THE JANGLE EVENTS – THE FIRST NUCLEAR WEAPONS EFFECTS TESTS

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On 19 and 29 October 1951 the United States detonated the 1.2 Kt JANGLE Surface (3-1/2-foot HOB) and JANGLE Underground (17-foot DOB) events at the then newly created Nevada Test Site. The JANGLE events provided the first real attempt at measuring airblast and ground shock in a nuclear environment and to measure their effects on military targets. A full suite of airblast and ground motion gauges were used on both events and on JANGLE Underground a large array of above and below ground structures were fully instrumented. While only modest cratering work was accomplished; the documents, data and photography in the DTRIAC Archives together with recent re-examination of the test site has allowed a fairly good reconstruction of the cratering and ejecta aspects of both events. Interestingly and also very important is that the JANGLE events were the only nuclear events where both device and geology were the same with only the heights-of-burst differing. The successes and failures of the JANGLE measurements provided the preamble to all the many follow-on nuclear effects tests conducted at Nevada Test Site and in the Pacific.