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SIR, *The stress dependence of the secondary creep rate at low stresses: reply to Professor J. Weertman's letter*

Our work (Mellor and Testa, 1969) was prompted by disbelief in the claimed Newtonian behaviour of ice at deviator stresses below 1 bar; our results appear to dispose of this claim, or at least to discredit the evidence on which it is based. Our final conclusion was that classical creep tests become impractical for stresses below 0.5 bar. Thus, to the extent of our published conclusions, we seem to be in complete accord with Weertman.

We were careful to point out that the results do not establish a firm stress/strain-rate relation for the low stress range, although they do provide a better approximation to secondary creep rates than those previously available. We did mention in a footnote the similarity between our apparent stress/strain-rate relation and a corresponding one derived from glacier flow observations, which were not subject to a serious time restriction.

While conceding the inadequacy of existing data for the low stress range, I would question the implication that a simple power relation (for ice) must necessarily be maintained over an indefinite range of strain-rates. New studies on the ductile–brittle transition (as yet unpublished) show stress tending to a limiting yield stress at high strain-rates, and many earlier investigations suggest curvature of the log–log plot at low strain-rates. Furthermore, indirect evidence (such as the temperature dependence of creep) causes one to doubt whether the straining of impure polycrystalline ice at very high homologous temperatures can be controlled by a single physical process.

MALCOLM MELLOR

Mining Department,
University of Sheffield,
St George's Square,
Sheffield 1, England
19 May 1969

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SIR, *Use of the term "glacier cave"*

A glacier cave is defined by speleologists as a cave formed within or at the base of a glacier (Halliday, 1966). When glaciologists and others refer to such caves they often use the term "ice cave". However, in popular and scientific usage ice caves are ". . . permanent caves in rock formations, in which ice forms and remains far into the summer or throughout the year" (Henderson, 1933). This is now accepted practice in the field of speleology, and it would avoid confusion if the term ice cave were no longer used to refer to caves in glaciers or other bodies of ice.

GARRY D. MCKENZIE

Institute of Polar Studies,
Ohio State University,
125 South Oval Drive,
Columbus, Ohio 43210, U.S.A.
29 April 1969

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