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CORRIGENDA

I. Nonlinear Faraday resonance

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II. Parametrically excited solitary waves

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The approximation to capillary energy adopted in Appendix D of I and Appendix B of II is inconsistent with the antecedent formulations in those papers, and (D 2) in I should be replaced by

$$V = \rho \hat{T} \iint \{[1+(\nabla\eta)^2]^{\frac{1}{2}} - 1\}\,\mathrm{d}S \tag{1a}$$

$$= \rho \hat{T} \iint [\tfrac{1}{2}(\nabla\eta)^2 - \tfrac{1}{8}(\nabla\eta)^4 + O(\epsilon^3)]\,\mathrm{d}S, \tag{1b}$$

where $\rho\hat{T}$ is the surface tension and $(\nabla\eta)^2 = O(\epsilon)$ (only the quadratic term is retained in (D 2)). The corresponding results for the mean (averaged over ωt) potential energy and the finite-amplitude-correction (to the natural frequency) parameter A are

$$\langle V \rangle = (\mathrm{D}\ 4) - \tfrac{1}{16}\rho S \hat{T} l^4 E (p^2+q^2)^2 \tag{2}$$

and

$$A = (\mathrm{D}\ 7) + E k_1^{-2} l_*^2 \tanh^2 k_1 d, \tag{3}$$

where (D 4) and (D 7) signify the right-hand sides of the corresponding equations in I, and

$$E = \tfrac{3}{4} S^{-1} \iint_S (\nabla\psi_1 \cdot \nabla\psi_1)^2\,\mathrm{d}S. \tag{4}$$

The corresponding modifications of (B 2) and (B 4) in II are

$$\frac{\langle V \rangle}{\rho} = (\mathrm{B}\ 2) - \tfrac{9}{128} \mathrm{T}_1 k^4 a^4 (p^2+q^2)^2 \tag{5}$$

and

$$A = (\mathrm{B}\ 4) + \tfrac{9}{8}\sigma \tanh^2 kd, \tag{6}$$

wherein $\langle V \rangle$ now signifies an average over both y and ωt, $T_1 \equiv \hat{T}$ and $\sigma \equiv k^2 l_*^2$. The values of A given by figure 1 in II therefore must be increased by $\frac{9}{8}\sigma \tanh^4 kd$, and $A < 0$, and solitary waves are impossible, in $0.153 < \sigma < 0.250$ (previously $0.14 < \sigma < 0.25$).

The change in A leads to a predicted amplitude of $a = 1.8$ cm (previously 2.3 cm) for the experimental data cited in the final paragraph of II §5; the observed value is 1.7 cm.