



December 8, 1978

Dear CLOAD Subscriber:

Hello there! We have some good news and some bad news.

The bad news first: your November and December issues will be a few weeks late.

The good news: when it comes, it should be a lot easier to load and go. The story is that we are shifting a few things around in our recording process to conform to new standards.

End of news. I'd like to take the remainder of this space to outline the history of our "Recording Department".

When we started out in March of '78 (seems like years ago), we felt that a row or two of cassette recorders hooked up to a computer would be sufficient. The computer, an extensively modified dual disk Altair\*, would be capable of automatically loading each program into memory from the active disk, and outputting it directly to the tape heads. Fortunately, we never implemented that plan. For one thing, we'd be wearing out tape heads faster than we could replace them. For another, we'd be doing nothing but feeding and pulling cassettes. The worst thing, however, would have been the poor quality of the product. There are about twenty reasons why mass duplication "in cassette" does not work.

Forearmed with this information, we approached a company which was in the business of mass duplication of cassettes. They take information from a 7 1/2 IPS open reel tape and transfer it to a "pancake" of narrower tape, and spool it into a cassette shell after recording it.

At first, they would take a tape submitted by us, load it into their TRS-80, and record a new master tape. Coupled with the audio/music format which we had on our first issues, this let to enough cutting, mixing and duping to please the most ardent rock musician.

We soon realized that (1) CLOAD Magazine would have to supply a quality master, or (2) CLOAD Magazine would have to pay for the service. As choice (2) would involve a subscription increase of about \$60.00 a year, we opted for the former. We had by this time purchased a suitable recorder, and were anxiously awaiting delivery.

\* All operational Altairs are by definition extensively modified.

It did not come, however, for some time. We had to master two issues by using a top quality, high fidelity four-track tape recorder. A bit of personal advice to all those considering doing likewise: don't. It won't work. There's too much hum coming from the TRS-80/ A hum filter distorts the waveform. The bias is all wrong. The equalization is all wrong. The volume is all wrong. The whole arsenal of oscilloscopes, distortion analyzers, wow and flutter meters, frequency counters and signal conditioners will not help. If you are contemplating distributing software, go to a professional duplicator who specializes in computer program duping.

When our half-track machine came, we immediately tore it apart and inserted our own recording circuitry, which helped immensely. We were out of the darkest part of the woods, and the only remaining problem was to "clean up" Level II

About this time, a great deal of effort was being brought into play by everyone associated with the TRS-80 to find the magic technique by which Level II recordings could be duplicated reliably. The technique is somewhat proprietary\*, and is somewhat reminiscent of the "notched pulse" technique used to communicate with Telstar I.

What all this boils down to is that (1) we have to shut down momentarily to change our recording circuitry, and (2) our patient subscribers must be patient a bit longer. The software is ready as soon as the hardware is. As a matter of distinct fact, we have the November, December, January and February issues ready to go, as well as a "Best of CLOAD" set of selections from our first six months.

So, if you are a new subscriber, have faith in our ability to overcome our obstacles.

If you are a long-time subscriber, don't talk to the new subscribers. At least, not about us.

If the subscription is a Christmas gift, please staple a bow to this letter and put it under the tree.

Happy Holidays!

Ralph 711 '89

Ralph McElroy  
Publisher

\* I would never, never admit that I don't understand it.