CORRESPONDENCE.

To the Editor of the JOURNAL OF THE ROYAL AERONAUTICAL SOCIETY.

DEAR SIR,—I should like to draw your attention to one or two statements in two recent papers on rocket propulsion that have appeared in the Journal, which I think may be erroneous.

In addition to the results in " The Development of Jet and Rocket Propulsion," by J. Stemmer, corrected by Mr. Coleridge, in the June issue of the Journal, I would like to mention the following:

(1) The expression $V_2 = \left(\frac{2}{n}\right)c$ on p. 409, should be $V_2 = \frac{c}{2} + \frac{c}{n}$

and the expression $V_k = \left(\frac{k}{n}\right)c$ should be $V_k = \frac{c}{2} + \left\{\frac{(k-1)}{n}\right\}c$

This is borne out by the expression further down the page $V_n = V_o + \left(\frac{n}{2}\right)c$.

(2) On p. 410 the discharge velocity should be 2,000 m/sec., and the expression for V_x should be $V_x = \left(\frac{560}{100}\right) \times 2{,}000 = 11{,}200$ m/sec.

(3) On page 411, the expression

$$M = \left(\frac{30}{2{,}000}\right) M \text{ means that } \left(\frac{1}{66\frac{2}{3}}\right) M \text{ and not } \left(\frac{1}{150}\right) M$$

must escape per second, which shows that the rate of projection is the same as if $\left(\frac{1}{100}\right) M$ were projected 1.5 times a second (as on p. 140).

(4) On p. 413 the expression at the top of the page should be

$$M = M_o 2.72^{\left(\frac{2{,}000}{3{,}000}\right)} = 2M_o$$

i.e., the initial mass M is twice the final residual mass M_o, and consequently the propellant to be carried must be equal to (and not twice, as stated) the empty weight of the aircraft.

On p. 60 of the March Journal—in the paper, " Rocket-Wing-Bomb and Rocket Torpedo," by Krzywoblocki—expression (18) should be $\eta = Rv/L_R = 0$. Incidentally, why work out this expression? In every case, surely, no velocity—zero efficiency!

Yours faithfully,

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