

New Equipment

When **C&S** was in Norway in early 2004, covering Royal Marines on winter training, Norwegian staff at NATO's Arctic Training Centre (North) told us how their national troops were being re-equipped with state-of-the-art clothing and sleeping bags, after having been poor relations to the British for many years. One of the items mentioned was a thermal waterproof bivvy bag, known as a Fjellduken or hill tarpaulin, which was about to



FJELLDUKEN

An Arctic Lifesaver

By Bob Morrison

see widespread issue to frontline troops. This year, while covering the multinational Exercise **BATTLE GRIFFIN** in central Norway, we spotted this interesting article of kit being carried by troops and now, courtesy of uniform collector Andy at EastWest Trading, we have had a chance to examine a genuine Fjellduken close up.

Manufactured by Jerven AS of Odda, the Fjellduken is a rectangular padded, waterproof tarpaulin with zips along all edges to allow it to be turned into an outer sleeping bag or an emergency bivvy bag for use in extreme cold climates. Originally developed more than twenty years ago for Norwegian hunters and trappers, it has an imitative camouflage pattern on the outer face, and the inner face is aluminium lined. Reinforced eyelets at the corners allow it to be turned into a roughly 2200x2000mm shelter bivvy, using paracord to attach it to trees or bushes. When all three zips are used, the Fjellduken becomes a 2200x1000mm closed envelope for extreme survival. Alternatively, the hunter or soldier can sit snugly in a protective duvet, with only the face showing through the zip opening at the upper corner, and feet sticking out of the bottom zip. Two small slanted zips at the top of the sack allow the arms to protrude to hold a rifle.

Although padded with insulation, the key to the superb performance of the Fjellduken is the aluminium liner, which reflects body heat back in the same manner as a thermos flask. The Fjellduken does not have a breathable membrane, which is possibly its one drawback if being used continuously on exercise.



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Above: Norwegian mechanised infantryman carrying a Fjellduken on the right side of his bergen during **BATTLE GRIFFIN 2005**

Top Right: Fjellduken, seen here compressed in its stuff sack, is a bulky but light lifesaver

Right: It may look silly, but for a soldier on stag in Arctic conditions, the Fjellduken gives an ideal outer protective layer against extreme cold and snow

Left: In uncompressed state - note aluminium reflective liner to sack

but, as it is meant primarily for static use, there should not be too much build-up of condensation in the short term. It must also be borne in mind that when used as a protective outer bag rather than a bivvy tarpaulin, this is primarily an extreme low temperature survival aid, and not a sleeping bag. Norwegian troops working in Arctic temperatures as low as -40C would also use their conventional 5-season plus issue sleeping bag inside the Fjellduken to derive maximum protection from the cold.



As is to be expected, the Fjellduken is quite a bulky item, but it comes with a capacious stuff sack with three nylon straps to allow it to be compressed for attachment to the side of the Norwegian issue bergen. The stuff sack is also aluminium lined, and can be used to store your boots at the bottom of the sack, preventing them freezing if left outside overnight. Despite its bulk, however, this potential lifesaver is incredibly light. A very practical bit of kit indeed, and one which some sources claim is already in use with British Special Forces too.