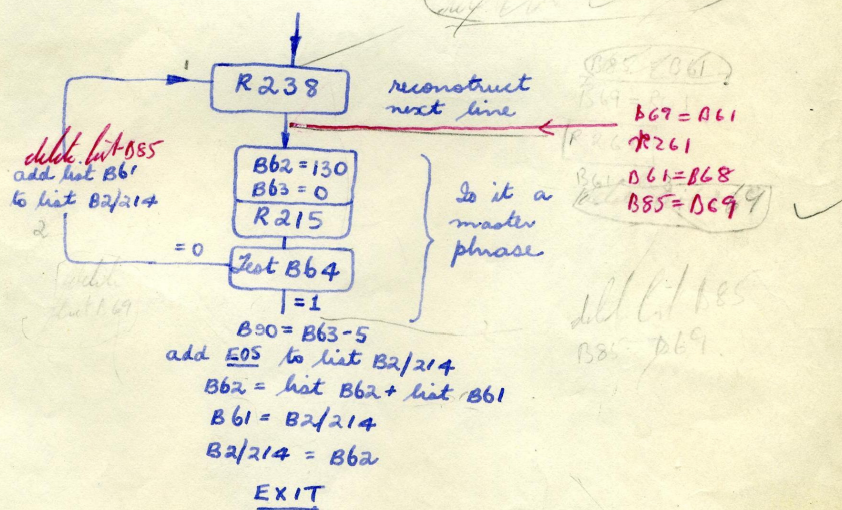


R 213 READ NEXT SECTION ROUTINE

Function : This routine is used as a subroutine by the routine routine, phrase routine etc. to pick in the whole of the section of the primary material.

Input Parameter : B2/214 = chain containing 1st material of section

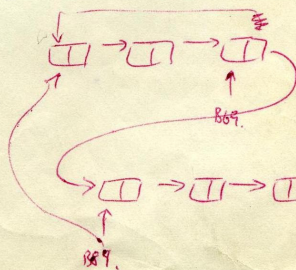
Output Parameters : B2/214 = chain containing next line of material after the end of the previous section
B61 = next section



$$B91 = (B69 + 1)$$

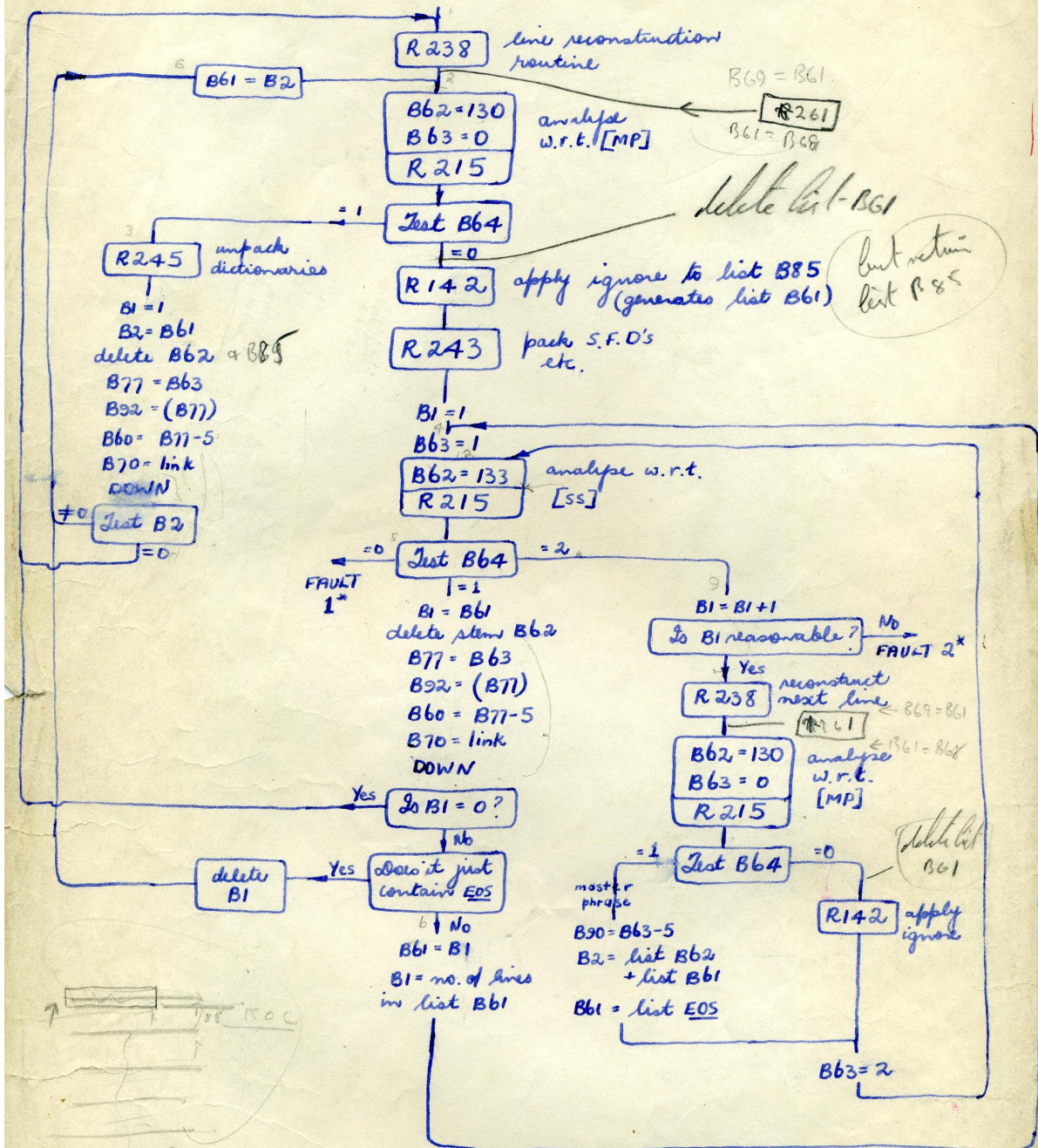
$$(B69 + 1) = B89$$

$$B89 = B91$$



15/9/61

R 214 MASTER ROUTINE

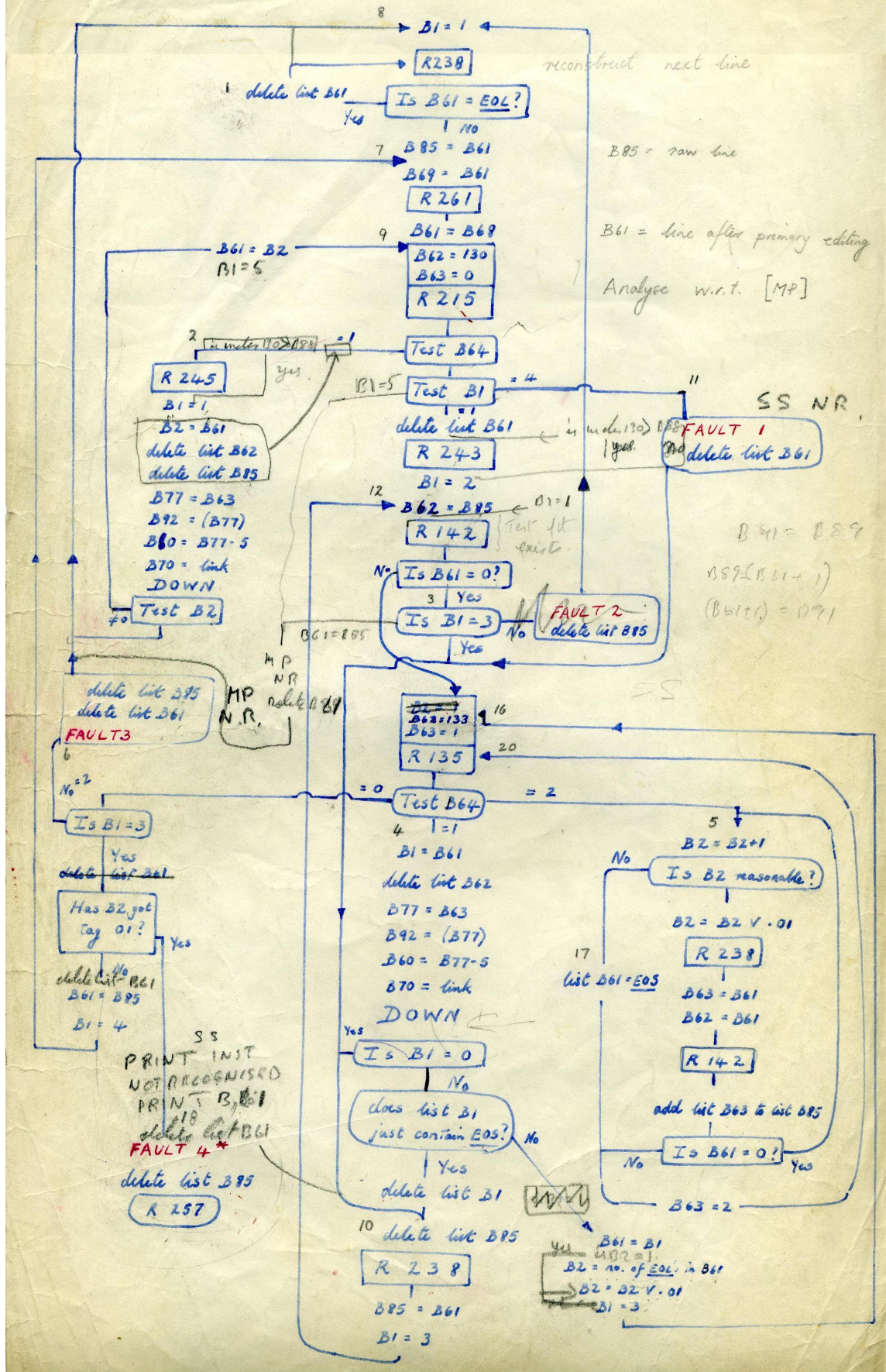


CARTION
ROUTINE

R 214

MASTER

ROUTINE



R 218 PHRASE ROUTINE

Function : To process a phrase definition and then pack this definition away in the record store. If the key words are completed an attempt is made to complete those of all other classes which are not yet complete. Otherwise the class itself is added to the list of incomplete classes.

Input parameter : B61 = address of the chain to be processed.

Output parameter :

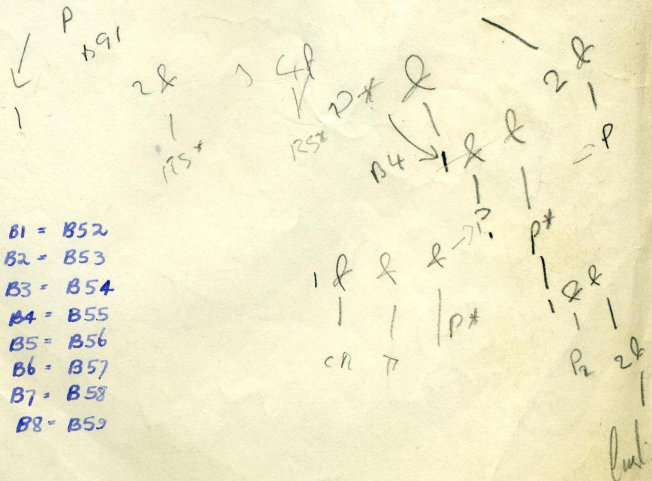
Working B-lines :

B1 = addr. of dict. of the phrase
 B2 = category numbers.
 B3 = cat. no. increment and "but not" switch
 B4 = addr. of A.R. of [phrase]
 B5 = addr. of A.R. of [phrase]
 B6 = cat. no. of [π]
 B7 = temporary storage
 B8 = M word

Notes : 1. If the phrase has (CR) in the beginning, then the appropriate digit (24) is set in M.

For basic coding

B1 = B52
 B2 = B53
 B3 = B54
 B4 = B55
 B5 = B56
 B6 = B57
 B7 = B58
 B8 = B59



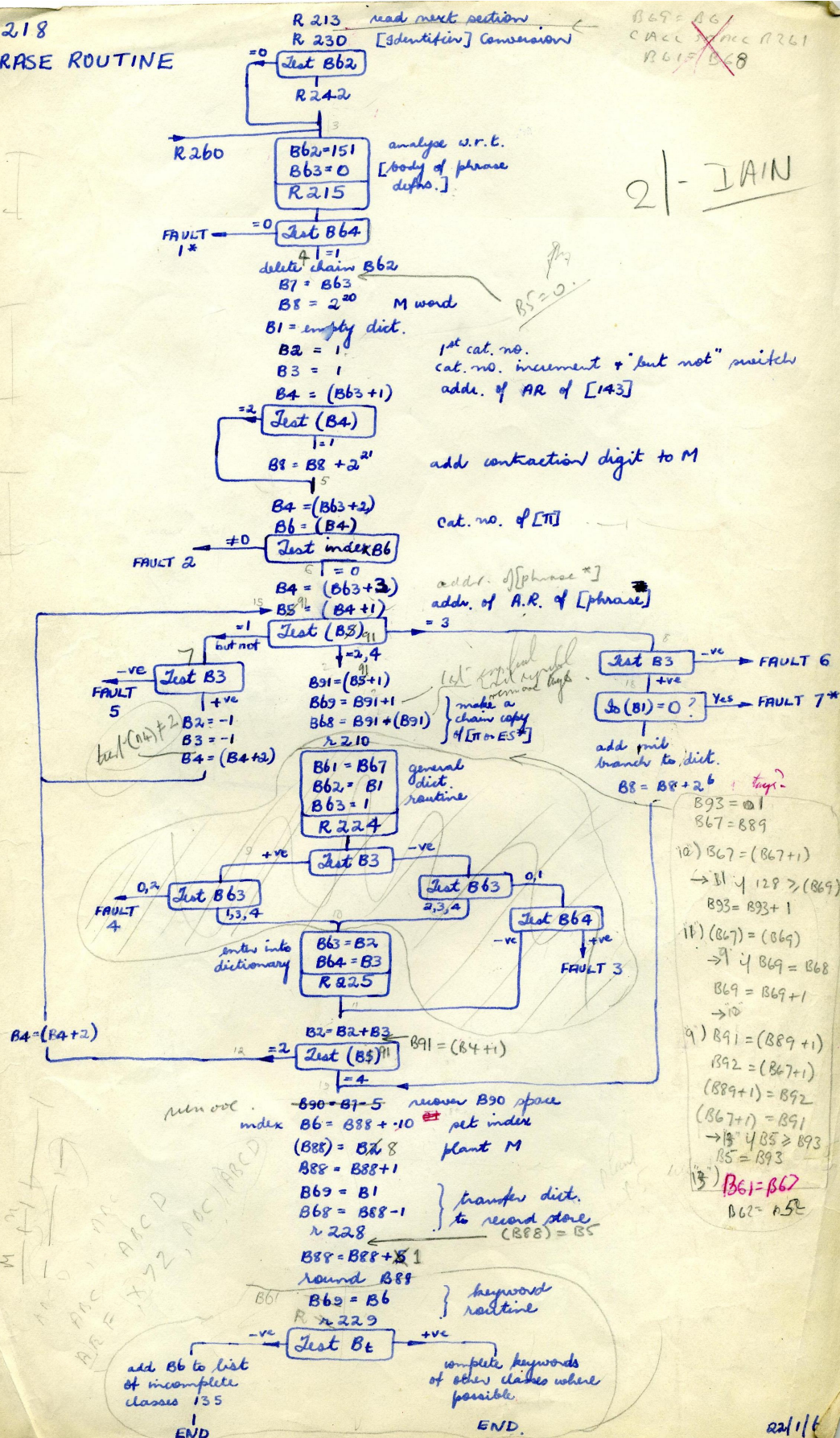
13/9/61

R 218
PHRASE ROUTINE

R 213 read next section
R 230 [Identify] Conversion

~~B69 = AG~~
~~CAC 5000 1761~~
~~B615 568~~

21 - TRAIN



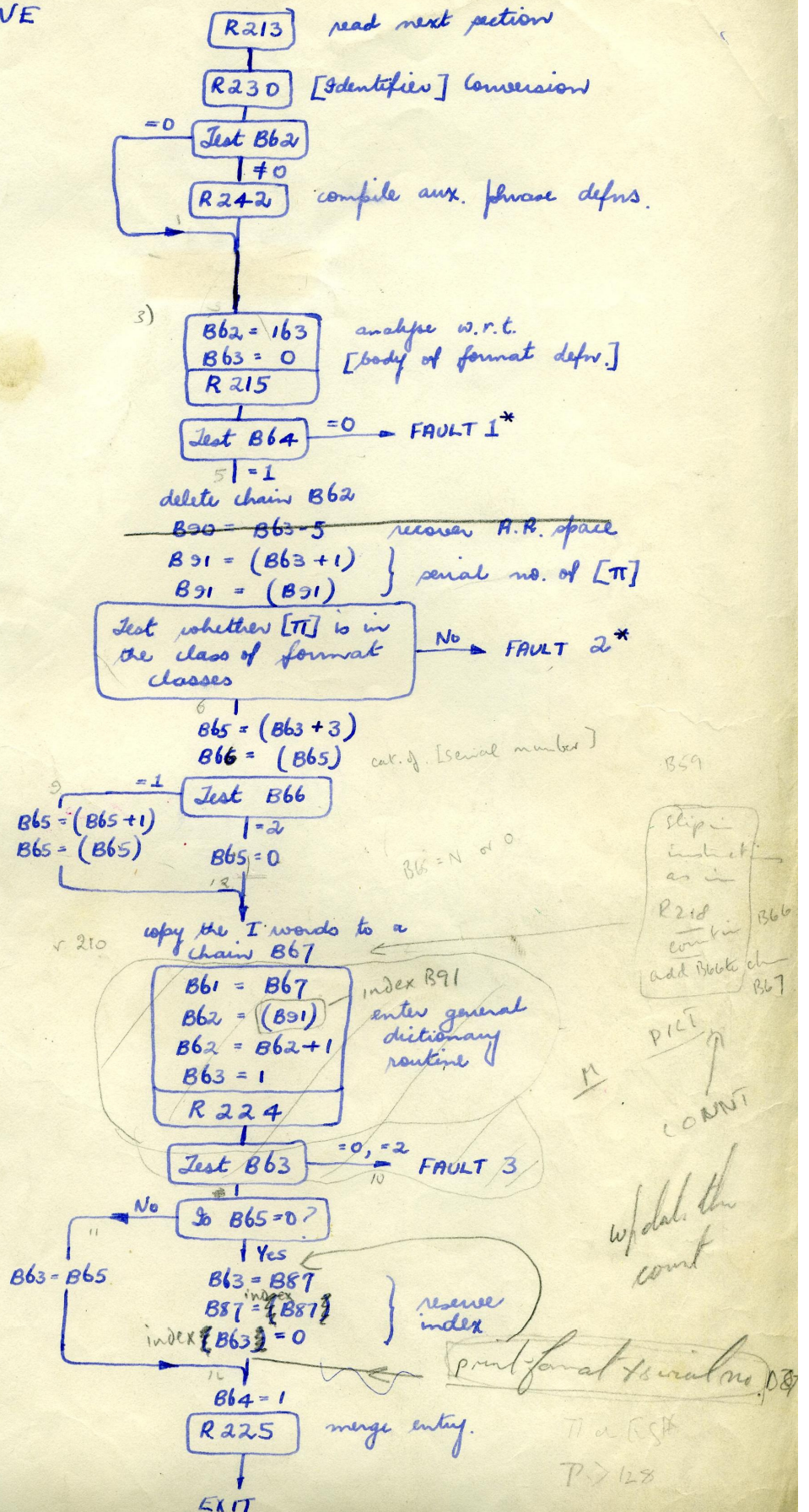
22/1/6

Function : To process a statement format, testing whether the class of format is in the list 129. If it is, then the routine tests that the format is not already in the corresponding format dictionary (nor is a stem of some existing entry), and enters it as the last entry. It also reserves an index position for the corresponding compiling routine. It is possible to actually name the index to be used, by putting its number preceded by a comma after the format. It is assumed that this index position has previously been reserved.

Input parameter : B61 = chain of input material.

Notes 1. list 129 is a conventional list of 10 items.

R 220
FORMAT ROUTINE



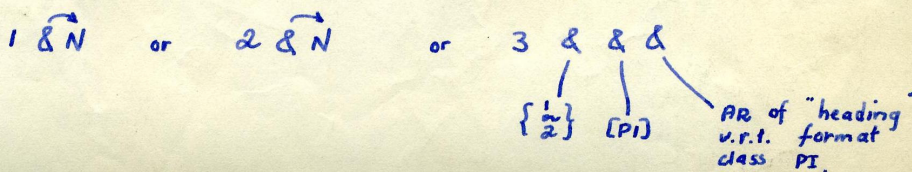
Function : To process a routine, either compiling or ordinary, converting, where possible, to machine instructions, and keeping a directory of labels and relative control numbers so that the routine is relocatable in the store. A list 256 is set up of the serial numbers of the routines and their corresponding compiling versions. R253 is used as a subroutine in the compilation of the body of a routine.

Input Parameter : B61 = loc. of input material

Working B-lines :
 57 B1 = cat. no. of routine heading
 58 B2 = serial no. of the format
 59 B3 = serial no. of the interpretive version if the compiling version is being processed;
 = 0 otherwise

Notes :

1. For jumps that are dynamically constant (e.g. $\rightarrow [N]$ but not $\rightarrow [p]$), the addresses are filled in after the last line has been processed. The instruction planted causes $B127' = B127 + [N] - [0] - 2$ where $[N]$ denotes the c.n. of label N and 0 is the present c.n. This is a relative jump and is therefore store invariant.
2. If the compiling routines find it uneconomical to compile an instruction then B3/253 is set to -1 and control returned to R 253. The instructions are then packed away.
3. The compiling routines must ensure that instructions such as $\rightarrow [\alpha]$ do not occur in "R" routines.
4. Since we have
 $[routine\ heading] = R[N], R[N], [compile\ phase][PI] = [resolved - P]$
 then the A.R.'s are



R 221

ROUTINE ROUTINE

