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1. ACME Computer Room Modifications

The ACME Computer room is being altered currently to provide a special area for users and a consulting office. We intend to have the project completed and the consultants moved in by the 1st of June. The user work area will consist of input and output bins, ACME Digital Display, 611 Display, two 2741 terminals, and an IBM keypunch. The consultants' office will provide greater accessibility for users to talk directly with our PL/ACME consultants, while the larger room will provide a centralized area for users to work. The room modification will greatly reduce traffic in the computer area, which will reduce dust and vibration and create a more efficient operation. The front door will be locked and a sign requesting users to enter the room via the work area door will be posted.

2. Keywords on ACME

Users may now have keywords set for their name and project upon written request made to Cindy Miller (TC101). This new feature is an added protection for users having sensitive data in ACME. For names and projects which are not keyword protected, the log-on protocol remains exactly as is. If the name and project are keyword protected the user will be prompted for the keyword after he has entered the project name.

Example

```
NAME? I AM|UNPROTEC|W51
YOU HAVE 73 PROGRAMS AND DATA SETS NAMED I__AM__UNPROTEC.
```

Example

```
NAME? I AM|PROTEC|W51
KEYWORD? ■■■
YOU HAVE 17 PROGRAMS AND DATA SETS NAMED I__AM__PROTEC.
```

Users who have existing keywords may change their keyword at anytime by entering (after a program has been entered) his old keyword first.

Example

```
SET KEYWORD
KEYWORD? ■■■
SET KEYWORD? ■■■■
```

Keywords must consist of exactly three characters -- all characters except backspace and attention are acceptable. The user is given three tries to make the proper keyword response. If he fails to do so at log-on, he is logged off; if he fails after a 'SET KEYWORD' command, an error message is generated. The user must enter exactly three characters as his new keyword -- backspaces are not legitimate characters and are used in the same manner (for correcting typo's) as in the past.

3. New Conversion Program PLA_PL1

A new program has been developed on ACME which will convert PL/ACME programs into PL/1. Presently PL/ACME programs can only be run on the timesharing ACME system. If a user leaves the Medical Center or decides to run his program somewhere other than on ACME, his program must be translated to standard IBM PL/1 or rewritten in another language. The new conversion program PLA_PL1 thus makes PL/ACME a transferable language since PL/1 is a common programming language. Converting a program from PL/ACME to PL/1 may also allow greater convenience in running certain production jobs on large batch-job oriented systems. Documentation of this new program is in ACME Note BER-1. NOTE: The translator requires about 50 pages of core and therefore is quite expensive to run. Dependent upon system load, the program takes 3 to 10 minutes to compile.

4. Tape Zap ... (Copy of article found in SCC Campus Facility Newsletter.)

A recent article in NIU Computer News¹ warns air travelers not to take magnetic tape between the two upright poles of the metal-detecting devices used by airlines to search for guns, etc. The magnetic field set up by such devices acts as a bulk eraser, effectively erasing the tape.

5. Ups and Downs for 1800 Users

Our operating record of 25 crashes within the last 30 days is disconcerting to the ACME user community and staff. Nine of these occurred in one day. The causes can be grouped into three categories:

- a) When a user declares a small number of buffers of a small size such as: buff size = 1, this command may cause a hardware failure. This cause is yet unknown.
- b) Bugs in new communications package between the 360/50 and 1800.
- c) Unknown problem in software or hardware.

The ACME staff is exerting maximum effort to solve our 1800 problems as rapidly as possible.

6. Bug Fixed in ACME Function SUBVEC

Execution of line 6.0 in the following program previously gave a 108 error message.

Caution: The size of array "b" at line 5.0 is calculated from the parameters of the SUBVEC function. Therefore even if the * is changed to a constant, this dimension is overridden by the call and error message 114 is correct.

(Example is shown on next page)

¹Tanya Joyce, Ed., "When You Take a Tape on a Plane", NIU Computer News, Vol. 4, No. 5 (April 21, 1971), p. 2.

Example

```

1.000  testsubv PROCEDURE;
2.000    dcl a(10)init(1,2,3,4,5,6,7,8,9,10);
3.000    do i=1 to 10; call stu(subvec(a,i,10)); end;
4.000 stu:proc(b);
5.000    dcl b(*);
6.000    put data(b(i));
7.000 end stu; end testsubv;
RUN?

```

```

b(1)=    1;
b(2)=    3;
b(3)=    5;
b(4)=    7;
b(5)=    9;

```

● 114: SUBSCRIPT OUT OF DECLARED BOUNDS.
 AT LINE 6.000 IN PROCEDURE testsubv
 ?

7. Truth Tests in PL/ACME

PL/ACME has a limited ability to handle boolean values; that is, variables whose values are either TRUE or FALSE.

ACME considers any non-zero variable or number to be true. Undefined variables (always initialized to -0) and zero are considered false.

The logical functions OR (|) and AND (&) are available.

```

Label 1:  FLOP = ¬ FLOP;
          ⋮
          Program Statements
          ⋮

```

Label 2: If FLOP then go to Label 1;

If FLOP has never been used, its value is -0 and the statements between Label 1 and Label 2 will be executed twice.

An example of a possible use of this type of variable is:

a = b | ¬ c;

TRUTH		TABLE
b	c	a
0	0	1
0	1	0
1	0	1
1	1	1

a = b & ¬ c;

b	c	a
0	0	0
0	1	0
1	0	1
1	1	0

It should be noted that:

If \neg variable then compiles and executes faster than
If variable = 0 then

and that:

If variable then compiles and executes faster than
If variable \neq 0 then