

```

* This example transfers control from a code segment running
* using the main stack to one running using the aux stack.
*
1  XFERALT  PHP                                ;preserve interrupt status in A
2          PLA
3          SEI                                ;disable interrupts
4          TSX                                ;save main stack pointer at $100
5          STA      SETALTZP                    ;and swap zero pages
6          STX      $100
7          LDX      $101                        ;now restore aux stack pointer
8          TXS
9          PHA                                ;and interrupt status
10         PLP
11         LDA      #DESTL                      ;set destination address
12         STA      $3ED
13         LDA      #DESTH
14         STA      $3EE
15         SEC/CLC                              ;set direction of transfer
16         BIT      RTS                        ;V=1 for alt zero page(RTS=$60)
17         JMP      XFER                        ;do transfer
To transfer control the other direction, change the following lines
5         STX      $101
6         LDX      $100
7         STA      SETSTDZP
16        CLV                                ;V=0 for main zp

```

The user's interrupt handler at \$3FE

If your program has an interrupt handler, it must place the entry address of that handler at \$03FE. After it sets the machine to a standard state, the Iie's internal interrupt handler transfers control to the routine whose address is in the vector at \$03FE.

It is very important for a peripheral card to place its slot address in MSLOT to support interrupts whenever it is executing code in its \$C800 space. Whenever the \$C3 page is referenced, the Iie automatically switches in its own \$C800 ROM space. When the interrupt handler finishes, it restores the \$C800 space to the original owner using MSLOT (\$07F8).

Warning

Be careful to install interrupt handlers according to the rules of the operating system that you are using. Placing the address of your program's interrupt handler at \$03FE disconnects the operating system's interrupt handler.
