



Although it is not normally necessary to take a doctor on such an expedition, trained medical assistance is highly desirable because of the extreme climatic conditions to be encountered.

The combination of temperatures as low as -50°C and winds of 20 mph can make the effective temperature - known as wind chill factor - as low as -90°C. At that temperature exposed flesh freezes in seconds.

Daily checks for frostbite of face, fingers and toes are essential and broadspectrum antibiotics would be taken as soon as frostbite is diagnosed to prevent infection which may occur rapidly if the area is untreated. Cuts and cold burns of varying severity are also likely to be encountered and you must treat these quickly.

Even at these low temperatures heavy work, such as axing, causes the body to sweat even with light clothing. The sweat subsequently freezes in the underclothes when the task in completed which can rapidly cause hypothermia or exposure so you would be responsible for detecting the first signs of this condition in the team (and of course in yourself).



As the mechanic it will be your task to keep the snow vehicles running as efficiently as possible given the very testing terrain you will be crossing. This would require that the scheduled maintenance procedures are completed and any mechanical or electrical problems dealt with promptly. The very severe cold would make engines difficult to start in the morning as oil and even petrol perform very sluggishly and, in these conditions, non-lithium batteries operate at much lower than normal efficiency. Up to two hours would be allocated to this chore each morning and at any stops during the day the engines would be carefully watched to ensure they do not stall, as even with a warm engine, restarting can be difficult.

Each night you would need to cover the transport with a tarpaulin and perform routine maintenance and refuelling tasks under cover.

You would be carrying a complete set of tools and spares but if serious damage to an engine or vehicle occurs then it would have be be abandoned and/or replaced.

One of the least enjoyable aspects of your role would be the necessity of placing spark plugs, batteries, fan belts etc in your sleeping bag each night to prevent them from freezing up.

You must also inspect the sledges for damage each day since a broken runner or frame could have disastrous consequences.

