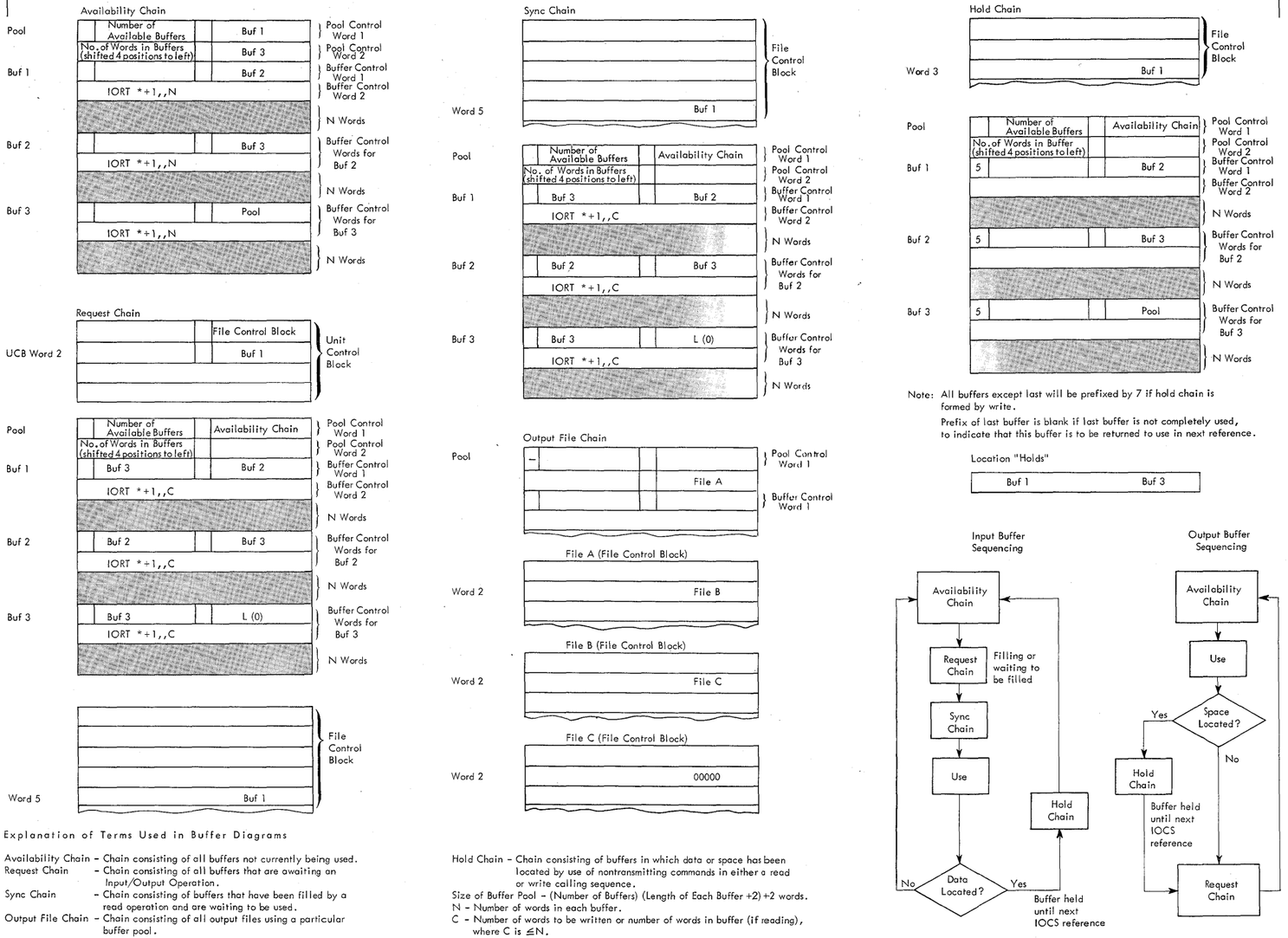
BUFFER POOLS AND CHAINS

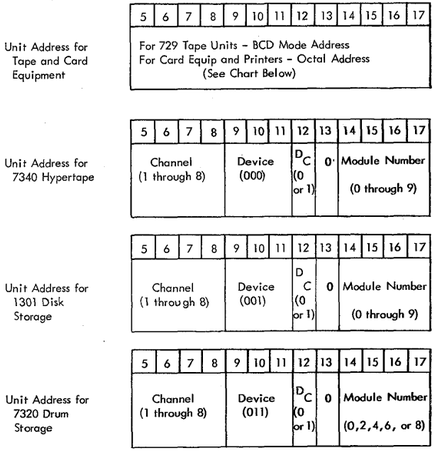


Explanation of Terms Used in Buffer Diagrams

Availability Chain – Chain consisting of all buffers not currently being used.
Request Chain – Chain consisting of all buffers that are awaiting an Input/Output Operation.
Sync Chain – Chain consisting of buffers that have been filled by a read operation and are waiting to be used.
Output File Chain – Chain consisting of all output files using a particular buffer pool.

Hold Chain – Chain consisting of buffers in which data or space has been located by use of nontransmitting commands in either a read or write calling sequence.
Size of Buffer Pool – (Number of Buffers) (Length of Each Buffer +2) +2 words.
N – Number of words in each buffer.
C – Number of words to be written or number of words in buffer (if reading), where C is ≤N.

FORMAT OF UNIT ADDRESSES IN UCB'S



Input/Output Device Addresses

Magnetic Tape Units

Channel	BCD Address
A	01201 to 01212
B	02201 to 02212
C	03201 to 03212
D	04201 to 04212
E	05201 to 05212
F	06201 to 06212
G	07201 to 07212
H	10201 to 10212

Printers

Channel	Octal Address
A	01361
B	02361
C	03361
D	04361
E	05361
F	06361
G	07361
H	10361

Card Readers

Channel	Octal Address
A	01321
B	02321
C	03321
D	04321
E	05321
F	06321
G	07321
H	10321

Card Punches

Channel	Octal Address
A	01341
B	02341
C	03341
D	04341
E	05341
F	06341
G	07341
H	10341

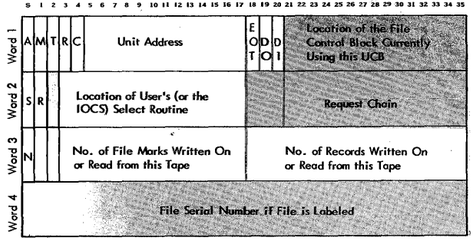
Explanation of Codes Used in Unit Control Blocks

A Availability Flag
AF Seek Request Flag
B Select Mode Flag (Normal or Backward)
C Channel Type
DI Tape Density at Current Positions
DO Tape Density at Load Point
EOT End-of-Tape Flag
EWA End Warning Area Flag
M Attachment Flag
N Noise Record Flag (reading only)
PF Seek Issued Flag
R In Word 1 of a UCB – Reserve Status Flag
In Word 2 of a Tape UCB – Permanent Redundancy Message Control
S Select Type (Read or Write)
T In Word 1 of a Tape UCB – Tape Unit Type
In Word 1 of a Disk UCB – File Control Unit Type
In Word 4 of a Disk UCB – Track Flag

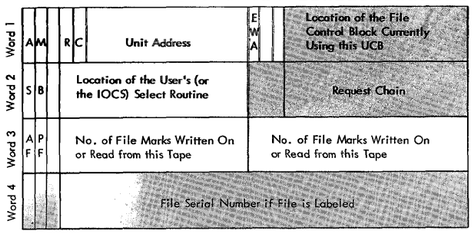
IBM 7090/7094 IOCS Reference Card

Form Number X28-6380
Printed in U.S.A.

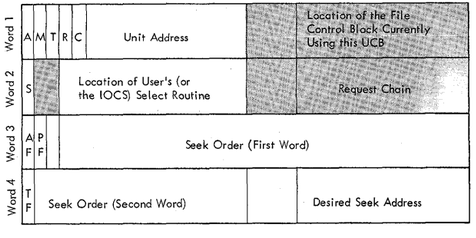
UCB for 729 Tape and Card Equipment

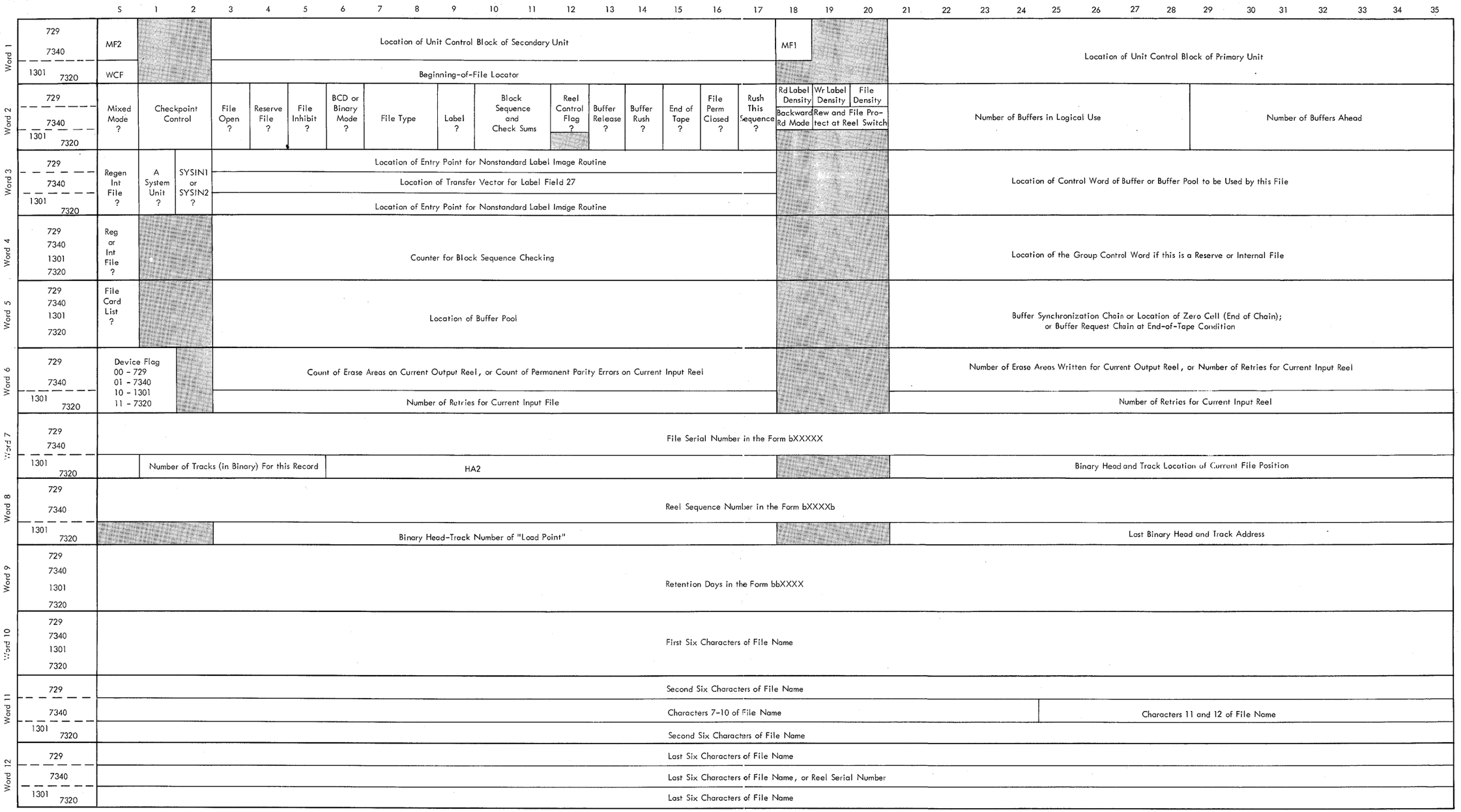


UCB for 7340 Hypertape Units



UCB for 1301 Disk Storage and 7320 Drum Storage Units





FORMAT OF THE FILE CONTROL BLOCK

IBM
International Business Machines Corporation
Data Processing Division
112 East Post Road, White Plains, N.Y. 10601