



## HISTORY OF SIGNALLING IN 100 OBJECTS THE COLES MARK 1 SUN COMPASS

The Sun Compass was used during WW2 by the Long Range Desert Group (LRDG) for accurate navigation in the Western Desert. It operates somewhat like a sundial. It indicates direction by employing the angle of the shadow cast by the Sun in conjunction with a compass card, a flat disk marked with points and degrees of direction.

Today there is much discussion regarding the over-reliance on GPS for navigation and the ability to jam the GPS signal. The Coles sun Compass cannot be jammed, but does need the sun!



### Major Ralph Bagnold and the LRDG



The founder of the LRDG was Major Ralph Bagnold, who joined the RE Signal Service in 1914, saw service in Ypres and in 1920 transferred to the Royal Corps of Signals.

Bagnold was fascinated by the desert and on his own initiative bought a Model T Ford and taught himself to navigate in the desert using this sun compass. His major Adventurous Training expedition took place in 1928 and he wrote about his experiences in several articles.

He retired from Royal Signals in 1935, but when WW2 broke out in 1939 he was recalled and posted to Kenya. However, his troop ship broke down in Port Said, where he was recognized by a perceptive reporter of the Egyptian Gazette. Fortuitously, General Wavell read the resulting article, which also described his exploits in the Western Desert. Bagnold

was summoned to the General's office, and had his posting immediately changed. Bagnold was directed to raise the LRDG. This he did by assembling a force of mainly New Zealanders, as he considered them reliable and innovative. The LRDG were organised into 3 groups each with 2 officers and about 30 men. They were equipped with 33 Chevrolet 30-Cwt trucks. Some of these were acquired from Egyptian dealers and 19 were begged from the Egyptian Army. He armed the patrols with Lewis machine guns, the Boys anti-tank rifle and a Bofors 37mm light anti-aircraft machine gun. He selected as his radio of choice the Wireless Set No 11, with which the LRDG signallers communicated using Morse code.

It was the LRDG that was used initially to insert the early SAS patrols in the Western Desert, but it carried out several attacks on the Axis Forces rear areas in eastern Libya before the SAS was formed. They passed on their navigation and communications skills to the SAS. When the war in North Africa was won, the LRDG was deployed to the Balkans. The unit was disbanded on the 21st of June 1945. Major Ralph Bagnold's vision and inspiration proved that small forces could operate and inflict damage to the enemy behind their front line, thereby disrupting logistics and command and control. He had gained this inspiration from his own form of adventurous training before the outbreak of WW2. Expeditions still plays a major part of individual training in the modern British Army and in Royal Signals in particular—just read the Wire or the Army Mountaineering Association Magazine!

