

CYLMAX : n of cyl / disk
 TRKMAX : n of tracks / cyl
 SECMAX : n of sect / track
 DUPAD : disk physical address

CF SEEK0 op 9E6

CIO with BDU = $\boxed{01000077}$ → seek zero

ABL CHECK op 9F2

CF INIA72 op 1A38

CIO with BDU = $\boxed{01}$ → write

NBRSEC = physical sect. nbr

CF SEEK op 1A0C

CIO with BDU = $\boxed{X|X|X|X|110}$ → seek forward

CF READ op BF8

CIO with BDU = $\boxed{X|X|X|X|100}$ → read

IPLD → sect 3 = soft sect 1
 → sect 6 = soft sect 2

sector n = $\frac{2 \times \text{F7SE}}{\text{head NBR} = \text{track NBR}}$
 sector number in track

112 = 79

49 TST \ A7,7

47 CIO \ A7,0,17

STATUS

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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CIR# = 0

DKBΦΦT

PREMARK

5 = on cylinder?
 6 = seek error?

$\frac{400}{256}$

256

744

$\frac{400}{}$

144

728

$\frac{16}{}$

717007/0

190

19A

200

470

→ 79A

470

→ 470

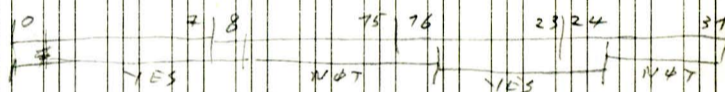
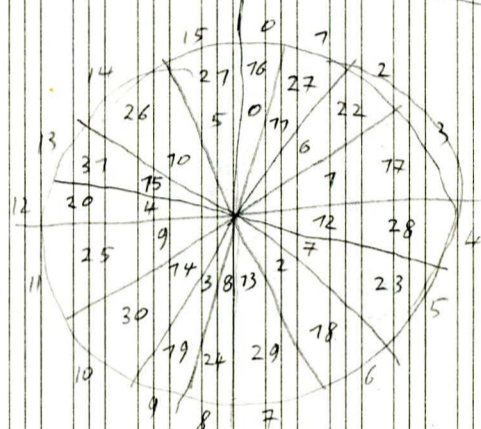
470

256

744

70

$\frac{470}{}$



205

32

400

609

$\frac{649}{}$

472

79A

$\frac{600}{}$

CF RATH,AX (seek zero) at 17A

A9 BYSE
 A2 SEEO

0007	0070	0017	0100	0701
007	0700	0710	7000	7070
0017	0710	7007	7000	7777
0170	0770	7000	7007	7070
7000	7070	0000	0070	0770
0070	0707	7000	7077	7770
7700	7070	7770	7770	7770
7000	0770	7070	7707	

Key / Phys

0	0
1	3
2	6
3	9
4	12
5	15
6	2
7	5
8	8
9	11
10	14
11	1
12	4
13	7
14	10
15	13

$ph = \log + \log \times 2$

$ph = (\log \times 3) \text{ mod } 16$

PREMRK

READING

<CHECK> ①

A7 ← W:SAV1
 SLL3 A7
 A7 ⇒ BITAB, A77

seek zero
 A73 ⇒ NBRCYL
 NBRTRK
 NBRSEC
 NBRGRN
 IDENT
 A77 ← 0
 W:SAV1

<LDBITA>
 A7 ← BITAB, A77
 W:SAV1 + 2

<TSTCYL>
 A7 ← NBRCYL

≠ CYLMAX A7 = CYLMAX

A7 ← NBRTRK

= TRKMAX A7 ≠ TRKMAX

A73 ⇒ NBRTRK
 NBRSEC
 NBRCYL + 7
 IDENT + 7

A7 ← NBRSEC

= SECMAX A7 ≠ SECMAX

A7 ← NBRTRK + 1

<IMTRK3>

A3 ← NBRSEC.17

≠ 0 A3 = 0

ML2 W:SAV1
 DLL1
 MS2 W:SAV1

A7.1

NBRGRN + 7
 A7 ← NBRGRN

≠ 75 A7 = 75

A73 ⇒ NBRGRN
 A7 ← W:SAV1
 BITAB, A77
 A77 + 2
 A73 ⇒ W:SAV1
 A72 ← BITAB, A77
 W:SAV1 + 2

<LDA3>

A3 ← NBRSEC
 (A3 + 10) - 10
 A3 ⇒ NBRSEC

A72 ← 16
 A7 ← NBRSEC

76 (A7 < 24) or (A7 < 8) A7 > 24 or (A7 < 8)

<LIM>
 NBRGRN + 7
 DLL1 W:SAV1 + W + 2

<CW76>
 A7 ← NBRSEC

776 A7 < 76

<ZER7A> A73 ⇒ NBRSEC

A7 ← 76
 NBRSEC

<ID>

<ID>

A7 ← 18000
 ± S ⇒ IDENT

<LWRT2>

CALL WRITE from BUFDISK

<CIP9>

A7 ← SST
 NBRSEC + 1
 A72 - 1

≠ 0 A72 = 0

<BITAL4>

W:SAV1 - /FFFC

NBDTRK + 1

<BITAL3>

②

<ENDCHK>

'END OF CHECK'
 seek zero
 A73 ⇒ NBRTRK
 NBRSEC
 IDENT
 BITAB = /7FFF

<LWRT3>

WRITE BUFDISK on sect 0
 A6 ← 3
 NBRSEC
 A6 ← IPLDD
 LDBDSK + 2
 WRITE IPLDD on sect 3

A6 ← 6
 NBRSEC
 A6 ← SEC2
 LDBDSK + 2
 WRITE SECL on sect 6

A6 ← BUFDISK
 LDBDSK + 2
 A3 ← NBDTRK
 'Nbr of End Tracks = (A3)'

reset Dev Address in all I/O instr.

MES30

'RUN AGAIN'
 NBR → REP

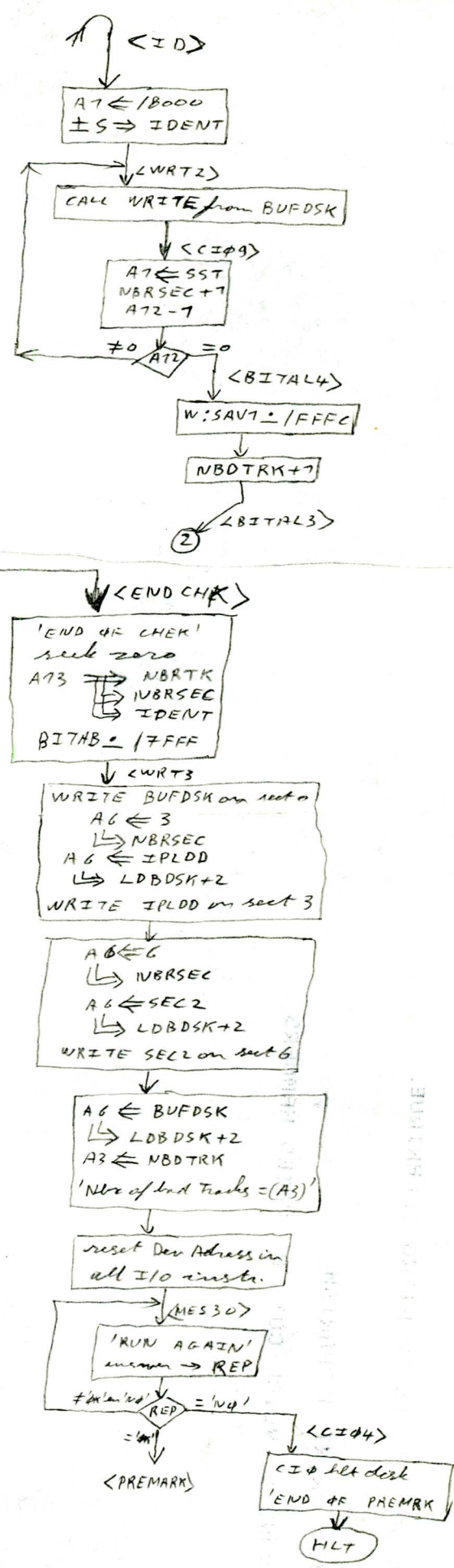
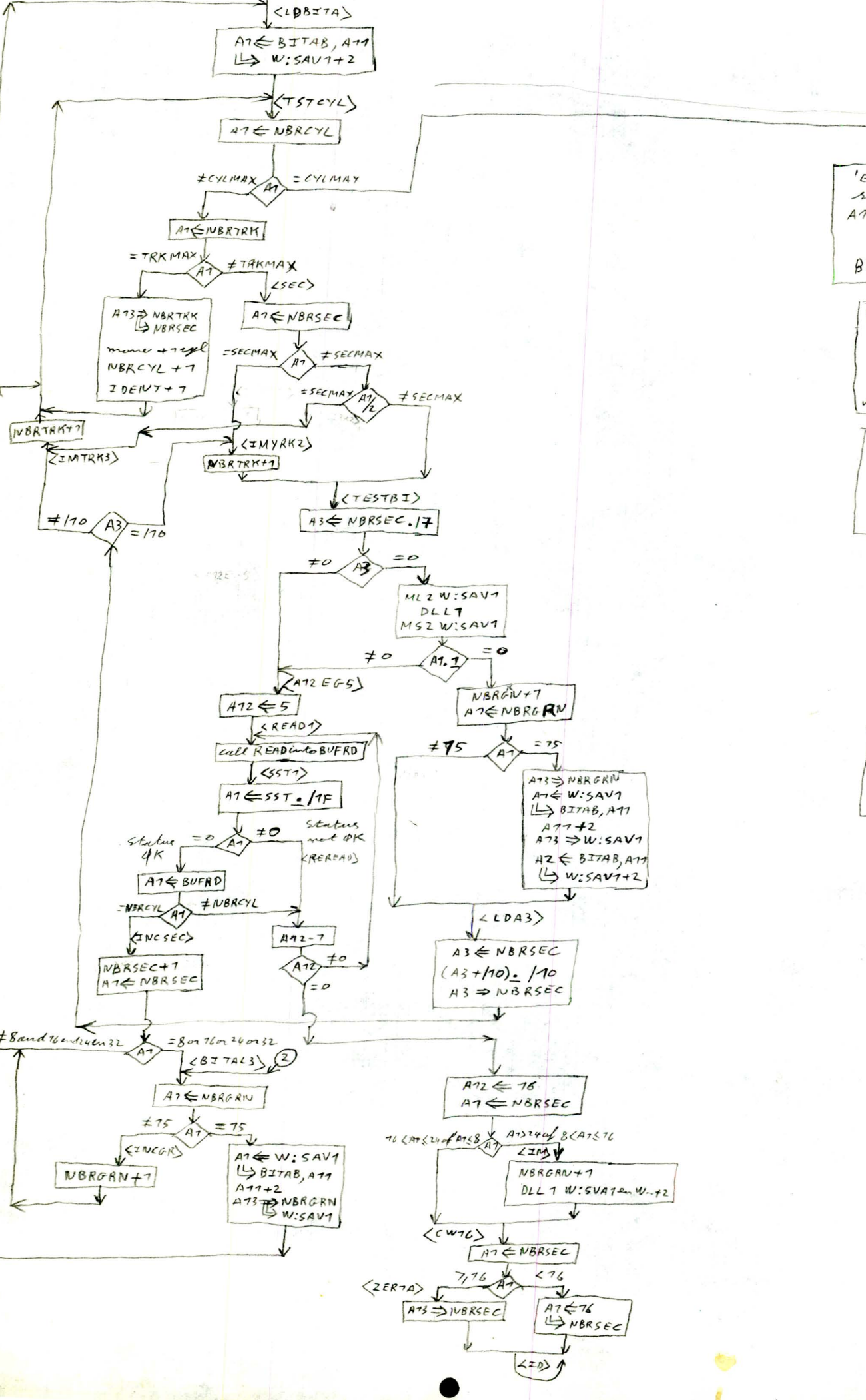
≠ 104 REP = 104

<PREMRK>

<CIP4>

CIP hit disk
 'END OF PREMRK'

HLT



PREMRK

A73 = 0
 A74 = W:SAV7+70

CYL MAX = nbr of cyl. / disk (105)
 TRK MAX = nbr of tracks / cylinder (2)
 SEC MAX = nbr of sectors / track (76)
 DUP AD = disk phys addr. (02)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					RDY	SEER				DISK	PRG	INC	DATA	THIR	WRP
					CYL	ERR				NBR	ERR	LGTH	FAULT		

init vol label

8 char
 'LABEL=' ⇒ 8 char → LABEL+0
 'DATE=' ⇒ 8 char → DATE+0
 'PACK NBR=' ⇒ 3 char → PAC NBR+0

WAITING

