```
                    ┌─────────────────┐
                    │  S T A C K      │
                    └─────────────────┘
   ┌───────┐                 │
   │ STACK │─────────────→   │
   │  +1   │                 ↓
   └───────┘           SP := SP - 3

   ┌───────┐                 │
   │ STACK │                 │
   │  +    │─────────────→   │
   │  4    │                 ↓
   └───────┘         W6 := octal control word

   ┌───────┐                 │
   │ INTER │─────────────→   │
   └───────┘                 ↓
                        W5 := -3

  ┌───────┐                  │
  │ OUTTER│──────────────→   │
  └───────┘        │         ↓
            │            Shift W6 left 3 places
            │            placing leading octal
            │            digit in Acc
            │                 │
            │                 ↓
            │               zero? ──── yes ──┐
            │                 │ no           │
            │                 ↓              │
            │        bring word to be stacked to Acc. │
            │                 │←─────────────┘
            │                 ↓
            │          write Acc to stack
            │                 │
            │                 ↓
            │  no      end of set
            └───────←     of 3 ?
                             │ yes
                             ↓
                  TS := top of stack in left most
                            8 bits
                             │
                             ↓
                         overflow? ──── yes ──┐
                             │ no             │
  ┌───────┐                  ↓            FAIL 83
  │ INTER │          2 entries to
  └───────┘          be made?.
      ↑←─────────────────┘
                             │ no
                             ↓
                          EXIT
```

Overwrites top
of stack with
new entry

Normal Entry

STACK CALLED FROM

(AL MOST EVERYWHERE)

(5 5)