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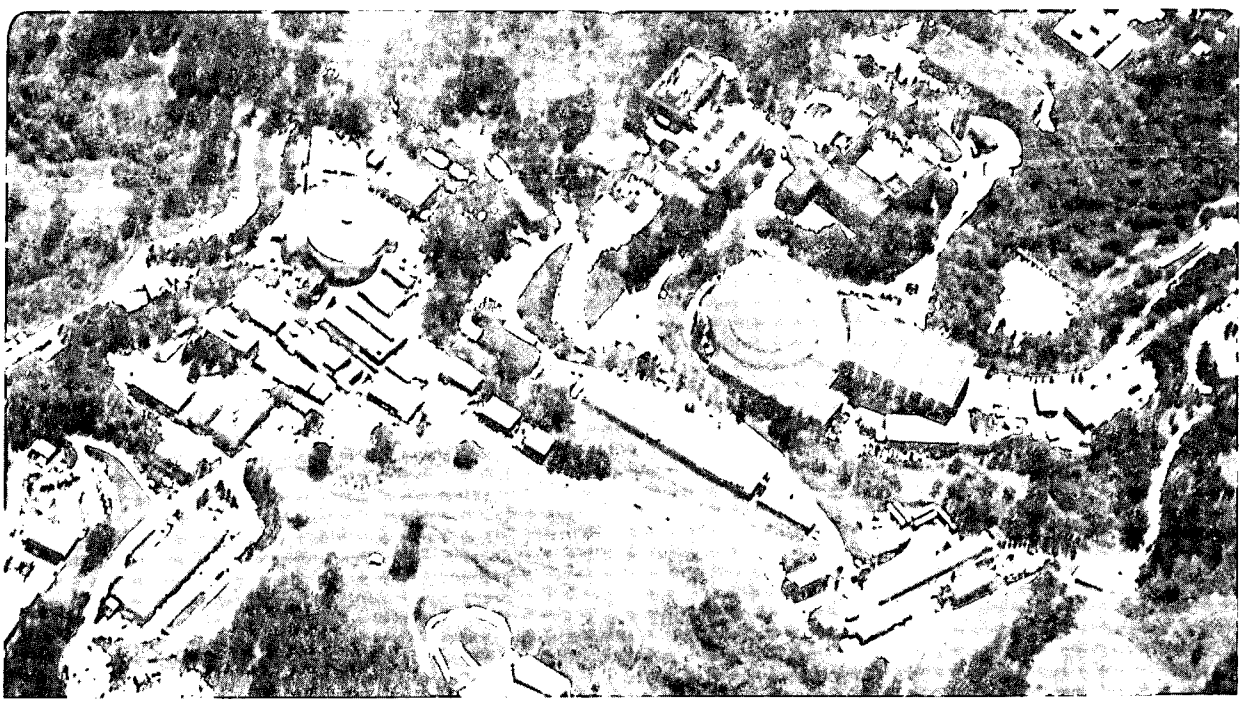

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NUMERICAL SOLUTION OF A NONLINEAR HYPERBOLIC EQUATION BY THE RANDOM CHOICE METHOD: CORRIGENDUM[1]

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The discussion printed in our paper [1] does not identify properly all possible cases for the solution of the Riemann problem

$$\frac{\partial v}{\partial t} + \frac{\partial}{\partial x} f(v) = 0 \ , \ t > 0, \tag{2}$$

$$v(x,0) = \begin{cases} u_L, & x \leq 0, \\ u_R, & x > 0 \end{cases} \tag{5}$$

for $f(v)$ having exactly one inflection point $(u_I, f(u_I))$ in the interval of interest and for which $f'(u_I) \geq f'(v) \geq 0$. To complete the description of the solution of (2),(5) given in §3.2 of [1], amend case (Ib) to read:

(Ib) if $a(u_L) < a(u_R)$, the state $v = u_L$ is connected to the state $v = u_R$ by an expansion wave when u_I does not lie between u_L and u_R; when u_I does lie between u_L and u_R the states are connected by a compound expansion wave and shock, according to (IIa) or (IIb).

For the compound wave, solution (6c) and Fig. 5 of [1] apply.

1. P. Concus and W. Proskurowski, *J. Comput. Phys.* **30** (1979), 153–166.

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