MOSTECHNOLOGY, INC.

VALLEY FORGE CORPORATE CENTER (215) 666-7950 950 RITTENHOUSE ROAD, NORRISTOWN, PA. 19401

February 12, 1976

Dear KIM-1 Customer:

With the help of our customers, we are continuing to advise you of corrections required in your KIM-1 documentation. The attached Errata Sheet #2 should be used to update your KIM-1 User Manual.

You have loaded the ending add

The first of our Application Note series is included, as well, to advise you of special subjects or problems pointed out to us by KIM-1 customers. We feel that all of our customers should be appraised of these matters as quickly as possible.

Thank you,

MOS Technology, Inc. KIM-1 Customer Support

KIM-1 ERRATA SHEET #2A

Please modify your KIM-1 User Manual to correct the following errors:

- Page 18 In Figure 2.4, the line connected to Pin A-S should be labelled "Keyboard Return" (not "Keyboard") and the line connected to Pin A-T should be labelled "Keyboard" (not "Keyboard Return").
- Page 32 In Figure 3.9, Pins U and T are reversed. Pin U should be labelled "TTY PTR" (not "TTY KYBD") and Pin T should be labelled "TTY KYBD" (not "TTY PTR").
- Page 52, 53 The key sequence for Punch Paper Tape is not correct and should be replaced with the following sequence and comments:

You have loaded the ending address (03FF) into addresses 17F7 (EAL) and 17F8 (EAH). A starting address of 0200 is selected as shown.

- 3. Now Type (continue as printed).
- Page E-2 In the 5th line from the top of the page, the reference should be to the "311 comparator" (not "310 comparator").
- Page E-3 Correct Fig. E-1. All references to "µ Sec." should be changed to M Sec. Also, correct figure to show "6 Pulses" (not "9 Pulses") in the third section of each waveform.

February 12, 1976

KIM-1
APPLICATION NOTE #1

A number of KIM-1 customers have reported difficulty in achieving correct results for the sample problem shown in Sec. 2.4 of the KIM-1 User Manual. In addition, some customers have experienced problems in recording or playback of audio cassettes. (Sec. 2.5 of the KIM-1 User Manual). In all cases, the problems have been traced to a single cause: the inadvertant setting of the decimal mode.

The 6502 Microprocessor Array used in the KIM-1 system is capable of operating in either a binary or decimal arithmetic mode. The programmer must be certain that the mode is selected correctly for the program to be executed. Since the system may be in either mode after initial power-on, a specific action is required to insure the selection of the correct mode.

Specifically, the results predicted for the sample problem (Sec. 2.4) are based on the assumption that the system is operating in the binary arithmetic mode. To insure that this is the case, insert the following key sequence prior to the key operations shown at the bottom of Page 11:

/AD/

/0/ /0/ /F/ /1/

/DA/ /0/ /07

This sequence resets the decimal mode flag in the Status Register prior to the execution of the sample program.

The same key sequence may be inserted prior to the key operations shown on pages 14 and 15 for audio cassette recording and playback. These operations will not be performed correctly if the decimal mode is in effect.

In general, whenever a program is to be executed in response to the $\lceil \overline{GO} \rceil$ key, the programmer should insure that the correct arithmetic mode has been set in the status register (00F1) prior to program execution.