- THE WOFFORD CONNECTION -

Wofford College Computer Center   Spartanburg, South Carolina

Interim

The big news this month is the Interim. A few individuals are mak-
ing use of the terminal in their projects, but the big users are the 23
students in the project on Computer Concepts and Uses. This project in-
cludes programming instruction and the students seem to be keeping the
terminal busy day and night. This heavy usage was predictable and, for
January only, a second (off-line) teletype was installed. Bill Rudisill
saved considerable expense by bringing the unit from Charlotte.

Chandler Saves the Day.

"Skip" Chandler of SREB paid Wofford another visit this month because
of his interest in the Interim program. His visit came at an opportune
time (6-8 Jan) since he was able to take over most of the teaching of
BASIC while Dr. Olds was home with "flu Manchu." He has taught this mater
ial many times and Wofford was lucky to have him to get the project along.

New SET Statement.

Some extensions to Call-A-Computer's BII (Basic Interim Improvement
or "Basic two") language were announced this month. An important one is a
SET command which gives some of the formatting flexibility of FORTRAN.
This command has the following general form:
      10 SET (Single Letter) = (Expression), (Left Options), (Right Options
      For example:
                        10 SET A = 3.2
                        20 A = 125
                        30 PRINT A
The value of A will be printed with three characters to the left of the
decimal point and two to the right. Leading zeros will not be printed and
trailing zeros will be printed. Subsequent PRINT statements will result
in columns whose decimal points are aligned.

Any legal BASIC expression may be used for the required expression.
The SET statement interprets the result as a number having an integer com-
ponent and a fractional component; i.e., N.M where N determines the number
of character positions to the left of the decimal point, and M determines
the number of character positions to the right.

The expression is evaluated to the tenths position only. If the ex-
pression results in significant figures to the hundreths or beyond, the re
sult is truncated (not rounded) to tenths.

Up to nine significant figures may be printed in any format.

There are four format options pertaining to the left side of the out-
put: Z,S,E,$. Any one, any combination, or all may be used in a single
SET statement.

Z causes leading zeros to be printed.
S eliminates the sign position from the format.
E produces an exponential format such as:

```
10 SET A = 3.4,E
20 A = .1250123
30 PRINT A
```
results in: 125.0.23E-03
$ produces a dollar sign immediately to the left of the output.

There are two format options pertaining to the right side of the output: Z,S. Either or both may be used in a single SET statement.

Z deletes trailing zeros.
S moves the sign to the right side of the output.
(Only minus signs are printed. Plus signs are replaced by a space.)

Any single letter variable may be used in a SET statement. It is not necessary to repeat SET statements for all elements in an array. SET A = N.M will automatically cover all occurrences of any of the variables A, A0- A9, A(1), A(I,J).

The standard BASIC unformatted output will always be obtained if the SET statement is not used. Since SET is an executable statement, formats may be altered during execution. SET A = 0 will result in return to the unformatted condition.

If all variables in a particular program are desired in one format, "SET ALL" will perform this function. Several variables may be given identical formats through execution of the command: "SET A = B = C = D = 5.2"

The SET statement has no effect on variables when they are used in expressions. For example,

```
10 PRINT SQR (A-B)
20 PRINT A+1
```
will result in the standard BASIC unformatted output.

More BII.

Other new statements added to BII this month are:

i. a computed GOSUB
```
10 GOSUB(100, 150,280), K
```

ii. an IF ENDDATA
```
10 IF ENDDATA then 500
```

iii. a computed IF ENDDATA
```
10 IF ENDDATA then (100, 200, 450), K
```