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DECUS NO.	8-560
TITLE	SAM-1
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SOURCE LANGUAGE	PAL III

Sam-1 Write Up

Sam-1 is a Morse Code Sending program designed to operate without D/A hardware. It uses the electromagnetic interference from core to produce the tones and pauses necessary for transmitting code. The Ditz and Dahz are produced by running the transmit routine for a specific time. The speed of the transmission is determined by a setting on the switch register. The more towards 7777 that the setting is, the faster the sending rate.

Operating Instructions:

Load tape with BIN loader into field 0.
Load Adress 0000; Set initial speed in SR. (7770)
Press Start.

The program will now read in text from the keyboard. The user may enter any message, drill, etc. that he desires. The acceptable characters are A-Z, 0-9, ? and space. The latter is used to create longer pauses. The user may use carriage returns and line feeds to format his input as no character below 260 (except space) is stored. If the user makes a mistake in entering a letter, he may depress rubout to delete 1 character to the left each time the key is pressed. Note: Rubout will echo as a 377, not the conventional Backslash. Care should be taken that the user not rubout more characters than he has stored in his buffer as this will eventually start to destroy the program itself. Once the user is satisfied with his text, he presses alt-mode. Sending will now commence. Turn on a radio and tune it to about 1525 AM (In the Boston area, this is the frequency that renders the clearest tone. If the user does not live within the Boston area, tune the radio until the code becomes clearest. The code will be heard over virtually all frequencies, but some are better than others.) The radio must be located within 20 feet of the computer, with 2-3 feet being an ideal distance. To vary the sending rate during transmission, the user only need to change the SR to a lower or higher setting, depending upon whether he wants a slower or faster rate. Note: a setting above 7773 tends to make the code indistinguishable. Once transmission is complete, the program will recycle and begin to accept more text.

FORMAT OF CODE (how stored)

A would be stored /1 0 0/0 0 0/0 0 0/0 1 0
bits 9-11 say how many Dits and Dahs in the letter and

beginning from bit 0, a 1 is a dit- a 0 is a dah