHC camera.

The Computer Emporium "was a sensation," says Shusterman, "until 1980, when the money situation in the marketplace was very bad. Interest rates went sky-high, I was caught in a cash squeeze and I was losing big because my customers could not get financing. So I sold the store to Carol's Development, a movie-theater chain and fast-food franchise but I stayed on



THIS JOB takes a keen eye and a steady hand.

as the principle manager until we had a disagreement and they fired me."

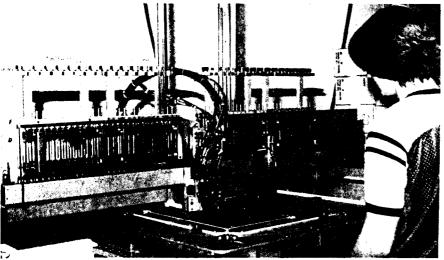
Continued Shusterman: "They had to pay out my contract, and I took the money and relaxed for a year and went to Europe. After I returned, I got together with Barry and Russ and we started writing a business plan.

"We observed that Apple was unique because there was a whole industry built around it. You bought the CPU [central processing unit] from Apple, but you bought all the peripherals and boards from hundreds of other companies. So the whole industry revolved around one CPU, and there was no alternative. We stepped in and became the alternative."

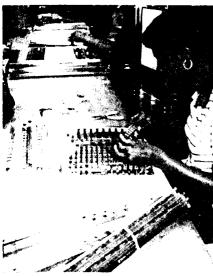
Today, many people regard the Franklin as an improved Apple II with a superior keyboard (the Apple II has no separate numeric keypad, while the Franklin does). The Franklin also has a host of special function keys, and a lower price.



FRANKLIN COMPUTER keyboards go through a final test before being installed in their housings.



A SUCTION DEVICE pulls main circuit board and a set of contacts together to check solder connections.



MOST OF THE COMPONENTS in Franklin computers are hand-assembled.

Franklin's success has sparked a giant lawsuit brought against the company by Apple. Franklin copied Apple's operating system which Apple claimed was protected by copyright laws. Franklin admits this, but contends it's done nothing illegal because

Apple chose to protect its system through copyright rather than patent laws—thus leaving a loophole that allowed Franklin to legally copy the Apple OS. According to Shusterman, "You may not copyright processes, functions or systems. They may be patented if they're patentable, but you may not copyright them."

So far, there has been no final decision in this multi-million dollar suit. Franklin is still manufacturing its computers, and Apple is still complaining.

Franklin Computer Corp. has its headquarters in several buildings in Cherry Hill, a lovely middle-class community of one-family homes, green lawns and immaculate shopping centers. The office building is a long, airy, two-story structure.

The staff is an enthusiastic collection of locals. In fact, Franklin is a company that could stand as a model for other industries in the way it has treated its employees. Many of the managerial jobs at the company are

filled by women who were originally hired as secretaries and have worked their way up to jobs with big reponsibilities. Many admittedly knew nothing about computers before being hired, but now are well versed in their use; practically every desk at Franklin is equipped with a computer—a Franklin, of course.

During a recent trip to Cherry Hill, EHC was treated to a tour of the factory where Franklin computers are built. The factory was definitely not your stereotypical grim mechanical environment in which zombied employees are doomed to endless workdays consisting of one or two mechanical movements repeated ad infinitum.

The Franklin plant is a spacious, sunny place in which teams of employees work together at a host of complex jobs from soldering to quality control. The atmosphere is calm and congenial. We saw no employees chained to conveyor belts moving at inhuman speeds. Managers and workers worked hand in hand constructing Franklin's two models of computers (the Ace 1000 and the Ace 1200).

Whatever problems Franklin may have to overcome in its continuing battle with Apple will have to be decided in the courts. From what I've seen, I have to wish the company continued success. Shusterman and his team seem, for the most part, to be a sincere group of dedicated people who relish their jobs and honestly believe in the quality of their product. Both the consumer and the people of Cherry Hill have certainly benefited from the birth of Franklin, even if Steven Jobs—the co-founder of Apple-sees Franklin as a company that has wormed its way into his firm's success.

(Note: just as we were going to press the Franklin/Apple lawsuit was settled. Franklin still does not accept liability; however, they did arrange to pay Apple 2.5 million, and agree to change the disputed operating system sometime in the future. [ed.])



THE BURN-IN ROOM