365(3): Some Comments on Note 365(2).

In the equation:

$$\left(1+\Omega^1{}_{01}\right)\frac{d^2\cos(\theta f(\theta))}{d\theta^2}+\cos(\theta f(\theta))=0 \quad -(1)$$

the factor $\Omega^1{}_{01}$ is by definition:

$$\Omega^1{}_{01}=\frac{\partial R}{\partial r} \quad -(2)$$

where R is the position of a fluid element and r is the coordinate of the plane polar system (r, θ). So $\Omega^1{}_{01}$ does not depend on θ. This allows a simple solution of Eq. (1) to be found, so that the orbital equation is:

$$r=\frac{\alpha}{1+\epsilon\cos\left(\frac{\theta}{\left(1+\frac{\partial R}{\partial r}\right)^{1/2}}\right)} \quad -(3)$$

It would be very interesting to graph eq. (3) as a function of $\partial R/\partial r$. In general the latter is not a constant. Eq. (3) could be fitted to the results of UFT 328 in which orbital precession was shown to result from the simultaneous solution of the ECE2 Lagrangian and Hamiltonian. Eq. (3) is the result of the inverse square law affected by the vacuum.