

I wrote this in pencil on page 21 of "Master copy" of CRMS APL Processor Reference Manual". It could have been written during 1972, or perhaps 1973-1974, in response to an inquiry from Chuck Grant. [Paul McJones, 1 June 2025]

Note compaction could be done using several passes:

1. Scan array storage space linearly, calculating new addresses for all reserved blocks. [Store this new address in the left half of the first (allocator's header) word of the reserved block.]
2. Scan global variables & stack, updating all array descriptors to point to new address of object.
3. Scan array storage again, moving all reserved blocks to new positions & resetting THISFREE, PREVFREE, & SLOP fields (note SLOP $\equiv$ 0 as result of compaction).
4. Form single free block, and reset ROVER.

This could be added to the MAKE() microcode (see Appendix III), but it's not clear it should be in microcode, since if it fails, the software must be called to get more space.