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1	Mr.A.B.Barnes London
1	Chief Engineers file.

Corrections to report No.K/GD.y.99
"The KDF 9 MULTIPLIER - DIVIDER UNIT PART A"

Report by

J.R.ELLISON

AP

Sheet No.5. first 9 lines should read:-

2   Inspect the least significant (ls) digit of M, and
add M.D. into a third register PP (which initially
contains zero), the number of times specified by the
l.s. digit of M.

3   Shift M and P.P. one place right (l.s), losing the digit
of M just inspected. Store the l.s. digit of P.P. in the
m.s. digit position of M which was left empty when M was
shifted right.
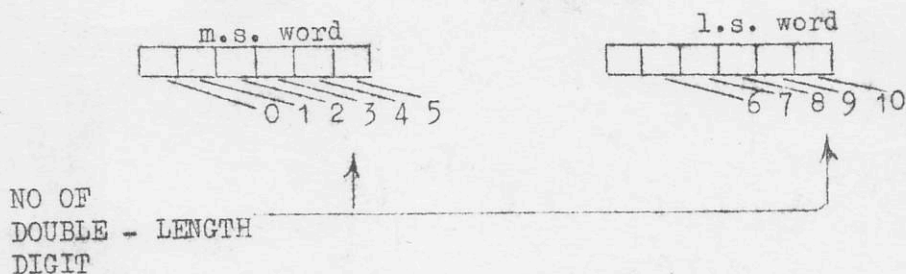
4   Finish when all digits of M have been inspected.

Sheet No.5 Example 2 add arrow below "M DIGIT INSPECTED" as:-

M DIGIT
INSPECTED

↓

M= (203)

Sheet No.10 Para 3 line 6 should read "advantage, because the
repeated additions during"

Sheet 17 upper drawing should be:-

m.s. word   l.s. word

0 1 2 3 4 5   6 7 8 9 10

NO OF
DOUBLE - LENGTH
DIGIT

Sheet No.21 Binary division example at bottom of page should
start:-

0 1 1 1 1 0 ÷ 0 0 0 1 0 0   (30 ÷ 4)

Sheet 25 Para 2 line 7 should read:-

recovery process would be required to determine Q. It

Sheet 32 line 1 should read:-

5.6 Recovery of R and Q

Sheet 33 Para 2 line 2 should read:-

stage "LAST M3 DIGIT" during transfer of M3 to C1, and

✓ Sheet 34 Sect. 5.10 line 6. 5

      NS instead of MS

✓ Sheet 34 Sect. 5.11 line 4 $\underline{-Q}$ instead of $-Q$

Sheet 37 line after flow diagram should read:-

✓ Q-1 is formed by adding the component parts of Q with a $\overline{\text{carry}}$

Sheet A1.1 Equations for the addition of PS1 and C1 giving PS2 and C2 should read:-

$$PS2_n = C1_{n-1} \neq PS1_{n-1}$$

$$C2n = C1_n \cdot PS1_n$$

$$\overline{PS2n} = \overline{C1n-1} \neq \overline{PS1}_{n-1}$$

✓
$$\overline{C2n} = \overline{C1n} + \overline{PS1n}$$

✓ Sheet A3.2 fourth line from bottom of page should read:-

$$\left| \text{New P.R.} \right| < 2 \times \left| \text{Dr MIN} \right|$$

Sheet A3.4 last heading should read:-

✓
$$\left| \underline{PR} \right| < 2 \times \left| \underline{Dr} \right| \text{ is always true}$$

Capital letters have sometimes been used to abbreviate "most significant" and "least significant" these should <u>always</u> read "m.s." and "l.s"

The abbreviation "AV" has sometimes been wrongly used instead of "A.U" for "Arithmetic Unit".

J. E. Ellison.