1 Test Programs, Flow charts, questions + Practice jobs

1-1 Testprograms

The following test programs can be used

① DISCT 1
② DISCT 2
③ DISCT 3
④ DISCT 4
⑤ DISCT 5

DISCT1 : Fills a whole disc pack with data and checks it afterwards
can be used e.g Installation X1210, D.C.U
C.U connected to Multiplex Channel

DISCT2 : Same as DISCT1 only C.U connected to D.M.A

DISCT3 : Can be used for checking heads X1210

Program gives RT2 SEEK
Then SEEK to a certain track : indicated by difference

Loop WRITE or read a certain number of words with a certain pattern on sector 0
Triggering is possible on the signal I.P.

DISCT4 : This program writes or reads a certain pattern on a track
Writing must be stopped via preset eg on/01AA (Depending on base address) not via INST because you might get a throughput error because you stop in the middle of multiplex exchange (multiplex not finished)

This program is very useful for trouble shooting Read / WRITE

DISCT5 : This program is used to test SEEK operation of X1210

The part with one difference - number in SEEK command can be used for trouble-shooting

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Premark This program is used to initialise a disc pack when it has never been used (by software)

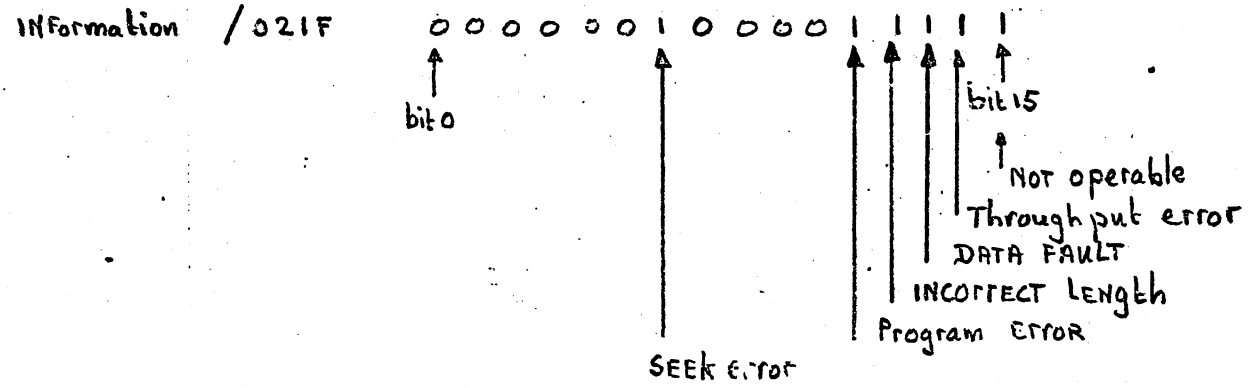
The pack is written with identifiers + IPL
After writing identifiers the identifiers are checked
Number of bad tracks indicated.

Identifier used to check if SEEK executed correct
Identifier contains track, sector number

General for all disc test programs :
The status is checked with a T.M. instruction

1-2 Program example :

```
INterrupt routine    SST   A7, DISC
                     LDKL  A6, /021F
                     TM    A7, A6
                     RF (1)  ERROR
```



by means of a TM instruction we can check whether one or more "FAULT bits" are set.

Example: IF a read error occurs and you want to loop for measuring you can change bit 13 into 0

Instead of LDKL A6, /021F you must fill in
LDKL A6, /021B

1-3 Trouble shooting

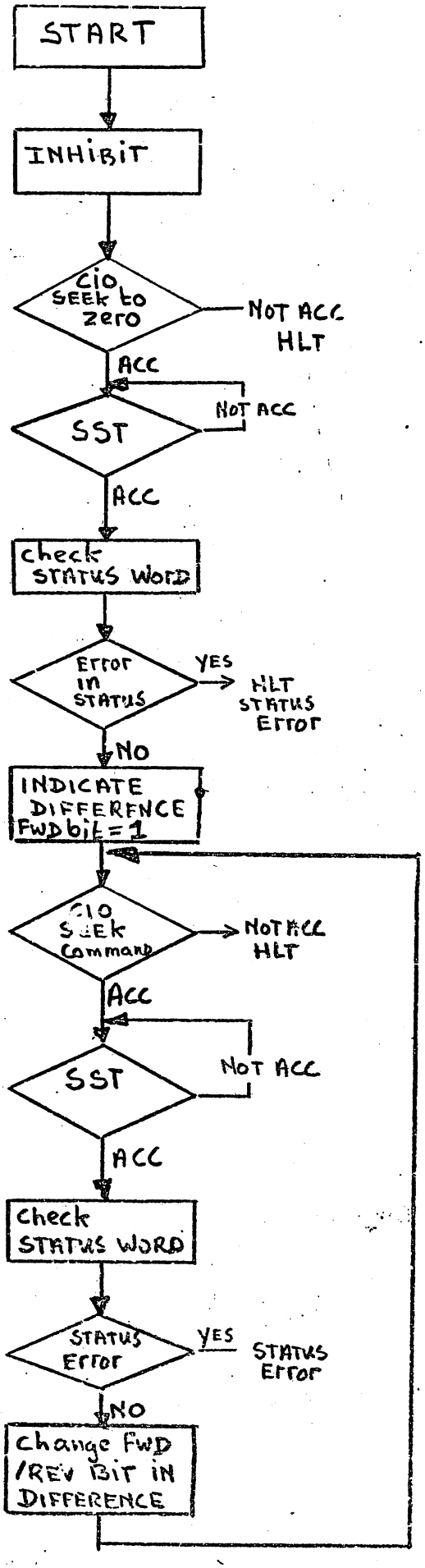
Suppose C.U gives data FAULT FST13.
to be sure that you get FST13 because of Reading,
WRITING must be checked
A fast check on writing can be done by checking (small number of words)

Positions RWS
BR signal
SERIAYA
ISERIA 15

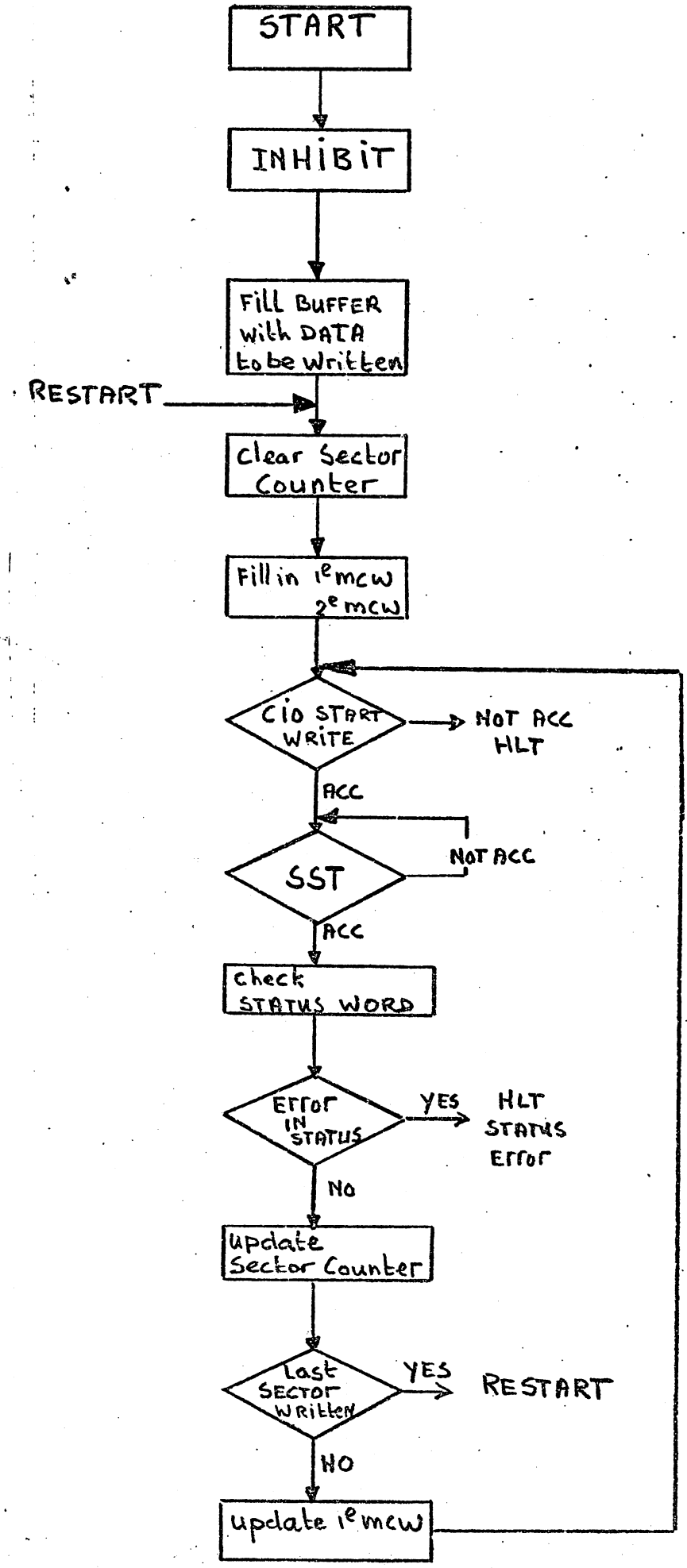
NOTE : positions of RWS can be useful as trigger signal

1-4

Flowchart SEEK



Flowchart WRITE



Flowchart - READ

