

West Jax 99er News

JAN/FEB 1990

The WEST JAX 99'ERS is a non-profit computer users group for the TI-99/4A Home Computer. NOT affiliated in any way with Texas Instruments. The club's mailing address is PO BOX 176 Orange Park Florida 32067.

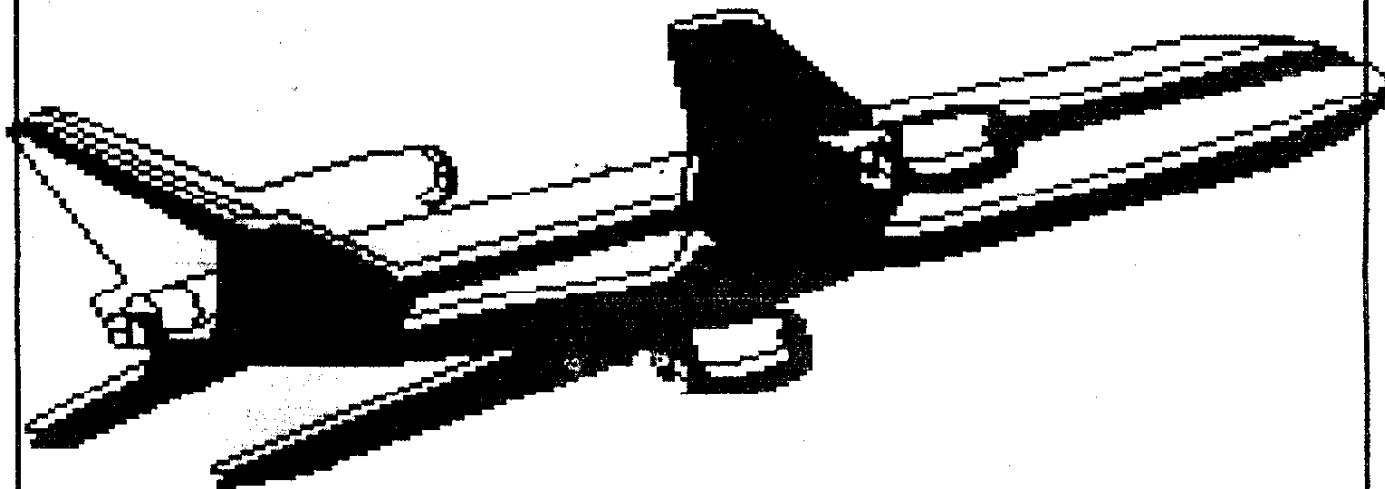
MEETINGS are held on the Second and Fourth Tuesday of each Month in the auditorium of the Webb Library. It is located two lights west of Blanding Boulevard on 103rd Street. The first meeting of the month is the Business meeting with workshop time after adjournment. The second meeting is strictly workshop time.

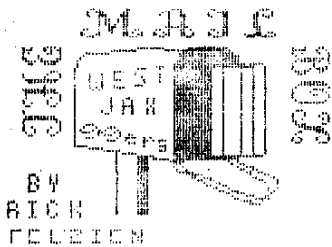
OFFICERS

President...Rick Felzien.....(904) 772-9162
Treasurer...Thomas LeMay.....(904) 282-5220
Librarian.....Zach Ziegler.....(904) 389-2194

For newsletter suggestions and submissions, contact Rick Felzien.

This month we have the usual Mail Box column and the Basic Assembler article. I didn't get my TI-Artist Plus! article finished in time, but will have it in the next newsletter.





- San Fernando 99ers Oct 89
1. TI-Writer Indenting etc.
(Bob Seddon)
 2. Delay Routines in real time
(Paul Scheidmantle)

- The Ottawa 99ers Oct 89
1. Assembly utilities
(David Caron)
 2. Fast ExBasic
(Lucie Dorais)

- West Penn 99ers Oct 89
1. Printers 2
(John Willforth)

- Philadelphia area 99ers Dec 89
1. More Secrets Hidden
(Jack Sughrue)
 2. The software works
(unknown)

- Ottawa 99ers Dec 89
1. TI-Artist Plus!
(Lucie Dorais)
Assembly prog. for Exbasic2
(David Caron)

2. Fast Extended Basic
(Lucie Dorais)

- L.A. 99ers Oct 89
1. Hackers problems
(Chick DeMartti)
 2. The TI-Base bandwagon
(Chick DeMartti)

- NUTMEG 99ers Oct 89
1. Printers 1
(John Willforth)
 2. Kens Korner (TFA tutorial)
(Ken Gilliland)

- New Horizons Sep 89
1. Call Load to Assembly
(Tom Freeman)
 2. SysTex program hybridixation
(Barry Boone)

- Spirit of 99 Nov 89
1. TI-Artist plus!
(Ken Marshall & Dick Beery)

ATTENTION

There are two fine authors that I would like to call your attention to at this time if you have not yet noticed their work.

Ken Gilliland writes Kens Korner in the NUTMEG Newsletter which is a Printers Prentice tutorial

Bill Gaskill writes 4/A Talk in the FRONT RANGER which is all about things TI even trivia type information.

Both are series type articles and are worthy of your attention.

THE BASIC ASSEMBLER #13 By Steve Peacock

GOSUB WITH RETURN

This month we will see how to use a gosub with return. The program sets up some data and messages to print at the start. After this the key scan is used (KSCAN). In the main loop we check first to see if a key is pressed. This is done by compare ones corresponding, (COC). Hex 837C is the status byte. If a key has been pressed then bit 2 is set. If no key pressed it is not set. This status byte is compared to >2000 (00100000 d). This is like the basic coding
150 CALL KEY(O,K,S)::IF S=0 THEN 150.

If a key has been pressed then put the ASCII code in register one. A comparison is then made, ex. CI R1,49. If register 1 does not equal 49 then go to the next comparison, if equal then branch and load to the subprogram.

If any key pressed, that has not been set up, to compare, then go back to the main loop. After a valid key press is detected the program goes to the proper place and execute the subprogram. It will then return using the RT command.

The coding of this months Basic Assembler can ONLY be used if you DO NOT auto run your program!

```
100 REM PROGRAM BA13B==>Basic Assembler #13 BASIC Version
110 REM GOSUB WITH RETURN
120 REM (C)1986 S. PEACOCK
130 REM YOU MAY WANT A 'CALL CLEAR' HERE
140 MAIN$="PRESS KEY 1, 2, OR 3"
150 MSG1$="THIS IS #1 SUB-PROGRAM"
160 MSG2$="THIS IS #2 SUB-PROGRAM"
170 MSG3$="THIS IS #3 SUB-PROGRAM"
180 DISPLAY AT(2,4):MAIN$
190 CALL KEY(O,K,S)
200 IF S=0 THEN 190
210 IF K=49 THEN GOSUB 250
220 IF K=50 THEN GOSUB 270
230 IF K=51 THEN GOSUB 290
240 GOTO 190
250 DISPLAY AT(5,2):MSG1$
260 RETURN
270 DISPLAY AT(5,2):MSG2$
280 RETURN
290 DISPLAY AT(5,2):MSG3$
300 RETURN
310 END
```

```

*
*PROGRAM BA13A==>Basic Assembler I13 Assembly Version
*GOSUB WITH RETURN
*(C)1986 S. PEACOCK
*

```

```

*****
REF KSCAN.VMBW
DEF START
NOKEY DATA >2000 *DATA TO COMPARE IF NO KEY IS PRESSED
MAIN TEXT 'PRESS KEY 1, 2, OR 3' *THE
MSG1 TEXT 'THIS IS #1 SUB-PROGRAM' *MESSAGE#1
MSG2 TEXT 'THIS IS #2 SUB-PROGRAM' *#2
MSG3 TEXT 'THIS IS #3 SUB-PROGRAM' *PRINT
*****
START LI R0,35 *PRINT MAIN MESSAGE
LI R1,MAIN *AT POSITION 35
LI R2,20 *
BLWP @VMBW *
*****
CLR @>8374 *SET UP KEY SCAN
CLR R0
CLR R1
LOOP BLWP @KSCAN *KEY BOARD SCAN
MOVB @>837C,R1 *>837C IS THE STATUS BYTE. IF A KEY IS PRESSED BIT 2
COC @NOKEY,R1 *IS SET. IT IS COMPARED TO >2000 (00100000b). IF
LIMI 2 *EQUAL A KEY HAS BEEN PRESSED.
LIMI 0
JNE LOOP *IF NOT EQUAL NO KEY PRESSED, GO BACK TO LOOP.
MOV @>8375,R1 *PUT THE ASCII CODE OF THE KEY PRESSED IN REG. 1
*****
CI R1,49 *REG. 1 HAS THE ASCII CODE OF THE PRESSED KEY
*****IT IS COMPARED TO 49 (1)
JNE NEXT1 *IF NOT EQUAL GO TO NEXT COMPARISON
BL @SUB1 *IF EQUAL BRANCH TO SUB1
*****
NEXT1 CI R1,50 *COMPARE TO 50 (2)
JNE NEXT2 *SAME AS ABOVE
BL @SUB2
*****
NEXT2 CI R1,51 *COMPARE TO 51 (3)
JNE NEXT3 *SAME AS ABOVE
BL @SUB3
NEXT3 JMP LOOP *IF ANY KEY OTHER THAN 1, 2, OR 3 PRESSED, GO BACK
*****TO LOOP

```

***THE BELOW SUBPROGRAMS WILL PRINT A MESSAGE ON THE SCREEN. ANY OTHER
***SUBPROGRAM COULD HAVE BEEN USED, MUSIC, CHECK FOR COLISION OF SPRITES ETC.

SUB1 LI R0,129 *'GOSUB #1'
LI R1,MESG1
LI R2,22
BLWP @VMBW
CLR R0 *SETS UP TO RETURN
MOVB R0,@>837C *PUTS STATUS BYTE IN REG. 0
RT *RETURN

*THE ABOVE THREE LINES ARE USED AS A RETURN.

SUB2 LI R0,129 *'GOSUB #2'
LI R1,MESG2
LI R2,22
BLWP @VMBW
CLR R0 *SAME
MOVB R0,@>837C
RT

SUB3 LI R0,129 *'GOSUB #3'
LI R1,MESG3
LI R2,22
BLWP @VMBW
CLR R0 *SAME
MOVB R0,@>837C
RT

THE ABOVE GOSUB/RETURN CAN ONLY BE USED IF YOU DO NOT AUTO RUN YOUR PROGRAM

END