

Ferrous Metal Artifacts at the Seven Site, Nikumaroro

Introduction

(Discuss generalities; note reduction to flakes of rust)

Corrugated Iron

Corrugated Steel

Ferrous Artifacts In and Around the SL-Fire Feature

Corrugated Iron

Small amounts of corrugated iron were found in excavating units SL-1, SL-2, and SL-3, the last of which contained most of the fire feature we refer to as the SL-Feature as well as the *Tridacna* cluster referred to as Clambush 2. Its frequency appeared to be comparable with that occurring elsewhere on the site (away from the major concentrations, so we interpret this material as incidental drift).

The 40-cm. Rectangle

Just west of Clambush 2, a deposit of highly oxidized ferrous metal was recorded in 2001, and recovered in 2007 (See Figures 1A, B). The deposit was rectangular, and 40 cm. across along its northwest side. The northeast side terminated indistinctly at a length of about 30 cm., the southwest side at about 25 cm. The southeast side could not be distinguished, but no fragments were found beyond about 40 cm. from the clearly defined northeast side, so we interpret the object as having been square, 40 cm. across on all sides.

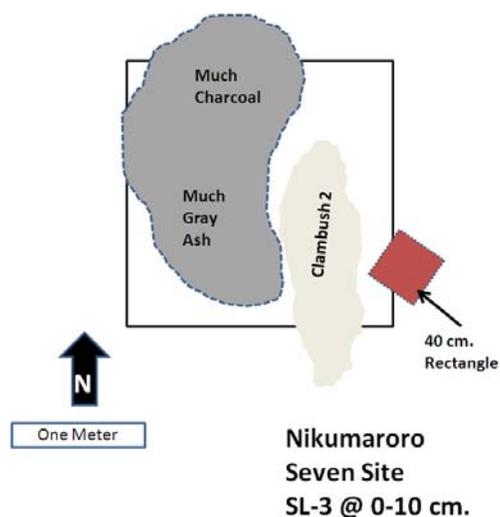


Fig. 1A: Schematic of SL-3



Fig. 1B: SL-3 in final phases of excavation

51 discrete fragments of oxidized ferrous metal were recovered directly from the 40-cm. rectangle deposit; we suspect that many of the similar fragments found throughout unit SL-3 (discussed below) were from the same object. 30 of the fragments are very small pieces of undistinguished rust, 21 larger fragments (around 1-2 cm. across) have been examined in detail to record their distinctive characteristics. A few fragments provide positive information about the object that produced the deposit.

Thin, laminated character

The average thickness of the 21 measured fragments is about 2.7 mm.¹ No fragment from the 40-cm. rectangle is more than 4.4 mm. thick. All are laminated – that is, made up of multiple layers of metal, each of which is about 1 mm. thick. At least five or six layers are distinguishable on some fragments. It is not clear whether these layers reflect the processes of manufacture, processes of oxidation, or both.

Straight edge

At least one edge of the object was straight. This is reflected in the overall distribution of fragments along the edges of the deposit, and the specific shape of five pieces (e.g. Fig. 2).



Fig. 2: Straight Edge with rivet-like device (mm. scale)

¹ Thickness is highly dependent on where the measurement is taken, since most pieces display more layers of metal in some places than in others, and many contain rivet-like devices.

Rivet-like devices

The object was held together by, or perhaps decorated with, some kind of rivet-like device (See Fig. 2). At least eight examples of such devices were found in the 40 cm. rectangle², and many more (discussed below) elsewhere in SL-3.

Embedded wires or rods

Three fragments exhibit thin wires or rods embedded on the edge of (Fig. 3), between (Fig. 4), or wrapped around by (Fig. 5) the layers of thin metal. The wires/rods appear to be rectangular in cross-section, and are about 2 mm. thick.



Fig. 3: Microphotograph of wire or rod embedded in edge of metal piece; note also rivet-like device in lower right-hand corner.

² In some cases, identification of a feature as representing a rivet-like device is uncertain.



Fig. 4: Microphotograph of wire or rod (possibly two) embedded within/between sheets of metal.



Fig. 5: Microphotograph of wire or rod with thin ferrous sheet(s) apparently wrapped around it.