BITS ON COMPUTER BITS

The response to Jerry Ogdn's first Computer Bits column (in the June issue) has been tremendous. Here are excerpts from just a few of the letters:

Thanks for your new column. I am interested in being a member of a computer hobbyist group. — John F. Sprague, Allendale, N.J. . . . Make it monthly instead of quarterly as soon as possible. I am a reasonably good programmer but need support in electronics. — Peter Nevius, Niskayuna, N. Y. . . . Because of this, I have just subscribed to your magazine. — Howe C. Fong, Los Angeles, Calif. . . . I have years of experience with hardware, but none with software. Please continue the column. — J. E. Kircher, Hannibal, Mo. . . . I would like to see this column become regular, instead of a quarterly thing. Glad to see somebody's in touch with 1975. — R. M. Bash, Fairbanks, Alaska. . . . We found your new column very interesting. We will be using your magazine as a "textbook" starting next fall. The wide variety of articles, new components, career opportunities, basic design projects, quizzes, printed and digital circuit projects all fit into our introductory electronics course. — J. W. Craig, St. Louis, Mo. . . . I welcome the appearance of "Computer Bits." However, I resent your statement that there are those who know hardware but nothing of programming and those who know software but not hardware. I know both very well and fully believe that you can't understand all implications of either without knowing both. — H. J. Kuhman, Pittsburgh, Pa. . . . I am guessing that your "neat, inexpensive solution" to the program-sharing problem will be achieved with cassettes. I am planning to buy a microcomputer. When asked why I wanted one, I came up with the following planned uses: Files Management (adaptation for record-keeping in a small business); Teaching Programs (programmable learning via teletype or CRT display); Software Experience; Academic and Job Augmentation (doing work at home with a phone hook-up to a big plant); Home Recreation (for the sheer fun of it). — Gary Walker, Gilroy, Calif.

CREDIT FOR CONVERTER CIRCUIT

I was pleased to see a good application for a V-to-f converter in the article "Converter Turns Counter into a Digital VOM" (May 1975). However, I was disappointed to see that a reference was not given for the source of this circuit. I developed the circuit shortly after the NE 555 timer became available. — H. Klement, White Plains, N.Y.

The author included the reference in his manuscript. It was dropped in editing.

RED IS OK

In the article "Build a Digital Marine/Auto Tachometer" (June 1975), it was stated that the use of red displays for anything other than emergency indicators in automobiles is illegal.

We checked this out with the National Highway Transportation Safety Administration, which is responsible for Federal Standard 101 (covering the subject), and also with the Motor Vehicles Manufacturers Association in Detroit, which provides automobile industry standards. We find no basis for the prohibition mentioned. — David K. Bradley, E. F. Johnson Co., Wasaca, Minn.

Thanks for bringing us up to date. Our statement was based on information we received several years ago when the NHTSA was with the Department of Commerce.

THE LONG CONNECTION

In your July 1975 editorial (The ATIS Connection), you said that transmission of the identifying code would take about 1/4 to 1/5 of a second. Using the most common implementation of the ASCII code, including framing bits for synchronization, a total of ten or eleven bits is required per character. Thus a 22-character message (suggested for ATIS) means the transmission of 220 or 242 bits. At 100 bits per second, each ATIS would take just under 21/2 seconds. Even more discouraging (about ATIS) is that the suggested frequency is smack-dab in the middle of the speech band. Of course, that's where you want it for use with equipment designed for spoken communication, but ATIS will sound like a canary. — Bob Brown, Atlanta, Ga.

Identification would require 176 bits of information. Transmitting this at 100 baud would require 1.76 seconds. — Stuart Goldberg, Warrington, Pa.

How right you are! It's 22 characters times 8 bits divided by 100 baud equals 1.76 seconds. That's a SMOP (small matter of programming) for you.

Out of Tune

In "Build a Muscle Feedback Monitor" (May 1975), the polarity of B2 in Fig. 2 should be reversed.