"ice-perched morainic ridges" are oblique, even perpendicular to the ice-cap margin and their petrographical composition indicates very clearly a subglacial origin in a region where there are no nunataks. This study will soon be ready for publication.

Secondly, Hooke asks pertinently if the interpretation of the localized debris-containing fault planes as crevasse fillings is not more consistent with the field observations. He attributes the absence of fines (<6 mm) in the deposit to the fact that they are frequently winnowed out of morainal material that has been on the ice surface for some time. Open crevasses are rare in Upper Ferrar Glacier and when they exist they are surprisingly clean. The climatic environment has a strong influence by preventing the carrying and concentration action of melt water. Furthermore, supraglacial morainic material travelling on the ice is very infrequent and it consists of blocks and slabs, while gravels are abundant in the localized debris-containing fault planes. Concerning the removal of fines, as water is absent, wind is the only agent able to do that. The katabatic wind can indeed be strong in the area, but it is difficult to understand why its action of removal of fines should be restricted to this kind of deposit alone and have no effect on the other nearby morainic deposits. One can answer that wind action need not necessarily have occurred in the area itself. However, the area is only 10 km from the last nunataks and the great ice sheet of eastern Antarctica. On the other hand, a petrographic study of the debris in the fault planes indicates a local origin. All these facts seem to reduce the possibility of numerous crevasse fillings in this area.

Concerning the offset of the foliation in my figure 3, I agree with Hooke's observation. Even if the situation represented in cross-section appears locally, it would have been preferable to suggest in the figure the opposite offset which is the normal one.

Finally, concerning terminology and the use of the term "shear moraine", we have to consider separately the respective situations at the base of an ice sheet under high hydrostatic pressure and at its margin.

In my paper, I justified the use of this expression and the fact that the Weertman hypothesis cannot explain the whole situation described. On the other hand, the term "shear moraine" (*moraine de cisaillement*) is an old expression, first introduced in 1904 as Lliboutry (1964–65) says, so that the historical aspect of the question should be known before any decision is taken either to preserve or replace the term.

The term "ice-perched moraine" is interesting but what would be the difference between it and "ice-cored moraine"?

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Sir,

Glaciological observations in north-central Greenland

During early July 1966 we were fortunate in being able to visit "Inge Lehman" station, a camp established by the Arctic Institute of North America and the U.S. Air Force, on the Greenland ice sheet. Our purpose was to test small-scale traverse techniques using Bombardier "Ski-doos" and to make snow studies south-east of the station in an area hitherto unstudied. We also intended, if possible, to locate "Northice", the 1952–54 ice-sheet station of the British North Greenland Expedition, and obtain snow accumulation and deformation measurements. Because of changes in flight schedules, the traverse to the south-east, which was intended to be approximately 160 km in length, had to be shortened to 28 km. "Northice" was revisited and a series of measurements were made. Figure 1 shows "Northice" on 4 July 1966 and can be compared with Banks ([c1957], p. 128) and Simpson (1957, p. 213, 220). The following are the results of the measurements:

Fig. 1. "Northice" on 4 July 1966

Station	*Latitude*	*Longitude*	*Elevation* m	*1956–65 accumulation rate* g cm^{-2} year^{-1}	*10-m temperature* °C
"Northice"	78° 04.3′ N.	38° 29.3′ W.	2 345	10.4	
"Inge Lehman" station	77° 56.8′ N.	39° 11′ W.	2 407		−30.4
"Station 1"	77° 43′ N.	38° 40′ W.	2 431	10.5	−31.3

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