

## SNEAK UP AND BITE YA DEPARTMENT

By the time that volume 1, number 6 of ARCADIAN had hit the streets (May 1979) it was apparent that there were two configurations of on-board ROM. Calls to some ROM subroutines worked on some machines but not on others.

H. A. R. D. has just spent an exasperating two months trying to produce game tapes in 2000 baud Astrobasic that would load on the customer's machine. The problem was that all PRINT statements in our programs were producing characters that were offset by one letter AND one pixel on our customers' machines: the string "ABC" would come out "BCD" and slightly off-center.

At first we thought it might be the tape quality. We spent a bundle having custom cassettes loaded with high-quality Agfa PE-651 tape. No good ... the problem remained. We next suspected the recorder. Out went the trusty old Panasonic Slimline to be replaced by a TRS-80 CCR-81 computer cassette recorder. Still no dice ... the characters remained jumbled on everyone else's machines but our own. That was the worst part ... we couldn't duplicate the problem! Everything loaded perfectly in our own shop. At the suggestion of one of our dealers, we even tried a new Astrobasic cartridge. No deal ... the problem wouldn't go away. Finally, in desperation, we bought another Arcade. Aha! We now had two Arcades sitting side by side on the bench, and they couldn't talk to each other! There are at least two different types of Arcades out there. The difference lies in the on-board ROM, which is five bytes off-standard between the two. I have christened these two machines "The 3159" and "The 3164" based on the address of the "GAME OVER" character string in each. A machine-language monitor dump of the ROM was changed. Who knows why?... there was a bug that was fixed, perhaps. Most of you have the 3159 machines, but there are a number of you with 3164 machines who are tearing your hair out or perhaps giving up in disgust because you can't load anyone else's programs.

Here's a quick test. Type in the following on your Arcade:

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CLEAR; %(19904)=-43;%(19906)=12341;%(19908)=27651;%(19910)=3164;%(19912)=-13871; CALL19904
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If the words "GAME OVER" appear at the top of your screen, you've got the 3164 configuration and you are stuck. The newer 3159 configuration will only print the word "OVER". If you change %(19910) to 3159, you will get the entire "GAME OVER" on the 3159 machine.

