



HISTORY OF SIGNALLING IN 100 OBJECTS PRC 316 “THE JUNGLE RADIO SET”



The PRC 316 (also known as the Station Radio A-16) was a lightweight HF radio. It was introduced in the 1960s to operate in the 2-7 MHz band using carrier wave up to ranges of 800km. The set was designed and developed at the Signals Research & Development Establishment (SRDE), Christchurch. Even though it became known as the jungle set, it was designed to be “soldier proof”. The front of the radio even had a Morse Code card. Was this to help Ghurkhas? No, the common belief was that it was to help officers who had forgotten their Morse Code and might have to send a message in an emergency! Patrols previously had had to use the more complex and much more bulky A13 or A14, so this much lighter and more simple set was much welcomed by those deployed on patrols.

As a patrol radio, it was employed in the Far East. In the jungle environment the operator was competing against a high humidity, frequent tropical storms and a primary jungle canopy of +50m to establish an RF link. To overcome these factors, Near Vertical Incidence Skywave (NVIS) was utilised with a dipole antenna oriented North to South, to achieve ranges of up to 500km using voice and Morse code communications.

The ‘Jungle Set’ as it was affectionately called, was used by a variety of military units on operations, where they would be inserted by helicopter and be expected to operate independently and often without support or resupply. The relatively small size and weight of the radio and batteries ensured that the operators could maintain reliable communications for the duration of extended jungle patrolling.



Its low protection from interception meant that later it had to be replaced by more sophisticated sets. However, for its time in operations in Malaya and Borneo it proved to be a very reliable and useful radio. The picture on the left shows it in use on a long distance patrol. This operator did not require the Morse Code Card!