

516-8  
CC  
12/16/68

### DISK HOLE FORMAT

When a segment is read from disk and expands or contracts while in core then it can no longer be written on disk in its old slot (or a gap is left if it has contracted). A new slot on disk must be allocated and the old slot is then marked as a hole. These holes will be collected and reused when there is no longer any space at the top of the disk to allocate.

#### HOLE FORMAT

CONVENTION  
INC. DISK ADDR.

SECTOR  
BOUNDARY

SEGMENT TYPE  
= 0 INDICATES  
A HOLE

SEG. TYPE = 0 (6)	HOLE SIZE (11)
	0
	0
	CHECK SUM

HOLE SIZE IS  
NO. OF DISK SECTORS  
(8 WORDS/SECTOR)

CHECK SUM IS 2'S  
COMPLIMENT SUM + 1

B-8  
C.C.  
6/20/68

## DISK HOLE FORMAT

WHEN A SEGMENT IS READ FROM DISK AND EXPANDS OR CONTRACTS WHILE IN CORE THEN IT CAN NO LONGER BE WRITTEN ON DISK IN ITS OLD SLOT (OR A GAP IS LEFT IF IT HAS CONTRACTED). A NEW SLOT ON DISK MUST BE ALLOCATED ~~OLD~~ AND THE OLD SLOT IS THEN MARKED AS A HOLE. THESE HOLES WILL BE COLLECTED AND REUSED WHEN THERE IS NO LONGER ANY SPACE AT THE TOP OF THE DISK TO ALLOCATE.

### HOLE FORMAT

SECTOR  
BDY

ID = 0
SIZE
0
CHECK SUM

~~SIZE~~  
INDICATES A  
HOLE

SIZE ALLOWS  
SKIPPING OVER  
THE HOLE TO FIND  
NEXT SEGMENT

CONVENTION  
INC. DISK ADDR.