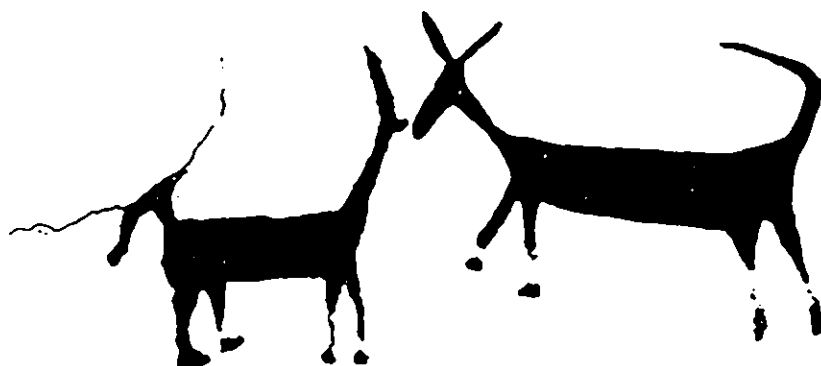


Kaho'olawe Island Conveyance Commission  
Consultant Report No. 21

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## The petroglyphs of Kaho'olawe, Hawai'i



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By: Georgia Lee and Edward Stasack

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by

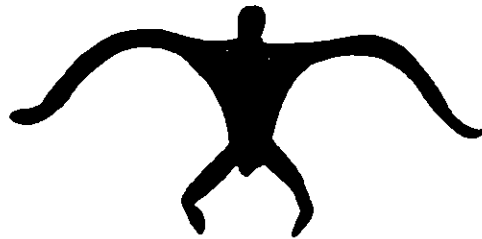
Georgia Lee and Edward Stasack



# The petroglyphs of Kaho`olawe, Hawai`i

A report prepared for the Kaho`olawe Island Conveyance Commission  
by Georgia Lee, Ph.D. and Edward Stasack, Prof. Emeritus,  
University of Hawai`i

1993



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## *Acknowledgments*

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The authors are grateful to those who assisted and facilitated our documentation project on Kaho'olawe. Our thanks to Rowland Reeve who provided invaluable assistance and good company, and kindly reviewed and commented upon an early draft of this report; Frank Morin, who surveyed and mapped our sites; Lt. Vern Young, Lt. Michael Nahoopii, and Capt. Milton Roth, USN, for facilitating the project while on Kaho'olawe, and particularly to Hardy Spoehr who provided support for the enterprise in every possible way. Thanks also to Mikilani Ho who helped with the recording of petroglyphs during our first session on Kaho'olawe and to Prof. F. Rubellite Johnson, whose interest in the petroglyphs of Kaho'olawe helped identify the need for this scientific documentation project.

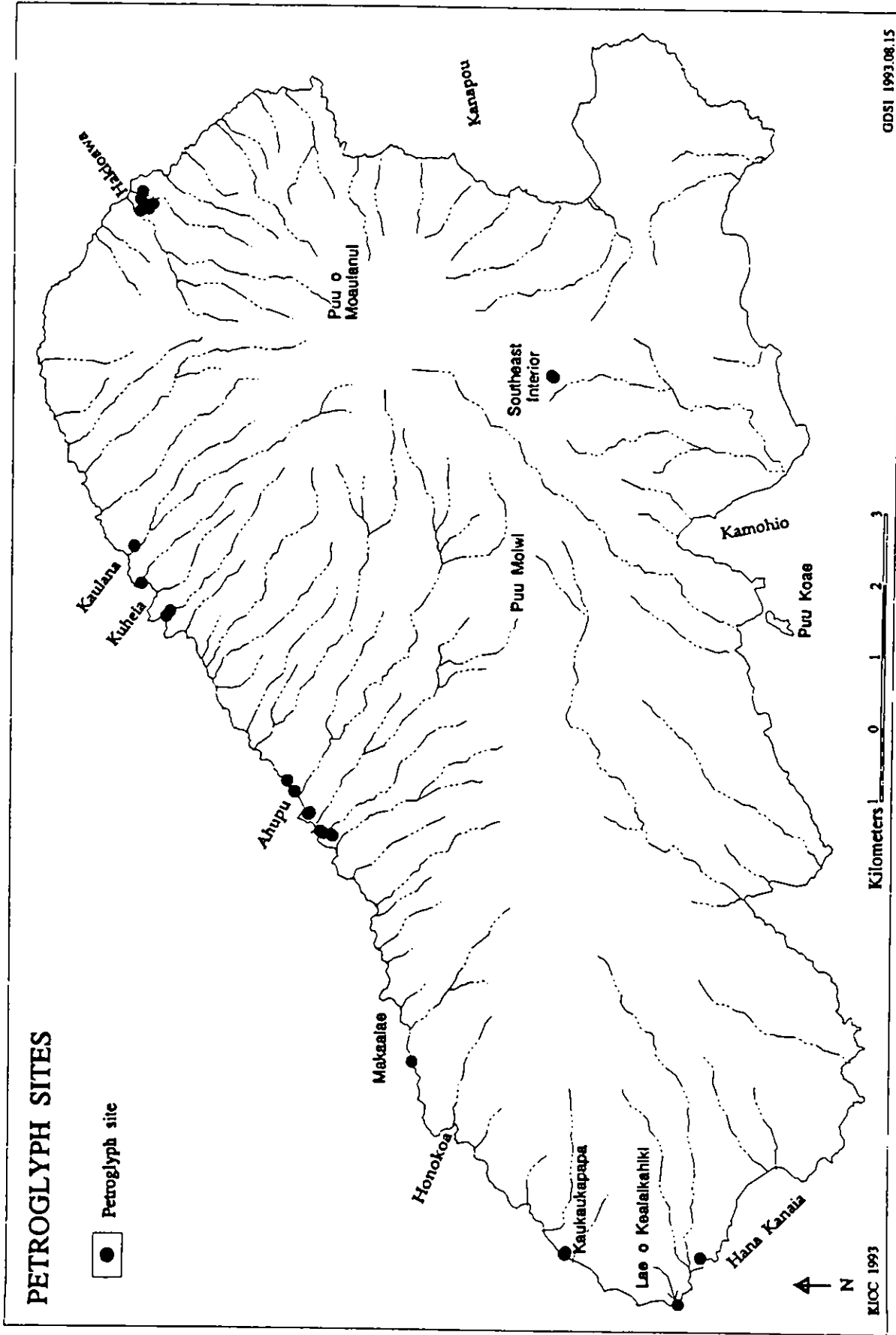
We would like to express our gratitude to the United States Navy for providing us with access to the island and allowing us the use of their facilities at Hana Kanaia, and to the Protect Kaho'olawe 'Ohana for sharing their hospitality and their knowledge during our time at Hakioawa. Without the assistance of both these groups this survey would not have been possible.

The dating portion of this project was by Dr. Ronald Dorn, Arizona State University, and was under the direction of Edward Stasack. Rowland Reeve assisted in the selection process. Dorn's results will appear in a separate report.



**PETROGLYPH SITES**

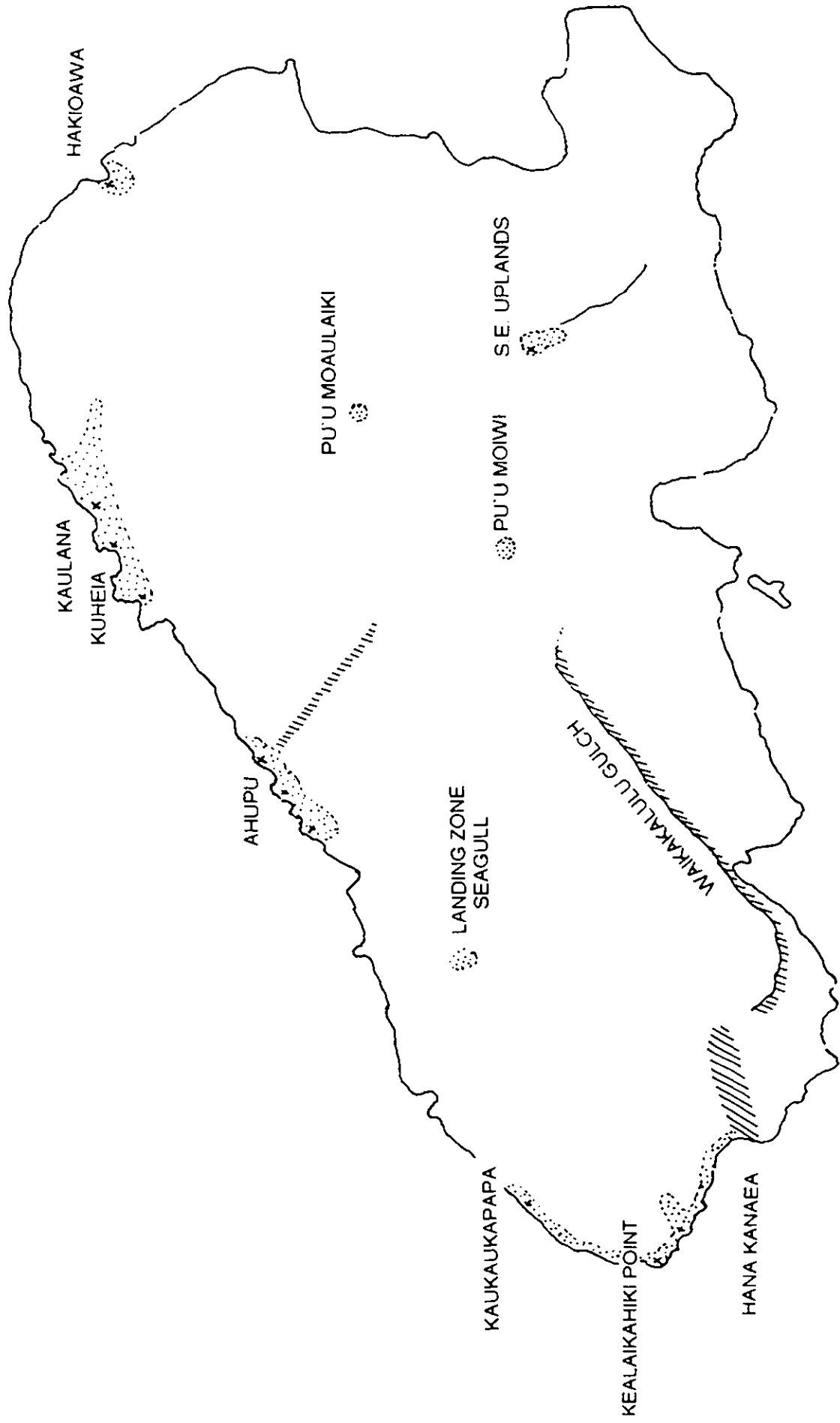
● Petroglyph site



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☒ INDICATES PETROGLYPH(S)

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KAHO'OLAWA ISLAND

## Introduction

The island of Kaho'olawe is the smallest of the eight major Hawaiian islands, comprising a mere 116 square km. This eroded volcano is located 18 km southeast of Maui, in the rain shadow of Haleakala. Basically wedge-shaped, it has steep cliffs --up to 245 meters--on the eastern and southern coast. From the island's high point (Moaulanui, at 450 m), the central plateau slopes westward. Stream-cut gulches radiate out from the plateau.

Despite Kaho'olawe's small size and relative impoverishment, remains of former settlements are found in nearly all parts of the island. The waters surrounding Kaho'olawe have always been rich in marine life, and fishing probably provided the mainstay of these ancient communities. At one time there must also have been considerable agricultural wealth. The presence, at Pu'u Moiwī, of the second largest stone adze quarry in the Hawaiian Islands suggests that Kaho'olawe possessed resources beyond what one might expect, given its present degraded condition.

Cook's expedition, sailing past the west end, described the island as being barren of trees, causing some to suggest that the island was eroded in prehistoric times.

Recent research, however, questions this view, and it now appears that the vast majority of the erosion took place during the historic period (Spriggs 1991:79). Basing one's entire time-frame, as Hommon did, on dates obtained from volcanic glass can pose problems. The hydration process for this mineral is poorly studied, and variables such as temperature and humidity can significantly alter one's results. More serious research is needed before dates obtained from basaltic glass can be accepted with any confidence. This, combined with the paucity of good carbon-14 dates from Kaho'olawe, makes it difficult to construct a reliable chronology for the island.

Shortly after contact, goats were introduced to Kaho'olawe. By the early 1800s large herds of feral goats roamed the island. They, along with sheep and other livestock brought over during the ranching period, devastated the landscape.

Overgrazing appears to have caused major erosion, as accounts from 1903 on suggest (Spriggs 1991:78-9). "Here in the short span of 152 years the soil accumulation of a million or more years was blown away forever and the former green little island became a bare bald forbidding land" (Stearns 1940:147). Although these animals have been eliminated, today the inland plateau is a wasteland of eroded hardpan, devoid of vegetation.

What is clear is that, at one time, things were different. In prehistoric times the island supported a dry land forest or scrub park land--a savanna of grassland, shrubs and small trees (Spriggs 1991:78). Research by Hommon (1982) and others have identified native plants from charcoal fragments. Six native plants, not known to exist today on the island, are: *Chenopodium*, *Santalum*, *Nototrichium*, *Bidens*, *Canthium*, and *Nothoestrum*.

In the upland areas there was open dry-land forest; in the lowlands, *pili* grass mixed with low shrub. The west end of the island was almost all *pili* grass. This vegetation acted to hold the soil and allowed rainfall to penetrate, replenishing the island's fresh water lens. The loss of plant cover due to overgrazing resulted not only in erosion of the upland soils but in a depletion of the ground water supply.



Today the lowlands are covered with often dense stands of *kiawe* (*Prosopis pallida*). Reforestation projects (undertaken by the U.S. Navy working with the Soil Conservation Service and by the Protect Kaho'olawe 'Ohana) have planted windbreaks and helped to re-vegetate parts of the central plateau.

The archaeological remains found on Kaho'olawe are similar to those found throughout the islands (Kirch 1985:144) and, in fact, are usually better preserved, for the island's landscape has not been altered by plantation agriculture or tourist development. Due to its relatively dry environment, Kaho'olawe was probably never as densely populated as the other major islands. The presence of ancient house sites, shrines, and burials, however, attests to the existence of a permanent resident population.

One limit to population growth on Kaho'olawe was the lack of permanent streams. Water appears to have always been in relatively short supply. Three brackish wells are known to always have existed in ancient times. These, and smaller coastal springs, probably provided the island's only year round water source. During the winter months pools of standing water can be found along most stream beds, as well as in the island's three major craters. Undoubtedly water was more readily available prior to the deforestation of the uplands (Spriggs 1991:104-105).

Vancouver, who passed here in 1792, was told that the island had once been fruitful and populous, but that it had been devastated by Kamehameha's wars of conquest (1801:301). However, few western visitors set foot on Kaho'olawe during the early historic period. As a result, our earliest written descriptions of the island are those recorded by ships sailing past, making long-distance judgements based upon what could be seen from the sea (Spriggs 1991:75-8).

From about 1826 until 1859 Kaho'olawe served as the site of a government penal colony which appears to have been located at Kaulana valley on the island's north coast. It is estimated that, in the 1830s, there were around 80 people on the island. In 1858 Kaho'olawe was leased for ranching. At that time plans were made to bring from 10,000 to 20,000 sheep over to the island, an indication that Kaho'olawe possessed sufficient grass and shrub land to support such an endeavor. A census taken in 1866 reported some twenty people on the island, all of them working for the ranch. There is evidence, however, to suggest that this population was localized at the old ranch compound in Ahupu bay, and that other parts of the island were still occupied by Hawaiians carrying on subsistence fishing and farming.

The island was declared a Forest Reserve in 1910, some of the stock were removed and attempts made to rid the island of goats. In 1918 it again became a ranch, but efforts-- which lasted into the 1930s-- failed to keep the feral goat and sheep population under control. In 1941 Kaho'olawe was taken over by the Military, which used the island as a target for practice bombing.

In 1980 the island was declared an archaeological district and placed on the National Register of Historic Places.

The settlement pattern for Kaho'olawe appears to fall into three zones (Hommon 1980a). The Coast (Zone I) is a narrow area around the island, about 400 meters wide. Here are most of the stone structures, including some *heiau* and *ko'a*, as well as house terraces. The Inland (Zone III) includes a dense concentration of sites on the interior uplands. Here are the remains of fireplaces and middens which may have been the sites of

temporary field shelters associated with upland agriculture. The Inland Zone also contains a series of adze quarries and workshops centered around Pu'u Moiwi.

Between these two Zones is the Intermediate (II) which has few sites.

The largest concentration of sites is found at Hakioawa Bay, which faces toward Maui. Two stream beds converge at a large beach, and the sites found here include house terraces and platforms, *heiau*, smaller shrines, midden, petroglyphs, and burials (Kirch 1985:150). This complex has been described as the "politico-religious center of the island" (ibid.) But this may not have been the case in earlier times.

A tentative chronology for the island (based on Hommon's dates) begins around A.D. 785-1035, suggesting initial use of the island by the 10th century. Most dates (for Hakioawa) cluster around A.D. 1300-1650, which seems to be the time of most intensive occupation (Kirch 1985:153). Hommon (1980a) has a four-phase sequence for prehistoric times:

Phase I (A.D. 1000-1400) was the initial settlement, with small communities settled around the coast and some occupation of inland and intermediate zones. The inland zone seems not to have been occupied until later in Phase I; only 13 religious sites have been found in the upland areas, as compared to 70 on the coast.

Phase II, from A.D. 1400 to 1550 saw a shift in the population. This shift suggests the development of inland zones for agriculture and an increase in population. Land was cleared for sweet potatoes and other dry land crops, resulting in ecological disruption.

Phase III (A.D. 1550 to 1650) saw a decline in the population due to progressive degradation of the agricultural potential. What followed was the development of the settlement at Hakioawa. This continued into Phase IV.

Phase IV, from A.D. 1650-1779, has inland areas abandoned after A.D. 1750. When contacted by the West, the population was likely down to some sixty individuals, living on the coast (Hommon 1980a:65).

According to Spriggs (1991:108-9) the large scale erosion of the island is due to events which occurred during the historic period and he suggests a revised sequence beginning with initial human occupation around A.D. 900. From A.D. 900-1600 there was low intensity of human occupation, with fishing as the focus but with some agricultural use on the plateau. From A.D. 1600 to around 1778, there was more intensive use of the plateau for agricultural purposes. From A.D. 1778 to 1830 the population decreased dramatically, probably due to the combined effects of warfare, introduced diseases, and changing economic conditions which encouraged emigration to neighboring Maui.

Kaho'olawe is mentioned in traditional myths and legends, and the island was associated with a number of ancient Hawaiian gods, including Kanaloa, the god of the sea. In fact, Kanaloa was the ancient name for the island. Kaho'olawe is linked to the shark god, Kamohoali'i, brother of the fire goddess Pele; a major shrine to a shark god may have existed on the island. 'Ai'ai, son of the fishing god Ku'ula, is said to have come to Kaho'olawe and built a shrine to his father on the headlands overlooking Hakioawa. The remains of a stone structure can still be seen today atop the bay's southern headland (See Reeve, n.d., for full coverage of the myths and legends).

## *The Petroglyph Recording Project*

The original purpose of this project was to record all of the petroglyphs known on the island of Kaho'olawe. To accomplish this, we attempted to systematically locate and visit all of the petroglyph sites that had been noted during the 1976-80 island-wide archaeological survey. At the time of the 1976-80 survey, each of these sites had been given a distinct site (and or feature) designation, and information concerning the site had been recorded on National Register of Historic Places Nomination Forms (copies of which are kept on file at the Hawaii State Historic Preservation Office).

Using these forms as our guide, we attempted to re-identify the petroglyphs seen by the 1976-80 field crews. This, however, was not always possible. The number of petroglyphs we identified (and subsequently recorded) at these sites did not always match the number listed on the site form. In some instances we discovered that natural features had been mistaken for petroglyphs, while in other cases many more petroglyphs were found to exist at a site than had been originally recognized. During our surveys we also located a number of new petroglyph localities which had not been noticed during the 1976-80 survey. These are Kaulana, Kealaikahiki, and an unnamed site east of Kealaikahiki.

The report which follows consists of a site by site inventory of the petroglyphs we recorded during our various trips to the island. It does not pretend to be a catalogue of all the petroglyphs on Kaho'olawe. There are many areas of the island which the limitations of time and transport did not allow us to visit. Judging from the number of previously undiscovered petroglyph localities revealed during our short survey, it seems reasonable to assume that more petroglyphs remain to be found. Any further archaeological surveys conducted on the island should bear this in mind.

Whenever possible, we have retained the site and feature number given to a specific petroglyph locality by the 1976-80 survey. In cases where a new locality was discovered, we made an effort to place it within the boundaries of an existing site, and assigned to it the next available feature designation.

Each of the petroglyph localities encountered during our survey was documented in the following manner.

Once a site was discovered (or rediscovered) its precise geographic location was determined using a global positioning system. A map was then drawn of the site locale, showing the location and relationship of those boulders and/or cliff faces found to possess petroglyphs. In some cases the existing site map drawn by the 1976-80 field crew proved detailed enough to serve our needs. Neither major clearance nor excavation was attempted during the project, with the exception of the occasional cutting back of *kiawe* limbs in order to allow access to the petroglyphs.

Individual petroglyph panels were given separate numbers and their location identified on the site map. Each panel was then drawn to scale. This was accomplished by gridding the rock face into ten or twenty centimeter squares with string. Using the gridlines as guides, each panel was drawn onto graph paper. Petroglyphs were not isolated from their context, but all motifs within a panel were recorded in their entirety, noting relationships, overlapping of designs, etc. Each element was measured in centimeters, as were the panels themselves.

In two instances, the petroglyph panels were traced on mylar with an indelible marker; one of these, an elaborately incised panel, was deemed to be too complex for the usual string grid method.

The location of datum points was determined using a Magellan GPS NAV 5000D from Magellan Systems Corp. The map datum set in the GPS was WGS84. However, the map datum used in the USGS topographical map for Kaho'olawe is the Old Hawaiian Datum. The GPS was calibrated to this datum by measuring the location of two bench marks: Puu Moiwi and Hakioawa and comparing the measured latitude and longitude to that on the topographical map. The average of these two measurements was used in determining all the other datum points for the sites on Kaho'olawe. Sketch maps were drawn of individual petroglyph sites, showing the location and relationship of petroglyph boulders to the datum point.

Photographs were taken of each site showing the site as a whole in order to illustrate location and surroundings. Photographs were also taken of individual panels and petroglyphs. This was done to provide a visual record of the petroglyphs and to assist in the correction of final drawings. Photo documentation was effected with 35 mm color transparency film. In addition, selected petroglyphs were photographed with both 35 mm black and white and color negative film. Due to the wide range of lighting conditions, film speeds ranged from ASA 25 to 400.

Upon our return from the field, each drawing was reviewed and corrected. These were then re-drawn in India Ink. The final step in the recording process consisted of entering the attributes of each petroglyph into a computerized relational data base (Microsoft Access).

It should be noted that this documentation process utilizes neither chalking nor rubbings, nor application of any substance to the petroglyph itself. The addition of chalk can contaminate the rock and negate any future attempts to obtain dates. Rubbings have the potential to damage the rock surface and are no longer considered to be a proper means of recording.

During our study and mapping of the sites, some petroglyphs were located that are not included in the National Register manuscript. Conversely, some cited in Hommon's report were not relocated despite careful searching. We also experienced problems in trying to match up our findings with the designs illustrated in the original (1976 through 1980) survey manuscript.

Some petroglyphs are in the Hommon report, but as the motifs were first chalked, what is shown in a photograph is the chalked image. Unfortunately, in many cases the petroglyph was not interpreted correctly by the person doing the chalking. This problem was particularly acute at the Loa'a boulders where it appears that some natural formations in the rocks were mistakenly chalked. Thus the photographs show the "petroglyphs" very clearly despite the fact that they are, in many cases, non-existent. The archaeologists conducting that survey were not trained in the recording of petroglyphs with the result that some natural features were thought to be designs. At Ahupuiki (Site 121), the original surveyor, Charles Streck, noted a total of at least 378 petroglyphs; our survey found only 93 individual elements. It is our opinion that the "missing" petroglyphs were actually natural features that were misinterpreted.





As has been noted in other Hawaiian sites, natural formations in the rock were sometimes utilized as part or setting for a motif. When a natural feature is incorporated into

a petroglyph, it is called "iconic congruence" and is not specific to Hawai'i but common in many parts of the world where natural features in the rock either inspired the petroglyph or were found attractive to the ancient carvers.

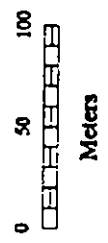
HAKIOAWA



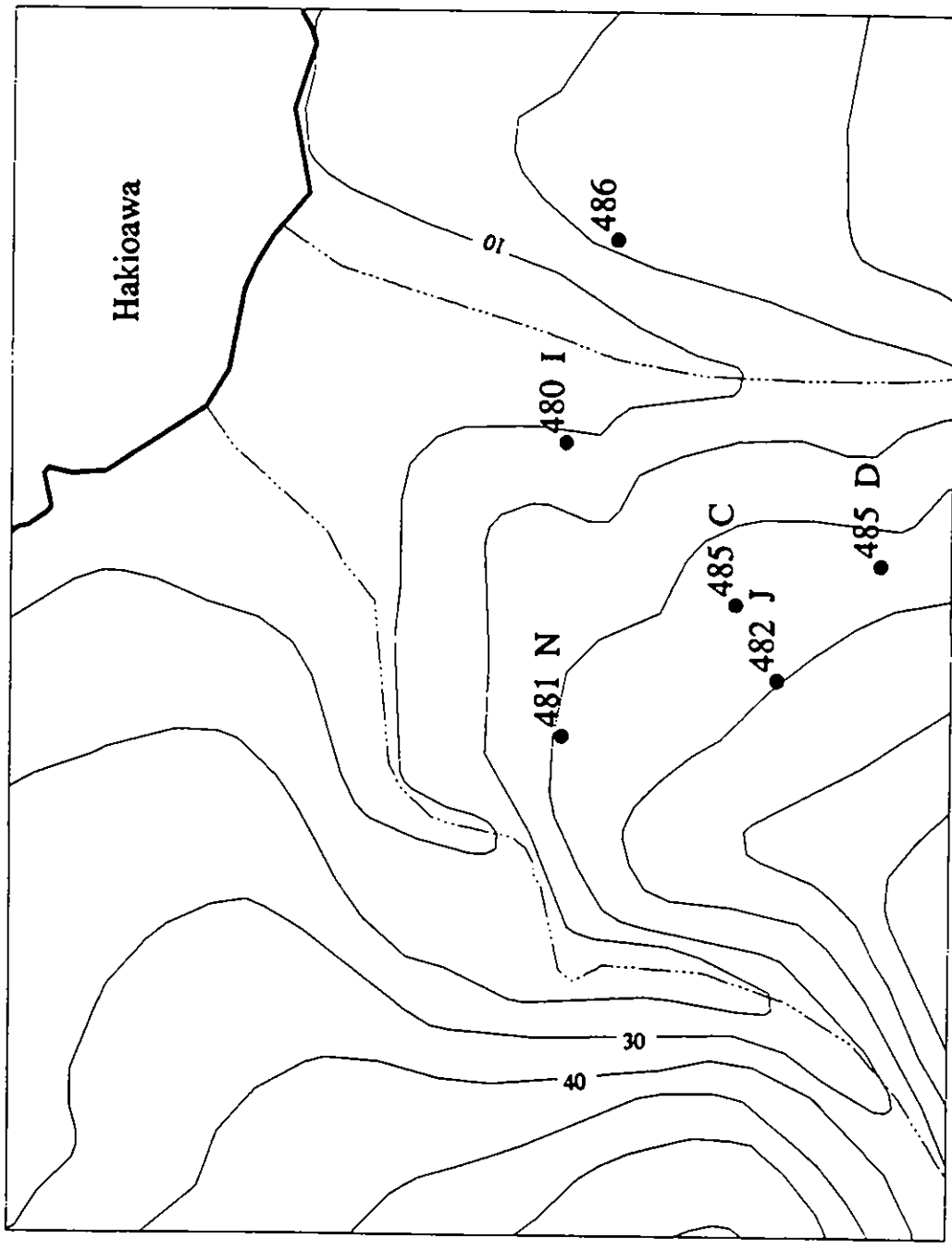
# HAKIOAWA PETROGLYPH SITES

-  Petroglyph site
-  10 meter contours
-  Shoreline
-  Streams

481 N Site & Feature ID



KIOC 1993





200 M  
HAKIOAWA  
(MAP AFTER USGS 1984)



## *The Sites*

### *Northeast Coastal*

#### Hakioawa

Sites 50-20-97-480, 481, 482, 485 and 486

The bay of Hakioawa appears to have been the major settlement on Kaho'olawe during the later prehistoric period. The valley is formed by two streams which join at the beach. Between the courses of these two streams lies a central ridge, approximately 12 to 36 meters above sea level, and with moderate *kaawe* cover. Atop this central ridge are scattered numerous house terraces which formerly supported pole and thatch houses. Reeve (n.d.:61) cites a total of 41 archaeological sites, with 182 individual features. Some of the stone structures are too large to have been house sites, and it is suggested that these were religious temples.

Hakioawa has a fairly gentle slope to its ridges, in contrast to most of the other bays on the island; it had potable water at one time in the past before overgrazing caused degradation of the natural environment, and it is close to Maui, just across the channel.

The majority of the petroglyphs found in Hakioawa are situated along the central ridge between the two stream beds. They can be found pecked, abraded, or at times incised, into the surfaces of dense basalt boulders scattered amid the house sites. Most are on vertical surfaces. Few are deeply carved, due no doubt, to the density of the rock surfaces.

One cluster of petroglyphs was discovered along the face of the valley's southern ridge. This ridge contains the remains of numerous *heiau* and fishing shrines as well as some sizable house platforms, possibly those of status individuals.

#### The Petroglyph Sites

Site 480 is described by Hommon as a complex consisting of eleven features including cairns, midden, habitation terraces and petroglyphs. His sites 480G and H are stated to contain petroglyphs but we were unable to relocate them. As described in the original survey, 480G is an:

"...area of large bedrock boulders, two of which contain petroglyphs...consist[ing] of three pecked male figures." The report contains a drawing of an anthropomorph with phallus and four curved lines attached to right hand. We were unable to relocate this site, but Stasack viewed it on a previous visit and noted that the figure is basically correct as drawn except that the curved lines associated with the figure are, in fact, natural features in the rock surface.

The original survey report describes Site 480H as a petroglyph on a flat face of a large boulder; a sketch shows what they describe as a birdman. We did not find this element.

### Site 50-20-97-480I

Site 480I is described in the original survey report as a petroglyph on the flat face of a large bedrock boulder. However, at this site we not only located the petroglyph cited by Hommon but three other separate rocks with petroglyphs.

Our datum was established at rock #1; panel #2 is on a boulder 12 meters to the south and slightly west. panel #3 is 5 meters to the north. Number 4 is 25 meters northwest. See map and figure drawings at end of this section.

Panel 1 contains a single figure.

1. This pecked phallic stick figure measures 14x14.5 cm. Our drawing varies from the one shown in Hommon's report in that the angles of the shoulders and legs are different and the right arm and left shoulder have incised lines added to the pecked areas. The elongated right arm as shown by Hommon is in error.

Panel 2 is on the vertical face of a small boulder. It contains one element.

1. A pecked fishhook motif is 10x32 cm, and is the only example of a fishhook found so far on Kaho'olawe. It is roughly pecked and appears to be of the type used for deep sea fishing. The surface of the rock is exfoliating badly and the design is close to being impacted by the natural erosion of the rock.

Panel 3 is on a small boulder, also on a vertical face. Here the petroglyphs are both incised and pecked, covering an area of approximately 22 x 40 cm. The face of this boulder has natural creases, and part of the pecking crosses one of these. It is possible that the pecking may have been intended to represent anthropomorphic figures, for they are somewhat suggestive of those forms. The incised lines are over the pecked areas.

Panel 4 has 2 figures on the side of a large boulder. This panel has some recent scratches.

1. A "T" figure, without legs, measures 15x16 cm; it is quite square and symmetrical.
2. A second T figure located just below and to the right is 16x20 cm. This figure has more fluidity to it; the left arm curves in and out again and the right arm curves outward. Directly below the figure is a distinctive natural depression, oval shaped.
3. A cupule is near the left hand of #2. It measures 5 cm diameter.

### Site 50-20-97-481N

This site is a complex with 12 features, including a petroglyph locus, Feature N. Described as a basalt dike outcrop with two petroglyph boulders, one contains (according to Hommon's report) three human figures; the other may have two more. We documented five figures at the former; we did not find any others on any separate boulder. See map and figure drawings at end of this section.

The panel at Site 481N contains a row of five stick figures, several of which appear to be interacting with each other.

1. The figure on the left is angular, with a line for a head. It measures 15x20 cm. The arms are angled downward and part of the legs disappear into an eroded area.
2. A phallic stick figure with wide arms; the hand on the right overlaps the hand of the next figure, giving the impression of connection although not actually touching. It measures 19x20 cm. The legs are narrow and end in points.
3. The central stick figure has short curved legs and arms outstretched, nearly connecting to the next figure which holds an object in the right hand. It is 15 x17 cm.
4. This stick figure holds an object in its right hand. Legs are rounded.
5. The final figure on the right is in a running posture and measures 9.5 x10 cm. The upper part of this petroglyph is very faint. Directly above this row of figures is an exfoliated area.

#### Site 50-20-97-482J

Site 482 is a complex described as having a shrine, habitation terraces, midden and a petroglyph (Feature J). Hommon's report cites "...a petroglyph" but, in fact, his drawing shows two figures. One, his "Face 1, Figure A" corresponds to the only one that we recorded here although we saw it somewhat differently. The site is 15 meters south and a bit east of a large grinding stone, located near the trail leading *mauka*. See map and figure drawings at end of this section.

#### Panel 1

1. A stick figure with rounded legs and raised elbows. Exfoliation is severe. It measures 15 x15 cm.

#### Site 50-20-97-485C

Site 485 is another complex with possible habitation terraces. Site 485C consists of "...two basalt boulder outcrops with petroglyphs...." Hommon's site map of these petroglyph boulders is specific and the boulders were carefully inspected. We found only one panel, at 485C. The other boulders have irregular natural features that apparently were mistaken for petroglyphs.

The panel we did record contains incised lines plus peck marks. This complicated panel was recorded by tracing on mylar. Among seemingly random lines can be seen a stick figure with pecking for a head, a possible comet, and what may represent canoe shapes. The overall distribution of lines, which cross in a loose grid, suggest that the lines were made at different times, in a sort of incremental process.

#### Site 50-20-97-485D

Site 485D is described by Hommon as a basalt dike with two boulders containing petroglyphs, one with "...an indeterminate number of scratched incisions on the east face and three pecked male human figures on the west face."

Our survey recorded three boulders (with a total of four panels) and a total of twenty nine figures, but no scratched incisions. Panel 1 is on the vertical face of a boulder,

facing west; the rock is eight meters east of the other panels. Panels 2 and 3 are on the same boulder, a large horizontally oriented rock. Panel 2 is near the top on the west side; panel 3 is on the east-facing vertical surface. Panel 4 faces west, and is on a vertical surface. Numbers 3 and 4 are less than 2 meters apart. See map and figure drawings at end of this section.

Panel 1 contains two figures. Our documentation follows Hommon's drawings fairly closely. We observed a variety of pecking which suggested to us that these figures may have been reworked in recent times.

1. A stick figure which appears to be in a running posture. The head is a horizontal oval shape, and the figure has shelf feet. It measures 21x22 cm.
2. A stick figure with a line for a head and one arm raised. The feet are shelf-like. It measures 19x21 cm. The legs are rather faint.

Panel 2 and 3 are found on opposing faces of a large boulder lying near to the rock containing Panel 1. Panel 3 covers a large and relatively flat vertical face, while Panel 2 is located in a narrow band near the top on the reverse side of the rock.

Panel 2. These particular elements are not illustrated in Hommon's report and likely went unobserved as they have considerable lichen growth. Here we found three units,

1. A "T" figure with fingers and wavy arms (19x34 cm).
2. A headless anthropomorph with long wavy arms and short legs (29x30 cm).
3. A partial figure (11x16). The first two are roughly pecked and irregular.

Panel 3 contains 25 petroglyph motifs plus random pecking on the long face of a large boulder. Some of these are extremely faint, and it is possible that more figures are/were here. Different types of pecking are visible and there is visible overlapping (superimpositioning). The figures on the upper part of the rock appear to be older. Hommon's report exhibits 8 anthropomorphs, selected out of the panel and not drawn with great accuracy. We describe the units, beginning at the far right side of the boulder.

1. A curved line, 5x10 cm. pecking varies from light to heavy.
2. A phallic stick figure formed by light, fine pecking (16x20). A line bisects the torso. Other pecking is associated on the right side. This corresponds to Hommon's Face 3, Figure A.
3. A triangular bodied anthropomorph (17x18? cm), roughly and loosely pecked but with a small tool. Arms are very faint and legs wide-spread. This may correspond to Hommon's Face 2, Figure B.
4. Triangular bodied figure connected or superimposed over adjacent figure (No. 5). Pecking above and to the right of the head is shallow. Figure is 18x24 cm.
5. Stick figure (16x18 cm) connected to or overlapping Figure 4. Legs curve sideways and left arm connects to head of adjoining figure. These are shown in Hommon as Face 5, Figures B and C.
6. Phallic stick figure, 18x28? cm, either over or under adjoining figure, #7. Arms are long, and head has square appearance. Compare Hommon's Face 4, Figure A. The upper part of this figure is very faint and other (random?) pecking is above the head.

7. Triangular bodied anthropomorph (26x28 cm), loosely pecked. Shoulders are angled. This is either over or under No. 6.
8. A "T-shaped" figure, legless. Very faint, there is some additional pecking near the right arm/hand area. Figure measures 23x23 cm.
9. Triangular figure (8x16 cm) with faint suggestion of a head, and possibly the start of one leg. Figure is armless and legless.
10. A faint figure, with a somewhat box-like body shape, and detached head (13x16 cm). The left arm appears to connect to another pecked area, # 11. The legs are rounded.
11. Fragmentary pecked area, 16x28 cm. It is possible this is an eroded figure with attachment to # 10.
12. This faint pecked area (10x16 cm) appears to be a torso/legs; whether or not this connected to # 11 is unclear.
13. A partial anthropomorphic figure (11x11 cm). All that remains is a lower part of a torso and legs, one of which is under a leg of # 14.
14. A fairly clear stick figure (14x19 cm) partially over some other pecking near the left leg; the right leg is over the lower half of another partial figure, # 13.
15. Pecked area that may be the beginning of a triangular-bodied figure.
16. This stick figure (17x18 cm) has a detached head and appears to be older. A vertical element crosses the right arm of the figure.
17. A faint stick figure, lightly bruised (17x22) with a head suggested by a pecked area; it appears to be partially superimposed over the next figure on its right (# 16).
18. An indeterminate figure, probably the start of an anthropomorph (14x17 cm). The right side of this element interacts with another, # 17.
19. An anthropomorph with slightly triangular body, and curved arms and legs (16x20 cm). The head is detached and small vesicles in the rock give the appearance of a face. This seems to be Hommon's Face 2, Figure A.
20. Incomplete headless figure, 12x16 cm. Legs are wide and asymmetrical; the one visible arm extends upward.
21. Torso and legs, partial arm on the left (17x22 cm). Feet are clearly shown; head is missing. Faint line seems to connect the arm of #21 with the leg of #20.
22. Connected stick figure, 21x22 cm. Figure is asymmetrical with wide legs, and wide right arm; left arm joins to legs forming a square shape. The right leg joins figure 25. It is possible that this is Hommon's Face 5, Figure A.
23. Partial figure? 16x28 cm. This may have been the start of a triangular anthropomorph.
24. Triangular figure, 16x24 cm. The left arm of this figure becomes the leg of # 22.
25. Fragment of a figure, 8.5x14? cm.

Panel 4, is a small boulder which lies near the rock containing Panels 2-3. It possesses only one petroglyph.

1. A heavily patinated triangular-bodied anthropomorph, measuring 23 x24 cm; it is legless. It is made with fine, even pecking plus some abrasion. The arms appear to be made with incised lines.

Site 50-20-97-486

Site 486 at Hakioawa is described by Hommon as containing midden scatters, habitation terraces, an enclosure, and petroglyphs. Unlike the previously mentioned petroglyph sites, all of which lie along Hakioawa's central ridge, Site 486 rests on the slope of the valley's southern ridge. The site is on a bedrock ledge above the stream bed. The ledge runs along the side of the slope, about four meters down from the crest. Into these faces of exposed bedrock have been carved, at intervals, the petroglyphs we recorded. The large occupation sites and midden scatters described by Hommon are situated on the crest of the ridge. Some terraces have, however, been built at the foot of the bedrock ledge, suggesting that the area was used for small shelters. Stone alignments lying further down slope near the stream bed appear to be agricultural features. These are not so much distinct boulders as rocks which form a part of the ledge.

Our documentation revealed fifteen figures on five boulders. The earlier survey describes Feature F as a petroglyph on the flat surface of a natural bedrock ledge; Feature G is described as four petroglyphs on boulders: three anthropomorphs and one zoomorph. Another human figure is said to be on a nearby rock. That report also shows a map of the rocks, with letter designations. Because we were unable to match the drawings shown in the 1976-80 field team report, we gave the panels number designations, 1 to 6. See map and drawings at end of this section.

Panel 1 and 2. These panels face west, out over the stream bed.

Panel 1

1. The stick figure human in Panel 1 measures 13.5x13 cm. The anthropomorph has shelf-like feet and hands, and the right leg is extended somewhat, giving the figure a lively pose.
2. The dog is 7.5x18 cm. It is shown with two legs, the back one having an indication of a foot. The tail is extended up and back; the head lacks ears.

Panel 2, the lower panel, has similar elements.

1. A stick figure anthropomorph measures 14x19 cm; it has shelf-like feet but the right hand disappears into an eroded area. The figure is carefully made, but with sparse pecking.
2. The dog, 8.5x15 cm, is similar to the one in Panel 1. It has two legs, feet indicated and tail extended. However, ears are present on this animal. There may be some recent pecking on this figure.

In each of these panels, the human figures appear to be older and the dog figures faint and almost casually pecked. The two anthropomorphs were made by two different hands and in two different styles. There appears to be a relationship between these two panels in that they each have one figure and one animal. This may echo the pattern in places such as the gulch west of Ahupuiki where there is an animal paired with or

sometimes superimposed on a figure, with the animal appearing to be the more recent, and at times overlapping the human figure.

Panel 3: This panel faces south, on the side of the boulder, and twenty meters north of Panels 1 and 2. Four anthropomorphic figures were recorded here, plus traces of at least one more figure. This panel is exfoliating.

From right to left:

- 1) A triangular bodied human with wide arms and feet that form a circular shape. It measures 20x22 cm. The left arm and a portion of the head continue into an exfoliated area.
- 2) Stick figure, 12 x18 cm; the left leg is overlapped by the leg from figure #3.
- 3) A triangular bodied figure with torso not pecked fully, 18x21 cm. The left arm is faint and the right leg appears to overlap the left leg of figure # 2.
- 4) A triangular body figure, 20x21 cm, with faint legs. The torso is fully pecked and the left hand is not connected to the arm. Head is partially exfoliated. The arms curl inward toward the torso.
- 5) A partial figure, 6x11 cm, consists only of a head and one arm.
- 6) A straight line measuring 11 cm long.

Panel 4: This panel faces west, over the stream bed on the same boulder. The single figure here is one of the deepest pecked images and yet is difficult to see. Also, there are faint suggestions of other petroglyphs on the same panel; it would be fruitful to restudy this panel under varying lighting conditions.

1. This single phallic figure, measuring 12 x 24 cm, has a triangular body and may represent a bird-man in that it has very wide spread arms with wing-like appearance. It is very finely pecked and made with great care.

Panel 5 faces west and is on a boulder fourteen meters to the north. Six anthropomorphic figures are here. Right to left, they are:

- 1) A triangular figure with straight "V" shaped legs, looking somewhat like the tail of a frigate bird. It measures 24x27 cm.
- 2) A second triangular figure, similar to # 1. Both have arms extended out and down. It measures 23x27 cm.
- 3) A phallic stick figure with shelf feet, 11x11 cm.
- 4) A faint stick figure, measuring 11x15 cm.
- 5) A stick figure, more deeply pecked than the others; it measures 16x18 cm.
- 6) Another stick figure, basically the same as the other three in this group, only more lightly pecked. It measures 17x18 cm.

Panel 6 faces north and is on a boulder 1.3 meters to the north of # 5. The panel contains four figures. A natural arch of vesicles is above the figures, making a sort of frame for the panel.

- 1) A double? anthropomorph. 18x18 cm. The right arm touches an exfoliated area. This form appears to have two sets of arms (or legs) with a circle in the torso (which may actually be a head of a lower figure).

- 2) An active stick figure with both arms raised, this measures 18.5x22 cm. The legs are curved and have shelf-like feet. The head is "lobed" as if to represent ears or perhaps some kind of headdress.
- 3) Stick figure, 14.5x16.5 cm, has one arm raised and rounded legs. The raised arm nearly connects to the figure above (#4).
- 4) A double stick figure, 9.5x19.5 cm. is most unusual. It appears to have two torsos, two heads, but shares one set of legs and arms.

#### Site 50-20-97-567

Site 567 is described by the 1976-80 survey as having a petroglyph of an anthropomorph at the base of a boulder outcrop. No other information accompanies this item: we were not able to relocate it.

### Discussion

Hakioawa's sites contain, according to Hommon's study, at least twenty-nine petroglyphs. Our count for this area is 65 (not counting all the fine incised lines at sites 485I and 480C). If one adds to this the six units that Hommon reported but that we were unable to relocate, the total is higher.

The figure types run the gamut from simple T figures to the usual Hawaiian stick figure anthropomorph to triangular bodied anthropomorphs to muscled figures. Compared to sites near Ahupu, there are few dogs and no zoomorphs that appear to represent goats. Notable designs include the fishhook, figures with bird attributes, and connected figures which may represent family connections. Many figures appear to be rather ancient; whereas some look like they were recently reworked.

The sixty-five petroglyphs at Hakioawa show considerable diversity when one considers their relatively small number as compared to major sites such as Puako and Pu'uloa on the Big Island of Hawai'i. The fishhook petroglyph at 480I(2) is unique on Kaho'olawe, and there are a number of motifs which are one-of-a-kind such as the birdman at 486(2), the cryptic panel of incised lines at 485C, and the anthropomorphs with shared arms and legs at 486(6).

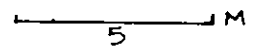
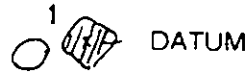
For some reason, these singular inventions did not inspire nor influence other petroglyph makers on Kaho'olawe to copy or emulate them. Unlike sites such as Kuhcia, where the somewhat repetitious figures on the main panel give the impression of a one-person art exhibition, Hakioawa is more like a group show of the works of several individuals, probably working at intervals.

The boulder at 485D(3) with its preponderance of stick figures shows some of the homogeneity typical of sites on the other islands. The stylistic aspects here are reminiscent of the petroglyphs of Lana'i and Maui, while still retaining a local Kaho'olawe flavor which is difficult to define (see Conclusions). Despite similarities in a handful of the curvilinear anthropomorphs on this boulder, a close look reveals differences, sometimes subtle, that reinforce the general sense of diversity. This suggests the type of individuality of form associated with a personal style, rather than a purposeful departure from a prototype in order to define content or impart a particular meaning to the petroglyph itself.

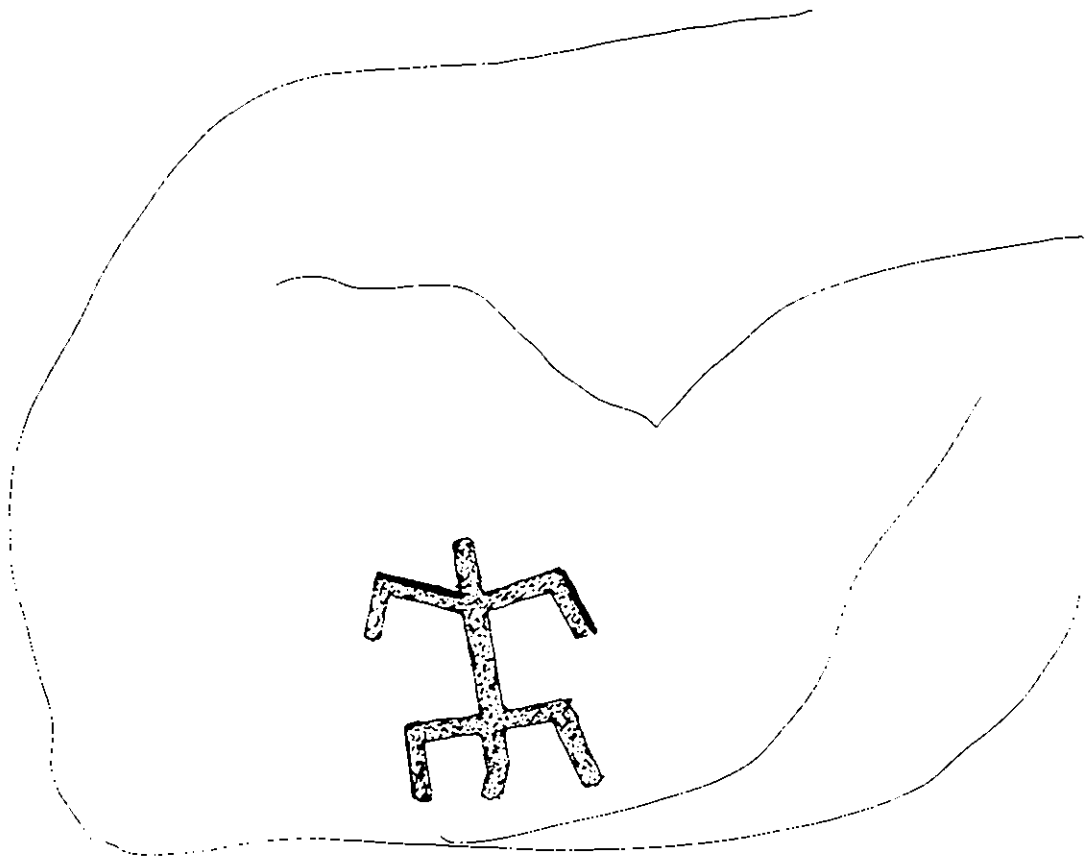


The diversity of style, subject matter, size, depth of lines, and scattering of sites all suggest a changing or evolving function for the petroglyphs. If petroglyphs embody the values of the culture and the petroglyph maker, and we believe they do, the changing values reflected in the images at Hakioawa indicate brief to moderate periods of activity, possibly corresponding to similar brief, intermittent occupation periods. Archaeological evidence eventually may or may not support this.

The petroglyphs of Hakioawa, as artistic visual accretive embodiments of socio-historical activity, do not suggest a long uninterrupted occupation of this site. If it had been continuously lived in, there would be some indications of a prolonged or evolved development of style or technique, conventionalization of image or form, or the presence of at least a few pervasive formal elements (such as particular or peculiar qualities of line, shape, texture, etc.). These are absent.

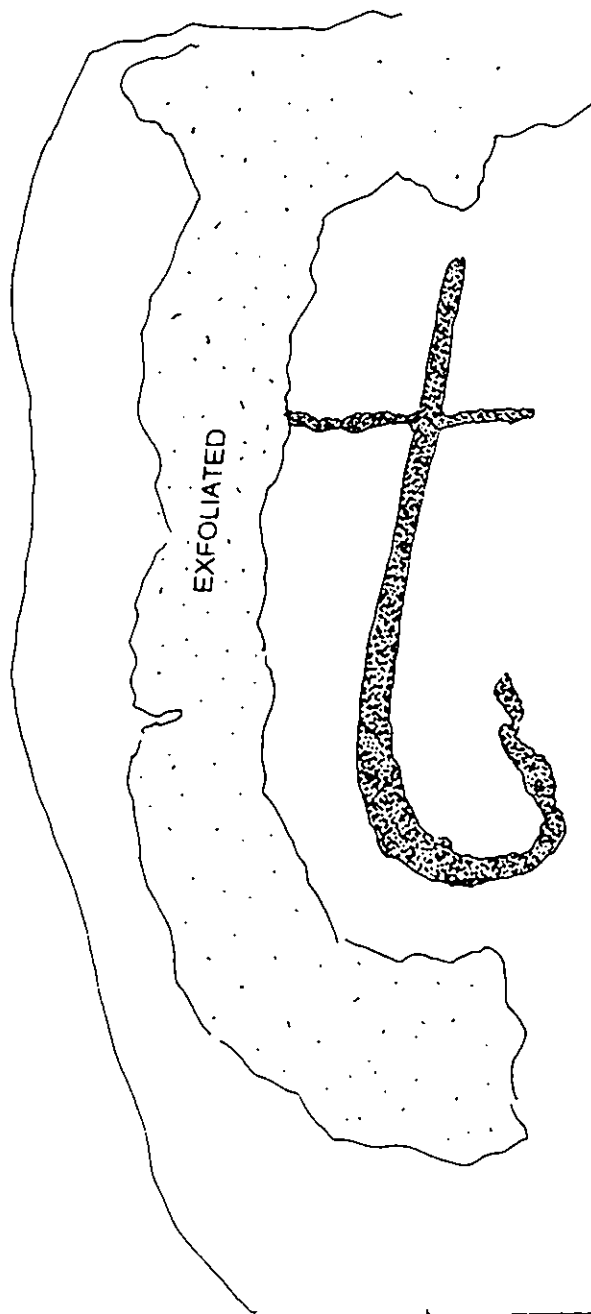


SITE 50-20-97-4801  
HAKIOAWA



SITE 50-20-97-4801, PANEL 1

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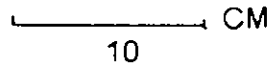
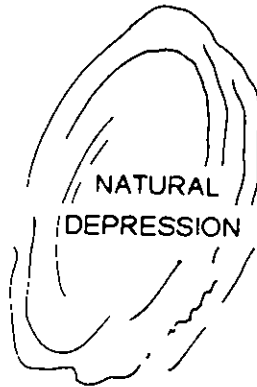
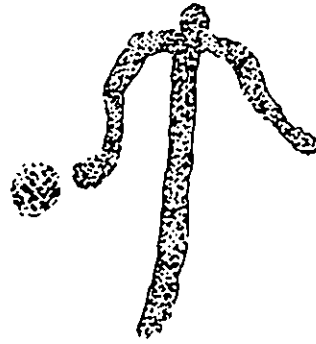
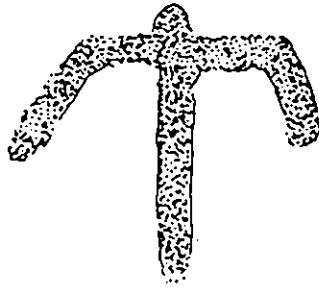
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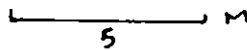
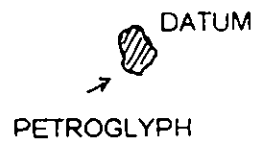
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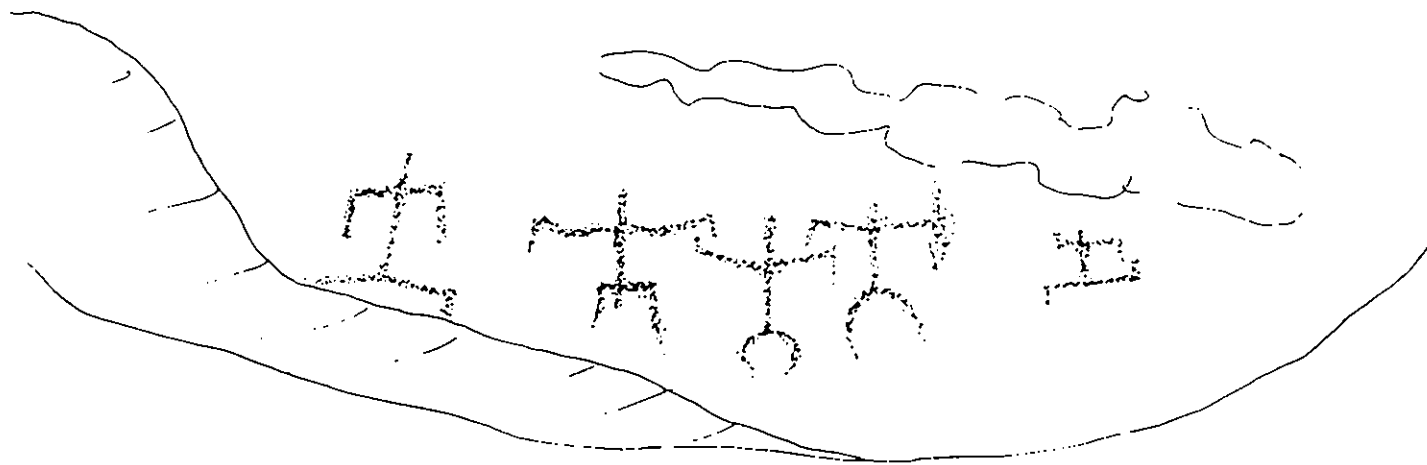
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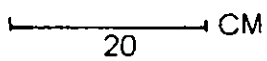
SITE 50-20-97-4801, PANEL 4



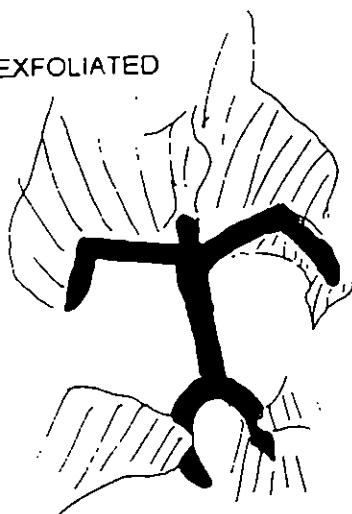
SITE 50-20-97-482J  
HAKIOAWA



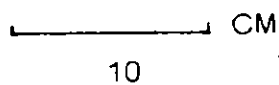
SITE 50-20-97-48IN, PANEL 1



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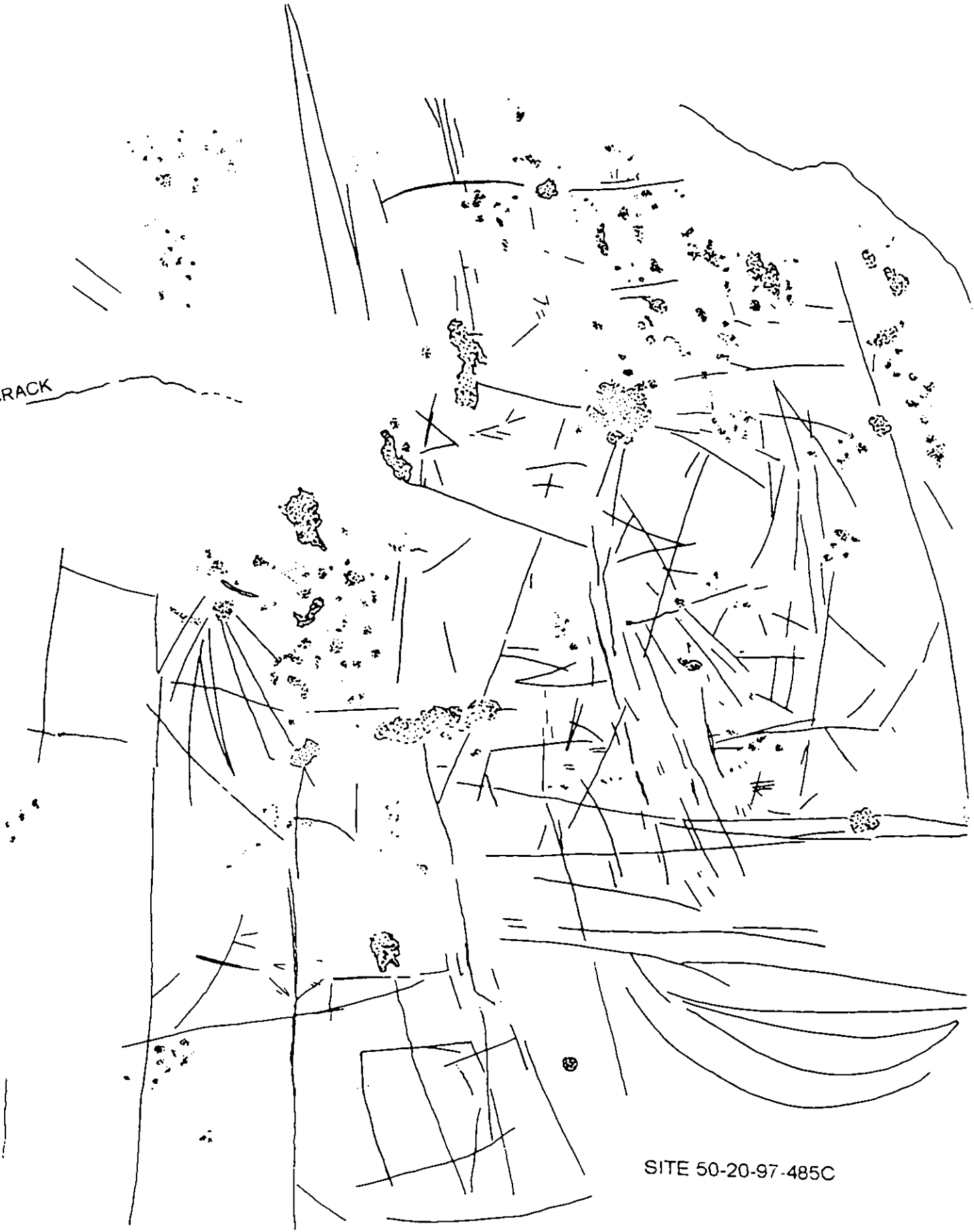


SITE 50-20-97-482J, PANEL 1



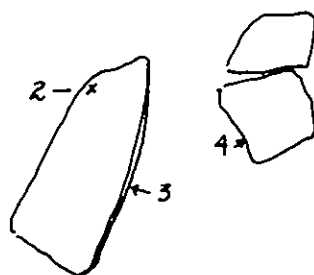


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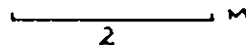


SITE 50-20-97-485C

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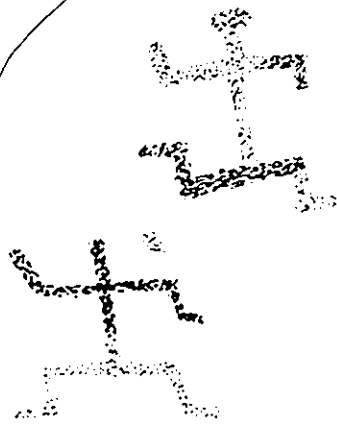


SITE 50-20-97-485D  
HAKIOAWA

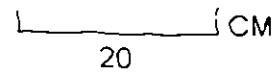




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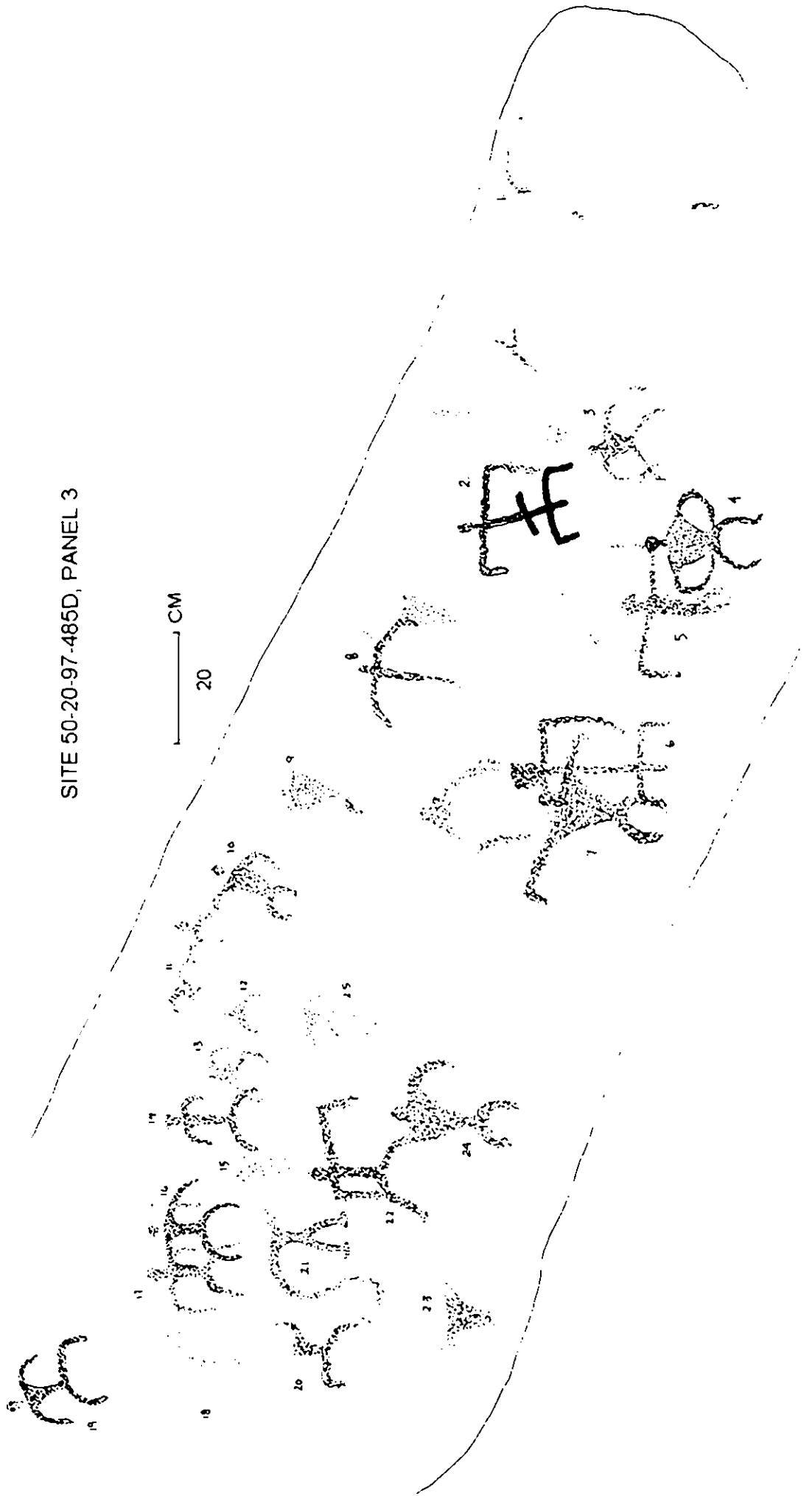


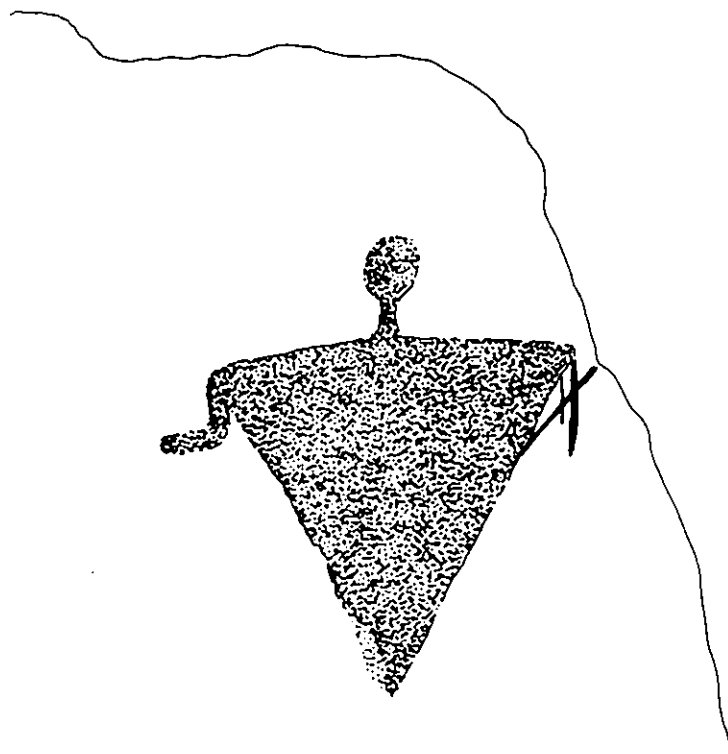
SITE 50-20-97-485D, PANEL 1



SITE 50-20-97-485D, PANEL 3

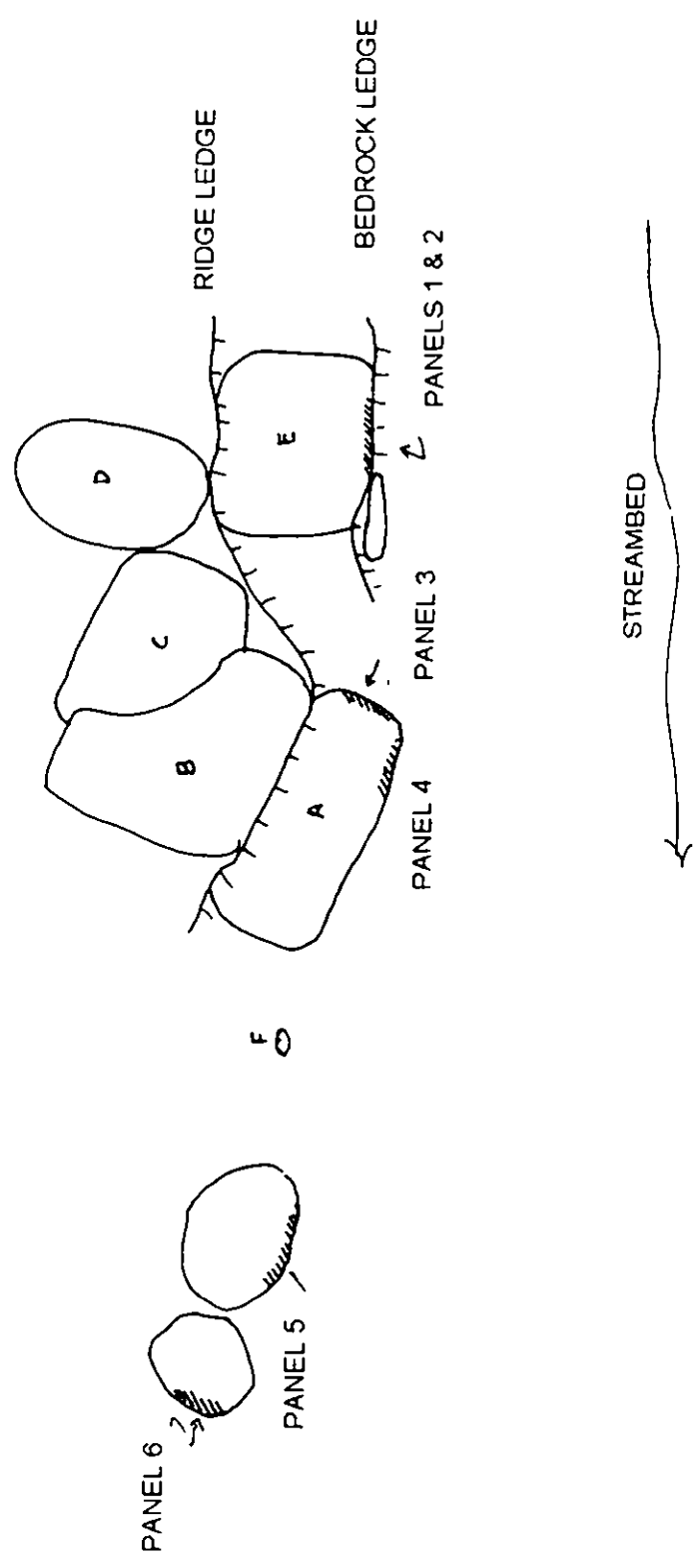
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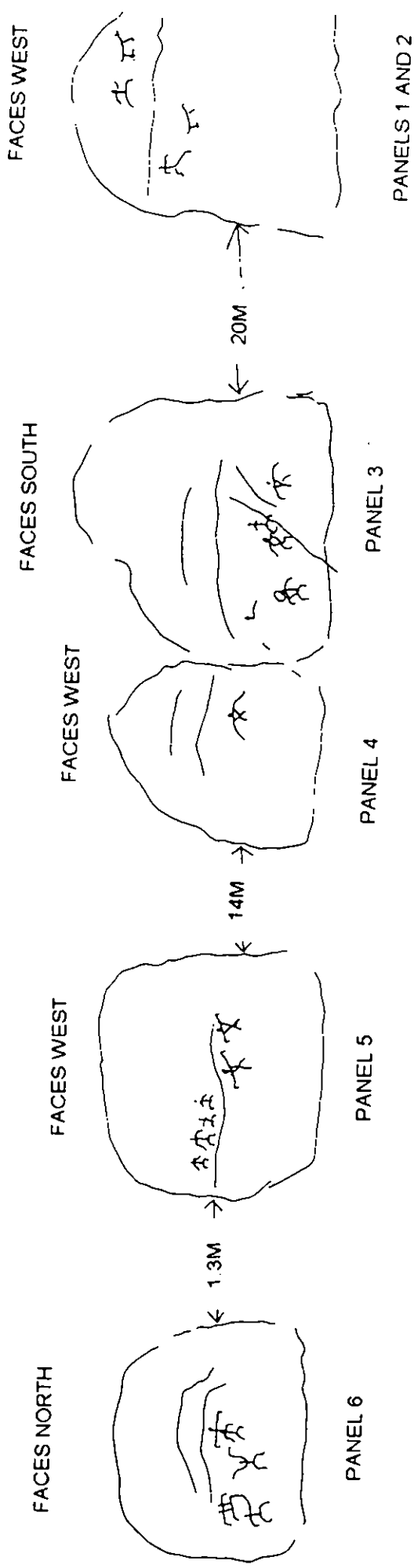
SITE 50-20-97-485D, PANEL 4



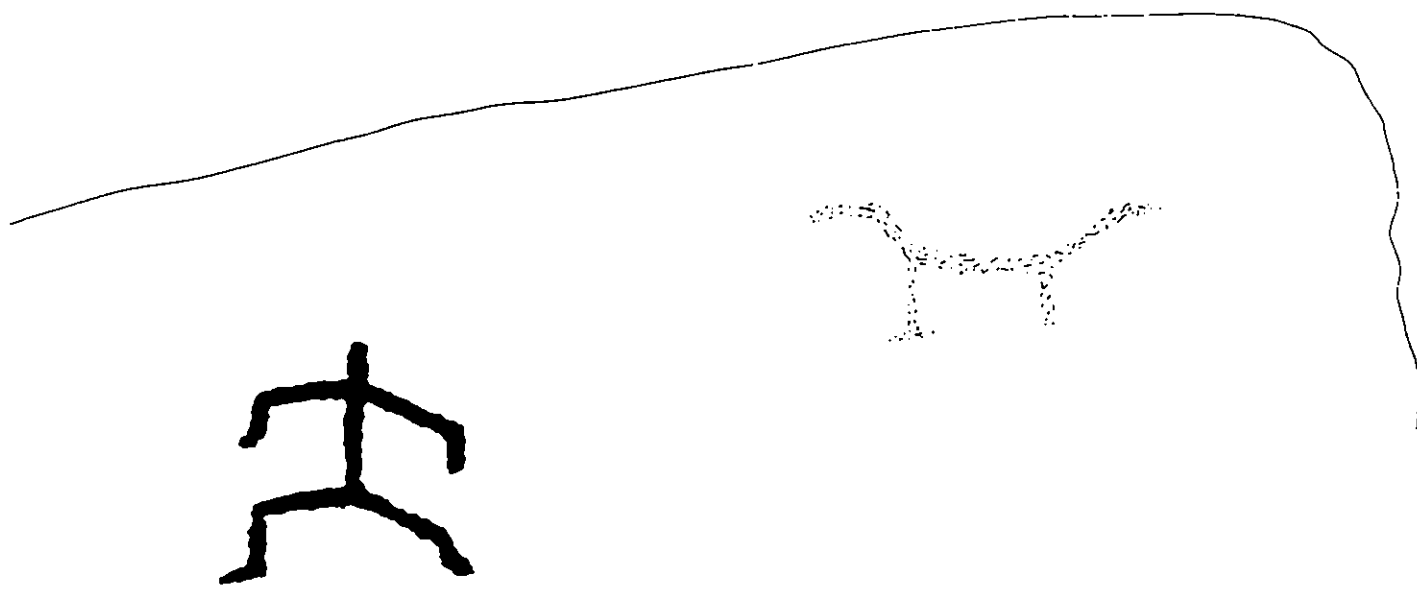
SITE 50-20-97-486, PANELS 1-6  
SCHEMATIC MAP OF BOULDERS

10 METERS

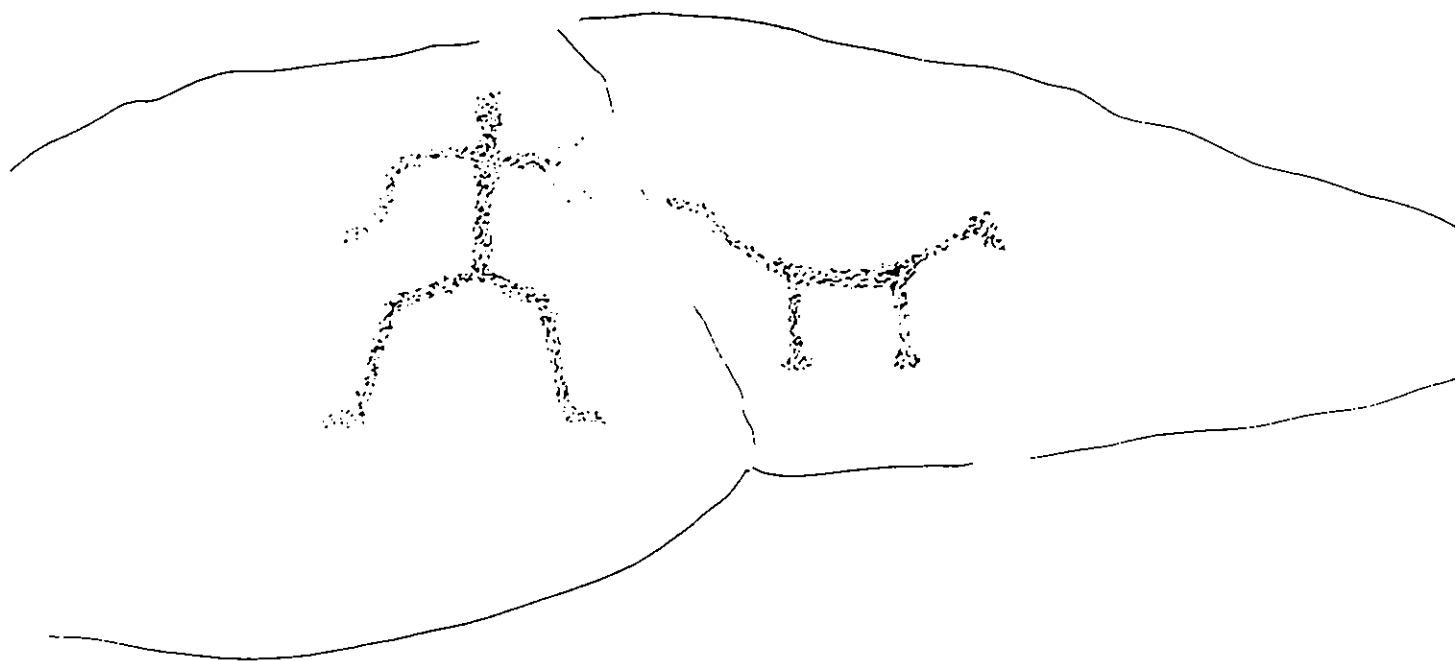
NOTE: LETTER DESIGNATIONS ARE FROM HOMMON REPORT



SITE 50-20-97-486, PANELS 1-6  
SCHEMATIC MAP OF BOULDERS



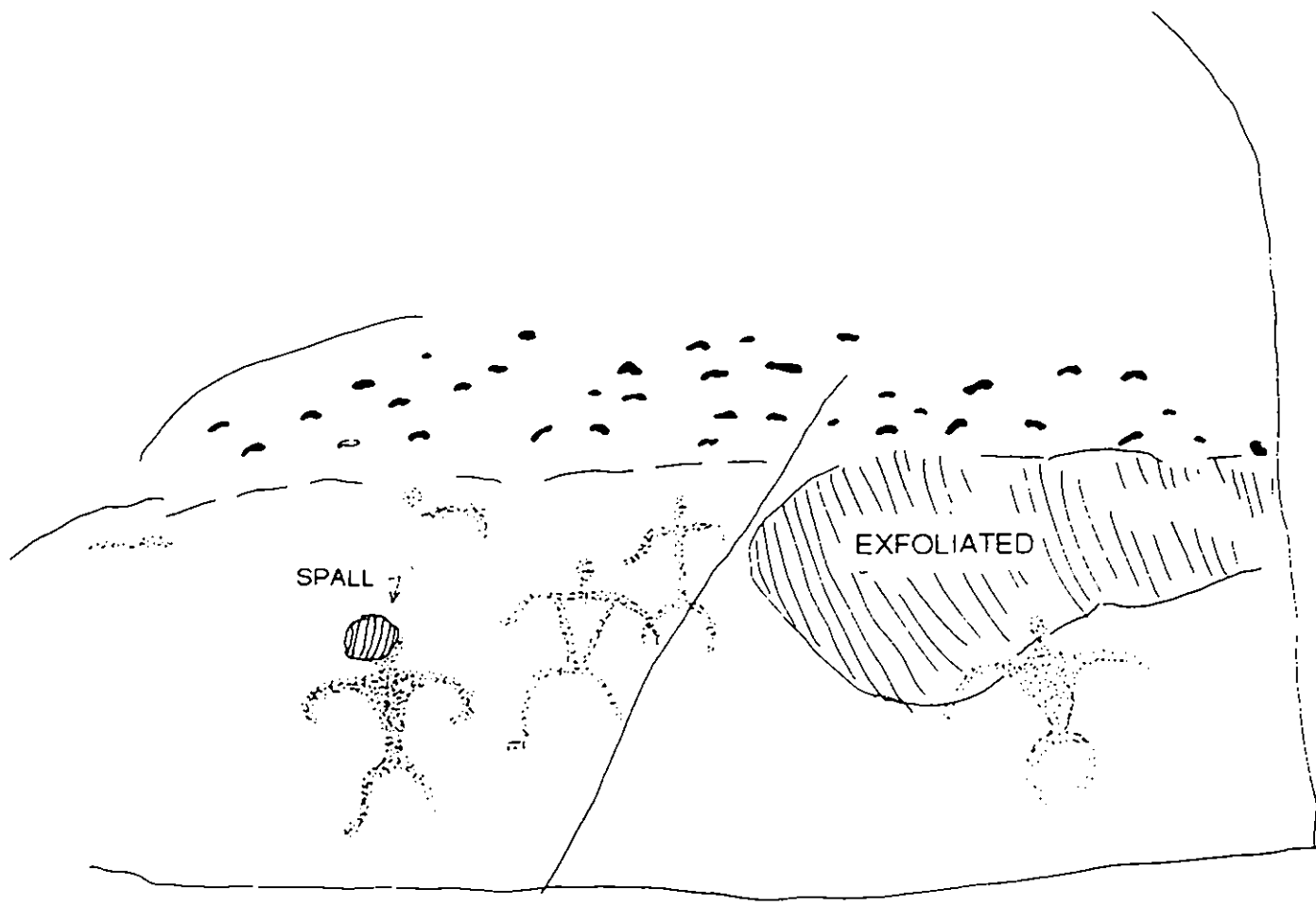
SITE 50-20-97-486, PANEL 1



SITE 50-20-97-486, PANEL 2

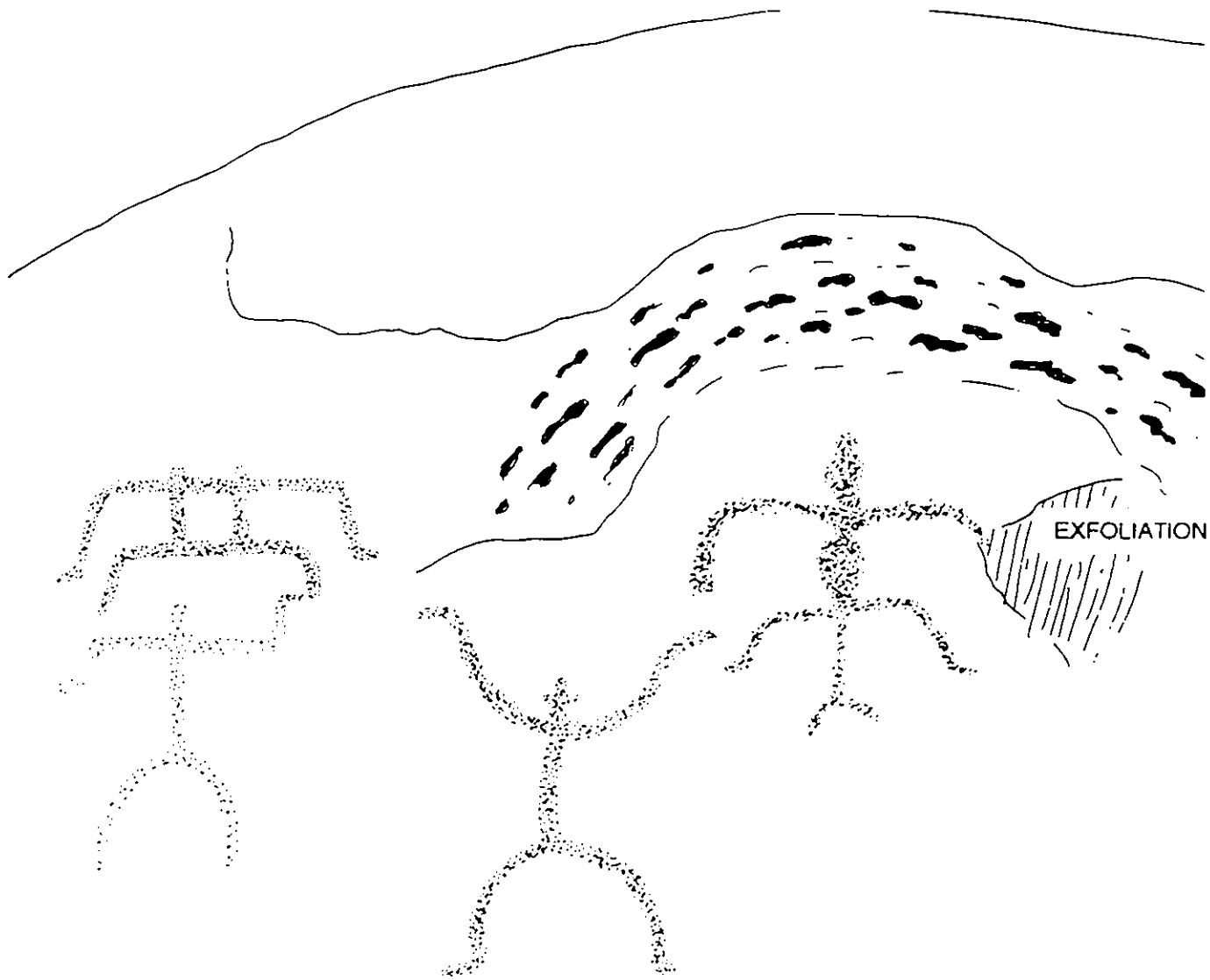
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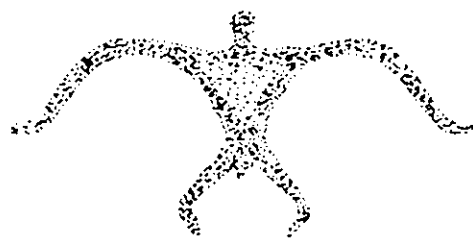


SITE 50-20-97-486. PANEL 3

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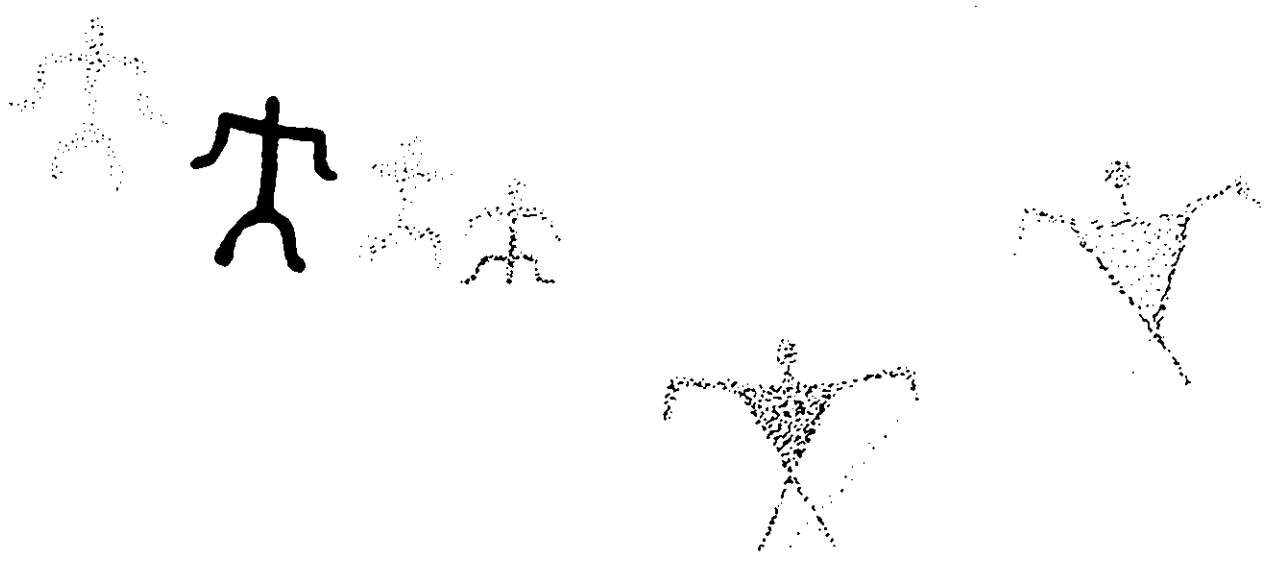


SITE 50-20-97-486, PANEL 6



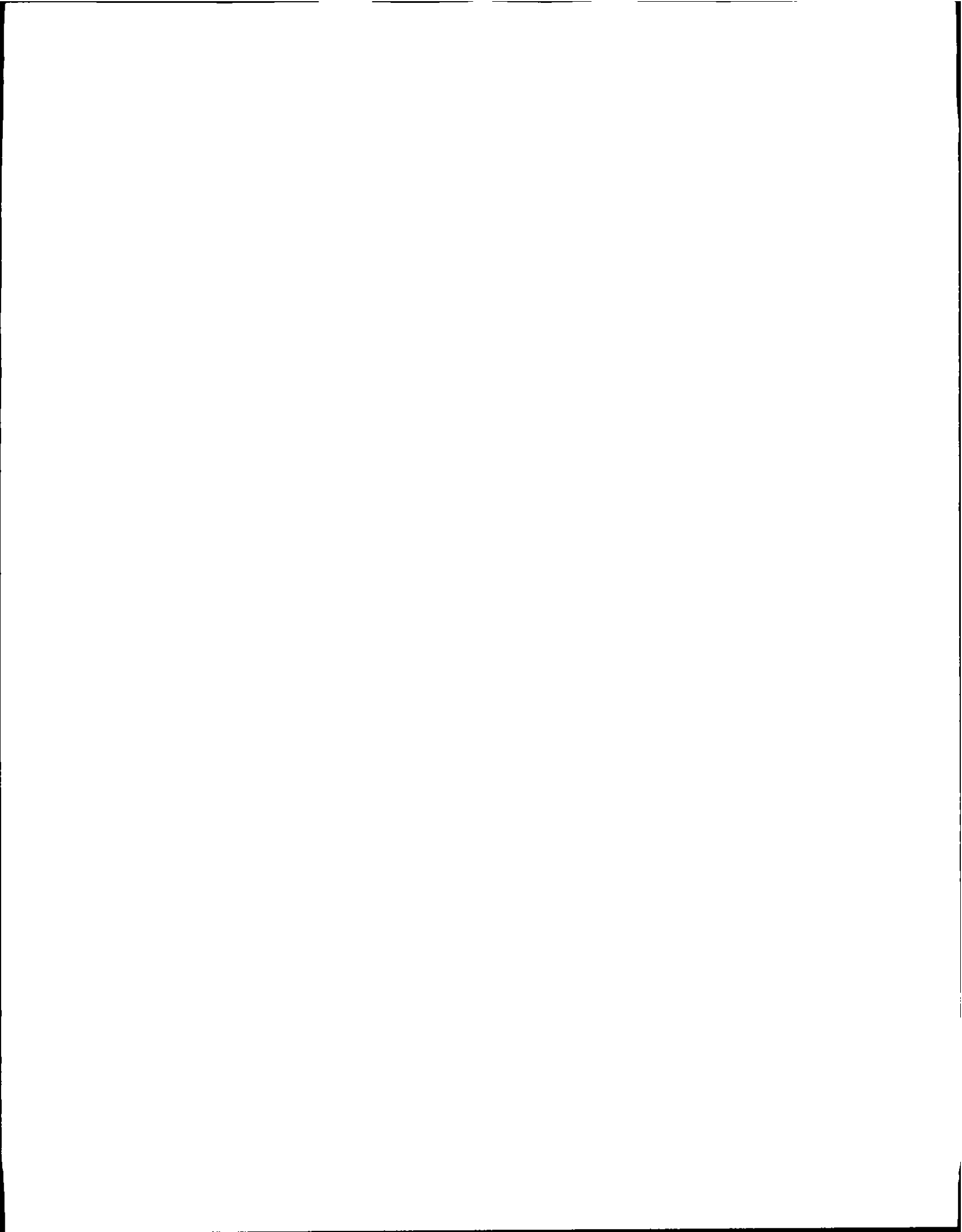
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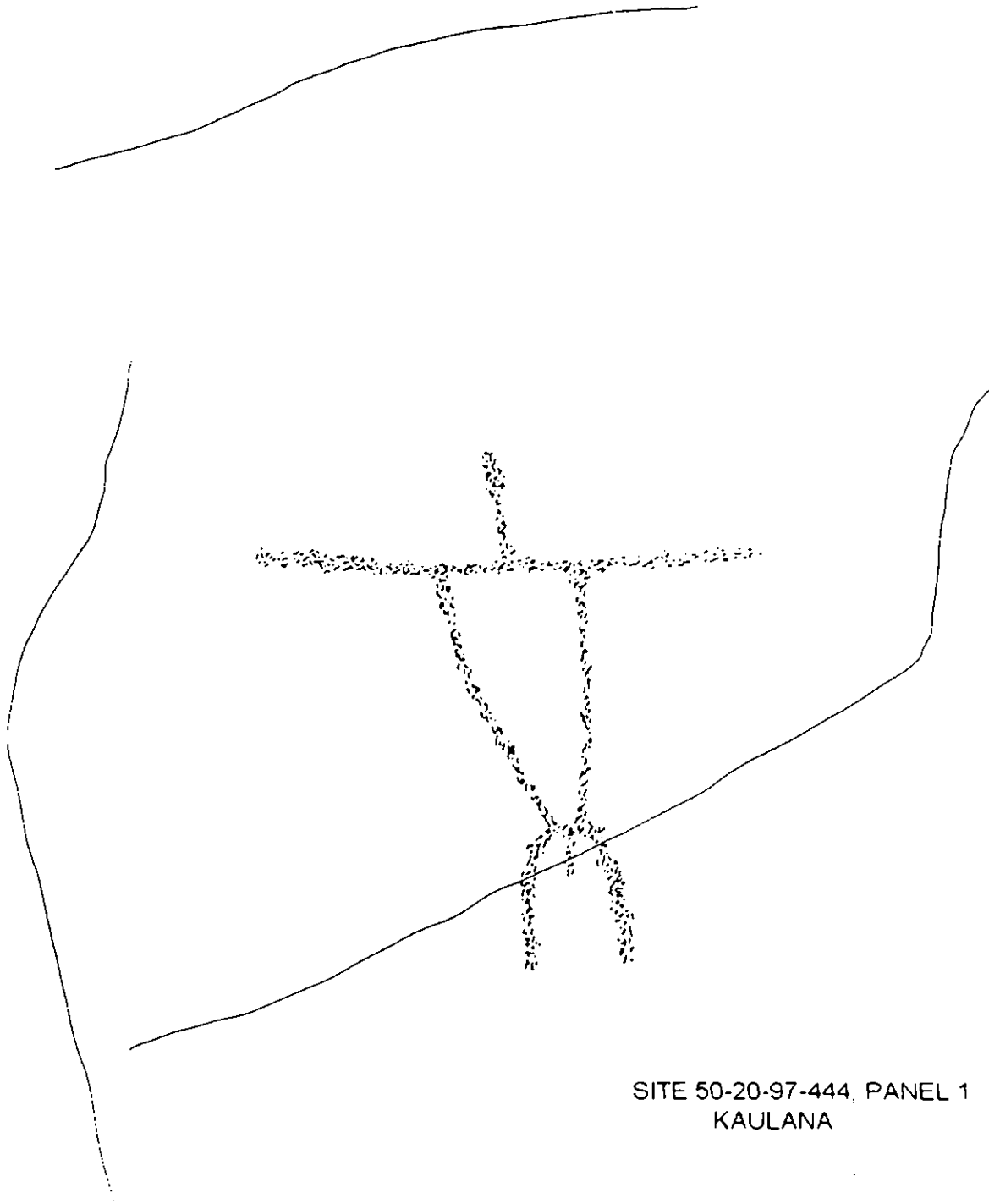
SITE 50-20-97-486, PANEL 5

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KAULANA









SITE 50-20-97-444, PANEL 1  
KAULANA

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# KAULANA-KUHEIA PETROGLYPH SITES

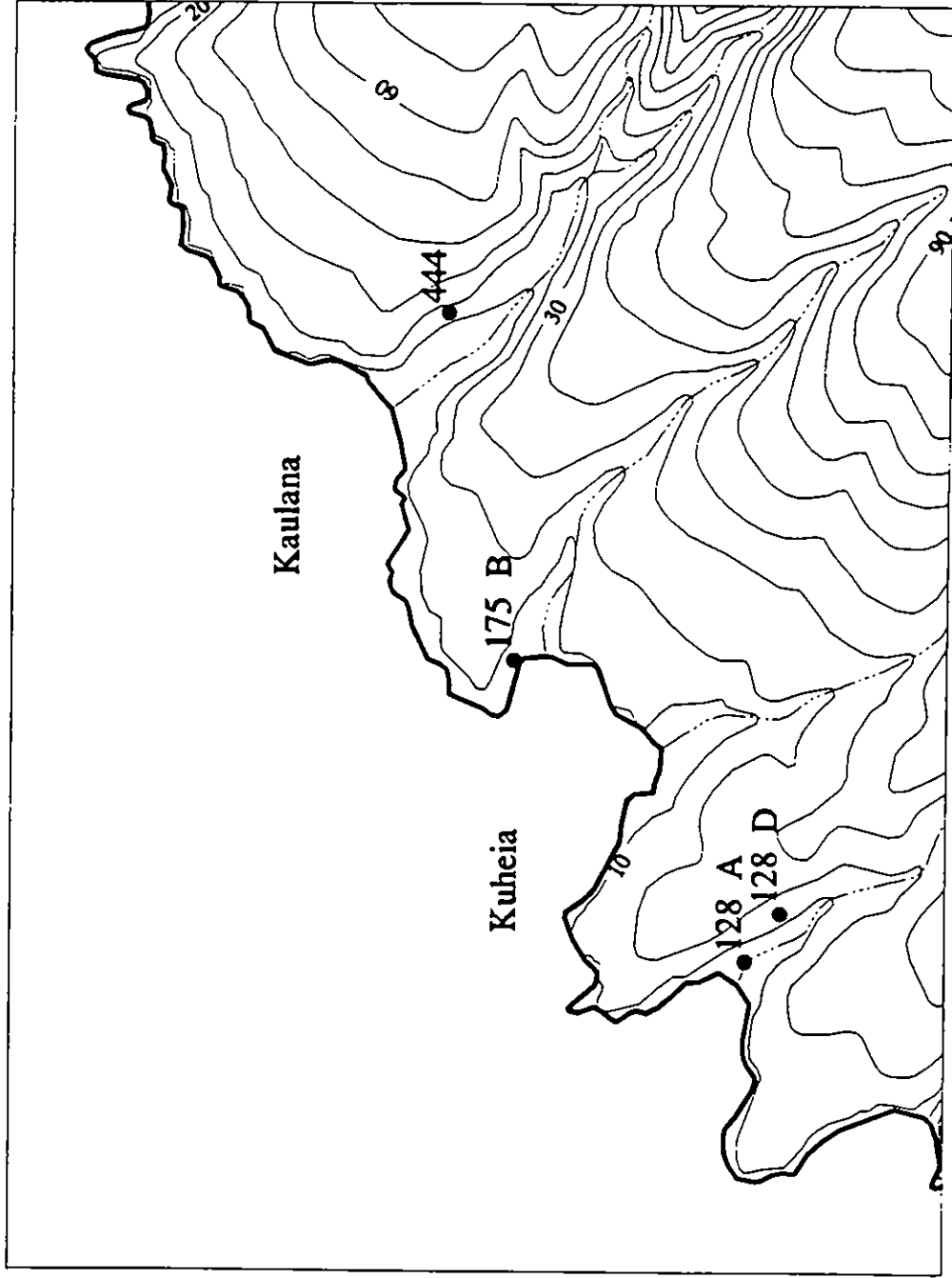
-  Petroglyph site
-  10 meter contours
-  Shoreline
-  Streams

481 N Site & Feature ID

0 100 200  
Meters



KICC 1993



## *Northwest Coastal*

### Kaulana

Site 50-20-97-444

The bay of Kaulana lies along Kaho'olawe's northwestern coast to the north and west of Hakioawa. The bay possesses a good sand beach backed by a relatively wide gulch. In the early 1800s Kaulana served as the site of a government penal colony. During the 1976-80 survey, the entire gulch mouth was designated Site 444.

The original survey did not find any petroglyphs within the Kaulana watershed. Our searches revealed one: this feature is situated inland from the beach on the northern slope of the gulch. A fairly large boulder outcrop stands against the slope, approximately 35 meters from the valley floor. On it is a single petroglyph. See illustration at end of this section.

Panel 1 has one figure.

1. A loosely pecked triangular bodied figure, measuring 32x32 cm. Although sparsely pecked, the phallic figure is symmetrical and well proportioned. The arms are straight out, the head a mere line.



KUHEIA



## Kuheia

### Site 50-20-97-175 and 128

Just west of Kaulana lies the bay of Kuheia<sup>1</sup>. It was in this small bay on the northwest shore that the Kaho'olawe Ranch headquarters stood. Built some time before 1895, the ranch buildings remained occupied until December 8th, 1941, when the military took over the island. The ranch was the largest of more than ninety ranch-related sites on Kaho'olawe. The primary activity was ranching of sheep, goats, and cattle. The most intensive period of ranching at Kuheia began in 1918 and many structural remains date from that time.

Today the foundations of the ranch buildings, corral walls, and water catchments crowd the valley (Tomonari-Tuggle and Carter, 1984). The entire complex is numbered as Site 175.

On the eastern edge of the bay, down near the beach, at the site of what was formerly a fenced-in corral, can be found a number of historic petroglyphs. These petroglyphs, which consists primarily of names (many of them known to be the names of cowboys who worked on or visited the Kaho'olawe Ranch), have been cut into the stone cliff face. The panels containing these names run from the ruins of a cement water trough out along the cliff face toward the beach. There are five panels in all, designated as Features B1 and B2.

Feature B-1 at Kuheia Bay is an enclosure abutting the cliff face of the gulch walls. Inscribed on the cliff face are the names:

E.K DUVAUCHELLE 1905;  
LALA IA; T.H. 05; KAULA; MELEANA, and ME

Feature B-2 has the inscriptions on the cliff face:

J. ENOS  
W. ENOS  
1903

D.K.K. and,  
x POAKULU NOV H. ENOS 1902 x .

Other names in this same location were unreadable, according to Tomonari-Tuggle and Carter, 1984.

We were able to extract the following, in addition to those mentioned above: The D.K.K. appears to be only a portion of the letters in that series. It actually reads:

---

<sup>1</sup> The USGS map spells Kuheia as Kehe'eia, which seems to be in error. The traditional spelling appears to have been Kuheia.

--DK--K--N--  
W--LL-

Other letters are:

V. Hoh  
KONA  
EY LNA

LANO  
W--E  
SYEAHEN-- -- --

Below the "name" is a line and the letters:

W<sup>m</sup> KA-- -- -- -- --

We noted the names:

D.N.PAHOA BENITO  
JUNE

K  
KAUO  
MEL

KAMUELAWAIKA ALOHA 1951 [the "9" is written backwards]

and newly written in coral chalk:

"ALOHA TE PAH TITA"

The petroglyph sites 128A and 128D lie within the gulch west of Kuheia, immediately west of Kuheia bay. Although narrow, the gulch shows evidence of prehistoric occupation.

Feature 128A consists of a large boulder resting at the foot of the gulch's eastern ridge, at the inland edge of the beach. Just upslope from the boulder stands the remains of a good-sized fishing shrine. The boulder appears to have suffered greatly from beach erosion. The petroglyphs all lie on its vertical southwestern face. The panel contains both figures as well as lettering.

Site 128D lies inland of Feature A, along the slope of the eastern ridge. Here a series of three stone faced terraces back up against a bedrock face. Panels containing some petroglyphs were found here by the 1976-80 survey team.

#### Site 128, Gulch West of Kuheia

##### Site 128A

Petroglyph site 128, Feature A, is in the gulch west of Kuheia. It is a large boulder resting at the eastern edge of the beach. The petroglyphs are on the vertical face. The rock itself is suffering from beach erosion. The panel contains figures as well as lettering. See illustrations at the end of this section.

1. A dog, 28x28 cm, with a curly tail and two legs; one of two together.

2. Dog, 24x31 cm, with two legs and no tail. This animal figure is less skillfully made than #1. It appears to be (an inferior) copy of the other.
3. The letter "A", plus fragments of other letters, perhaps a "KA". The group measures 10x28 cm.
4. Letters "AM", 10x18 cm. The "M" is partially eroded.
5. Letters "EK" (?), 10 x 21 cm. These are very faint.

#### Site 128D

Petroglyph site 128D is situated further inland along the east slope of the gulch. Five panels were recorded. L

#### Panel 1.

- 1A. A triangular bodied anthropomorph, 16x22 cm, on an exfoliating surface damaged by gunfire. The figure is symmetrical with rounded legs and shelf feet and hands. The interior is pecked, but not as heavily as the defining outline of the torso.
- 1B. This motif is on a nearby rock face, also damaged by gunfire. It is an anthropomorph, 14x22 cm, with rounded arms and legs.

Panel 2 has two figures, on adjacent surfaces.

1. A triangular bodied anthropomorph, 16x19 cm, uses the natural edge of rock as part of the upper torso.
2. A triangular bodied anthropomorph, 13x15 cm, with wing-like arms and rounded legs with shelf feet.

Panel 3 is the largest in this group, with 10 figures placed amongst natural cracks in the boulder surface.

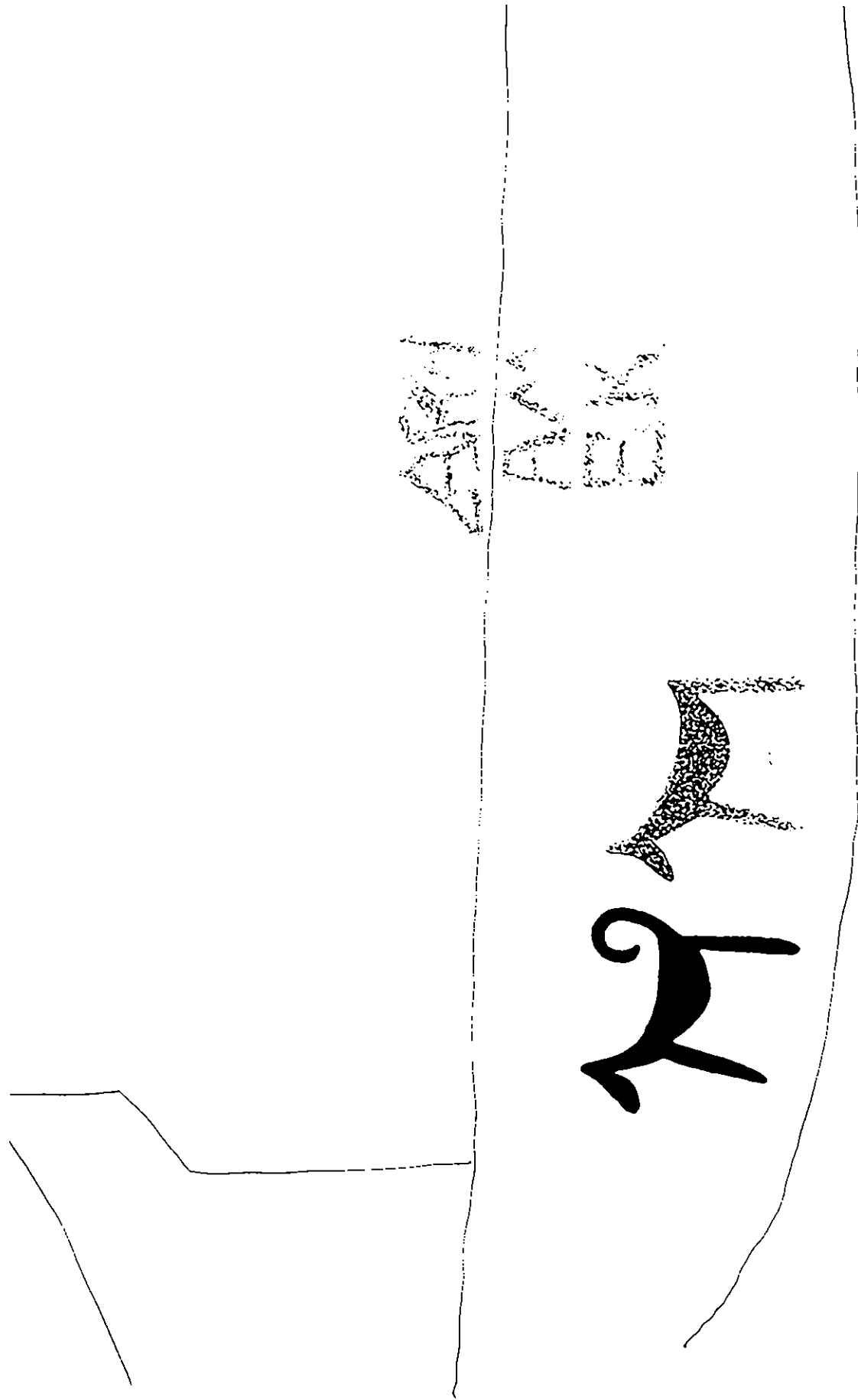
1. A triangular bodied anthropomorph, 19x22 cm, with rounded arms and legs. The arms curl inward toward the torso; the head is large.
2. A triangular bodied anthropomorph, 16x19 cm. Legs are spread wide, head is small. This figure is directly below #3. The center part of the torso is not pecked out.
3. A double? figure, this appears to be one phallic triangular bodied figure with the head becoming a partial torso with another head and upper set of arms. This unit measures 16x18 cm.
4. A triangular bodied figure 11x16 cm, with rounded legs. It is directly above #5.
5. A triangular bodied figure, 14x15 with rounded arms, curving inward. Legs are also curved.
6. A third similar figure, also with rounded arms and legs, 12x18 cm. This figure is below and slightly left of #4 and 5.
7. Triangular bodied figures with slightly squared legs, 11x15 cm.
8. Triangular bodied anthropomorph with wide arms and rounded legs, 15x15 cm.
9. Triangular bodied anthropomorph with right arm partially eroded.
10. A fragment of a petroglyph, 1x11 cm.

Panel 4 has three elements. The upper part of this boulder has been shattered

1. Triangular bodied figure with outsized head and rounded arms and legs, 17x22 cm.
2. Triangular bodied figure with large head and opposed arms. The edges of the torso are more deeply pecked than the interior; arms and legs are squared. It measures 20x26.
3. A small triangular anthropomorph, 10x12 cm, with outstretched arms.

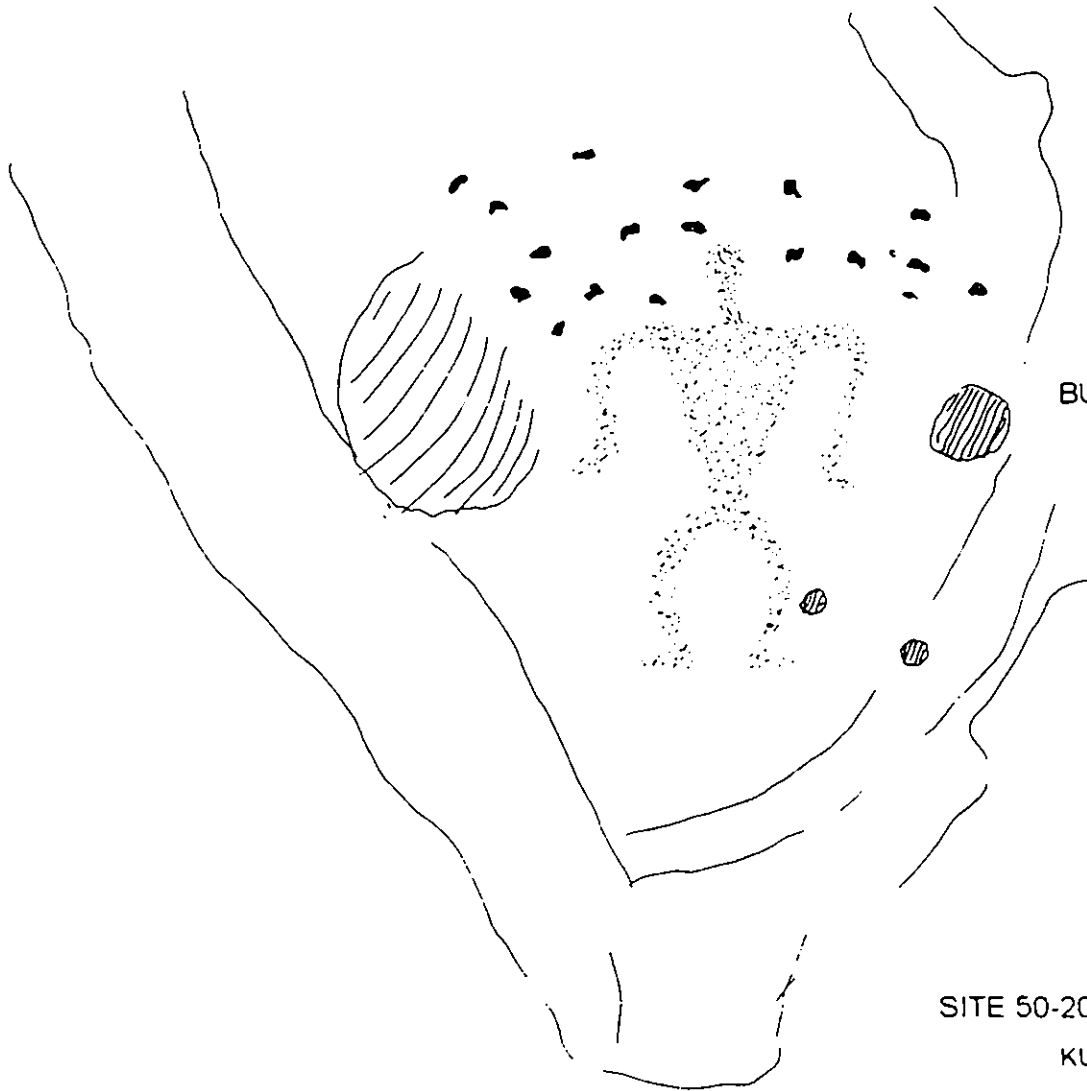
Panel 5 has a single figure plus traces of another.

1. Triangle bodied anthropomorph, with bullet marks on each side. The body is wide and head triangular. Arms are short; legs have shelf feet. It measures 17x20 cm.
2. A curved line of peck marks, 10x1.5 cm, near the right arm of the figure.



20 CM

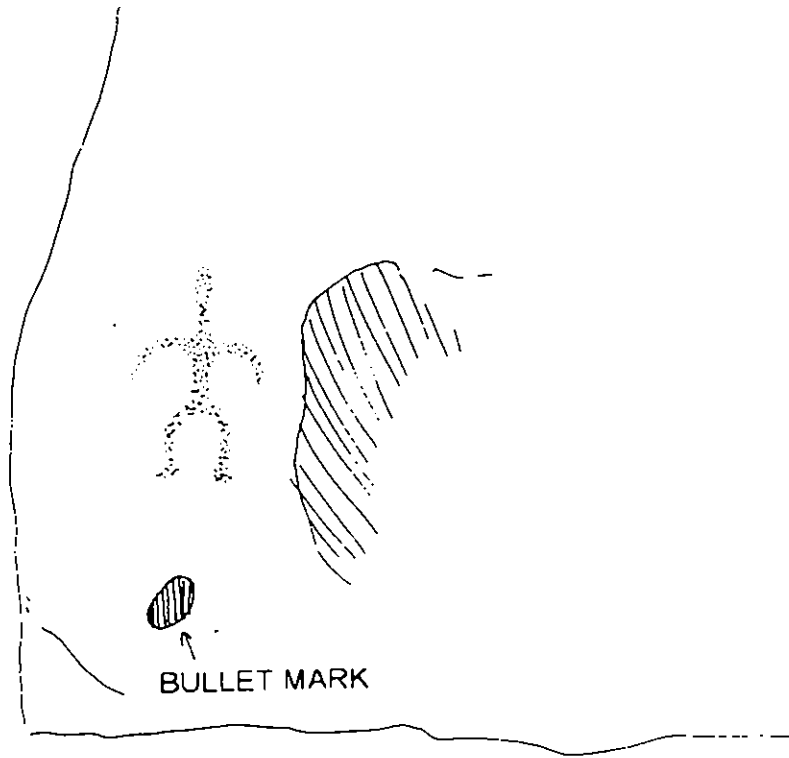
SITE 50-20-97-128A, PANEL 1  
KUHEIA



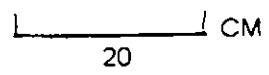
BULLET MARKS

SITE 50-20-97-128D, PANEL 1  
KUHEIA

10 CM



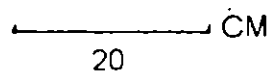
SITE 50-20-97-128D, PANEL 1(2)

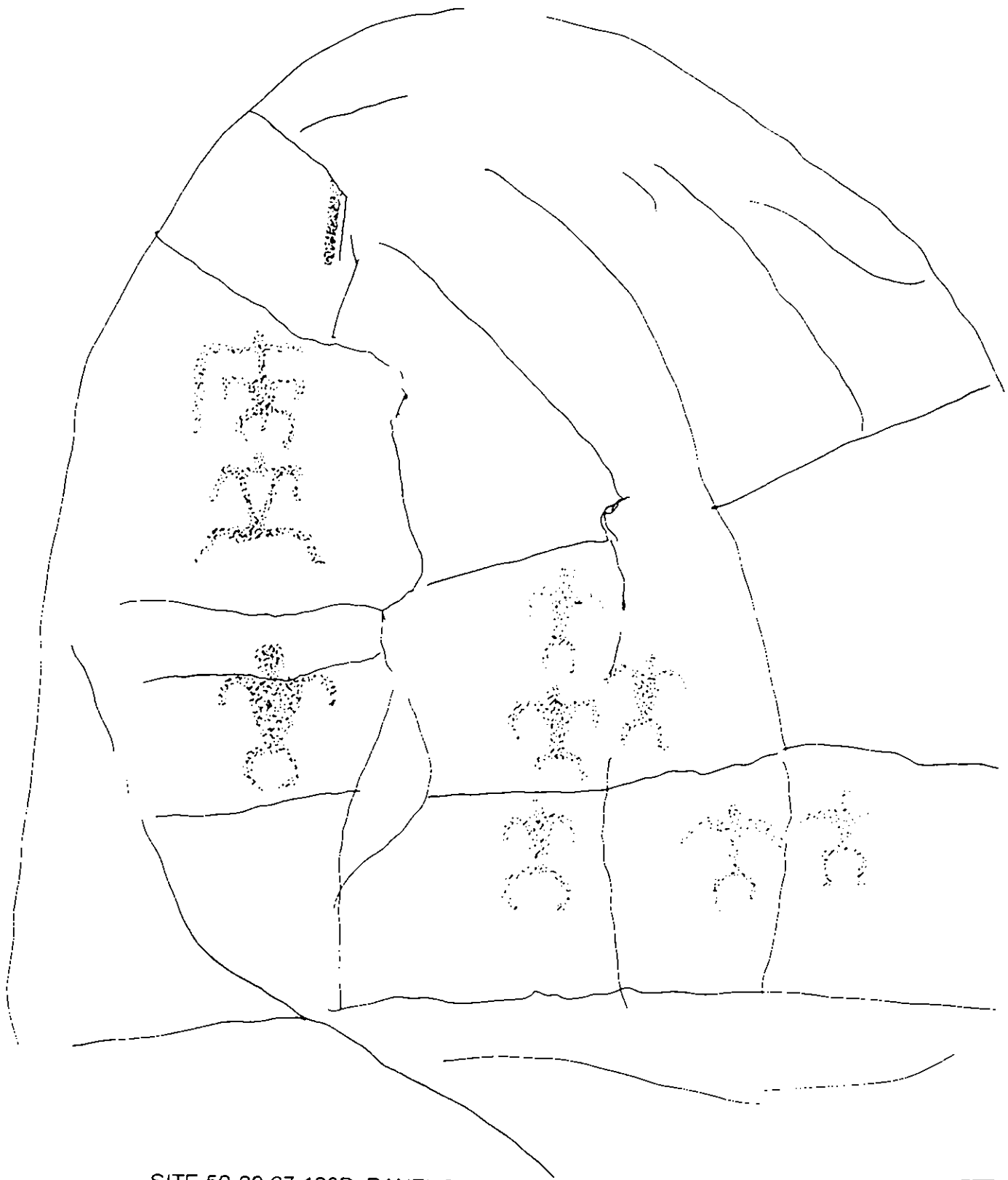






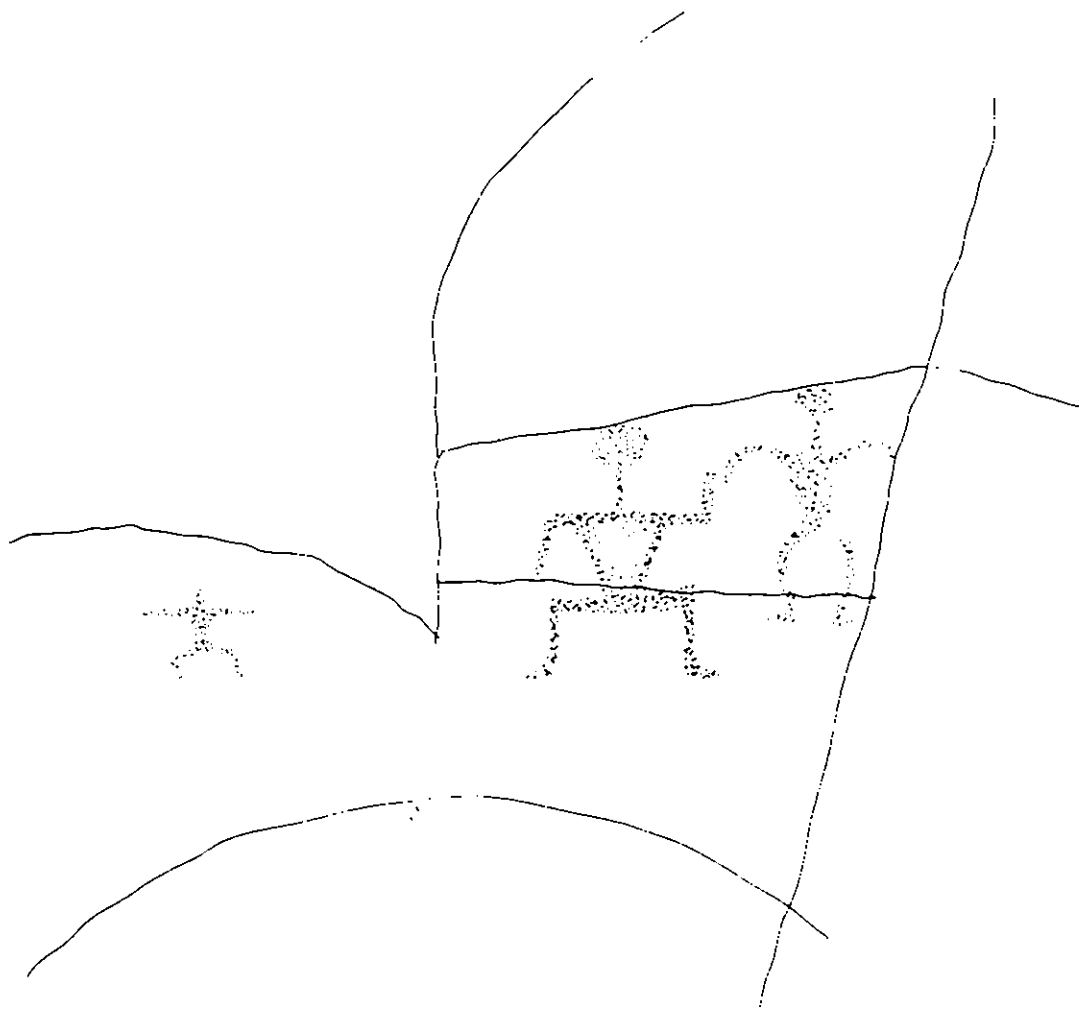
SITE 50-20-97-128D, PANEL 2



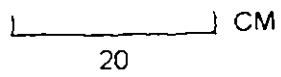


SITE 50-20-97-128D, PANEL 3

20 CM



SITE 50-20-97-128D, PANEL 4

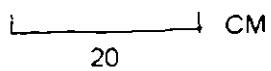


BULLET MARK



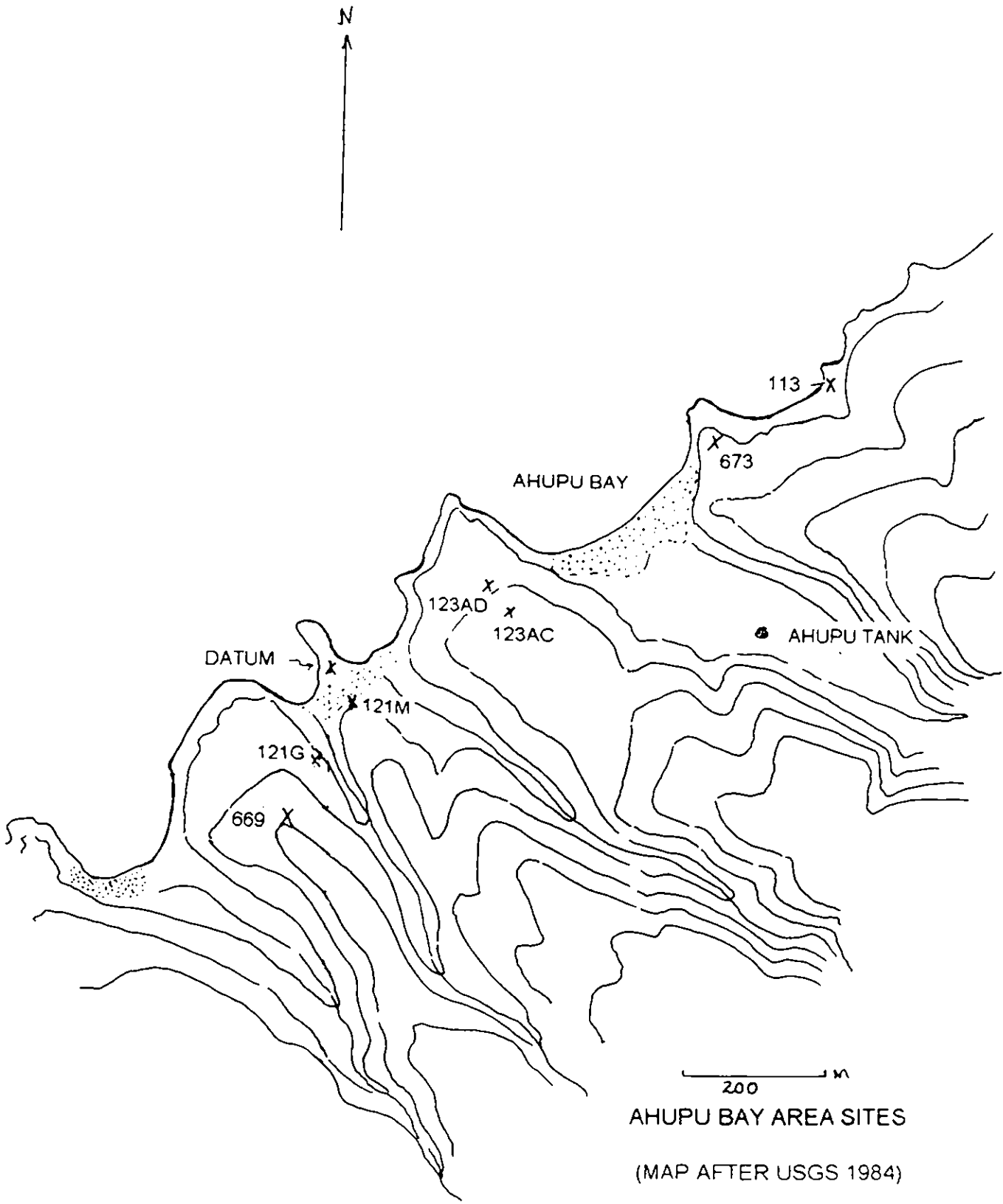
BULLET MARKS

SITE 50-20-97-128D, PANEL 5



AHUPU









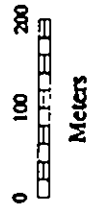
200 M  
AHUPU BAY AREA SITES

(MAP AFTER USGS 1984)

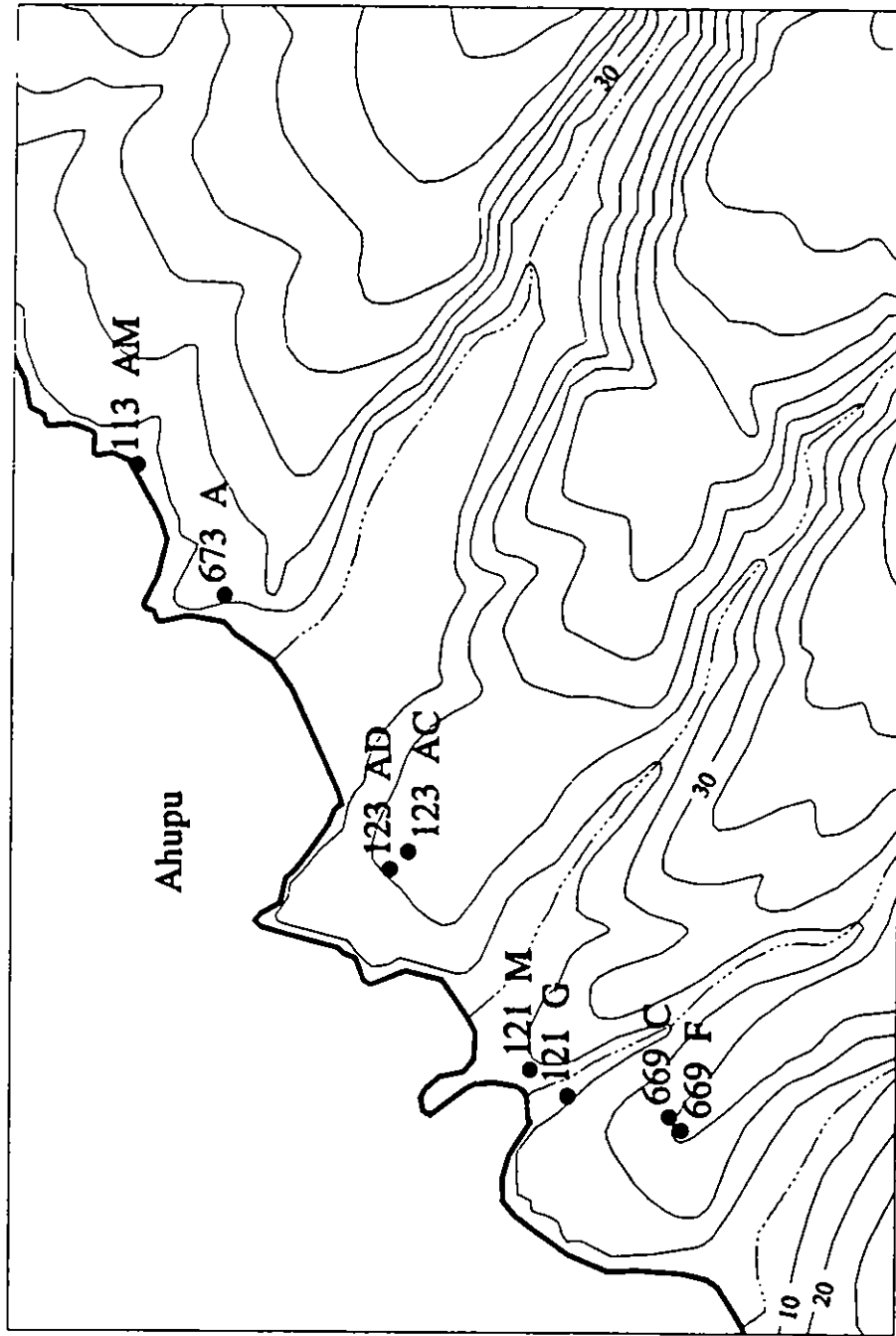
# AHUPU PETROGLYPH SITES

-  Petroglyph site
-  10 meter contours
-  Shoreline
-  Streams

481 N Site & Feature ID



KICC 1993



## *West Coastal*

### Ahupu Northeast

#### Site 50-20-97-113

Site 113 is located at the small bay immediately east of Ahupu Gulch at an elevation of one to ten meters. According to the report by Robert J. Hommon, the habitation sites within the bay were occupied for at least 100 years, from the last 14th or early 15th century to the early or middle 16th century. It is suggested that the site was occupied because of the presence of fresh water. The petroglyphs at this site were found on a large beach boulder situated in front of the habitation sites. This boulder was designated by the original survey as feature AM. The petroglyphs consist of Hawaiian names written in English using a characteristic type of upper case lettering which was used fairly consistently throughout the islands.

Judging by stylistic differences, the names appear to have been done by four different individuals. Some of the names, however, are difficult to decipher due to the fact that the surface of the rock is badly exfoliated; the lettering was more extensive before erosion. The letters, which are in the "copperplate style" taught by the missionaries, read "KELIIKIPI", the name of a young man born in Honuaula, Maui, who was living on Kaho'olawe during the 1866 census (Reeve n.d.).

Other lettering here reads "...OKAA"; probably another letter (or more) preceded these, but has now weathered away. Below these are traces of other letters, now obscure, except for an "A---E" and below this only fragments of a fourth name (or word) remain. The entire area below the main element is exfoliated, which has occurred since approximately 1866. See illustration at end of this section.





SITE 50-20-97-113, FEATURE AM  
BAY EAST OF AHUPU

— CM  
20

## Ahupu Bay

### Site 50-20-97-673

Sites 673A and 673B are located on top of the eastern headland of Ahupu Bay. The petroglyphs (which consist of lettering) are cut into two bedrock boulders resting on the western edge of the ridge crest bordering Ahupu gulch.

The lettering at Site 673 A reads "KIE" and "MAIH IU" [the character between the "H" and the "I" appears to be an upside down "I."]. These letters were made by engraving with a sharp tool and may represent names; they are of differing sizes. They appear to have been cut by a person with some obvious skill and probably some experience with engraving. See illustration at end of this section.

Site 673B is an incised name, in a different type of lettering (as is shown in Hommon's report). We were unable to relocate this in our survey despite an extensive search.

10 CM



SITE 50-20-97-673, PANEL A

## Ahupu Ridge

### Site 50-20-97-123

Site 123 includes all of Ahupu gulch, situated at and around Ahupu Bay, and west of Kuheia. This site is a coastal settlement situated on the western headland of Ahupu Bay between Ahupu and Ahupuiki; there are habitation terraces and platforms, enclosures, mounds, historic ranching structures, a shrine, etc. The site ranges from sea level to around 49 meters. The terrain is flat in the alluvial flood plain but has steep cliff-like slopes. There is considerable growth of *kiawe*.

Some 28 features were recorded here by Hommon. However, none were petroglyphs. On our survey, we discovered two petroglyph areas on the ridge crest west of Ahupu gulch; the rest of the features are spread in and around the gulch.

The two features we located are new sites. We recorded nine panels with a total of 15 elements plus one panel of incised lines. The petroglyph loci consist of a single boulder with a series of historic names and a boulder outcrop with names, anthropomorphs, and incising cut into the surfaces of a number of different boulders. The first of these we labeled 123AC as the closest site was #123 and the last feature recorded by Hommon was AB. The boulder cluster was labeled 123 Feature AD. These are both new petroglyph localities not noted by the original survey. See illustrations and end of this section.

Hommon's Feature L is described as a petroglyph site with five petroglyph figures. We located the shelter described in the earlier report but could find no petroglyphs.

#### Site 123AC:

Feature AC (Panel 1): is a single large bedrock boulder on the ridge flat west of Ahupu gulch. Feature AD lies nearby but is closer to the coastline. The AC rock face contains a series of names, plus a five-pointed star. These appear to be Hawaiian names, some of them written in copperplate style.

1. The letters "KOIA", followed by a star, measures 14x60 cm. These are made with good workmanship and strong lines.
2. The letters "HOOM", 6x28 cm, are very faint and below those of #1.
3. The letters "KAPAUKI", 12x66 cm are below.
4. The letters "A" and "HAMA--I" are below. The former is 10x17; the latter, 9x53 cm.

Panel 2 has three petroglyphs, including one complicated grouping that is counted as one because the motifs are all linked together.

1. An elaborate panel with four or five figures linked together. The panel, which has been damaged by gunfire, is 43x63 cm and consists of connected stick figures. On the left is a phallic figure with wavy long arms; the right arm becomes the arm of the central phallic stick figure, which has appears to have both arms upraised. The legs are square. The right hand figure melds with other lines that run up above it and are not clear.

2. A triangular bodied anthropomorph with inverted "V" legs, and one arm/elbow raised. It measures 28x28 cm and is loosely pecked.
3. A stick figure with one arm raised and 3 fingers on both hands. It measures 18x18 cm.

Panel 3 has a single figure.

1. An anthropomorph, stick figure. 10 cm high: this little figure has simple inverted "V" legs, and arms angled down.

Panel 4 consists of lettering.

1. Letters "KEKELA", 21x84 cm. These are carved and abraded. "Kekela" is the same as *kela kela* (Pukui and Ebert 1985), meaning "excel" or "jut out".

Panel 5 also has one figure.

1. Stick figure anthropomorph, 18x25 cm, has natural vesicles in the rock incorporated into the motif. The legs are "heart-shaped", arms are curved and down. A natural pit is in the head and below the right hand/arm.

Panel 6 has one figure.

1. Triangular anthropomorph with wedge shaped head and three fingers on the right hand. The left hand holds what may be a club. Legs are curved and wide apart with shelf-like feet. The figure is both bruised and abraded. It measures 33x36 cm. The torso is shown in outline only; no interior pecking.

Site 123AD:

Feature AD is on a large boulder in a boulder cluster on a ridge that is situated closer to the sea and overlooks Ahupu Bay. It forms the crest of a small knoll. The presence of two rusted 50 gallon drums suggests that this site was used as a target, probably for offshore gunnery practice. Fortunately, none of the petroglyphs appear to have been damaged by shellfire. See illustration at end of this section.

Panel 7: Three elements are here, including two that appear to represent ships or boats. From the petroglyph location, one looks directly over Ahupu bay, probably the best harbor on the island.

1. Letters, 10x45 cm, reading "KAAIAIUI"; they are incised and abraded and are located below the incised boats.
2. Incised boat, 61x60 cm. Fine lines seem to indicate rigging and possibly sails. The curve of the bottom of the boat is shown, not the normal view of a craft in the water. Perhaps a small boat had been brought (or washed up) on shore, thus allowing a view of the hull; however, most petroglyphs of ships do show the shape of the hull.
3. Another boat?, 20x32 cm. This motif has a curved boat shape with vertical lines from it. It partially overlaps lines from #2.

Panel 8 is near Panel 7, approximately 3-5 meters up ridge toward Ahupuiki. It faces Ahupu and measures 38x54 cm; it includes many finely incised lines that do not form any recognizable motif. The lines are mainly horizontal with some short verticals and diagonals.

Panel 9 has more letters.

1. The letters "KA--", measuring 8x14 cm, are pecked and incised. The third letter, which is mostly spalled off, may have been an "O" or a "U".



SITE 50-20-97-123 SOUTH, PANEL 3

CRACK

**KOIA** ★

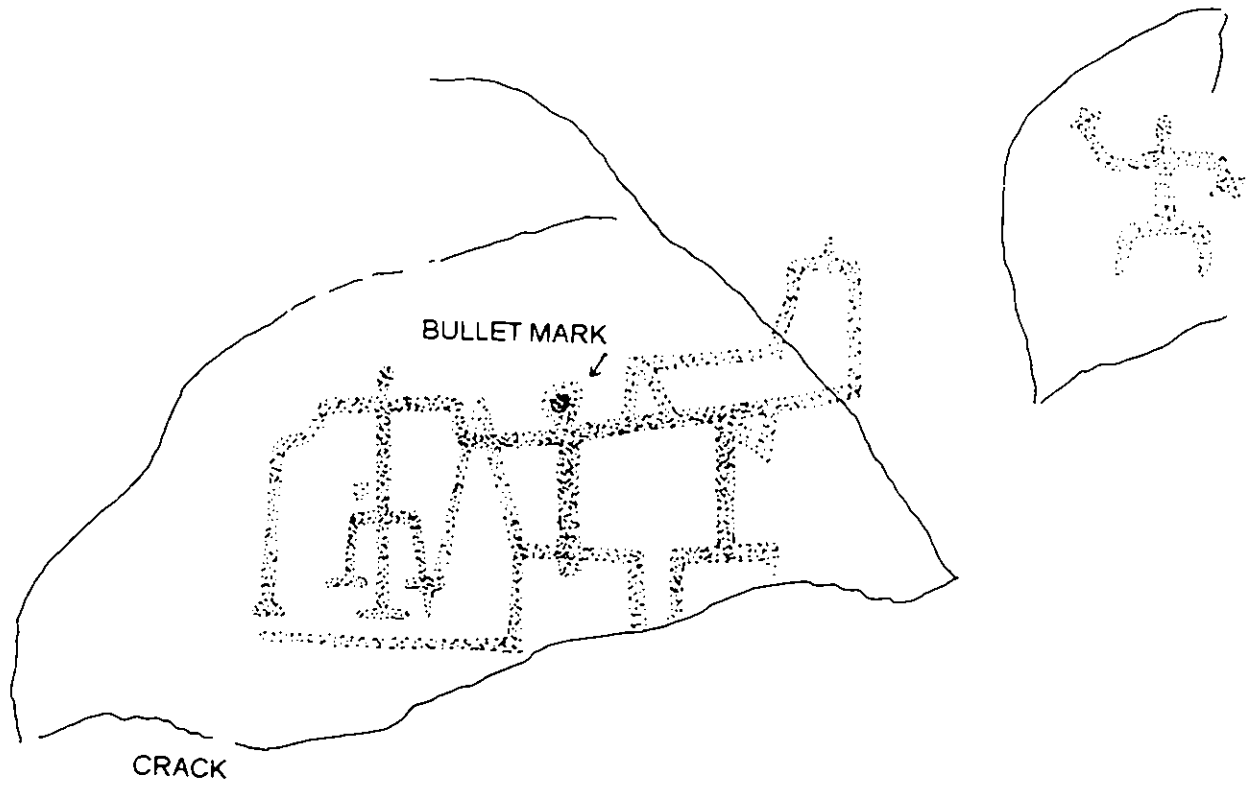
.....

**KAPAIKI**

**A HAMAKI**

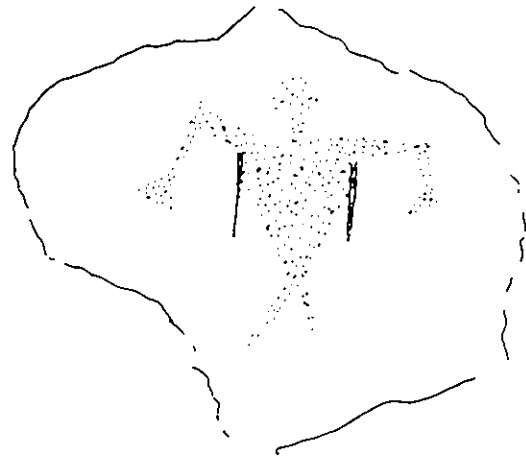
20 CM

SITE 50-20-97-123 SOUTH, PANEL 1  
RIDGE BETWEEN AHUPU AND AHUPIKI



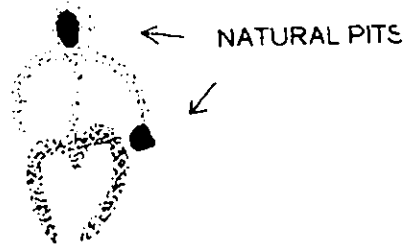
20 CM

NORTHWEST FACE OF BOULDER

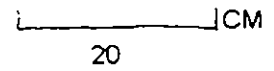
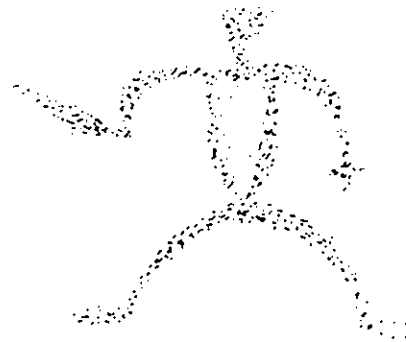


SITE 50-20-97-123, PANEL 2  
RIDGE BETWEEN AHUPU AND AHUPIKI





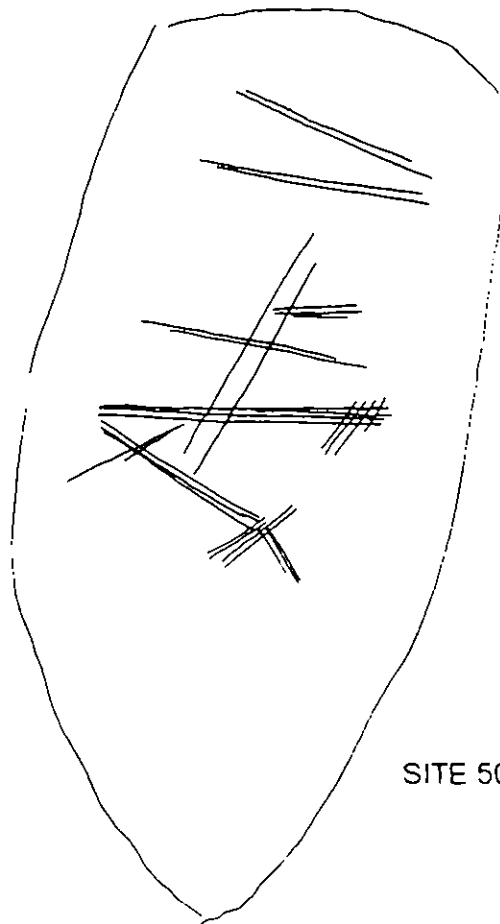
SITE 50-20-97-123, PANEL 5



SITE 50-20-97-123, PANEL 6

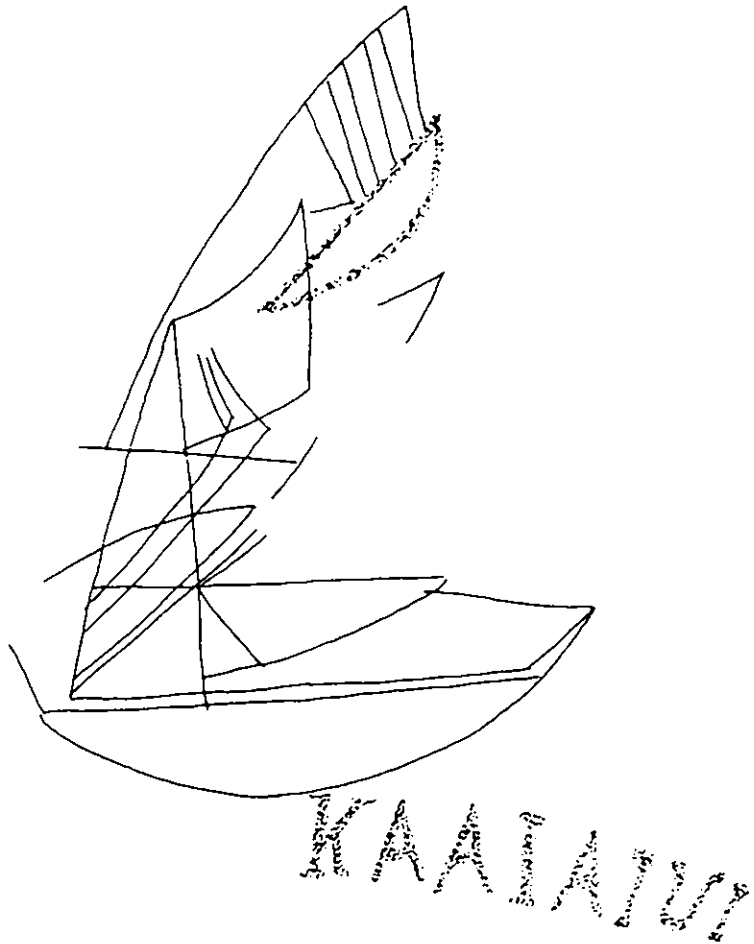
KOKOLA

SITE 50-20-97-123, PANEL 4

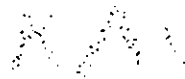


20 CM

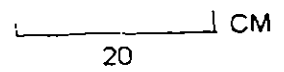
SITE 50-20-97-123, PANEL 8



SITE 50-20-97-123, PANEL 7

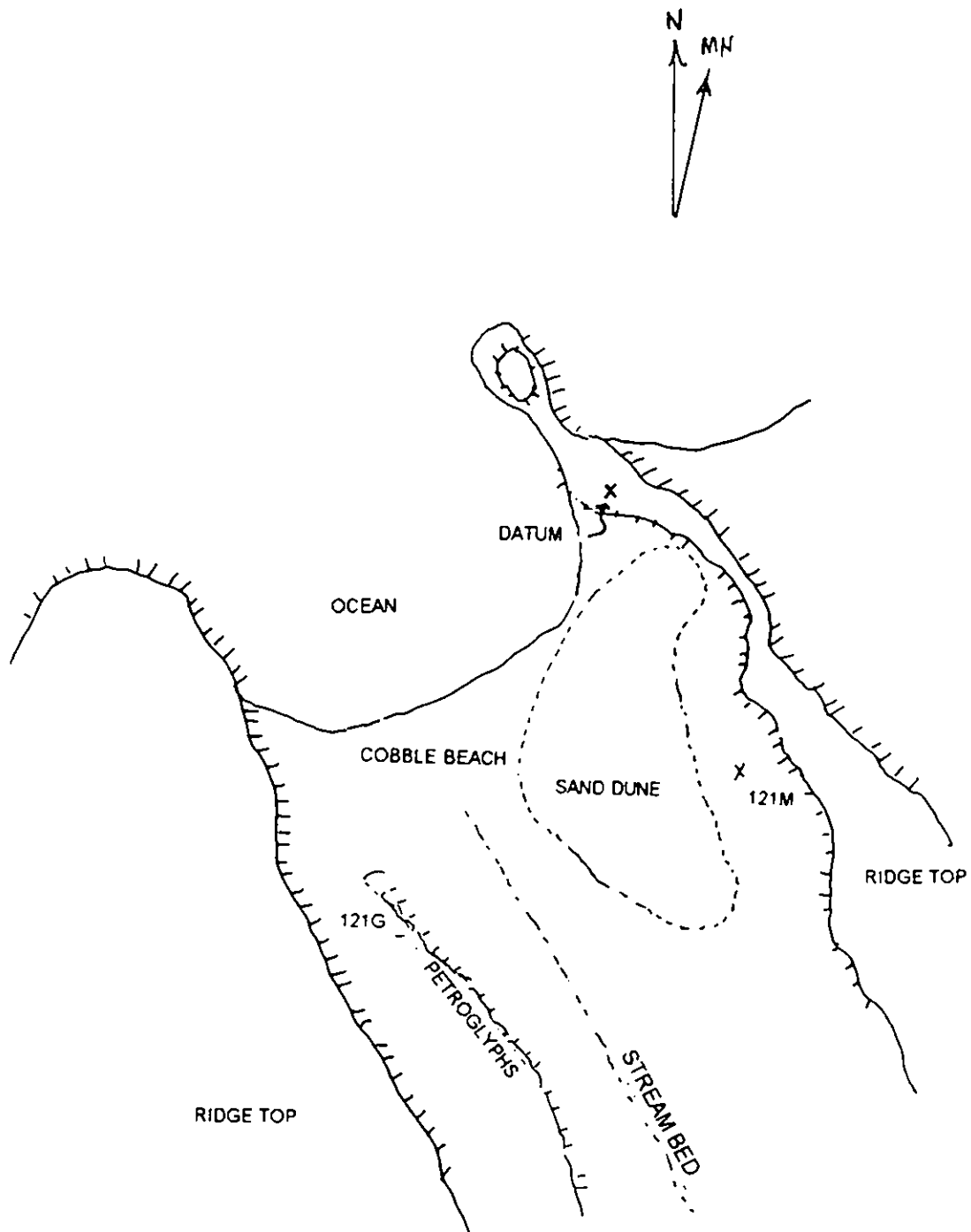


SITE 50-20-97-123, PANEL 9



AHUPUIKI





SITE 50-20-97-121, AHUPIKI GULCH

(MAP AFTER STRECK, 1980)

## Ahupuiki

### Site 50-20-97-121

Site 121 is situated in a narrow but very sheltered bay immediately west of Ahupuiki gulch. Ahupuiki contains a large stone walled corral, a remnant from the early ranching period. This smaller bay, to the west of Ahupuiki, possesses evidence of temporary as well as possible small scale permanent habitation.

Obsidian hydration dates for feature 121M are AD 1369-1443. These reported dates suggest early cultural use for this site.

Altitude for this site ranges from near sea level to approximately 31 meters. This coastal settlement has 27 features including habitation terraces, enclosures, shelters, midden scatters and petroglyphs. Although the early survey forms (by Charles F. Streck, Jr.) cited 378 petroglyphs on 35 rock faces, our restudy and documentation project found considerably fewer petroglyphs and many discrepancies between his drawings and descriptions and what we found on the rocks.

In addition to the dissimilarities, considerable damage has been done to some of the petroglyphs which appear to have been used for target practice. Bullet marks disfigure many elements and are the cause of severe exfoliation. Whenever the surface 'crust' on a rock face is broken, increased exfoliation follows.

Petroglyphs were found by us at two locations within the gulch. The major concentration of petroglyphs is situated along the western edge of the stream just up from the beach and stream bed. This area was designated by the original survey as feature G. A small cluster of petroglyphs was also discovered on the walls of a rock shelter against the eastern slope of the bay. This is called feature M. The original survey by Streck also indicated the presence of petroglyphs at three other loci within the gulch [features J, K and L]. Our surveys found no petroglyphs in these areas. It is unlikely that so many petroglyphs could have eroded from the rock surface in the intervening years, and leave others nearby. Streck most likely mistook natural features for petroglyphs.

Feature G at site 121 is described as "...a extensive petroglyph field measuring about 9 by 30 meters." And, "At least 36 bedrock faces containing a minimum of 211 figures have been identified. Many of the figures have been partially or completely buried under recent alluvium." However Streck only drew (as far as we know) five panels. Despite our intensive search, we failed to locate the numbers of motifs described; we did, however, record 94 discrete units. In some instances we found natural features which appeared to match Streck's "petroglyphs". We assume that natural features were probably mistaken for petroglyphs, particularly in view of his measurements which ranged around 1x3 cm. Such tiny measurements are out of line for Hawaiian petroglyphs. As for the "missing" petroglyphs being covered by recent alluvium, this seems unlikely because the stream bed is much lower than the site. Even those drawings that we could identify did not accurately correspond to the existing petroglyphs.

The petroglyph site is a bedrock cliff consisting of a number of faces onto which petroglyphs have been carved. Petroglyphs have also been cut into the surface of some

nearby (downslope) boulders. Occupation shelters are located within the site area. These are probably temporary habitation sites.

Designs on the boulders include anthropomorphic figures and quadrupeds which appear, for the most part, to represent goats. See illustrations at the end of this section.

#### Site 121G:

Panel 1 faces the ocean. It has a bullet hole in one of the petroglyphs, plus another near figure 4, and one in the foot of figure 6. It also has one of the few examples of superimpositioning. The figures are mostly quadrupeds, possibly goats.

1. Goat? measuring 17x20 cm, lightly pecked, has four legs (with backward feet) and large ears.
2. Goat? with three legs, more faintly pecked and with incised lines for legs, measures 18x20 cm.
3. Possibly an unfinished goat body; this shape has a bullet hole in the center. It measures 8 x17 cm.
4. Goat? with four legs and backward feet, appears to be pecked over an anthropomorphic stick figure. It measures 26x28 cm, and has horns plus ears and a raised curved tail.
5. Anthropomorph stick figure, under #4. This faint figure is 20x22 cm, has short legs and long arms.
6. Probably an incomplete goat, faintly pecked. It measures 12x19 cm, in its present condition. Only the head, foreleg and half of torso are visible.
7. Faint pecking below #6, not recognizable.

Panel 2 petroglyphs are fairly complex, with twelve figures and some superimpositioning. This panel has also been impacted by bullet marks.

1. A phallic stick figure, 20x38 cm, with left arm raised. Both feet extend, connecting to other figures. On the right, the foot line extends to figure #5 and provides a line on which figure #4 stands; on the left, lines appear to cross the foot, but these are so faint that it is difficult to determine.
2. A triangular-shaped torso is superimposed over the lower torso of figure #1; it has a left arm but none on the right, and legs (if any) are obscured by figure 3.
3. A small anthropomorphic figure, with rounded arms and legs. The head seems to be overlapping the phallus of figure 1 and/or the lower part of the body of #2. It measures 14x16.5 cm.
4. Stick figure anthropomorph, long torso with short curved arms and legs. It measures 11x28 cm, and appears to be standing on the line running from the foot of figure #1 to the arm of #5.
5. A triangular-bodied figure, left arm connecting to foot of #1. The head has been obscured by a bullet hole. It measures 13x16; the body is fully pecked. Below this figure are faintly pecked horizontal lines plus one that has a boat-shaped form (possibly the start of another goat or dog figure?)
6. Quadruped, 24x27 cm, connected to a small figure on the right (#7). The animal has two ears, four legs, and a curved tail. The body line that connects to the anthropomorph extends behind the animal.

7. Triangle-bodied anthropomorph, with detached head, 18 cm high. The left arm connects to the animal, #6. The torso is not fully pecked.
8. Stick figure, 14x16 cm, with wide inverted "V" legs.
9. Triangle figure, with inverted "V" legs, fully pecked. It measures 22x25 cm.
10. Stick figure 12x23, with right arm connected to hand of figure #11. The torso line has a curve to it.
11. Stick figure, 22x33 cm, has three digits each hand; it is connected to #10. Torso is long with a horizontal line crossing it.
12. A quadruped, 16x17 cm, with body fully pecked. This creature has four legs, two ears and a curved tail. It could be a dog or a goat.
13. A stick figure; the shoulder area is beneath a line extending from the body of the goat, #6; it is 6x14 cm.
14. A small shape that may be a kid; it is faintly pecked near the feet of #6 and is 6x9 cm.
15. An unidentified unit, 7x32 cm, is below the upper figure grouping and consists of a horizontal line with a somewhat oval shape on one end.

Panel 3 contains seven figures, some connected or superimposed. It also has been impacted by bullets.

1. A stick figure anthropomorph with shelf hands and triangular head connects to adjoining figure, #2. It is 32 cm high and forms a unit with the figures to the right.
2. A running? stick figure, with shelf foot and hand, appears to be headless, although there is faint pecking in what would be the head area. The left arm and leg connects to the right hand and foot of #1; the right leg becomes part of the next figure on the right. It is hard to measure this figure as it part of a unit.
3. Triangular headed stick figure, connected to others in this group. Figure is symmetrical with shelf hands and feet. The left leg connects to figure #5. It is 25x27 cm.
4. Triangular bodied figure with inverted "V" legs, no arms. Placed above the group of stick figures, the head is a line and the body is pecked out. It measures 14.5x30 cm. A bullet hole is in the torso. This figure appears to be more recent than the others on this panel.
5. Faint triangular shaped anthropomorph, 18x42 cm. The head is square and the legs form a small half-circle. The legs of figures 2 and 3 connect to the shoulder line of this anthropomorph and the feet protrude onto the torso. It is not possible to tell if figure #5 had/has arms.
6. A small faint triangular bodied figure, with detached head, round legs and long curved arms. It measures 16x20 cm and comes close to touching the arm of #7.
7. The final figure here is a faint upper triangular torso with a head and outwardly curved arms. It measures 17x30.
8. Unidentified lines that may be legs for a figure; they are partially under #3 and #5 and measure approximately 26x11 cm.

Panel 4 faces the ocean; it contains one small panel with three figures.

1. A goat? figure which appears to overlap an anthropomorph. The animal has a straight tail pointing up, four legs with backward feet, and measures 24x27.5 cm.



2. An anthropomorph, partial figure, 17x25 cm, which seems to be under the animal. The upper half of the left arms coincides with the animal tail.
3. A curved line, 7x8 cm, is below the above figures.

Panel 5, located below the above faces the ocean. It has bullet marks also.

1. A square, symmetrical stick figure, 17x26 cm.
2. Triangular bodied, phallic anthropomorph, with short inward curved legs. A natural line in the rock forms the left side of the body. It measures 24x33 cm and has a bullet mark in the center of the torso. The right arm is somewhat unclear.
3. Stick figure, 20x23 cm, has a detached head, broad shoulders. It is very faint.

Panel 5a is above Panel 5. It has been impacted by bullets. A single figure was documented here.

1. Stick figure anthropomorph, 20x30 cm, has the right side partially obliterated by erosion. The left arm angles in close to the body line, and the left foot curves up, as if in an active pose. The figure lacks a neck.

Panel 6 has one figure.

1. Stick figure anthropomorph, with long curving legs and shelf feet, measures 27x28 cm. A natural crack runs through the middle of the figure. The rock is exfoliating. Extra pecking can be seen to the right of the right hand. The head has a slightly wedge shape.

Panel 7 is located above Panel 6.

1. A single faint triangular-bodied figure is on this panel; it measures 20x30 cm and represents an armless anthropomorph; only one leg was visible.

Panel 8 is above 8a, on a horizontal surface. The single figure here is a quadruped:

1. Goat? measuring 23x36 cm is finely pecked, but the pecking diminishes toward the rear of the animal. The tail is destroyed by a bullet mark.

Panel 8a is fairly elaborate:

1. A triangle bodied anthropomorph with legs curved inward; it measures 20x22 cm. The head is rather mushroom shaped and the shoulders are outsized for the legs. Along the right side of the figure is a natural "bubble trough" running diagonally down the rock. This trough is eroded below the figure and impacts figure 3. A faint diagonal line runs in opposition to this natural feature, giving the appearance of a much larger triangular figure. It is possible that the present anthropomorph was pecked on top of an earlier, larger figure.
2. A large quadruped, likely a goat, measures 24x26 cm. It has long ears, four legs and an odd tail. The figure is nose-to-nose with another animal and a small anthropomorph is directly above the back of the figure.
3. A quadruped, likely a goat, measures 18x20 cm. The tail of the figure is lost in an eroded area associated with the natural trough in the rock surface. The figure has four legs, two ears and is nose-to-nose with figure #2.

4. Small anthropomorph with down-turned arms, rounded upper body; it measure 10 x16 cm. The head is detached. A faint line resembling an arm is to the left.
5. A partial anthropomorph, 12.5x18.5 is below #2. This faint figure has its legs angling to the right; the right arm is unclear.

Panel 9 contains six figures and several bullet marks.

1. An anthropomorph with muscled legs and an extension on the head has a triangular torso, fully pecked. The figure is 13x17 cm. Feet are indicated as 'ball-like'.
2. A dog with two legs, measures 12x15 cm and has an extended curved tail. The head appears to suggest a canine.
3. Triangular-bodied anthropomorph, with wide curved arms and tiny head; it measures 14x18 cm. The legs are slightly muscled.
4. A dog, 19x19.5 cm, with two legs, upward curved tail, and 2 ears. It is lightly pecked.
5. Stick figure anthropomorph with flat-line head, and very long rounded legs. It measures 18x 28.5 cm. The arms are short and curved outward.
6. Triangle-bodied figure with upraised arms, 13x18 cm; legs are flaked away due to bullet damage.

Panel 10 contains three zoomorphs, either goats or dogs. The rock is badly exfoliated.

1. Animal, 9x17 cm, has four legs, crop tail, and long thin body.
2. Goat? with two legs, extended short tail, and two ears. The nose of the figure is into an exfoliated area. Part of the belly area is also exfoliated. The figure is 12x17 cm.
3. Possible animal, 10x10 cm. This faintly pecked but minimal figure may be a dog.

Panel 10a is below Panel 10, and contains a single unit.

1. Triangular bodied figure with a long neck and split head or headdress(?); it measures 27x43 cm. The body is not fully pecked; arms both end in either exfoliated areas or natural cracks. Legs curve inward; the one of the right is obscured.

Panel 11 faces the ocean, and has a single figure:

1. A stick figure anthropomorph, 20x26.5 cm, has long down turned arms, and rounded legs. It is placed in a concave section of the boulder face.

Panel 12, which has considerable erosion, has three figures.

1. A stick figure anthropomorph with shelf-like hands and right foot; the head is somewhat wedge-shaped. Part of the torso is obscure and the left foot is lost to erosion. The figure measures 26x32.5 cm.
2. A goat?, shallow pecked, measures 18x22 cm. It is difficult to tell which end is which on this creature as the left side is partially lost due to exfoliation.
3. A goat?, 19x28 cm, shallow pecked but with sharp edges, has large ears four legs and a long curved tail.

Panel 12a is a small panel, located above #12. It is basically a horizontal surface.

1. A triangular bodied anthropomorph with muscled legs, this figure lacks a neck. The inside of the triangle torso is not as deeply pecked as are the edges.

Panel 13 is a large boulder with a single figure.

1. A dog, 12x16 cm. The tail is deeply pecked, and curls downward. The animal has two legs, and no ears.

Panel 14 is on the boulder below #15 and also faces the ocean.

1. A single phallic stick figure anthropomorph, 20 x22 cm. The figure, which has short legs, is in a slightly concave area of the rock.

Panel 15 faces the ocean. Above the figure are bullet holes:

1. A quadruped, possibly a dog. It measures 18x22 cm and has two legs with shelf-like feet. An incomplete line curves up over the back from the tail forming an imperfect circle.

Panel 16 has a single figure located between two natural cracks in the rock face.

1. A triangular bodied anthropomorph with muscled legs and arms. The head is angled with a natural bubble in the lava incorporated into it. The figure measures 26x29 cm.

Panel 17 is the final one on the south end of the ridge. It faces the ocean. Two figures here are both lightly pecked.

1. A triangular bodied anthropomorph with slightly muscled legs and arms. Legs are spread apart, and the head is somewhat wedge shaped. It measures 14x19 cm.
2. A triangular bodied anthropomorph with muscled arms. Legs are curved and come to a point instead of having feet. This figure measures 17x23 cm.

Panel 18 is on a coarse vesicular boulder; the figure goes over the curved of the rock surface.

1. Stick figure anthropomorph, 17.5x30 cm, with inverted "V" shaped legs. This figure has minor similarities with 486 (1) at Hakioawa. It is a mirror-image, lacking only the shelf-foot and hand of the one at Hakioawa.

Panel 19 is on the east face of a coarse boulder. It contains one figure.

1. Triangular bodied anthropomorph with wide spread arms, resembling wings. The torso has some abrasion. The left arm ends in a somewhat shapeless form composed of peck marks. It is 25x29 cm. A faint suggestion of facial features may be an accidental result of natural markings in the rock.

Boulder #20 has four sides and top, all with petroglyphs. These are given letter designations, A-E.

Panel 20A is on the west face, containing two figures.

1. An enigmatic figure, 20x20 cm, this motif looks more like an emblem than a figure. It consists of crossing lines, with a half circle.
2. A wedge-shaped head, with arms curving down and a lightly pecked torso line. The figure lacks legs. It measures 13x20 cm.

Panel 20B, the top of the rock, has two figures.

1. Stick figure without a definite torso line. Lightly pecked, this anthropomorph has rather undulating arms and legs and a detached head. A smaller figure is positioned below the legs, giving the suggestion of a birth scene. It is 29x33 cm.
2. A deeply pecked stick figure, 6.5x12 cm. made with clear pecking. Situated below the legs of figure #1.

Panel 20C, the east face of the boulder, has two figures.

1. A muscled figure, pecked and smoothed, this anthropomorph measure 11x19.5 cm. It is made with very fine craftsmanship on the remains of an exfoliated area. The arms and central portion of the torso are exfoliated.
2. A partial triangular figure, measuring 13x14.5 cm, lacks legs. Both arms are up. The figure is very vigorously pecked.

Panel 20D is on the northeast side of the boulder; It has three figures plus bullet holes.

1. A stick figure with curved legs and wavy arms, this small figure has a bullet hole between the feet and one to the right. The grooves are pecked and smoothed. It measures 15x20 cm.
2. A triangular bodied anthropomorph with left arm up, holding an object. The legs are muscled and the head rather wedge shaped. It measures 20x22 cm.
3. A lightly pecked triangular bodied anthropomorph has a detached head, muscled legs and bird like wings. It measures 20x20 cm.

Panel 20E, the south side of the boulder, contains one figure.

1. A muscled triangular anthropomorph, this figure measure 27x31 cm. Both hands and feet are shelf-like and the head is wedge shaped. The figure has a wide stance and is very symmetrical.

Site 121M is located across the gulch from 121G and consists of a habitation terrace and shallow overhang shelter. Charles Streck, who originally recorded the site, described it as possessing five bedrock faces with at least 15 petroglyphs. These panels were said to be situated along the base of a bedrock ledge near the crest of the gulch's northeastern ridge, in an area partially covered with *kiawe* and grass. His figure list includes a dog, an animal, turtle and eight human figures, plus four enigmatic figures. Streck did not include any drawings with his descriptions so that we have no way of determining whether we have indeed located and documented the same site, interpreted it differently or have found a different locus.

We recorded a total of two panels at this feature. The first consists of a vertical rock face resting at the back of the overhang. The second is a similar face just around the corner to the south.

At Panel 1 we recorded at least fifteen elements, but many of these are fragmentary, some are simple incised lines, and several appear to be simple starts of designs that were left incomplete. The panel, aside from a few anthropomorphic figures, has odd and seemingly random peck marks, plus short incised lines.

Site 121M(1):

1. A series of narrow incised lines, these take the form of looped and pointed ovals; simple lines in series, chevron lines, inverted "V"s and short dashes. They are faint and complex, and were not counted or measured individually.
2. Associated with the incised lines are two short pecked lines, 1x5 cm and the outline of a triangular figure with straight legs, one arm. It is headless and lacks a left arm.
3. A small pecked triangle may be intended as a torso for the set of legs below (but not connected). The triangle is 2x3.5 and is made of fine scratches.
4. Possible legs for a figure, measuring 4x6 cm.
5. Various lines are pecked below a natural crack in the rock, as well as some line scratches. Whether these were intended as part of figures is unknown. They appear to resemble legs for figures.
6. Associated is a small triangle shape, 3.5x6 cm, partially abraded.
7. Above the crack are four figures; one of these is an incised triangle bodied figure, without a head. It measure 6x8.5 cm and has three scratched vertical lines associated with it.
8. A partially pecked stick figure anthropomorph with legs that continue past the crack measures 14x23.5 cm. The legs have suggestions of shelf feet, and there is some pecked areas to the right of the figure.
9. A pecked figure with "skirt-like" shape to the body. The arms are out and have shelf-like hands. The feet seem to disappear into the crack area. The head is almost wedge shaped. It measures 14x15? cm. The right arm appears to connect to the figure on its right.
10. A phallic stick figure, attached to the one on its left. The right arm is unclear. Various short incised lines are associated with this panel.

Site 121M (2) is in the same rock cluster. Panel 2 possesses two triangular shaped anthropomorphs, one with muscled legs and a long neck. They almost join, shoulder to shoulder. The figure on the left has no discernible limbs. We were unable to record these two figures due to a lack of time at the site.

121J is described as a habitation terrace with at least 10 faces of rock with 109 petroglyphs. We found no petroglyphs at this loci. The fact that many of the figures listed by the earlier report possess such measurements as "1 x 1 cm."; or "2 x 1 cm."; etc., suggests these are natural formations or cracks in the stone. There is simply no precedent for Hawaiian petroglyphs being that small.

Site 121K is a habitation terrace of 5 x 10 meters. Two faces on the bedrock ledge at the rear of the terrace are said to contain at least 21 petroglyphs. Again, many of these

are listed as measuring "1.5 x 1.5" or "1 x 0.5 cm.", etc. These are not realistic dimensions for a man-made carving: we suggest natural markings in the rock were mistaken for petroglyphs.

Site 121L is described as a habitation enclosure with rock faces containing 22 petroglyphs. None were found here by our study. Measurements are once again listed as "2 x 0.5" and "3 x 1 cm.", etc.

## Discussion

There is a distinctness to the petroglyphs of the Ahupuiki/Ahupu area. Some, such as 669F(1) and 669F(2-3), have similarities which suggest they could have been made by the same hand. For example, they are both large in scale, are made with rough but skillfully expressive "strokes", are of figures with animated postures--all very harmonious and appropriate to the energy and power with which they were crafted. The petroglyph maker of each had a disregard for continuous edges, and each chose an essentially simple figure style, the more ancient and traditional type, despite the apparently late period in which they were made. The strokes appear very fresh when compared to nearby images. The strong bruising and impact marks have scarcely repatinated. Their position upon an exposed ridge may have contributed to this lack of surface accumulation, but they seem remarkably fresh. Other petroglyphs on this ridge have accumulated more of a coating. However, such visual judgements are not conclusive. A few of the figures at the main site also seem to be from the same hand, but the majority have the typical Kaho'olawe diversity.

Among those diverse characteristics are detached heads and wedge shaped heads. These are seen at a few other places on Kaho'olawe island, but are uncommon in the other islands of Hawai'i. Some anthropomorphs also have flat and narrow heads, or with extensions that may be headdresses. Several panels, instead of isolated individual motifs, are lively groupings of figures. A few figures with bird-like arms or other attributes that give the appearance of a bird-man are found at site 121.

Although stick figures predominate, there is a fair sprinkling of triangular-shaped figures, some with muscled legs--evidence of a later time-frame than the simple "stick figure".

Zoomorphs, either goats or dogs, are fairly common at this site. Thirteen motifs identified as goats at this site may reflect the ranching activity which was carried out in this area. These creatures have, in several cases, backward feet. One zoomorph has both ears and horns, which leaves little doubt that it represents a goat. The presence of images of goats establishes an approximate time-frame and speaks of the introduction of goats to Kaho'olawe by Vancouver and other early visitors. Three of these show the superimposition of goat over human figures, and a few other pairs are clearly associated, shown in 'scenes' with two animals nose-to-nose. This pictorial connection is not to be taken lightly. It suggests a variety of possibilities such as the commingling of the animating spirits of each, a reference to *malama* (custodian or keeper), an association or reference to *'aumakua*, a symbolic or ritual act involving the protection or well being of one or both, the seeking or tapping into *mana*, and so forth. It appears significant that all the goat motifs found on Kaho'olawe come from site 121.

Associations of figures with animals are not particularly common in Hawai'i; there are few images in which the petroglyph seems to be a synthesis of man/animal, e.g., the so-called "shark-man" from Ka'u, Hawai'i, and some examples from Lana'i where a human figure appears to be clearly joined to an image of a dog, such as is seen at Kaunolu.

Subject and style of the images ranges from the historic goats and names to the classic, ancient stick figure, some of which may not be ancient at all. A visual evaluation of the erosion factors and the accumulation of coating on the stick figures suggests they are contemporary with others of their type on other islands, placing them between the 14th and 19th centuries. Some appear much closer to the first date. Two of these petroglyphs are being dated by Dr. R. Dorn; dates forthcoming.

Clearly, the focus of petroglyph making activity at this site ranged from the topical (goats) which embraced and intertwined with ancient type images (stick figures) which were created for purposes which were probably quite different than the 19th century goat carver. Yet the superimposed goat-on-figure was probably made while the petroglyph making tradition was still alive. There is no hint here of anything other than a benign purpose, whatever that may be, and apparently no cultural prohibition for the overlaying of the goat forms upon an existing carving.

Here we see adaptive and sequential overlays by one generation over another. There may be some relationship in this case to the kind of thinking which gave birth to the so-called genealogical petroglyphs at Puako, Hawai'i Island. The Puako images appear, in some examples, to have been made incrementally. This remains to be proved. There are petroglyphs at all the Kaho'olawe sites which appear to have additions and overlays from a later period. The multiple figure (669C-1) from the ridge west of Ahupuiki is a good example.

Another characteristic of Site 121G is the proportionally high number of animals: six dog images--as many at this one site as the entire rest of the island possesses.

There are a number of petroglyphs on nearby ridges that consist of names and words. This could indicate that there was some purpose or value to placing them there, perhaps a change of some sort in the function of the later petroglyphs. It is interesting to note that there are few anthropomorphs on the ridges; 669C-2 and 123-2 and 6 are the only exceptions.

## Ahupuiki West

### Site 50-20-97-669

Site 50-20-97-669 is a cluster of small and possibly temporary settlements built around a bedrock outcrop and located on the ridge west of site 121; it consists of seven features, three of which include petroglyphs. The site is at an elevation of 33 meters, and some 240 meters inland from the coast. This is a large boulder outcrop on a flat ridge, with considerable growth of *kiawe*.

Feature C is part of a cluster of structures centered around a boulder outcropping; most of these are occupation shelters. Petroglyphs were recorded on two large boulders during the 1976-80 survey. Feature F was found by our team. See illustrations at the end of this section.

1. C1 as described by the original survey team, is a set of "marching" figures or a "centipede". We saw this image somewhat differently; perhaps weathering in the intervening years has caused some erosion of the lower section: Hommon's drawing connects the figure whereas we saw a break in the figure. It is possible that it may represent a *mo'o* figure, perhaps indicating lineage. Similar motifs are found on the island of Lana'i. This petroglyph is on a flat upper surface of a large boulder and measures 34x74 cm for the top portion; 37x 21 cm for the lower part.
2. A large triangular bodied figure (CII), is 72x114 cm; arms are out and head is wedge-shaped. No legs are visible. The panel has bullet marks on it. This figure is unusually large for Kaho'olawe petroglyphs. Hommon's drawing of this motif shows legs and longer arms, and either horns or a headdress on the head. These were not seen by us.
3. CIII is a stick figure anthropomorph, partially abraded. The figure is not symmetrical; the right leg is extended and has a shelf-like foot. The arms are not connected to the torso. The figure measures 24x32.5 cm.

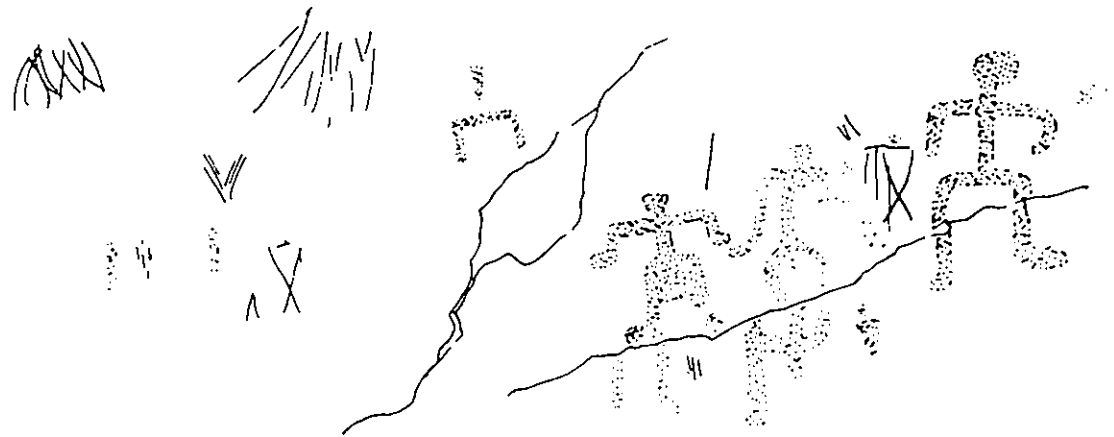
Feature F(1) at Site 669 was newly discovered during our survey, and is situated some distance away to the west and consists of two very large boulders. Site 669F(1) has one figure. This panel has been impacted by gunfire.

1. Stick figure anthropomorph, 51x57 cm, shallow but roughly pecked; this image has an expressive pose. It is close in feel to #3 at Feature F(2).

Feature F(2) at Site 669 has three anthropomorphs on a large boulder. There may, in fact, be more figures at this locus; the surface is very rough and weathered and the petroglyphs heavily patinated.

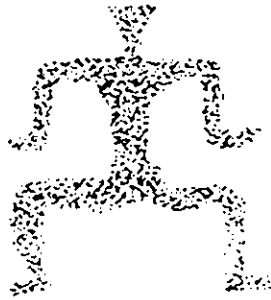
1. A stick figure with an "open" torso and opposing arms measures 27x27 cm. The head is wedge-shaped and legs curved.
2. A stick figure with similar features: wedge head, and opposing arms. However, the torso is a single line. It measures 14x22 cm.
3. A large stick figure, 38x48 cm, is symmetrical but is coarsely pecked or bruised. The figure has three fingers on each hand. It appears to have been made by a different hand than figures 1 and 2 and may not be as ancient.





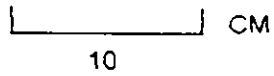
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SITE 50-20-97-121M

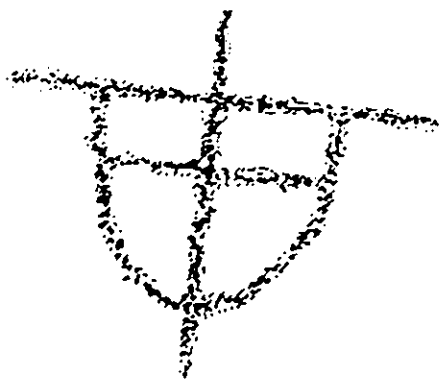


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SITE 50-20-97-121G, PANEL 20E

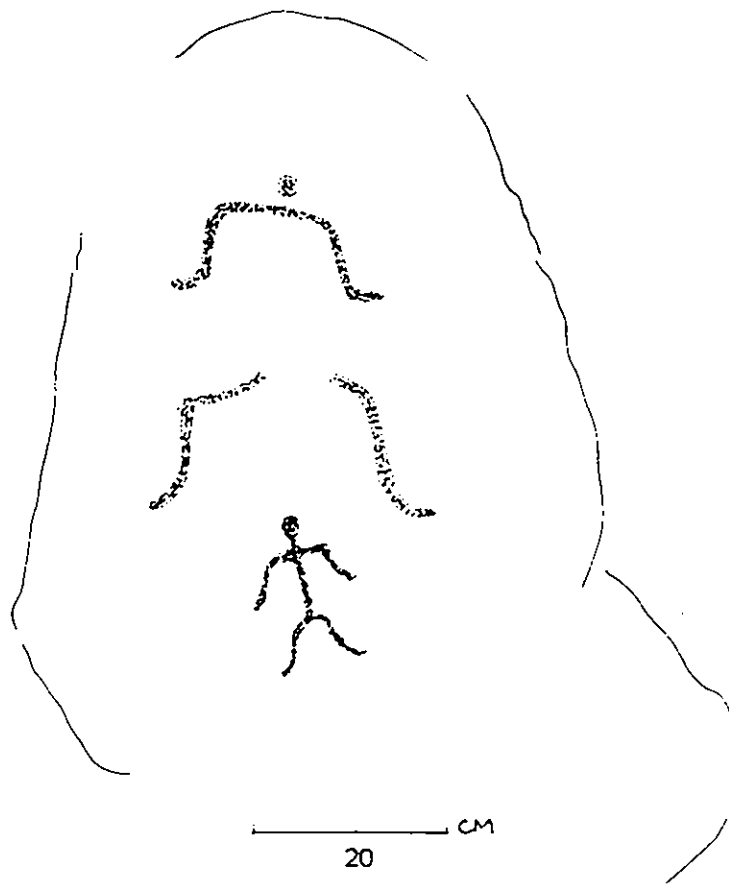


SITE 50-20-97-121G, PANEL 20A



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SITE 50-20-97-121G, PANEL 20A



SITE 50-20-97-121G, PANEL 20B

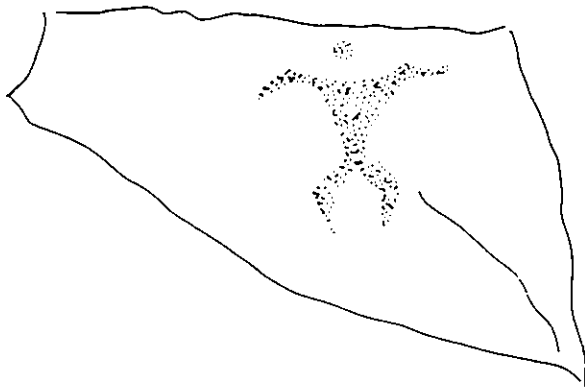


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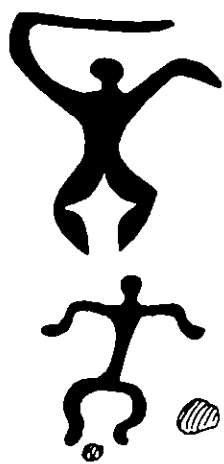
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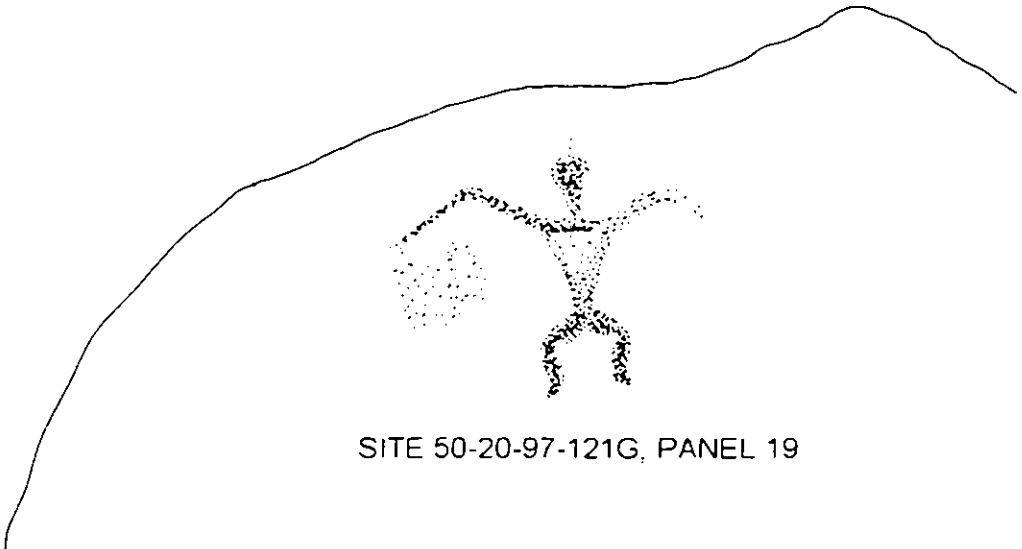




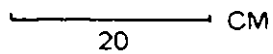
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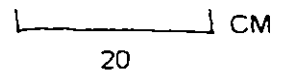
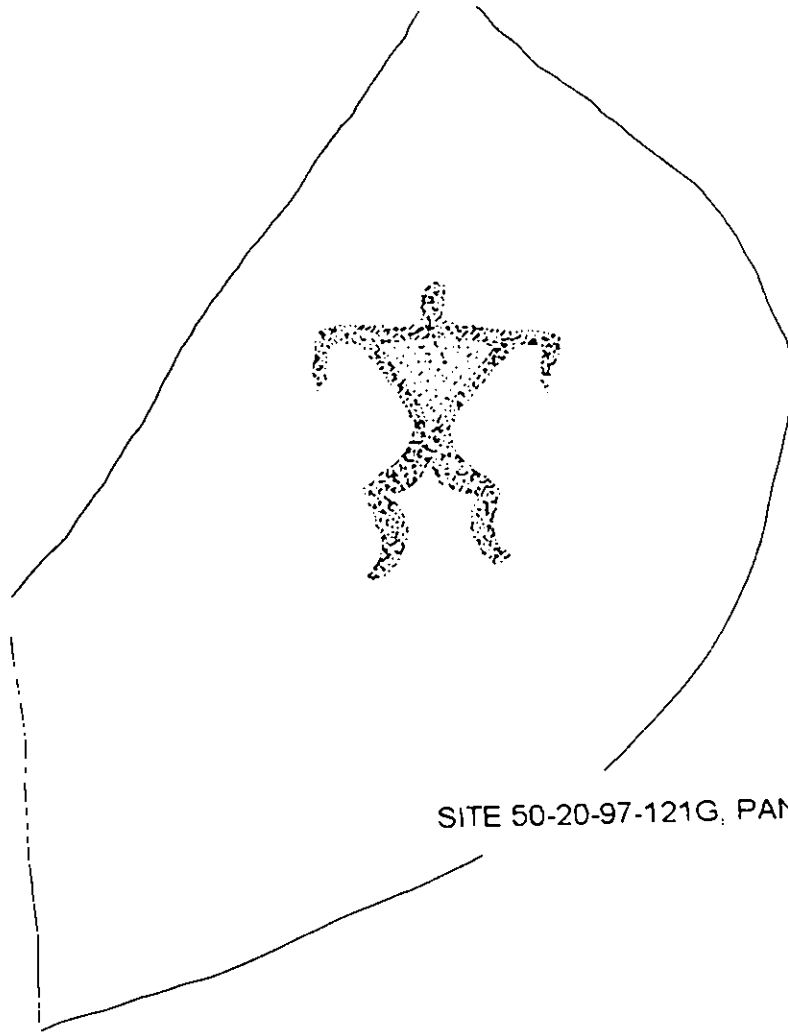


BULLET MARKS

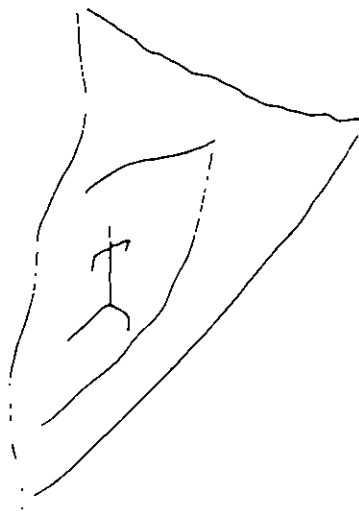


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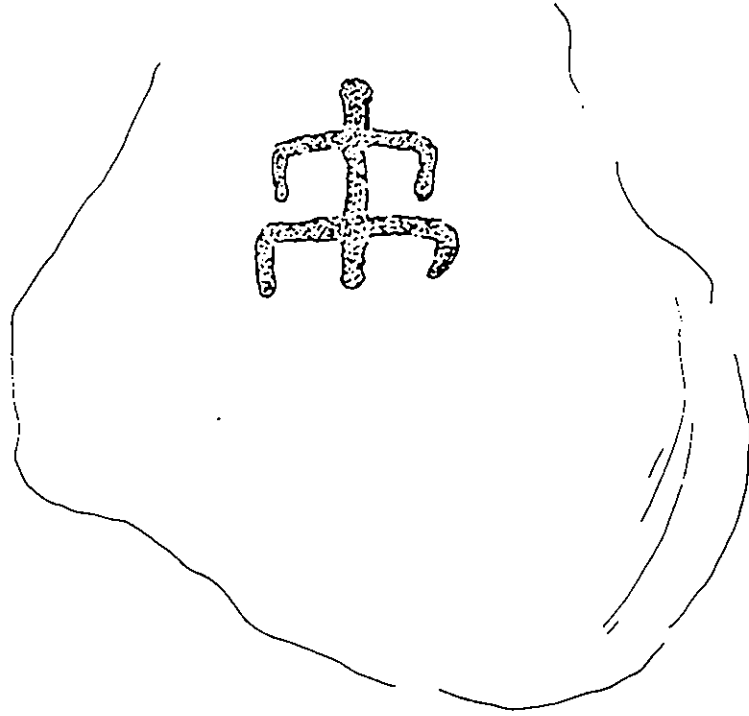




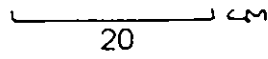
SITE 50-20-97-121G, PANEL 12 (TOP)



SITE 50-20-97-121G, PANEL 18

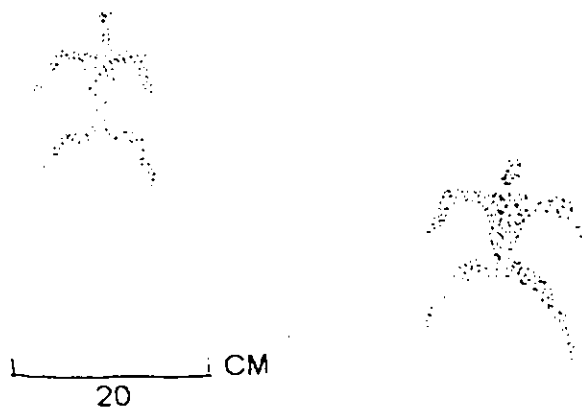
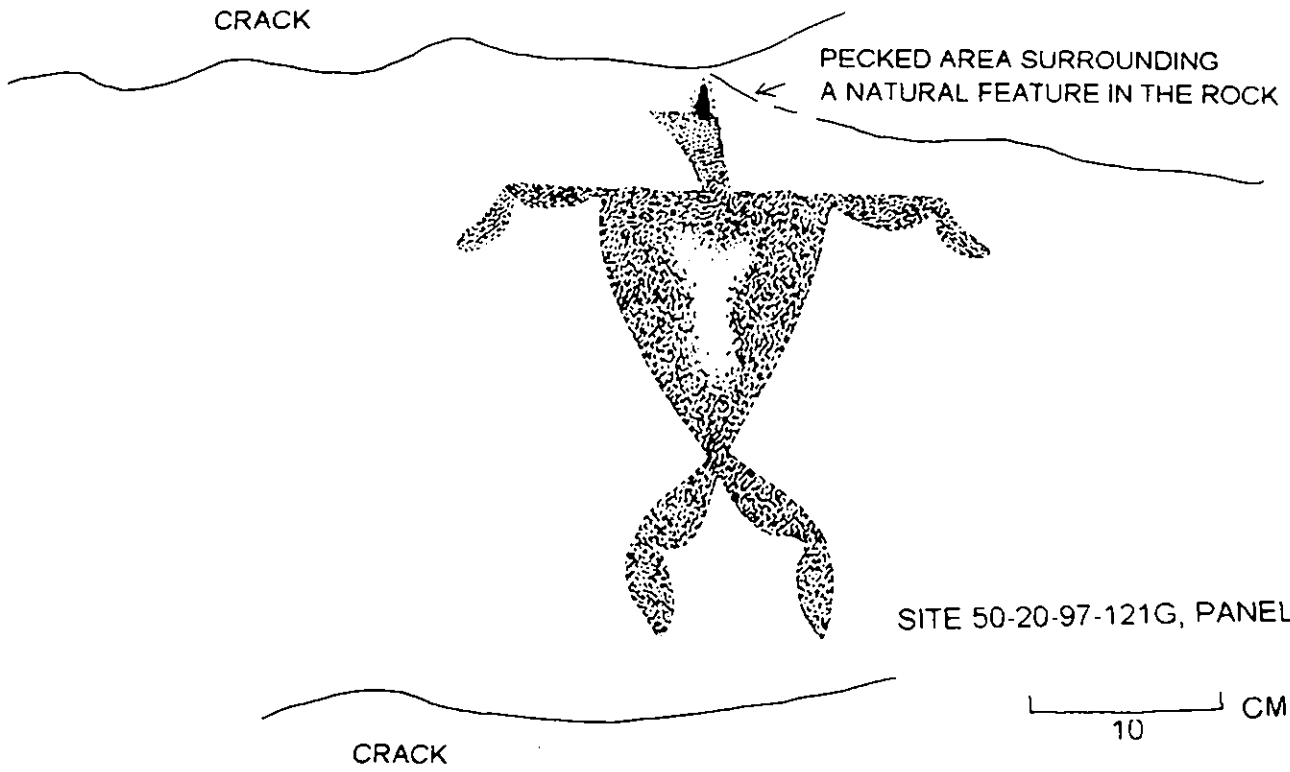


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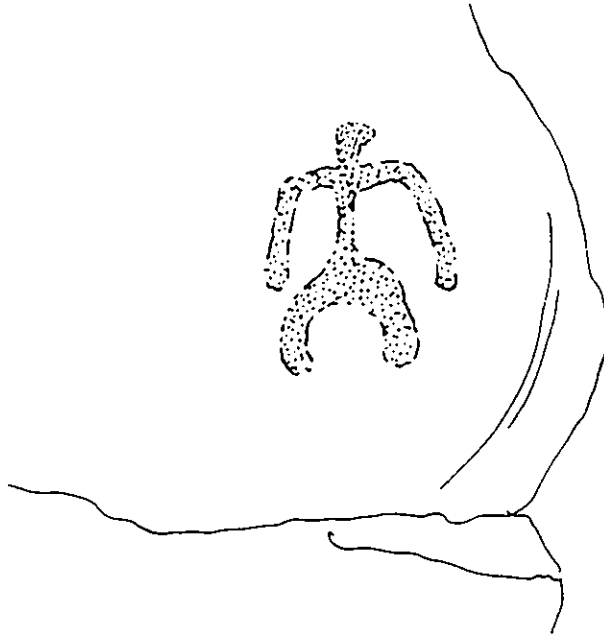


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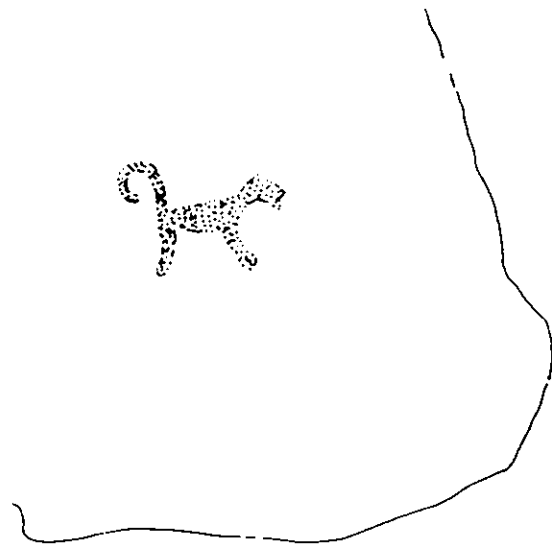
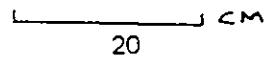




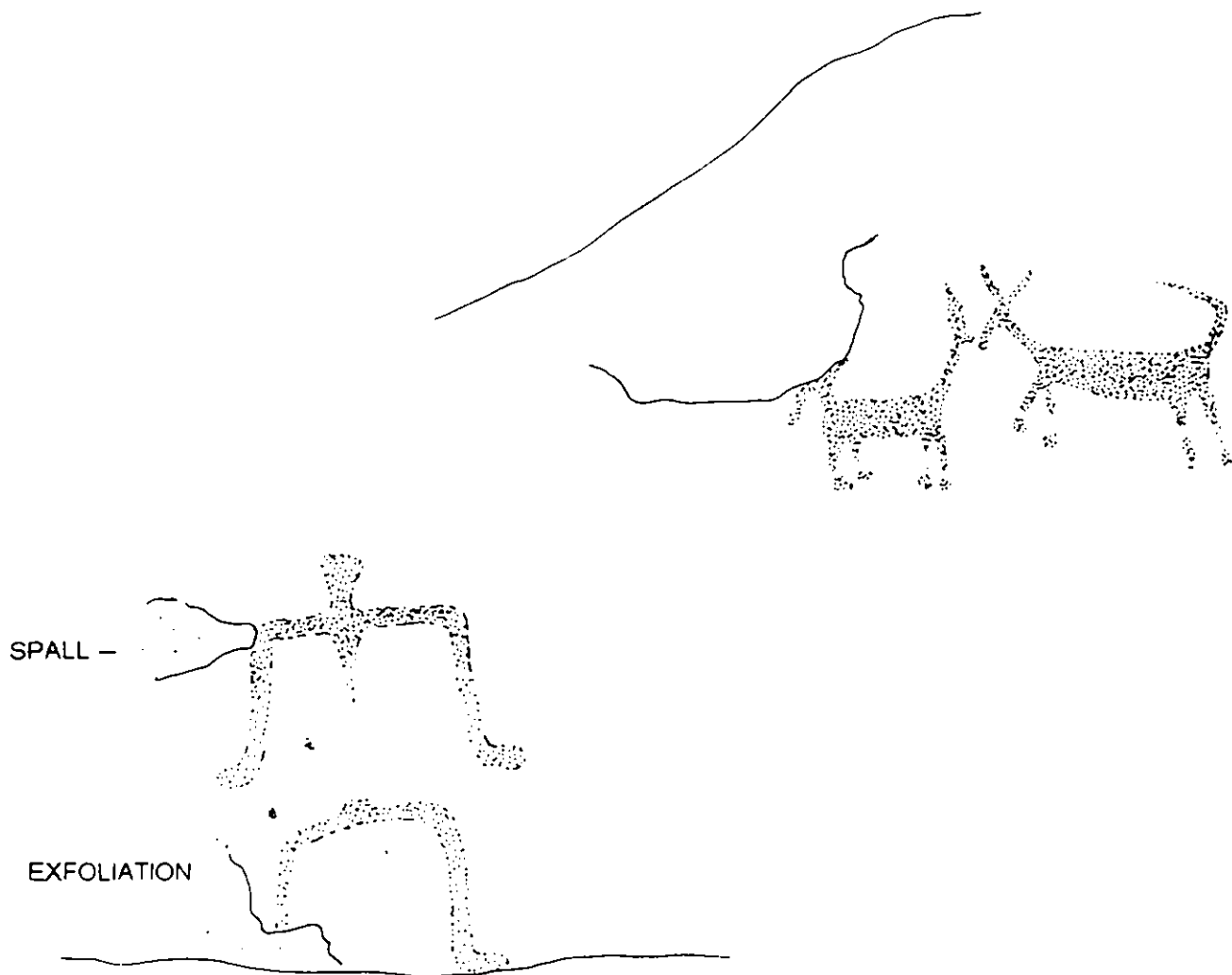
SITE 50-20-97-121G, PANEL 17



SITE 50-20-97-121G, PANEL 11

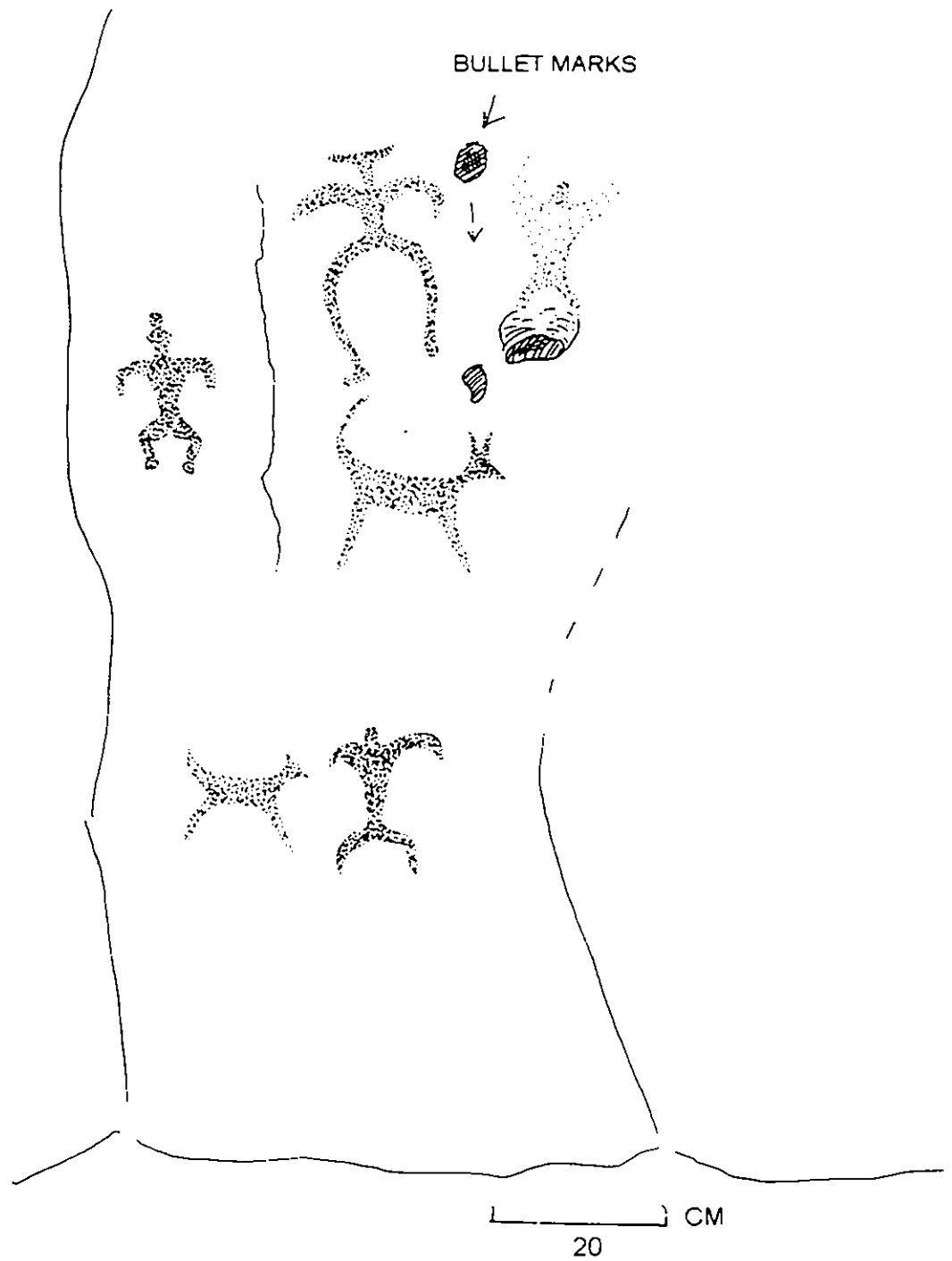


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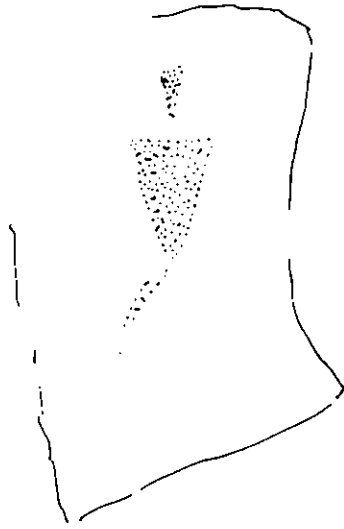


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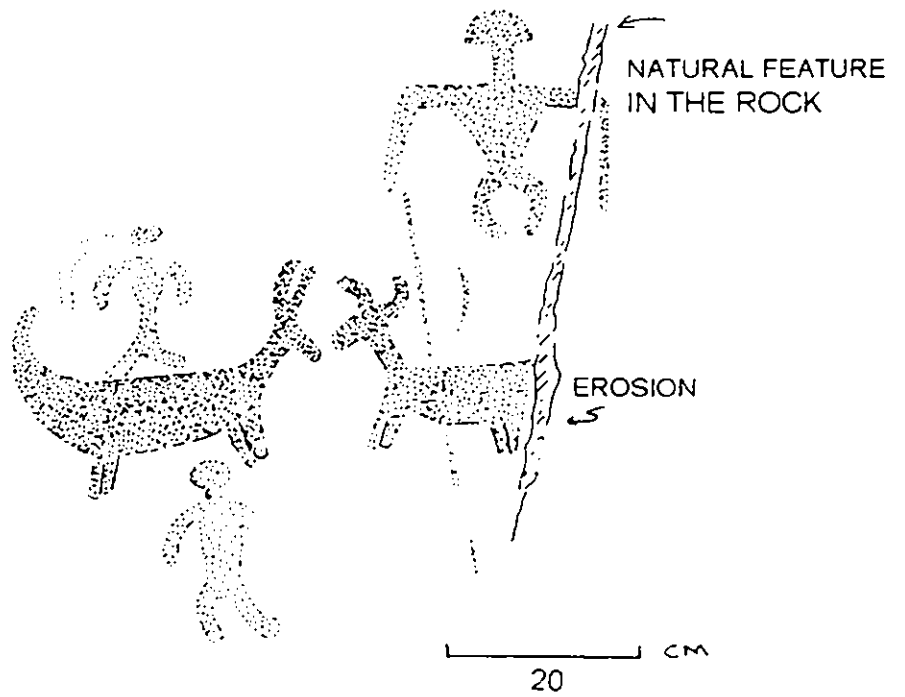
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SITE 50-20-97-121G, PANEL 9

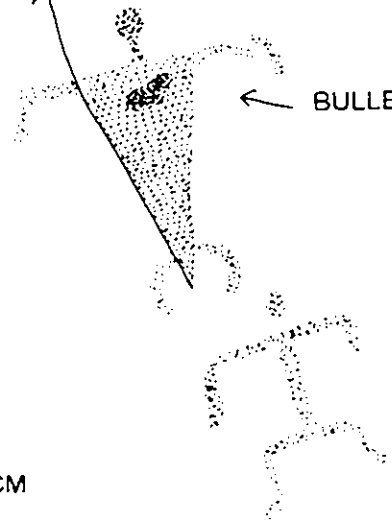


SITE 50-20-97-121G, PANEL 7



SITE 50-20-97-121G, PANEL 8

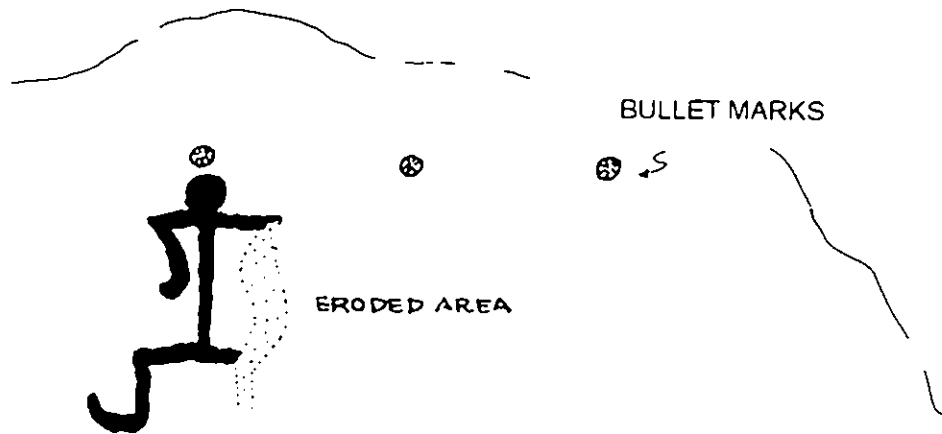
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THE LEFT EDGE OF THE BODY



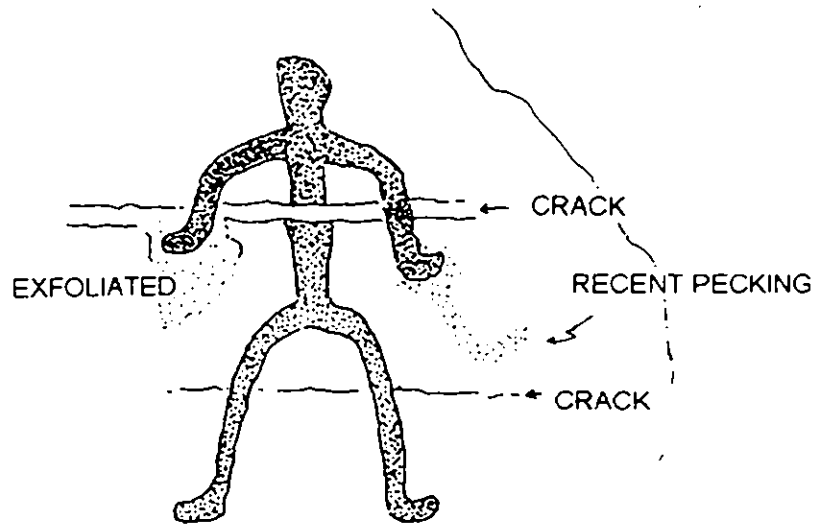
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SITE 50-20-97-121G, PANEL 5

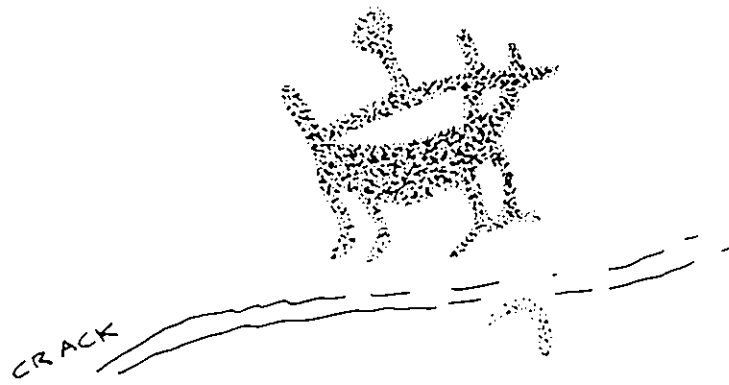


SITE 50-20-97-121G, PANEL 5A

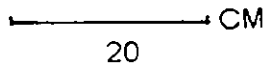


SITE 50-20-97-121G, PANEL 6

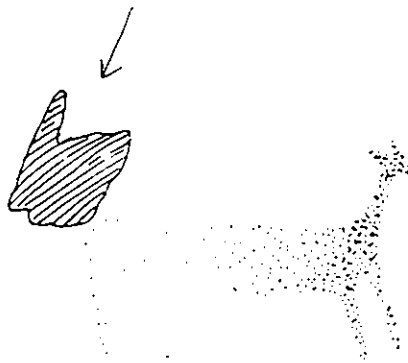
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SITE 50-20-97-121G, PANEL 4



BULLET MARK

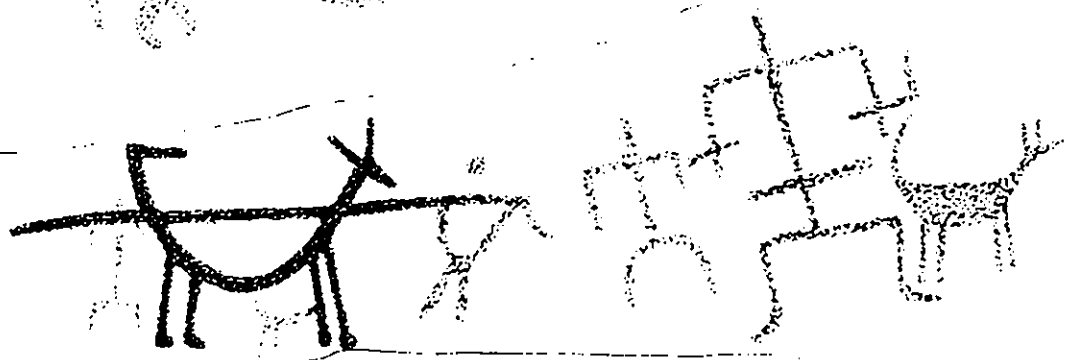
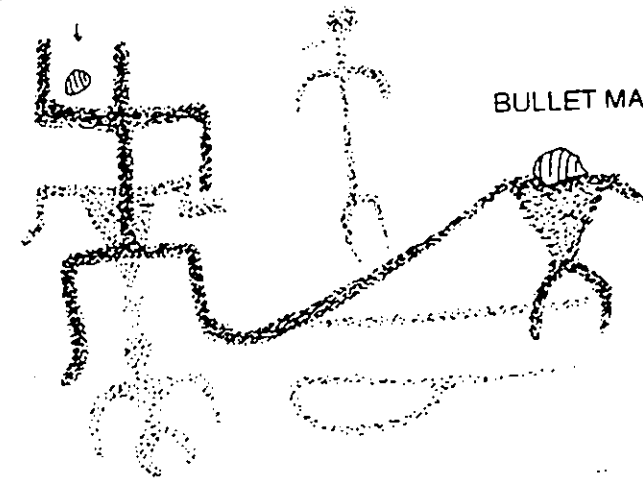


SITE 50-20-97-121G, PANEL 8



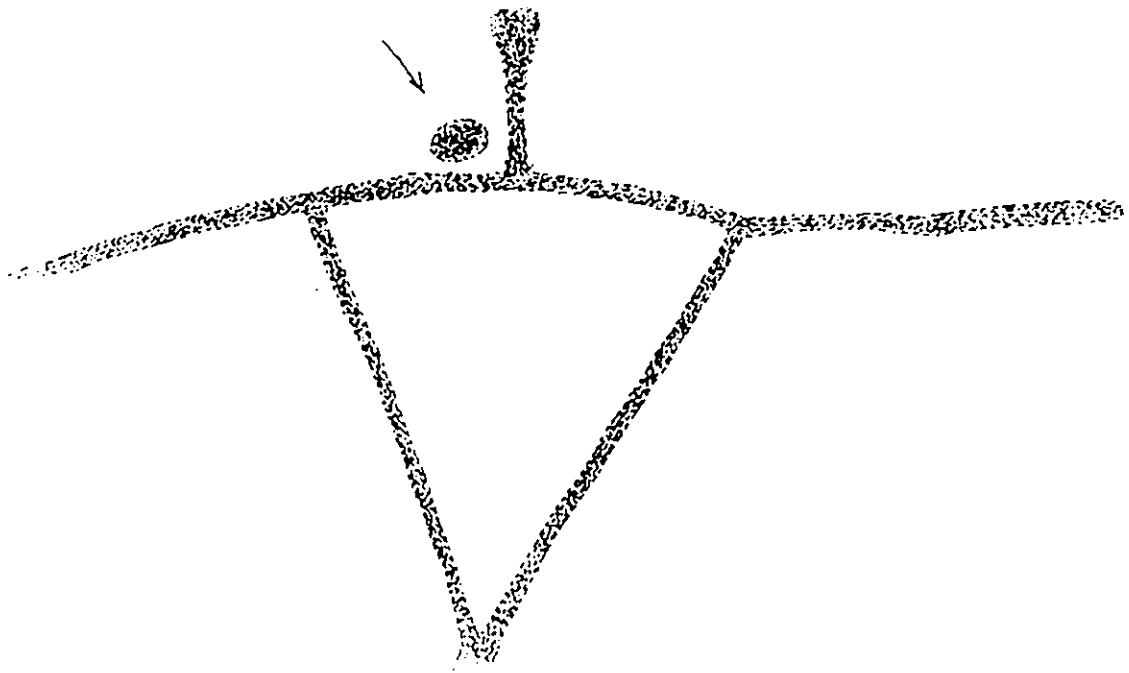
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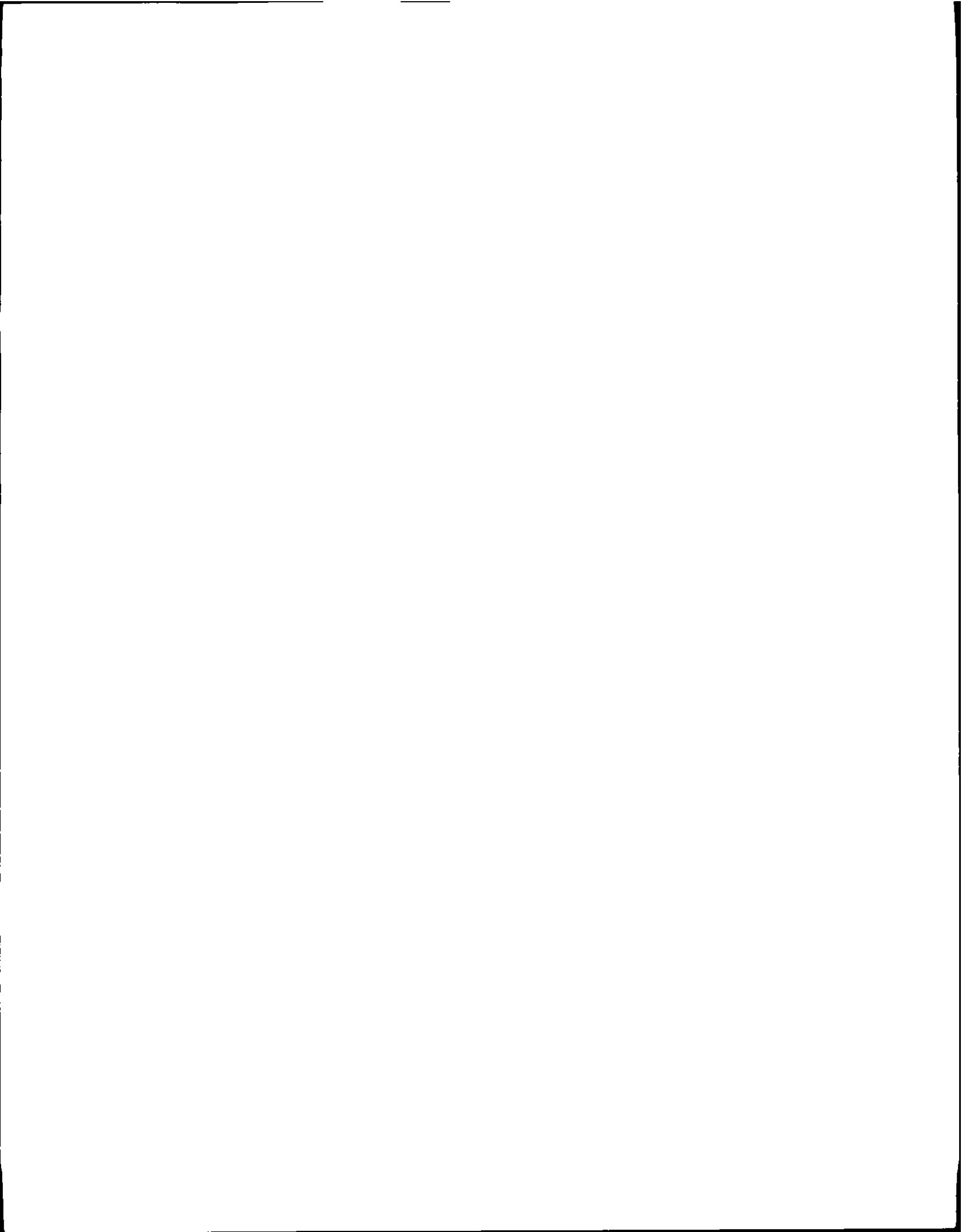
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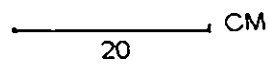
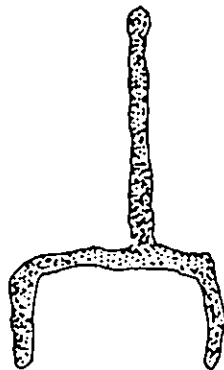
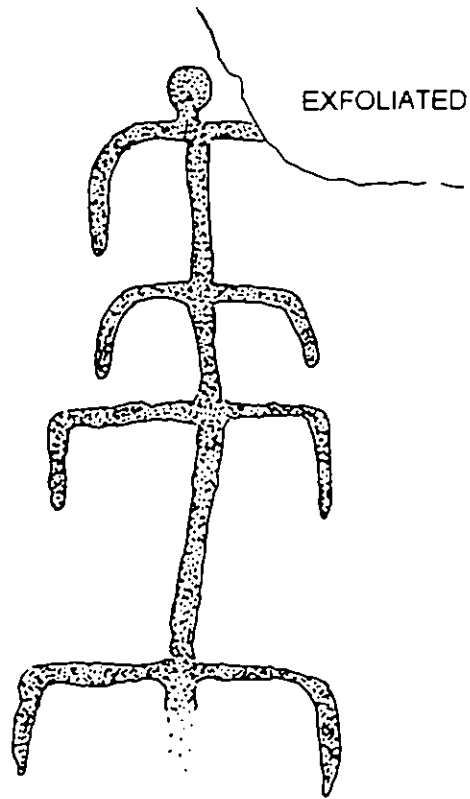
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BUBBLE



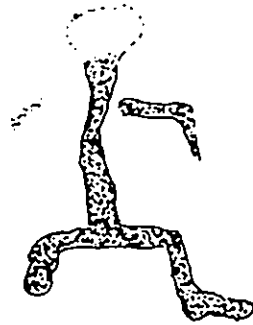
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SITE 50-20-97-669C, PANEL 2





SITE 50-20-97-669C-1



—→ CM  
20

SITE 50-20-97-669C-III

BULLET MARK



20 CM

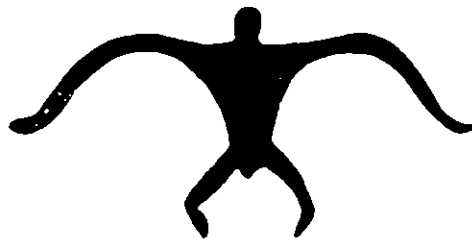
SITE 50-20-97-669F, PANEL 1

20 CM



SITE 50-20-97-669F, PANEL 2

MAKAALAE





## Makaalae

### Site 50-20-97-340

Site 340B is located between Makaalae peninsula and Honokoa Bay on the northwest coast of the island. Any possible petroglyphs at this site are not included in the data as we were unable to visit the site due to lack of time.

The original survey form records that it "includes a small midden scatter and a boulder with petroglyphs." "The petroglyphs are carved on the inland side of a large boulder, the seaward side of which has been painted white and was probably used as a target. In addition to three petroglyphs which have no obvious meaning there is carved the name "ONAKAI". The name measures 50 centimeters in width and is a maximum of 15 centimeters high. All of the lines are incised."

# KAUKAUKAPAPA



## Kaukaupapa

### Site 50-20-97-135C, D, and E.

Site 135 is approximately 1000 meters north of Kealaikahiki Point, on the northwest side of the island. The site is situated on a low rocky headland at the eastern end of Kaukaupapa Beach, which is a long white sand beach. The site includes a cluster of occupation sites, a fishing shrine and petroglyphs. One sample of basaltic glass from this site has been dated at AD 1241±43.

The petroglyphs are listed as Features 135C, D, and E. Features C and D are boulder outcrops in which are found shelters, while Feature E consists of a scatter of individual boulders. Feature C is located directly inland from Feature D and probably represents part of the same basalt dike.

At site 135C we documented 23 petroglyphs. The original survey form, recorded by Barrera (1977), cited 15. No number of elements was provided in the report for Features D and E, but our survey recorded 64 elements for D and 19 for E.

Some of the petroglyphs we recorded appear to date from a very recent period; in one instance, we recorded a petroglyph depicting a spaceman and rocket ship. Judging from the style of the space suit, it likely dates from the 1950s or early 1960s.

Some of the prehistoric petroglyph panels have been damaged by gunfire, and it appears that this damage is the result of either goat hunters or the military. Increased exfoliation of the surfaces has resulted from this damage. See map and illustrations at end of this section.

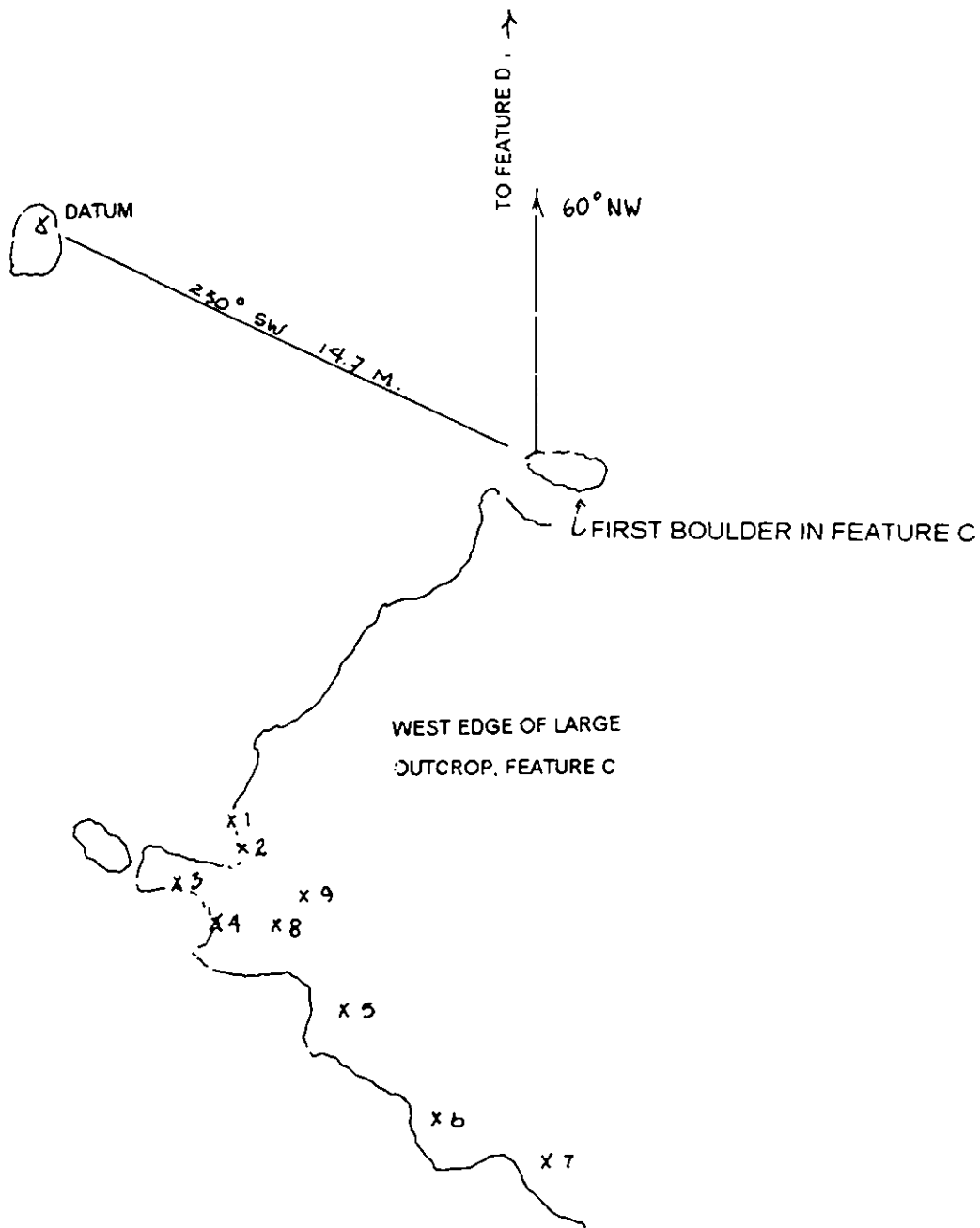
Site 135C is located eleven meters 102° southeast from 135D. The site is a massive outcrop of boulders; the petroglyphs (nine loci) are all located on the west edge of this boulder outcrop.

Panel 1 has been severely impacted by gunfire. Three partial figures remain, one of these is merely a fragment due to gunfire and the exfoliation caused by gunfire. There are at least 22 bullet marks.

1. A head and shoulders, and a partial torso are remaining; these measure 12x16 cm.
2. Another partial figure, 8.5x14.5 cm; with a head and arms.
3. Fragment, possibly the leg of a figure. The entire upper part has been destroyed.

Panel 2 has three figures; this panel has also been affected by gunfire.

1. Figure with an oval body, and legs angled in the same direction. The head has incised lines, like rays, coming out; the arms are very faint and appear to have been made by abrasion. The figure has three bullet marks, the center of the head, the chest, and the groin. This unevenly pecked figure is 26x32 cm.
2. A triangular body figure with a 'mushroom' shaped head, wide shoulders and short narrow legs; it is 16x16 cm and has a bullet hole in one elbow.



KAUKAUKAPAPA, SITE 135 (CONTINUATION MAP)

3. Stick figure, 15.5x29 cm, has a detached head, three fingers on each hand, and rounded legs.
4. A simple triangle, perhaps the start of a figure. It is 8x12 cm.

Panel 2A, on the cast face of the boulder, has two units, both very faint.

1. A stick figure, 6x10 cm.
2. Partial figure, 8x 14? cm. This petroglyph has a detached head and muscled arms and shoulders. Other pecking below may have been the rest of the figure, but now is too far gone to see clearly.

Panel 2B is on the south face of the same boulder. It has a very faint figure.

1. Headless anthropomorph, extremely obscure. It is 8x8 cm.

Panel 3 is located on a small boulder, separate from the boulder cluster. It is badly defaced by gunfire.

1. A triangular figure with broad shoulders and short arms. It is 16x20 cm, and has at least eight bullet holes directly into the figure's left side.
2. A faint curve shape, 8x8 cm. Six bullet holes are to the right of the figure.

Panel 4 has two figures, both lightly pecked.

1. Small triangular figure, 10x10.5 cm.
2. Anthropomorph, partial figure; it is 12.5x14 cm. What can be seen are arms, head, and a section of the upper torso. The rest is exfoliated.

Panel 5 has one problematical figure; the surface of the rock is spalling badly making it difficult to separate erosion from possible motif.

1. A possible figure; head and torso appear to be clear but other lines/shapes are not. The panel is 24x30 cm.

Panel 6 is to the right of #5; it has two figures.

1. Stick figure anthropomorph with a fairly thick body line, almost rectangular. The head is detached, legs curved. Arms, however, are angled. The figure is 14.5x16.5 cm.
2. A partial figure, torso and legs only; 5x8? cm. A spot of iron oxide partially obscures this petroglyph.

Panel 7 has three figures, one extremely faint.

1. A partial (legless) figure with rounded downturned arms, 14x14.5 cm. The torso is slightly triangular.
2. An asymmetrical anthropomorph with a rectangular body and 3 digits on the hands; the fingers on the left hand are more clear. Legs are rounded and one is offset. The figure is 16.5x24 cm.
3. A barely visible triangular figure, with one arm upturned. It is 12x14.5 cm.

Panel 8 has two units.

1. A square bodied figure with short legs and no neck, 9x12 cm.

2. A compound figure, 12x14 cm. This appears to be two triangular figures joined together, with one set of legs and arms. The head on the left side is detached, and the body is not fully pecked.

Panel 9 has four figures, pecked and incised. This panel also has recent peck marks.

1. A small abraded half figure with a flat head and arms. The torso ends at the head of the next anthropomorph. It is 6.5x8.5 cm.
2. An incised anthropomorph with large head. One arm is up, and it touches the shoulder of figure #4. It is 8x9.5 cm.
3. A dog with a long tail, 10x14 cm. It has four legs plus some recent pecking around the feet.
4. Triangle bodied figure with arms down and digits on the left hand. Legs are inverted "V"s, 18x28 cm. The head is off center.

Site 135D is a large outcrop of boulders, running along an axis of approximately 60° NW. Panels face in varying directions around the site; some are in an elevated niche. Datum was established at Feature B. Reference lines were used to draw in the outline of the rock outcrop.

Panel 1 is at the east end of the outcrop, and begins a series of panels that are arranged around a natural raised niche in the rocks. The panel has both pecked motifs and incised lines. Parts of the panel are also abraded.

1. A partial anthropomorph, 18x20 cm, this figure lacks legs and lower torso. The shoulder line is very squared.
2. A stick figure, 16x20 cm, with many incised lines running in and around the figure. Arms are straight out, and legs are curved. The head is unclear.
3. Incised lines, at least 30, do not appear to form any known motifs. Some are loosely crosshatched.

Panel 2 is on the east side of a small shelter. The petroglyphs --which are very animated-- are very hard to see; at least five are on this panel.

1. Stick figure anthropomorph, 11x14 cm, is in a lively running posture with one arm and one foot raised.
2. Stick figure anthropomorph, 10x14 cm, also has one arm raised, but legs are rounded, almost forming a circle. A bullet hole is in the crotch area.
3. Stick figure, 12x12 cm, also has an active pose. One arm is up, and the left leg shortened so that the figure appears to be dancing. There is some recent pecking on top of the ancient petroglyph.
4. A partial figure, 19x28 cm, with long curving arms, and curved torso. No legs. The left arm seems to impact the arm of figure #5.
5. A small figure with upraised arms, 9.5x13 cm, has a detached head and natural markings in the rock that give the appearance of eyes.

Panel 3 contains incised lines plus two figures.

1. Triangular bodied anthropomorph, 18x22 cm, has incised fingers on both hands, and short curved legs. Incising is close to the figure on the left.

2. A lightly pecked partial anthropomorph, 10x12 cm, consists only of an upper torso, arms and head.
3. Incised lines, at least 7, are to the left of figure #1; they do not form any known motif.

Panel 4 is one of the most complex. It is located inside a south-facing shelter. It appears that there are two levels of petroglyphs on this panel. The earliest are incised horizontal and vertical lines, forming a sort of grid. They are heavily repatinated. Superimposed over these lines are other, modern, petroglyphs showing space men, rocket, and an outrigger canoe.

1. Incised grid-like lines, at least 43. The panel is so eroded that an accurate count was not possible.
2. The modern panel, 80x120 cm, is over #1. All but one of the incised figures on this panel are clear and descriptive. A rocket is above a helmeted spaceman, below him is what could be a sun, and below that is an outrigger canoe with two figures in it. The one exception is the lower figure, which is not clear. It consists of curving lines in a series, plus other lines. It has been suggested that they represent a squid or octopus, one of the forms of the god, Kanaloa. Kanaloa is another name for Kaho'olawe (Emerson, 1978).

Panel 5 is on the west face of a boulder, and contains two figures.

1. A triangular bodied, phallic anthropomorph, 16x21 cm. The legs curve around, almost forming a circle. The arms are curtailed but with a hint of muscles. The body area is fully pecked.
2. A triangular bodied figure, with outsized upper body, and tiny curved legs. It measures 14.5x15 cm. The figures both appear to have been re-pecked in recent years.

Panel 6 is on the side of a boulder with a grinding slick on the top surface. It has two figures.

1. A zoomorph, probably a dog. The figure is abraded; 14x15 cm.
2. An anthropomorph with wide curved arms and "open" head. Two torso lines run down and turn into legs. This figure is crudely bruised.

Panel 7 has one figure.

1. A single symmetrical stick figure, lightly pecked. The upper portion is covered with lichen. It measures 14x11.5 cm.

Panel 8 has three figures on the top of a boulder.

1. A very faint, symmetrical stick figure without a head, 7x12 cm.
2. A stick figure with double arms? [Or a double figure?] It measures 10x20 cm. The head is an "open" circle.
3. A stick figure, 10x17 cm, with inverted "V" legs and a large head.

Panel 9 has a group of figures plus some fine scratched lines; some of the lines form a triangle shape. The petroglyphs appear to have been reworked in recent years.

1. A stick figure anthropomorph with one arm raised. the legs are short; it measures 18x28 cm.
2. A stick figure that is distorted; it has the appearance of a lying-down anthropomorph. The right foot has three toes. It is 18x27 cm. The arms do not articulate correctly with the torso.
3. A pecked and abraded figure that is not articulated; the arms are not connected to the torso, or the torso to the legs. It is 14x14 cm. A bullet hole is to the left of the figure.
4. This pecked and abraded figure is 14x18 cm; it is not symmetrical and may have a headdress. One arm is up.
5. A partial anthropomorph, 8x11 cm, with head, arms, and half a torso. The right arm is unusually long.
6. A fragment of a figure(?), approximately 8x7 cm. This is close to #5 and may have been connected, or a part of that motif. There is not enough here to tell for sure.
7. Incised lines form an inverted triangle with lines tailing from the bottom corner. Approximately 6x14 cm.

Panel 10 contains both incising and pecked figures on the side of a boulder.

1. An anthropomorph with angled arms and shelf hands, no neck, and very faint legs, 14x16 cm. The body is ovoid shaped.
2. An incised triangle, probably the start of a figure. There is no head, or limbs. 12.5x16 cm.
3. A small anthropomorph with one arm raised, 7x10 cm.

Panel 11 has a single figure.

1. Stick figure anthropomorph, 29x25 cm. The head appears to have a headdress, or a line curving from it. Arms are rounded, as are the legs.

Panel 12 has a single figure.

1. Stick figure anthropomorph, 16x16 cm. The arms angle down from the neck of the figure.

Panel 13 has a cluster of small figures.

1. A rectangular shaped anthropomorph with angled arms and phallus; it measure 14.5x15.5 cm.
2. A small anthropomorph with round torso; legs are very faint. It is 8x10 cm.
3. A stick figure with squared arms and legs, 12x12 cm.
4. A stick figure with detached head, wide arms and rounded legs, 11x11 cm.
5. Fragment of a figure, 4x4 cm.
6. An anthropomorph with squared head. The figure is more pounded than pecked. It is 10x11 cm.
7. An abraded anthropomorph with legs out and toes up; 8x9 cm.
8. A partial figure, 10x10 cm; upper portion of torso and arms; a faint trace of head.



Panel 14 has one figure on an irregularly shaped surface.

1. A phallic triangular bodied anthropomorph, 17x14.5 cm. Arms and legs curve down and figure is relatively symmetrical, except for the penis which extends below the legs. This is made by very rough pecking, seemingly recent.

Panel 15 has three figures, plus bullet marks.

1. A triangular anthropomorph with inverted "V" legs, and detached head. It is very faint.
2. A faint figure that may be the start of an anthropomorph; it is 6x6 cm.
3. An anthropomorph with arms up and widespread, bird-like. The figure lacks a neck and the body is rounded. It measures 15x16 cm.

Panel 16 is the western most locus in the outcrop; it consists of two boulders, one on top of the other, and several "faces" of rock surface. The petroglyphs are pecked and abraded, or incised. The surface of this boulder face is very fragile.

1. Small anthropomorphic figure with detached head and inverted "V" legs, 9x11 cm.
2. Small anthropomorphic figure, 6x10 cm, with right arm joined to hip line.
3. Incised "bird feet" or lines intended to suggest hands: there are 3 detached units of this motif, plus several that are attached to line that indicate arms or legs. The lines are finely incised.
4. Partial triangular anthropomorph, 15x20 cm. This abraded form is headless and legless, and has one possible arm.
5. Triangular anthropomorph, incised, with fingers (five on one hand, four on the other). The head is detached and legs very curtailed. It measures 8x16 cm.
6. Headless triangular anthropomorph, connected to #7. It measures 10x14 cm and has incised fingers. It is partially superimposed by more recent incising (#8).
7. Headless triangular anthropomorph, with tiny legs and one arm. It is 13x26 cm.
8. Superimposed scratched figure resembling a bird, with other curvilinear lines; the group of lines is 23x54 cm.
9. A triangle shape with line extending from one side, plus possible short arm lines; it is 20x12 cm.
10. Another triangle shape with one leg (?) extending with 5 "finger" lines at the end. It is 16x21 cm and is under the curved incised lines of #8.

Panel 17 has a single figure.

1. Stick figure anthropomorph, 17x25 cm. It is pecked and abraded, with rounded legs and shelf feet. The right arm is very faint; a curved line may extend from the head.

Panel 18 has two figures on the vertical face of a south-facing large boulder.

1. A stick figure anthropomorph with a curved line for a head, curved arms and legs. It is 20x30 cm.
2. A small stick figure, symmetrical, with curved legs and a "stick" head. It measures 14x15 cm.

Panel 19 has a combination of incising and pecked motifs on the top of a very eroded boulder.

1. Incised rectangle shape, divided into four sections; 11x16 cm.
2. A possible pecked triangular torso, 7.5x9.5 cm.
3. A possible pecked triangular torso, 9x11 cm. These two appear to be intentionally carved with gaps left at the upper corners. Neither has a suggestion of head, or limbs.

Panel 20 has two figures.

1. A triangular bodied anthropomorph with a lump for a head, upturned feet and a wavy left arm; it is 13x18 cm. A small "dot" above and left of the head area may or may not be part of this unit.
2. A triangular figure, long torso with one leg in a "step" position. It is 25x26 cm.

Site 135E consists of three large boulders that lie just to the west of Features C and D. The largest of the boulders has been used as the base for a small shelter. Feature E is also situated quite near the piled stone fishing shrine (Feature B), which appears to form the focus of Site 135.

Panel 1 has a cluster of small figures on the smooth section of a large boulder.

1. Legs and feet, plus other possible parts of a torso. All very obscure and faint. It is approximately 8.5x12 cm
2. This appears to be the lower half of an anthropomorph, showing muscled thighs, legs and knob feet. It is 7x7 cm. These two (#1 and 2) appear to be toe-to-toe or some such posture, or perhaps a mirror image.
3. A faintly pecked headless triangle torso, with faint legs; 8x11? cm. Some incised lines are near the feet.
4. Short horizontal incised lines, in series, plus some deep pecking; whether or not this has a connection with figure #2 is unknown.
5. A faint curved line, 9 cm long.
6. A stick figure with detached head and raised arms. The left foot is shelf like; the foot on the right has a curved line extending; it is 16x22 cm (including extension on foot).
7. A faint stick figure, arms down, 11x15 cm.

Panel 2 has a combination of incised and pecked petroglyphs.

1. An incomplete phallic stick figure with legs and head, no arms. It is 16x20 cm.
2. A small anthropomorph with curved legs and arms, and a large head; 12x13 cm.
3. A triangular bodied figure with out curved arms and legs that angle inward. It is 20 x 21 cm. The arms have a rather bird-like feeling.
4. This triangular bodied figure is formed with both incised lines and pecked lines; some are superimposed. It has muscled legs; 20x21 cm.
5. A partial figure, 7x8 cm. Visible are torso, a stick-like head, and arms, one of which curves inward to the torso line.

Panel 3 has a cluster of 12 figures on two vertical faces of a boulder.

1. A triangle shape, 6.5x9 cm. This probably represents an unfinished anthropomorph.
2. A small triangular anthropomorph with inverted "V" legs and no neck. It is 10.5x13 cm.
3. A very faint double? figure; a stick figure with what appears to be a second one attached. 13x17? cm.
4. This stick figure has long legs, short outward arms, and no neck. It is 12x17 cm.
5. A "T" figure, torso/arms but no head or legs. It is 6x9 cm.
6. This triangular anthropomorph has very long legs in proportion to the upper part of the body. One arm is raised and the head is not connected. It is 11x23 cm.
7. A lightly pecked triangle figure with straight-out arms, and curved legs; 18x24 cm. The legs are curved, the torso not fully pecked.
8. A headless triangle torso with legs, but no arms; 4x5 cm.
9. A chunky triangle anthropomorph, 13x15 cm.
10. A T-figure with arms and head; the lower part of the torso fades off; 10x12? cm.
11. This active stick figure has outward arms, and one leg in an action pose. The only indication of a head is a slight bulge on the shoulders. It is 19x19.5 cm.
12. A T figure with arms and small head; the torso has a curve to it. It is 9x10? cm.

Panel 4 is small, with three faint figures.

1. An oval torso with faint suggestion of arms and a head that is a mere lump. It measures 14x14 cm. Some faint pecking is inside the torso.
2. This faint triangle shape with a head probably is a figure start. No legs or arms. It measures 12 x 7? cm.
3. A tiny stick figure, 4.5x5.5 cm. Arms are straight out.

Panel 5 has a cluster of figures, some made with incising.

1. A phallic stick figure with squared legs and rounded arms. A line bisects the torso. The head is placed under a natural depression in the rock. It measures 13x16 cm.
2. A small triangular figure, 8x7 cm. formed by numerous incised lines. Incised lines are present on the panel, below and to the left of the figure.
3. A long torso stick figure with curved legs, 20x12 cm.
4. A possible start for a figure, these pecked lines appear to form arms/shoulders and a head. Other pecking is inside this area. It measures 12x9 cm.
5. A very faint figure that may be a torso, head and arms. 8.5 x 9? cm.
6. A legless triangular torso, made with incising with some pecking around the edges. The right arm has three fingers; there is no arm visible on the left. The head is detached. 14x28 cm.
7. Numerous incised lines accompany the figures; these are very faint and do not appear to form any recognizable motif.

## Discussion

Kaukauapapa has a total of at least 119 units, more than the other discrete sites on the island. Considering that the incised panels were counted as one unit instead of each fine line individually, the actual total is higher. Anthropomorphs are the most common element here, with slightly more stick figures than triangular-bodied figures (there are 47 stick figures and variations thereof; 10 partial figures; 8 others with unusual body treatment; and 37 triangular-bodied anthropomorphs. Thus 86% of the petroglyphs are human figures of one kind or another. There are two dogs, but no goat images.)

Style, subject matter, and lack of repatination suggest that the body of petroglyphs at Kaukauapapa are probably the most recent on Kaho'olawe. However, subject matter and style are not yet broadly reliable indicators for dating petroglyphs. But in some cases they may be, such as the case for the spaceman/moonwalker panel at 135D(4). Actually, many of the images here, especially at 135D, seem very fresh, judging by the amount of surface coating which is usually a more reliable indicator.

The petroglyphs on the boulders at locus 135E are apparently the oldest at Kaukauapapa. They are faint, overcoated with patina, lichen, and rock scum, and are very difficult to see clearly under any lighting conditions. This is true also for 135C.

The issue of style is complex and subtle. We are suggesting that although the style of a stick figure such as at 135D(14) is clearly "classic Hawaiian", it is a late/recent interpretation of the smaller icon; yet, itself, it becomes an icon of a different "feel". The subject matter is ostensibly the same but it is not, since the figure has a different meaning. It has been created by a person who is to a degree separated, by various forces of social constraints and time, from his ancient authentic cultural awareness. The maker of 135D(14) has a tie only through the Hawaiian collective unconscious to the authenticity of this prototypical image. This concept remains problematic. The same problem exists for anyone at any time attempting interpretation of a previously-made image.

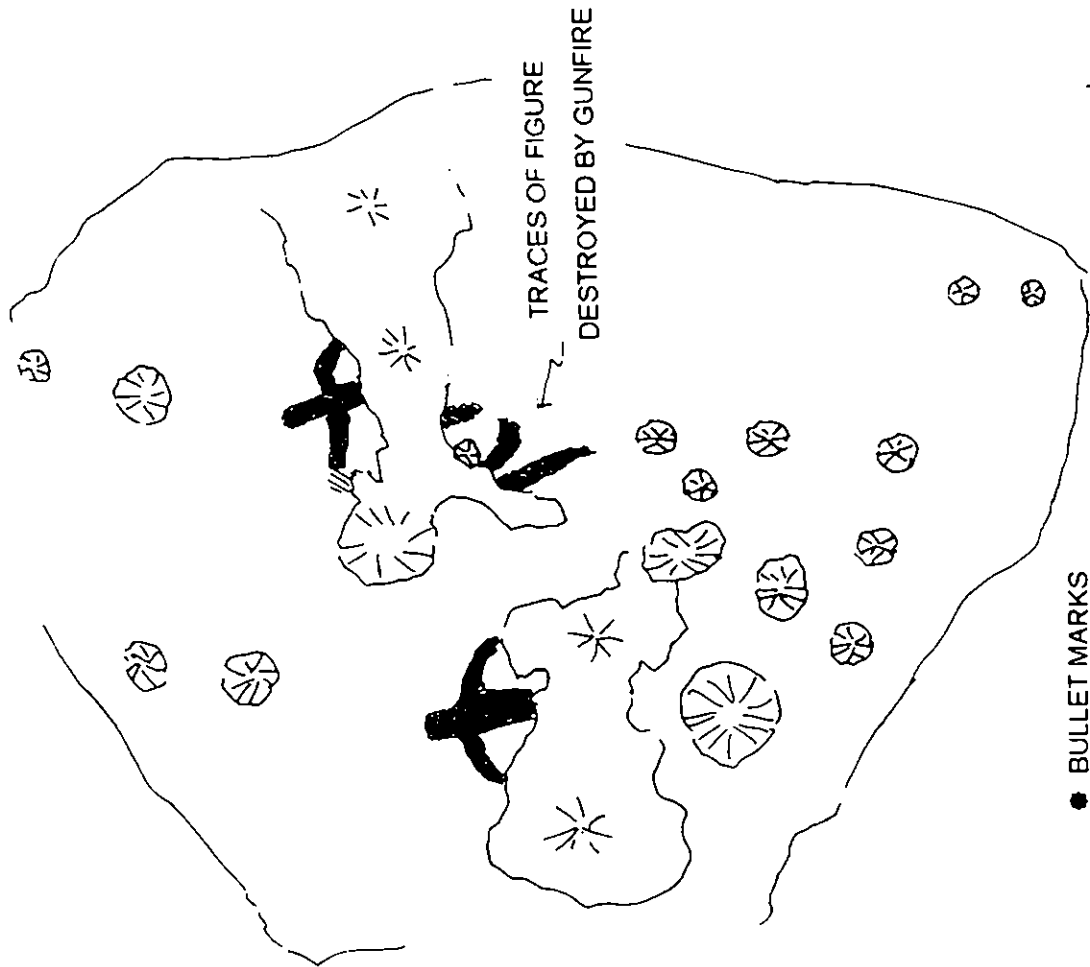
When an older style is favored and used, the style may be the same but it speaks to us with a new and different voice. In a later time, the voice is an expression and consequence of the evolved culture. At the moment of creation, the petroglyph has the voice of its maker, embodying his values and those of his culture. Generally speaking, the petroglyphs at Kaukauapapa exhibit noticeably less skill and craftsmanship than at the other sites on this island. The feeling is that they were carved in haste. However, in inventiveness, they are about on a par with the other sites, and may have equal or more subtle variations in form. For instance, there are many variations of the head shape and the way it articulates with the shoulders, including a number of detached heads. Also the body proportions show surprising variation. Such specificity may indicate the portrayal of an individual as opposed to a conventional representation. There is little evidence of site specific development of conventionalizations at Kaukauapapa, nor indeed elsewhere on the island. This may point to creative and innovative qualities that belie the apparent haste in execution.

For this reason, the petroglyphs tell us that this may have been an intermittent settlement, an occasional fishing or camping place, which allots little time for tangential activities. This observation is not based on archaeological evidence but on some familiarity with the creative process. Kaukauapapa is only about three kilometers from the substantial

settlement at Hana Kanaia; it may be that those residents were the chief petroglyph makers at Kaukaikapapa. There are no suitable rock faces near the ocean at Hana Kanaia, and the island's rock art sites are all near the ocean, except for the uplands site, 110 at Loa`a.





We are suggesting that Kaukaikapapa the concept and quality of the idea is nearly on a par with the petroglyphs of the other islands, but the most skilled petroglyph makers were not living there. There are a few notable exceptions, such as the "birdman" at Hakioawa and most of the anthropomorphs on the Loa`a boulder (near Site 110).

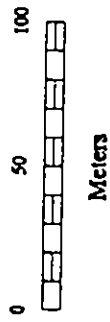
Another factor is the hardness of the rock. Basalt is a formidable surface to penetrate, particularly as compared to *pahoehoe* upon which are carved the majority of Hawai`i's petroglyphs. The apparent 'haste' may be due to the greater time needed to work such a difficult surface.



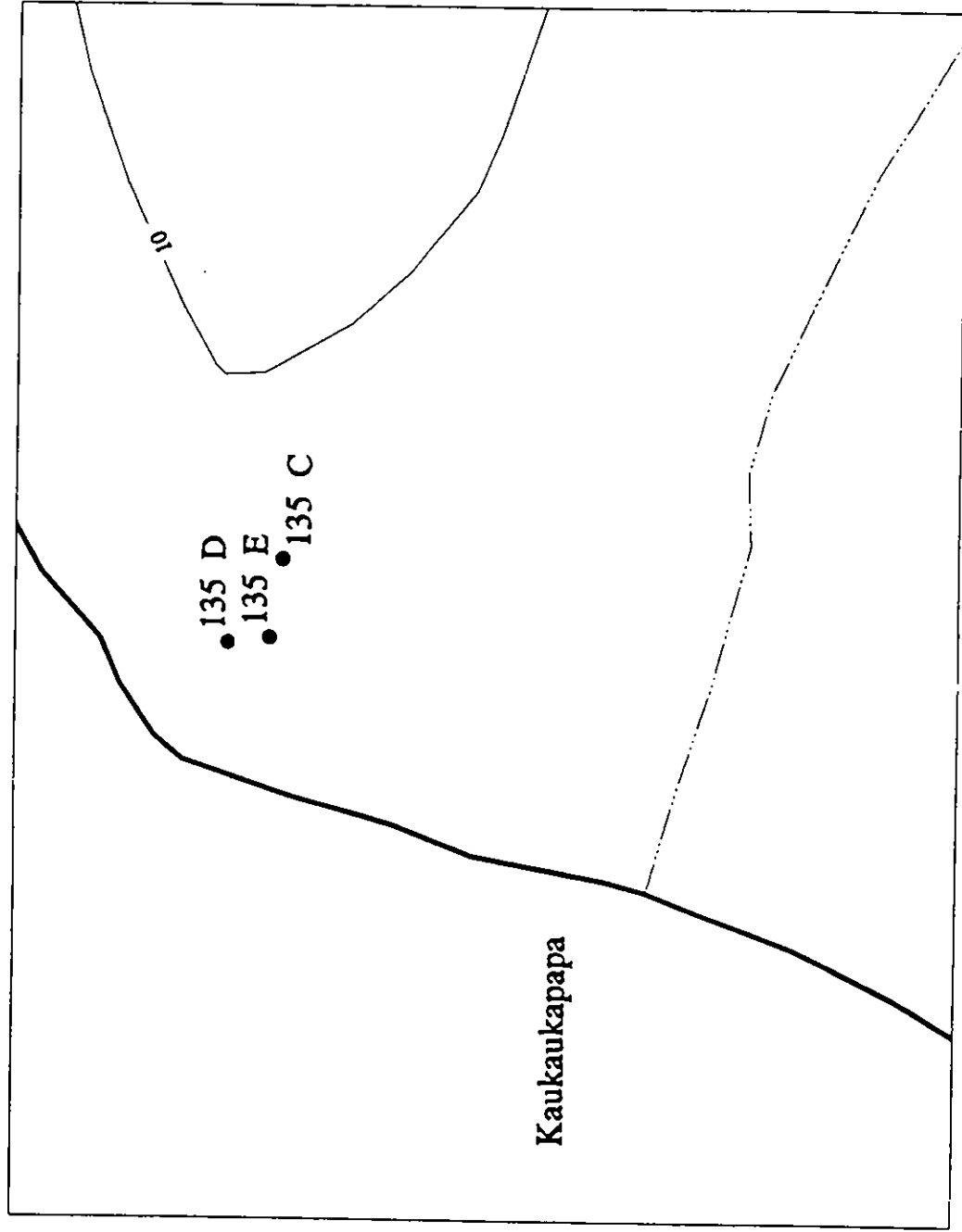
SITE 50-20-97-135C, PANELS 1 AND 2

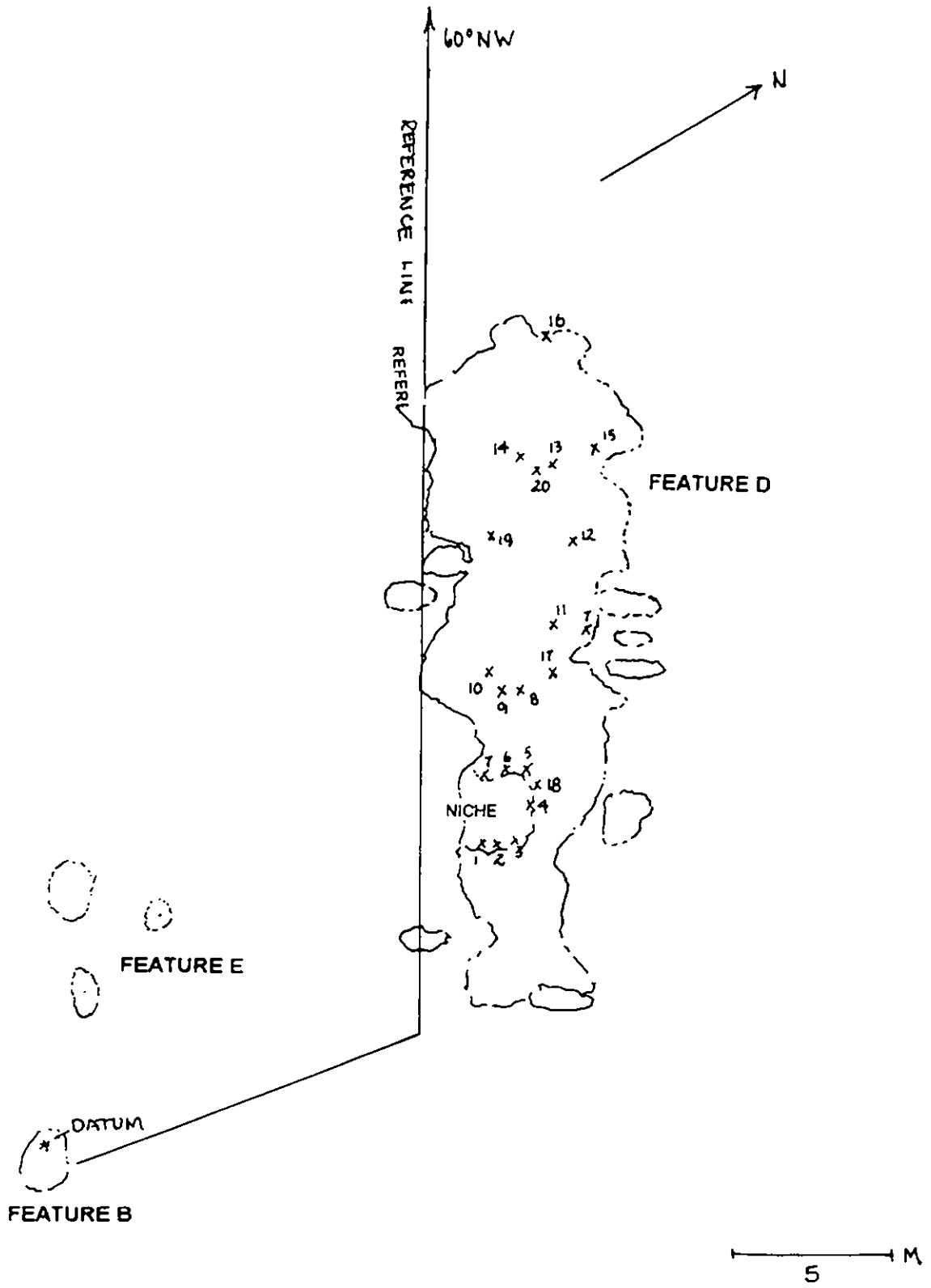
# KAUKAUKAPAPA PETROGLYPH SITES

-  Petroglyph site
  -  10 meter contours
  -  Shoreline
  -  Streams
- 481 N Site & Feature ID



KUCC 1993

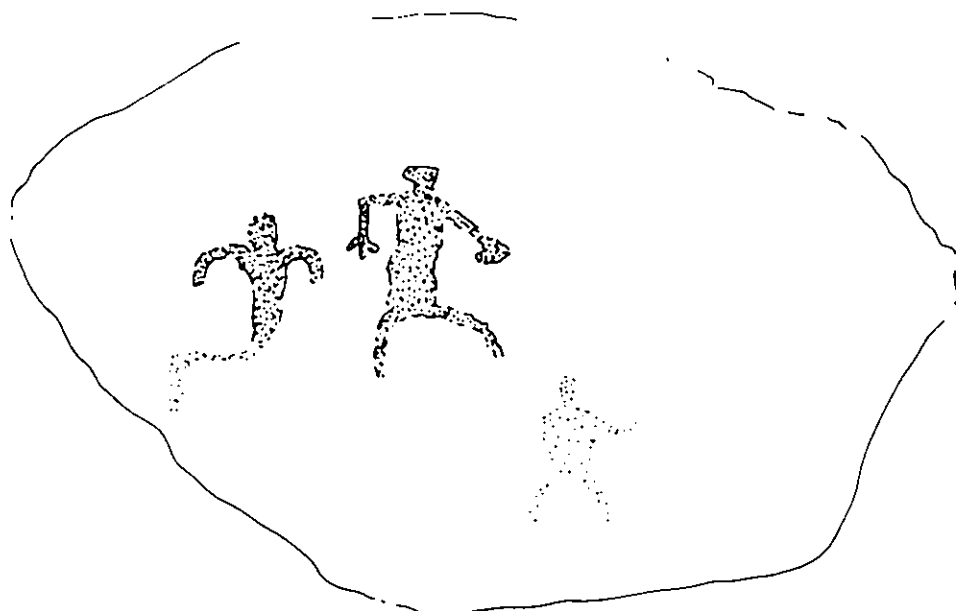




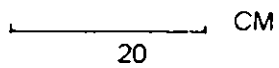
FIRST BOULDER IN FEATURE C

SITE 50-20-97-135  
KAUKAUKAPAPA

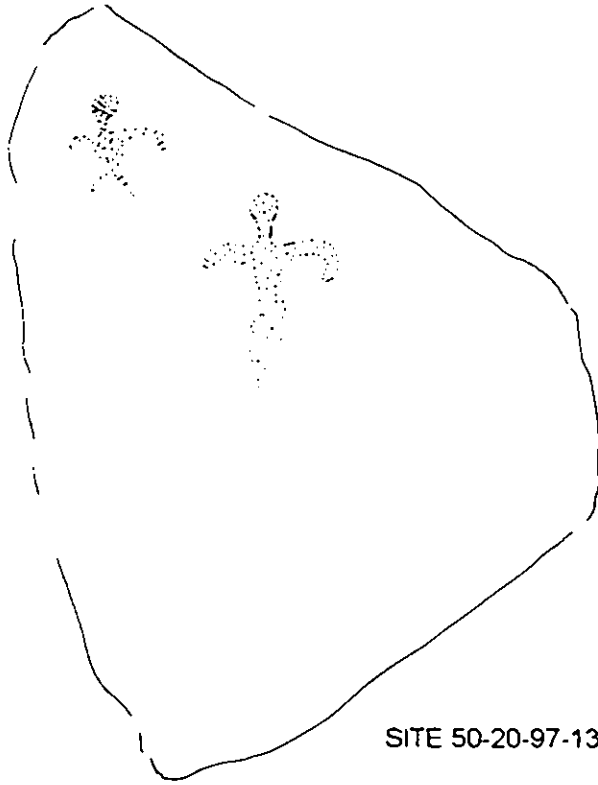




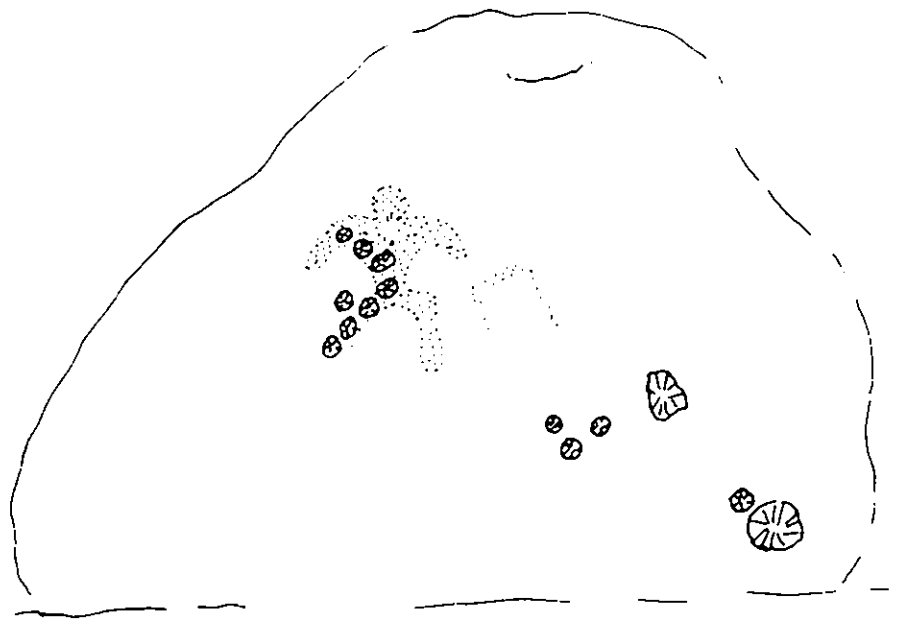
SITE 50-20-97-135C, PANEL 7



SITE 50-20-97-135C, PANELS 2A AND 2B



SITE 50-20-97-135C, PANEL 4



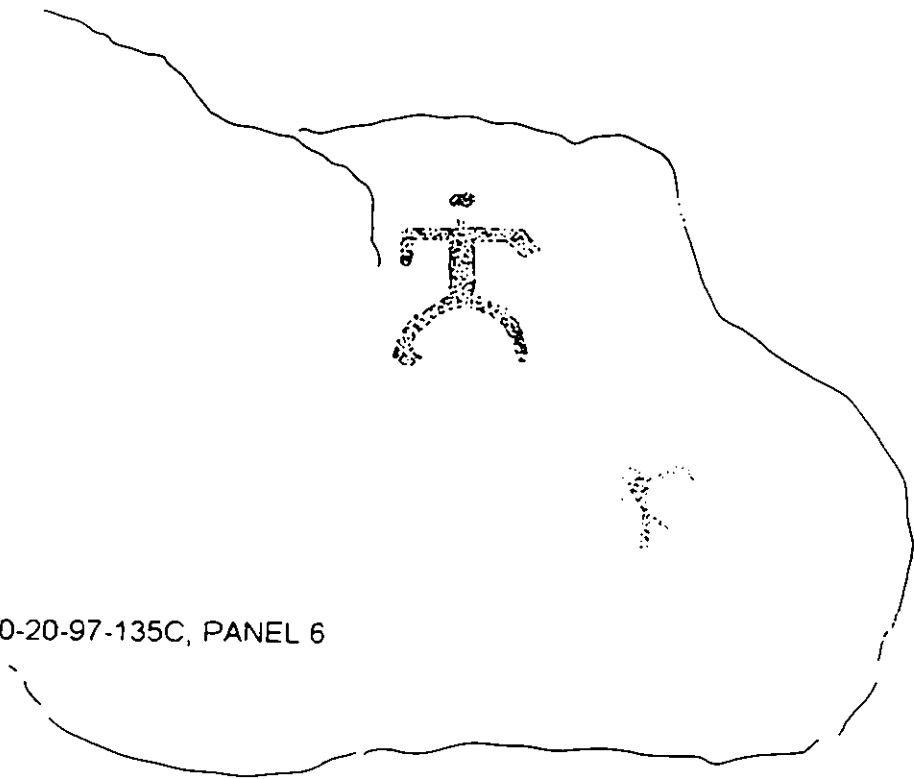
● BULLET MARKS

— 20 — CM

SITE 50-20-97-135C, PANEL 3

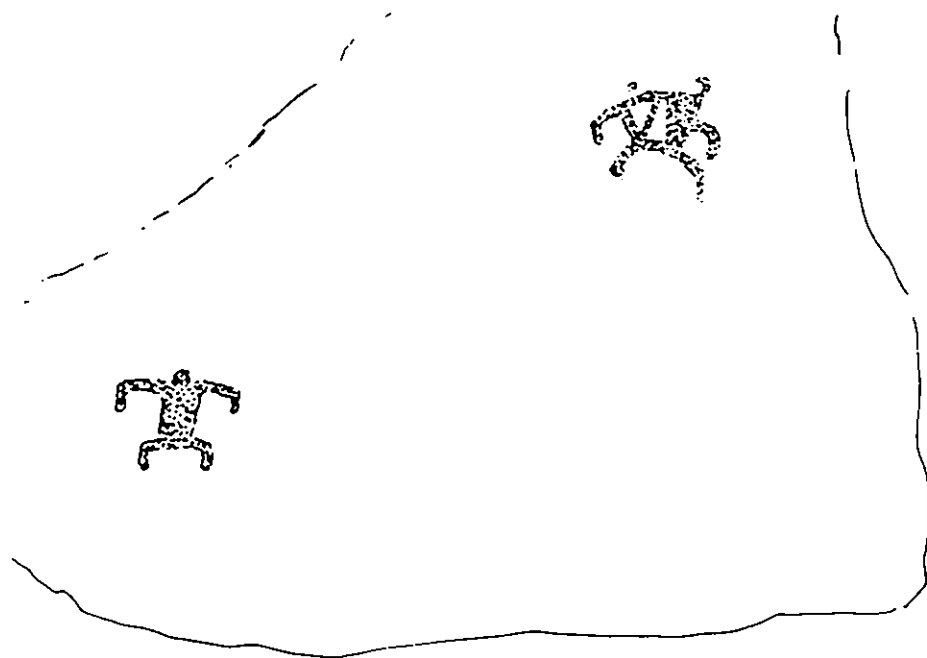


SITE 50-20-97-135C, PANEL 5

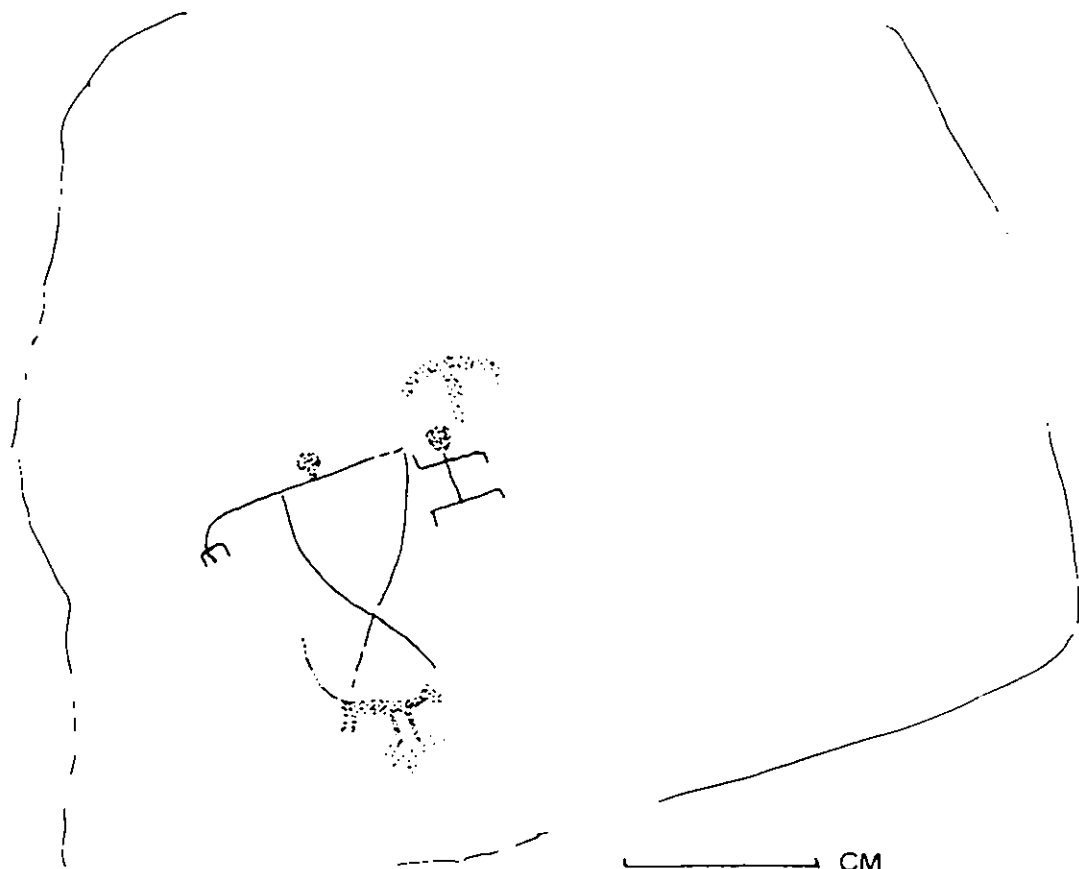


SITE 50-20-97-135C, PANEL 6

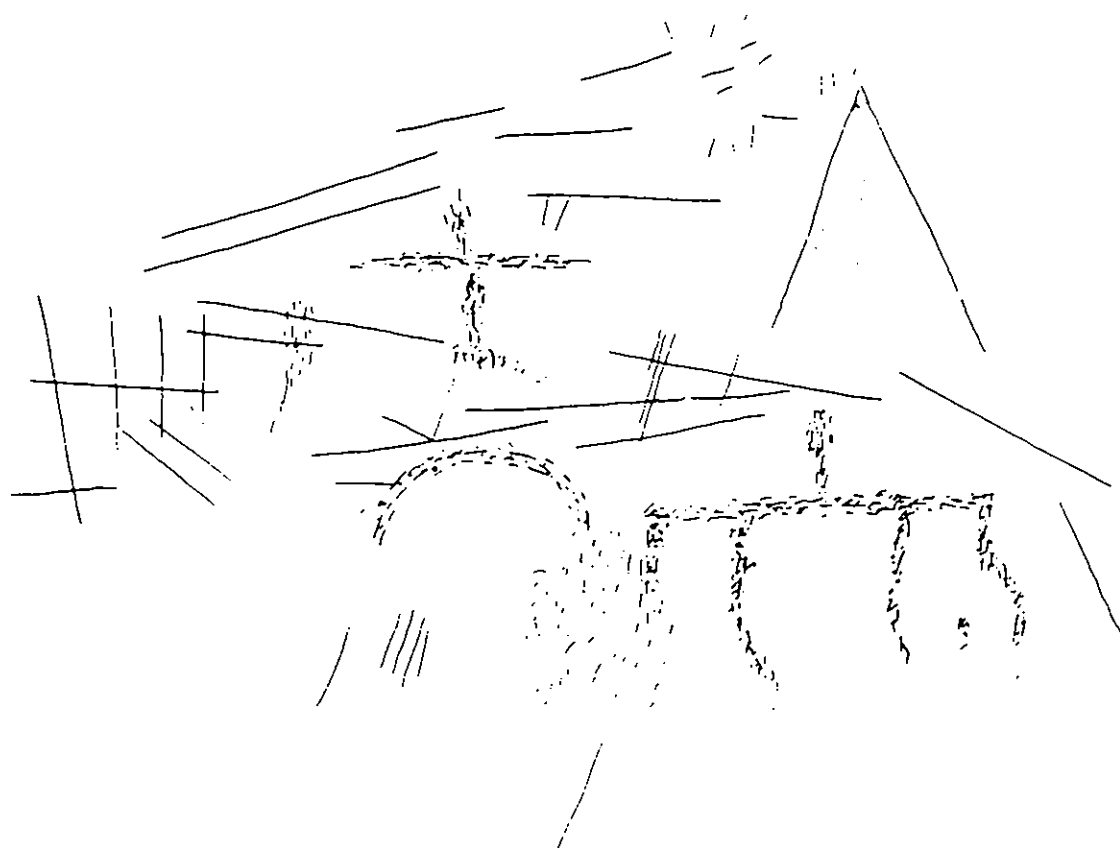
20 CM



SITE 50-20-97-135C, PANEL 8

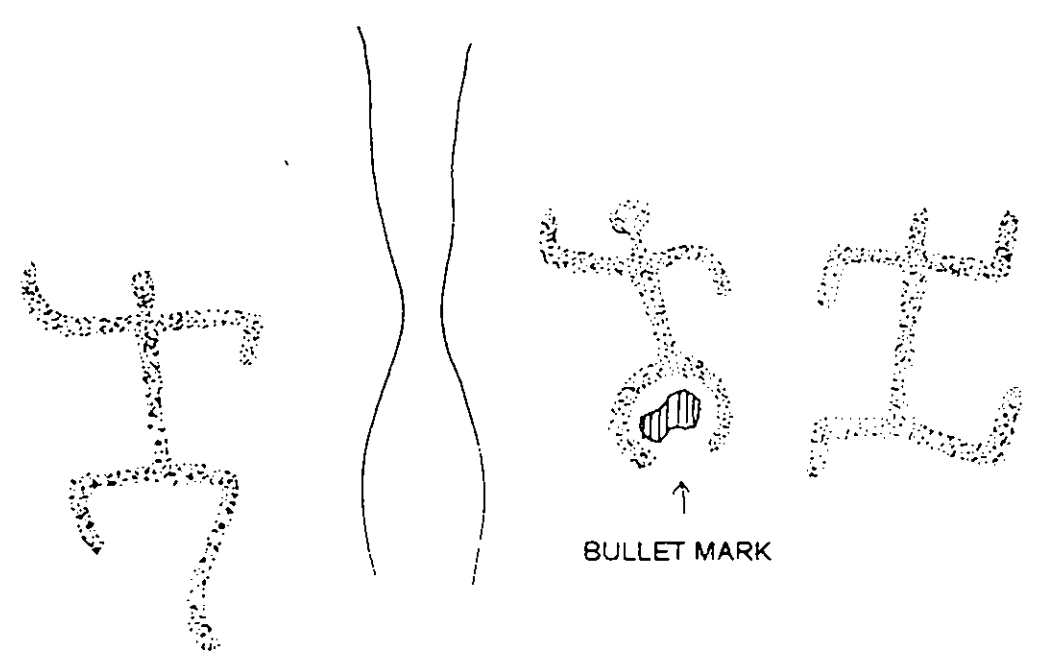
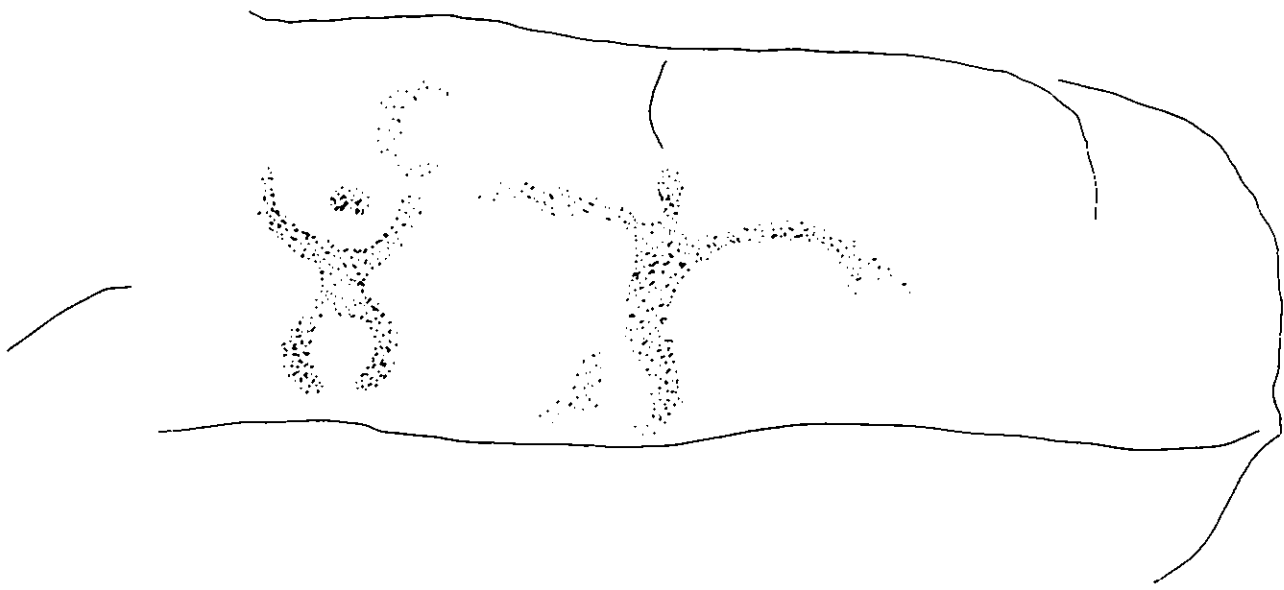


SITE 50-20-97-135C, PANEL 9



SITE 50-20-97-135D, PANEL 1

10 CM

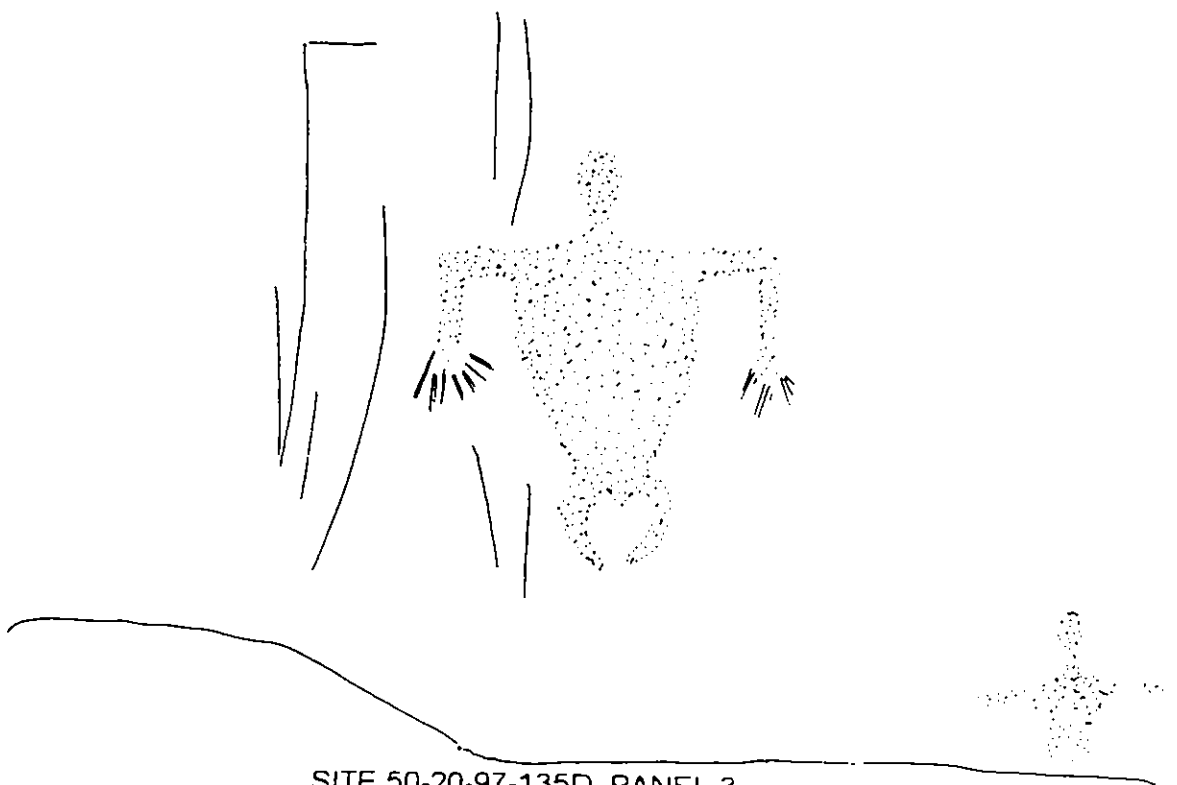
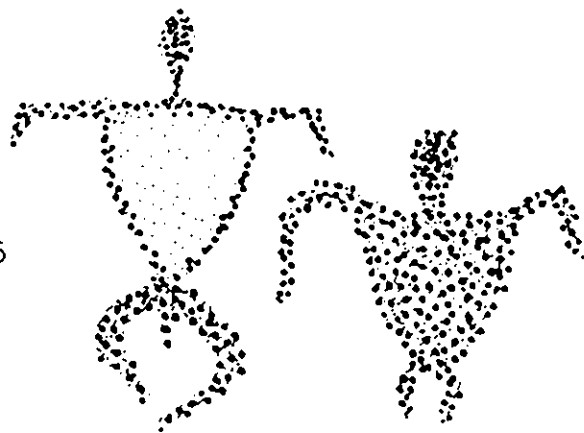


SITE 50-20-97-135D, PANEL 2

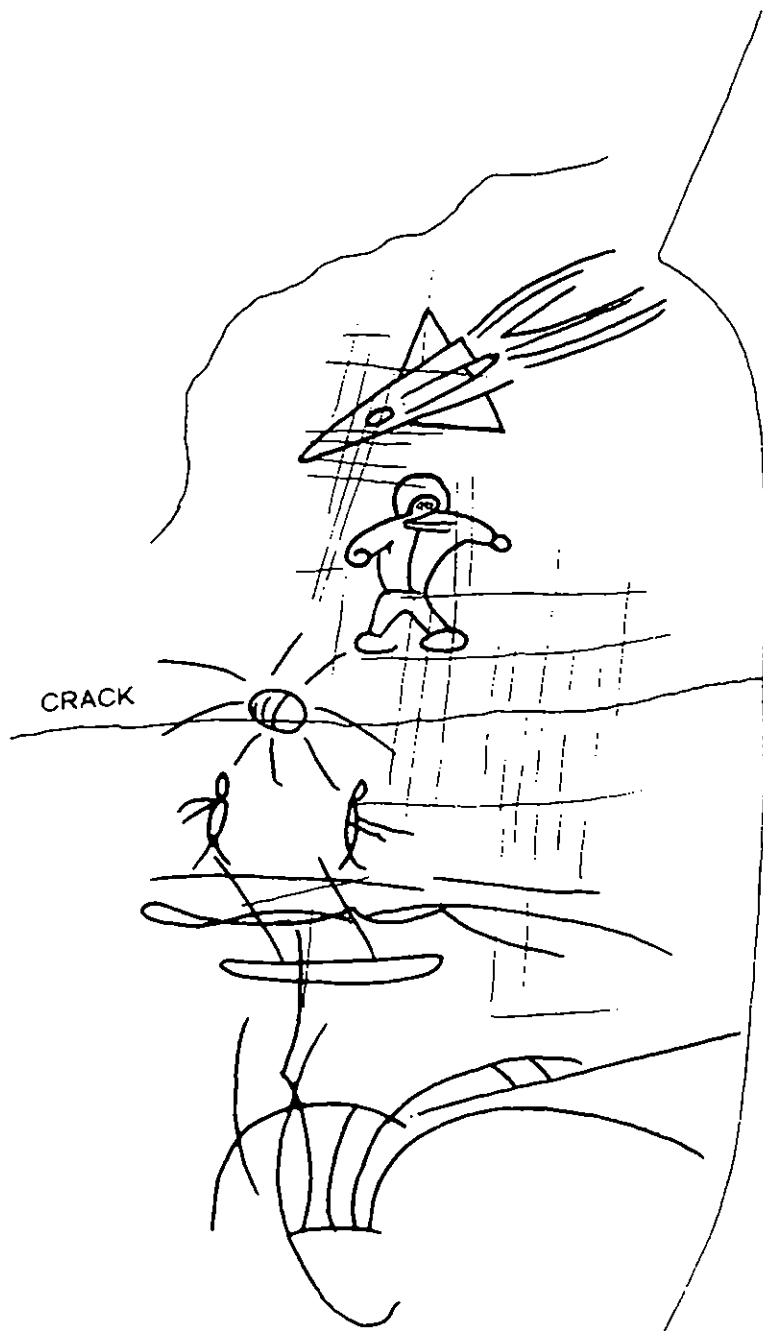
10 CM

SITE 50-20-97-135D, PANEL 5

20 CM



SITE 50-20-97-135D, PANEL 3



SITE 50-20-97-135D, PANEL 4

20 CM





SITE 50-20-97-135D, PANEL 14



SITE 50-20-97-135D, PANEL 6

CRACK



10 CM



BULLET MARKS →

20 CM

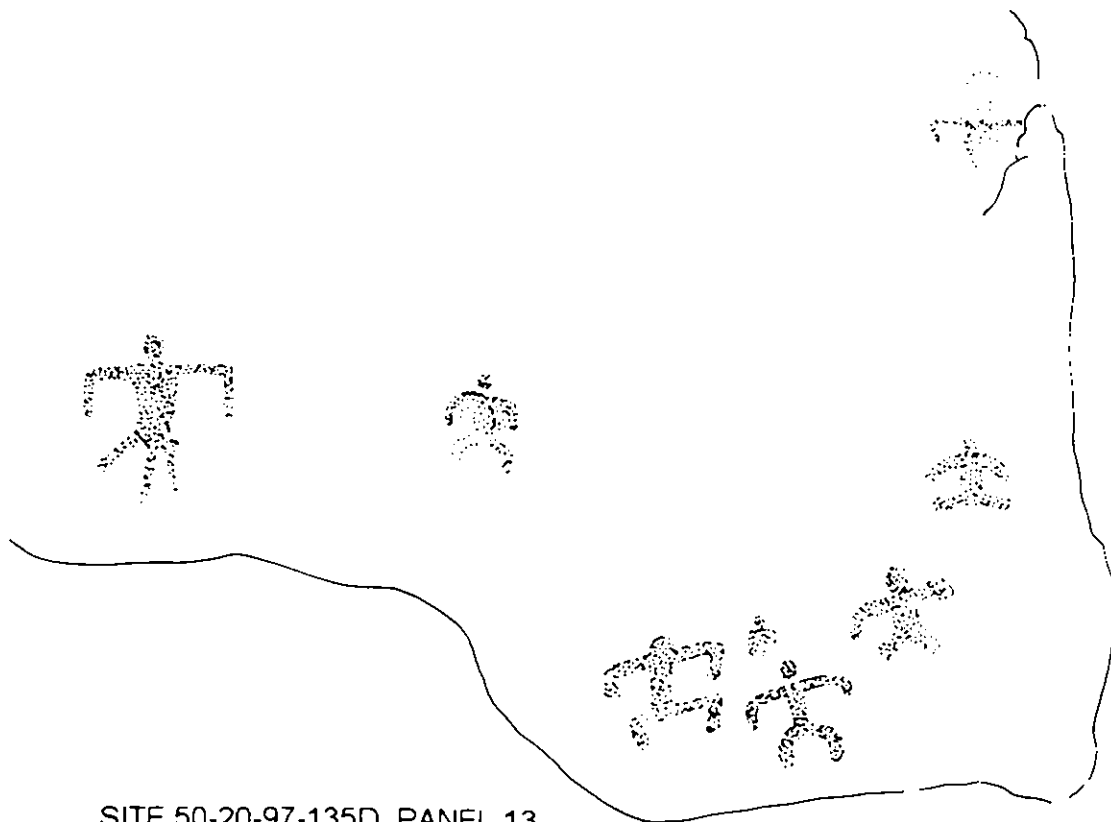
SITE 50-20-97-135D, PANEL 9



SITE 50-20-97-135D, PANEL 11

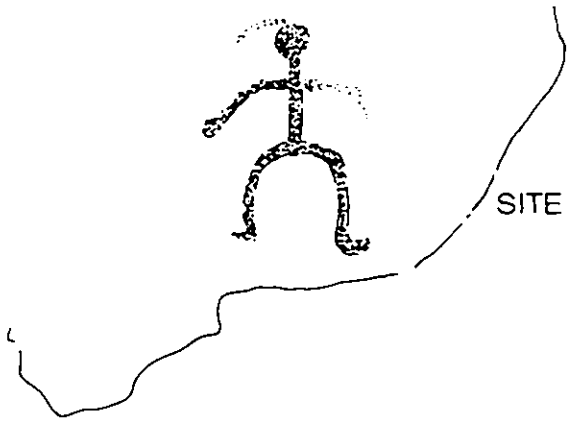


SITE 50-20-97-135D, PANEL 12

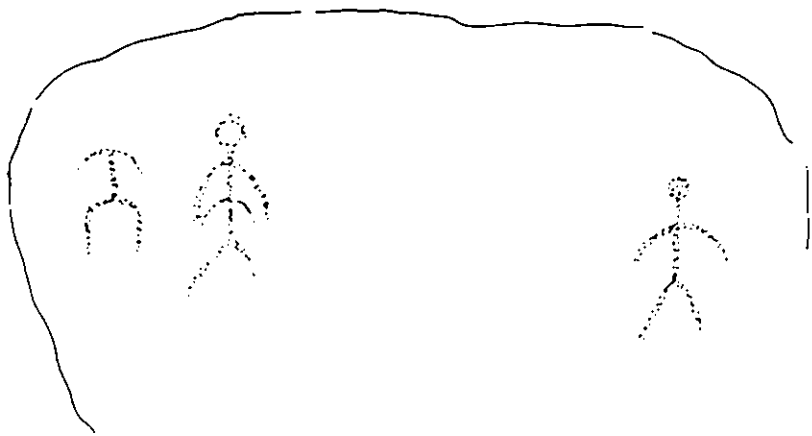


SITE 50-20-97-135D, PANEL 13

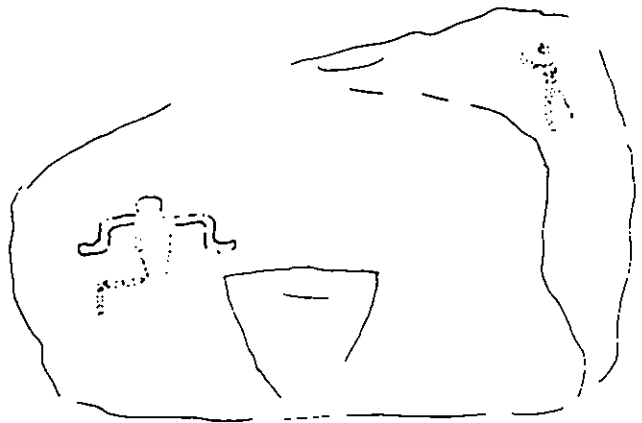
20 CM



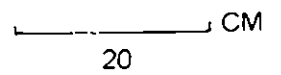
SITE 50-20-97-135D, PANEL 17

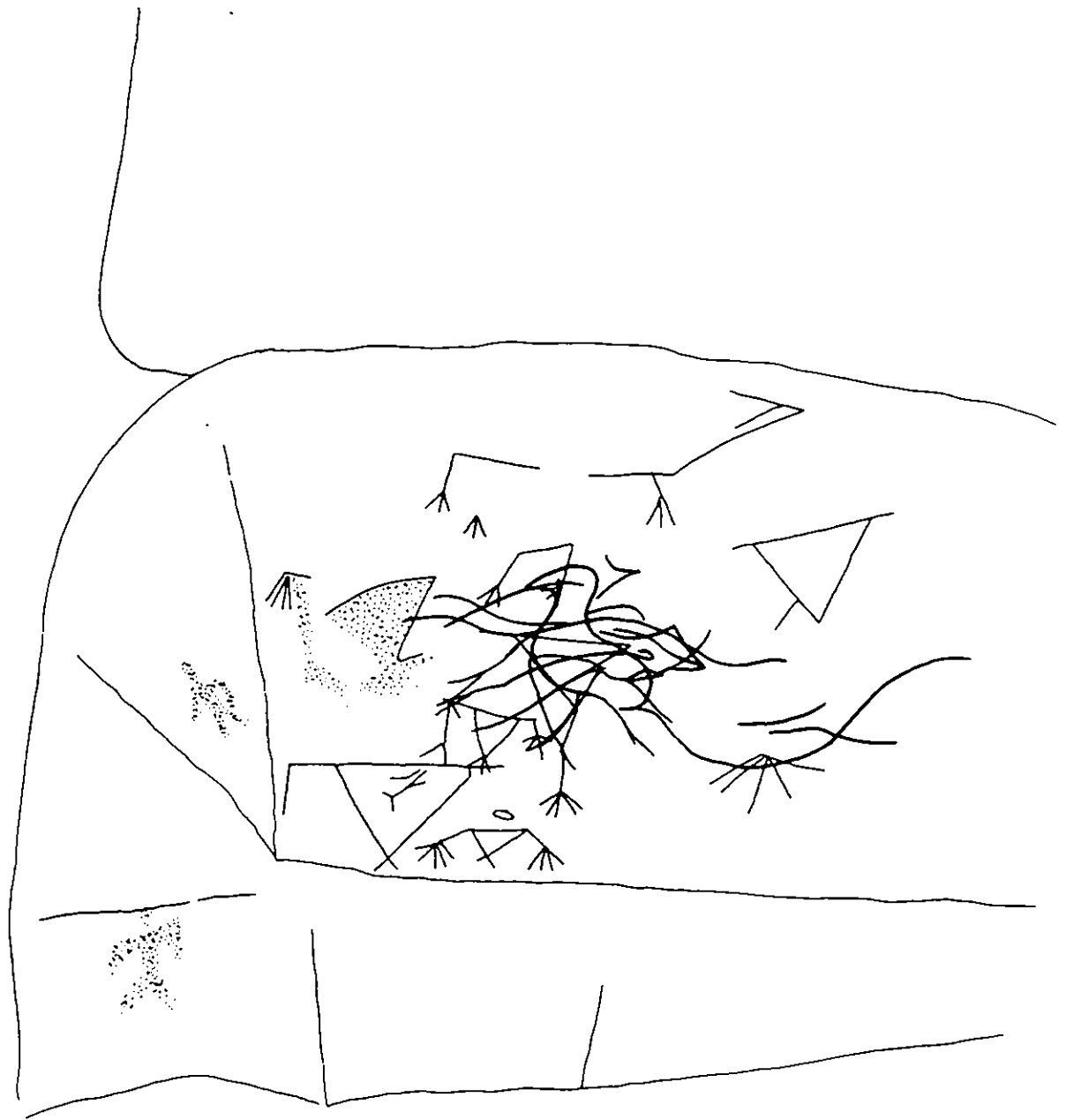


SITE 50-20-97-135D, PANEL 8  
(TOP OF BOULDER)



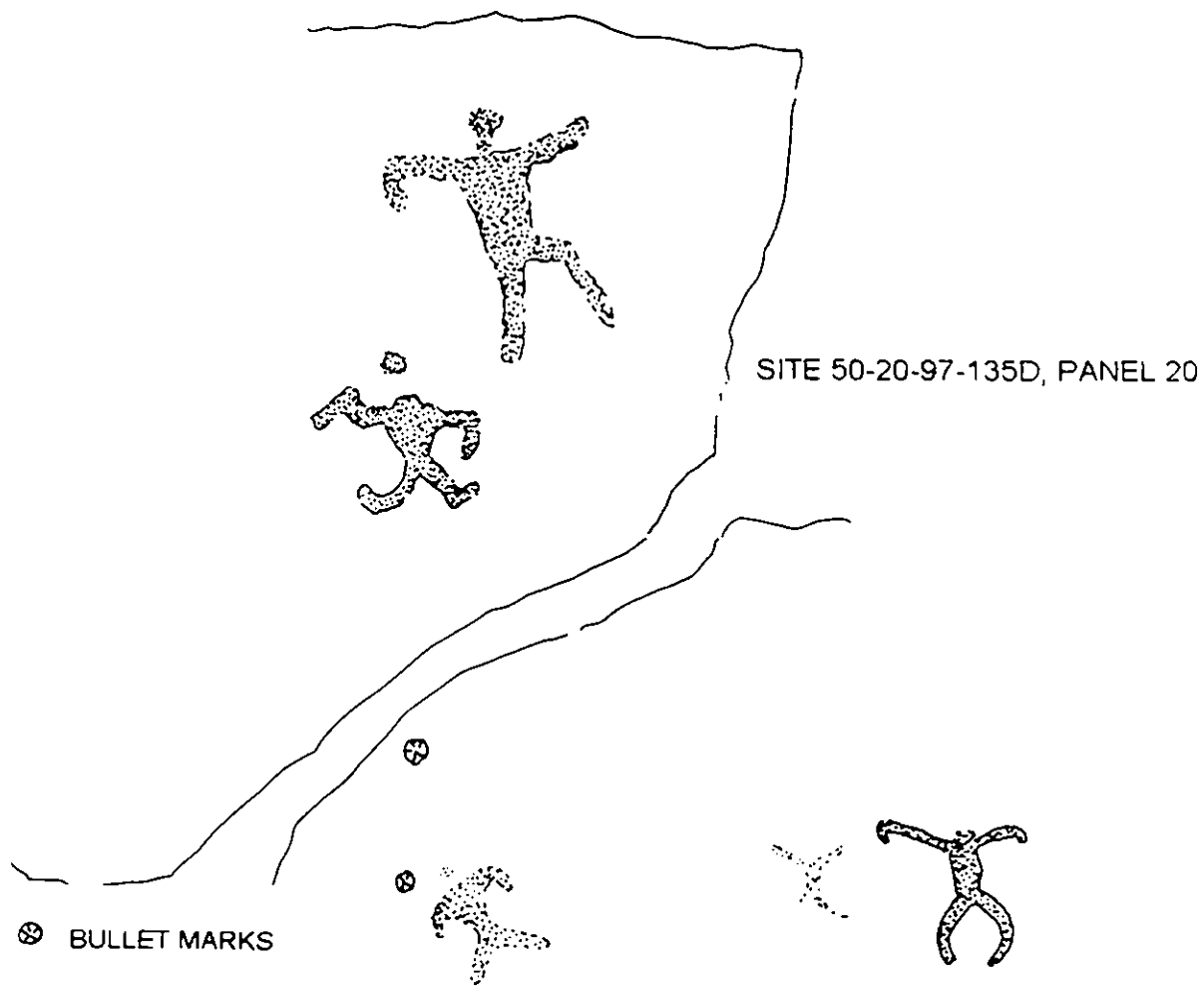
SITE 50-20-97-135D, PANEL 10





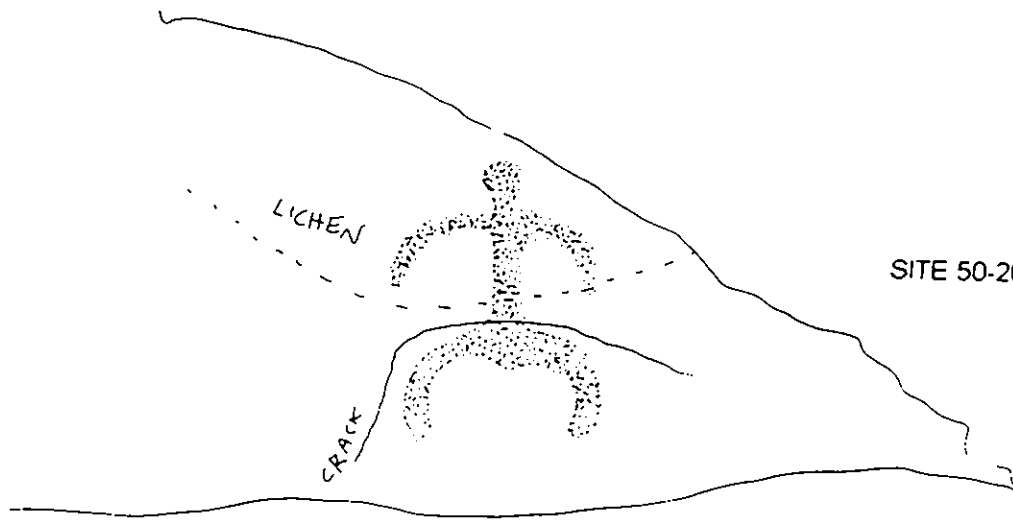
SITE 50-20-97-135D, PANEL 16

— CM  
20



20 CM

SITE 50-20-97-135D, PANEL 15

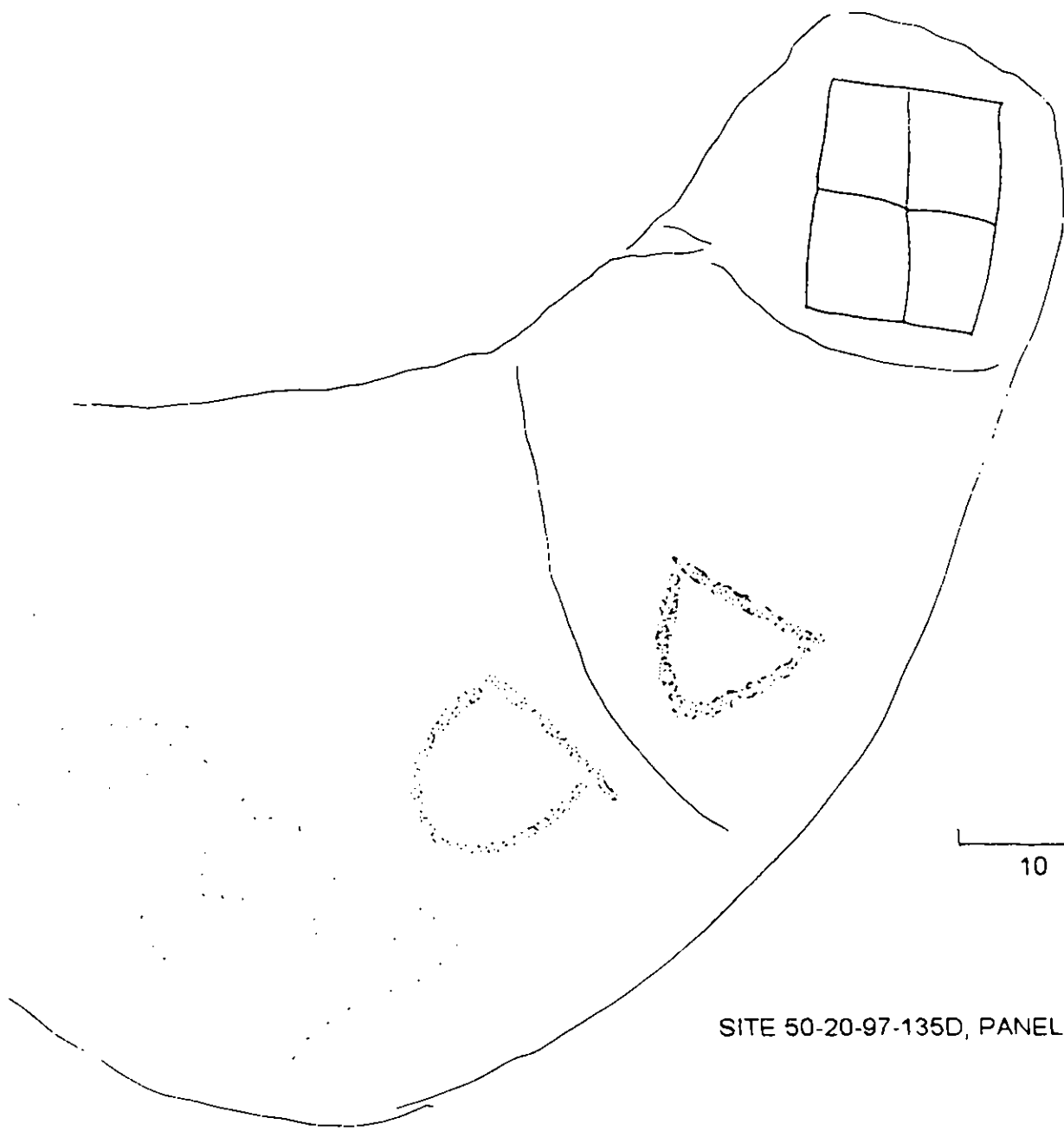


SITE 50-20-97-135C, PANEL 7



SITE 50-20-97-135D, PANEL 18

20 CM



10 CM

SITE 50-20-97-135D, PANEL 19



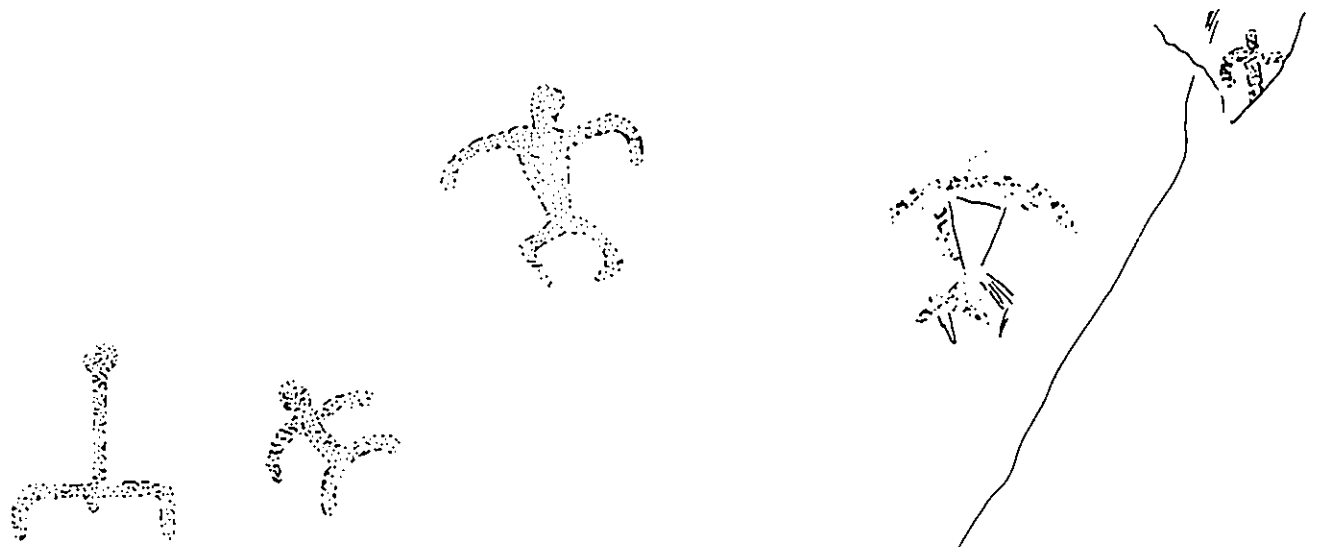


SITE 50-20-97-135E, PANEL 1

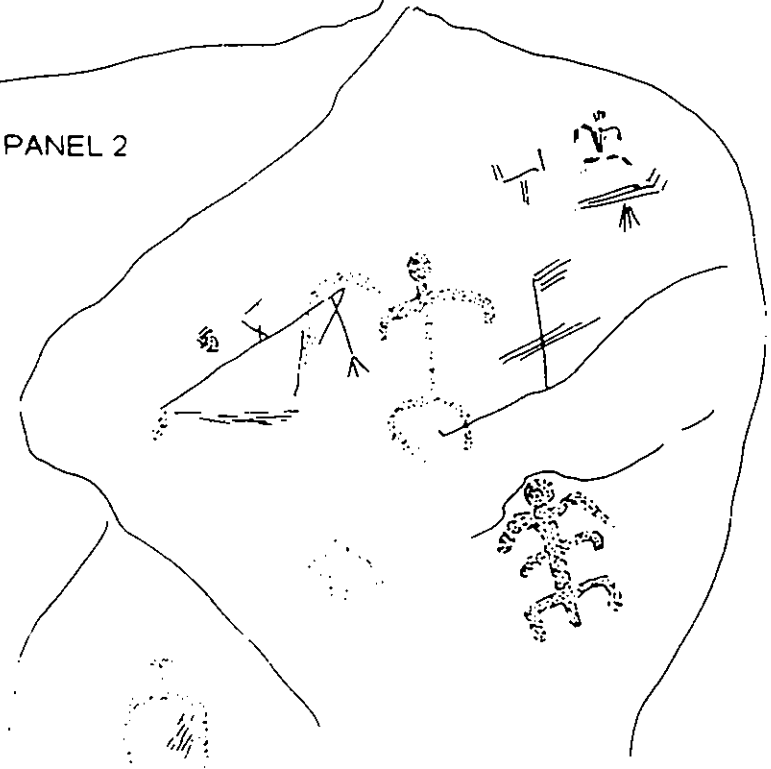


20 CM

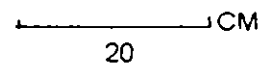
SITE 50-20-97-135E, PANEL 4

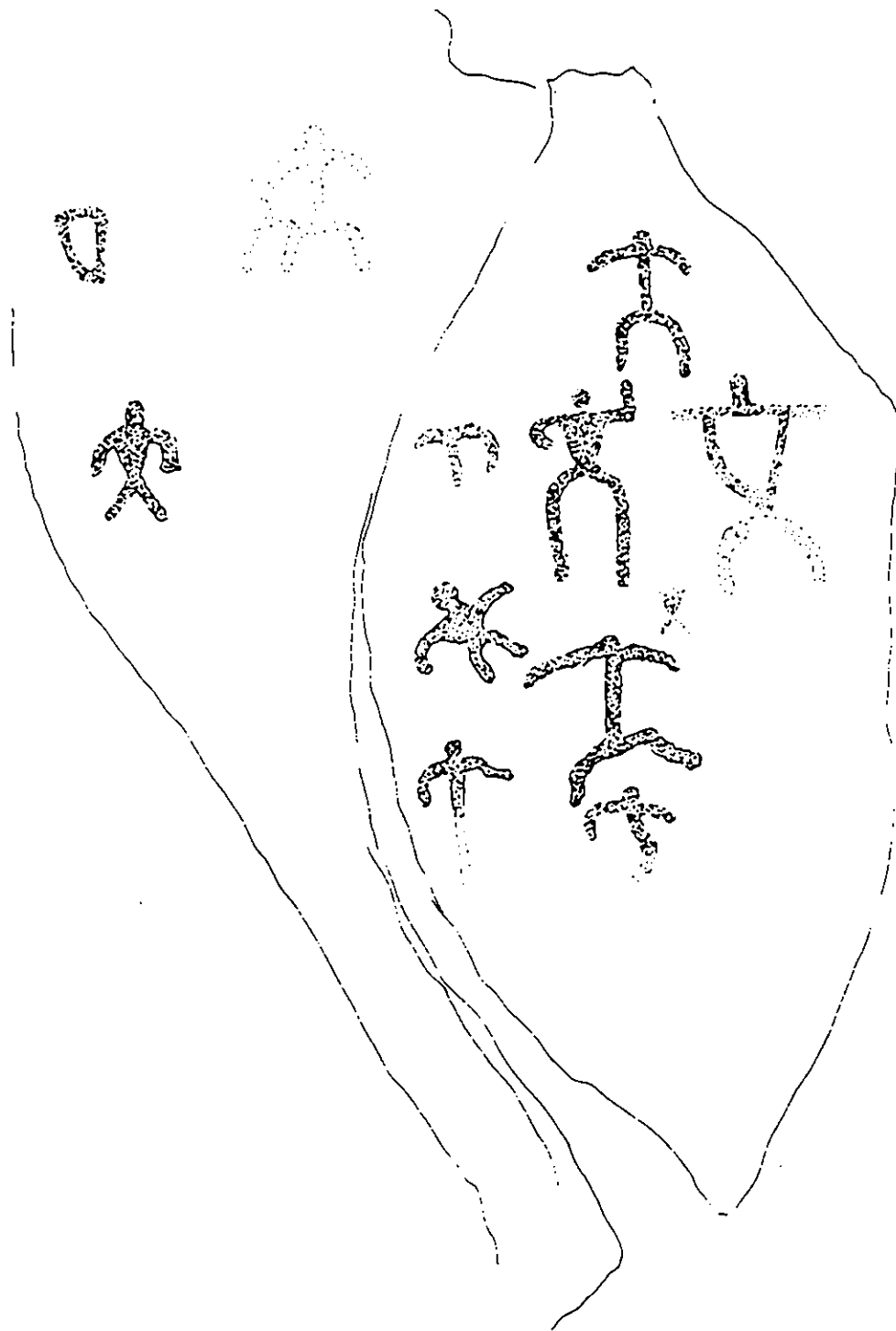


SITE 50-20-97-135E, PANEL 2



SITE 50-20-97-135E, PANEL 5









20 CM

SITE 50-20-97-135E, PANEL 3

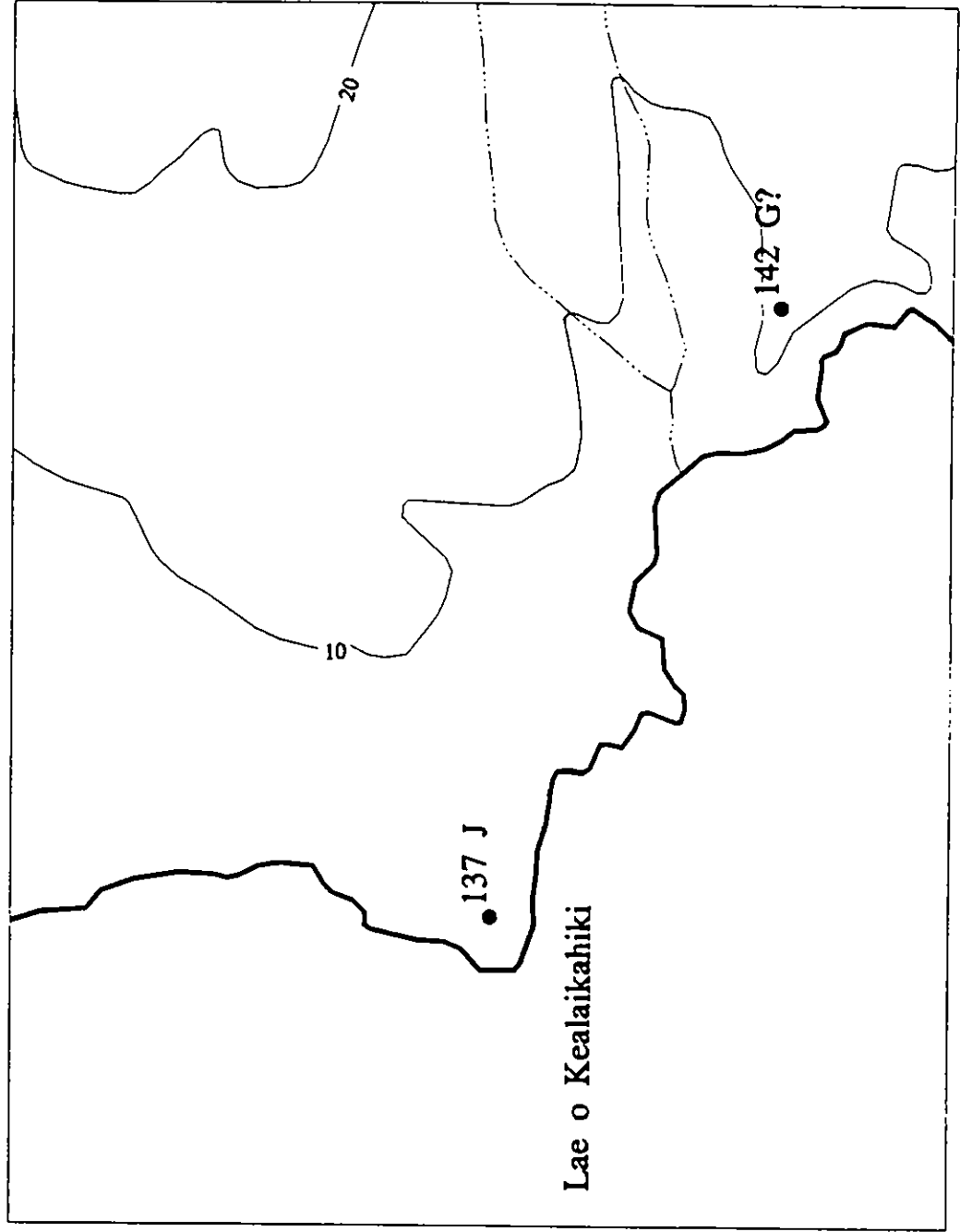
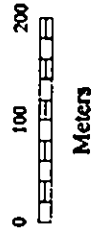
# KEALAIKAHIKI



# LAE O KEALAIAKAHIKI PETROGLYPH SITES

-  Petroglyph site
-  10 meter contours
-  Shoreline
-  Streams

481 N Site & Feature ID



## Kealaikahiki

### Site 50-20-97-137

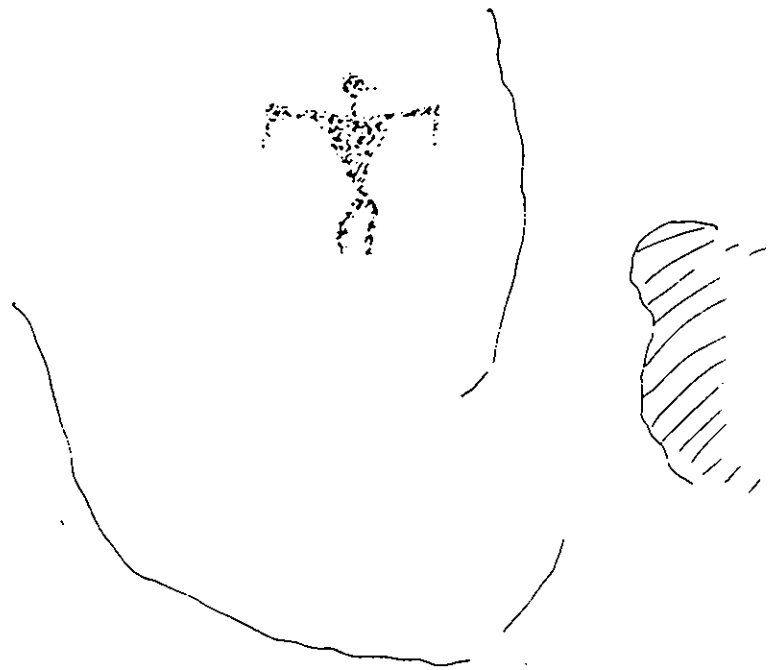
Site 137 is approximately 60 meters from Kealaikahiki Point, and covers the area in and around the point. The petroglyph locus is in a boulder outcropping that contains some small shelters. On one of these rocks are two petroglyph panels. See illustrations at end of this section.

Panel 1 consists of a single anthropomorphic figure which may have been reworked in recent times, perhaps when the writing was put on an adjacent surface (Panel 2).

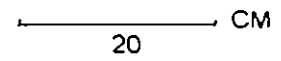
1. The triangular bodied figure is 17x19 cm and has arms outstretched, and narrow legs. It is placed in a slightly recessed area, strikingly visible as one approaches the outcrop. There is damage to the panel from bullet marks.

Panel 2 has lettering.

1. The letters, which read backwards and partially upside down, are 48x52 cm and, if turned around, read "LA LUNA HAKUKAI". This is difficult to translate. It may have some reference to the "master" or "overseer" of the sea.



SITE 50-20-97-137, PANEL 1





SITE 50-20-97-137, PANEL 2

— CM  
20



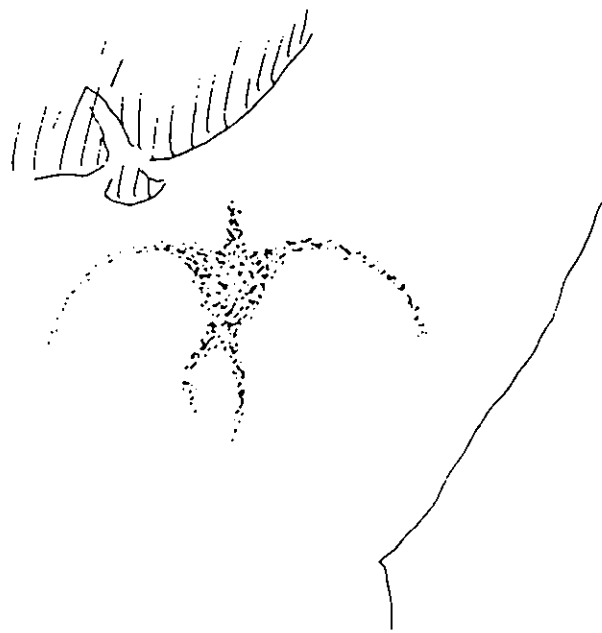
## Near Kealaikahiki Point

### Site 50-20-97-142

Site 142 lies along the shores of a small sand bay just southeast along the coast from Kealaikahiki Point. The site is composed of a large dune deposit as well as scattered occupation shelters. The feature is situated on the eastern headland of the bay. It consists of a boulder cluster, part of which appears to have been used as a temporary shelter. Two large boulders rest close together and against each other, forming a narrow crawl space. It is within this crawl space, along the vertical face of one of the boulders, that the feature's single petroglyph has been carved. See illustrations at end of this section.

A single panel with one petroglyph was recorded here, on fairly smooth basalt.

1. The figure resembles a bird-man with long sweeping arms and legs that are reminiscent of the tail of a frigate bird. The head is very small, on a triangular torso. It measures 12x19 cm and appears to be fairly ancient. The motif is both pecked and abraded.







SITE 50-20-97-142, PANEL 1

10 CM

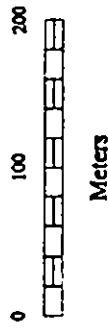
INLAND: LOA'A



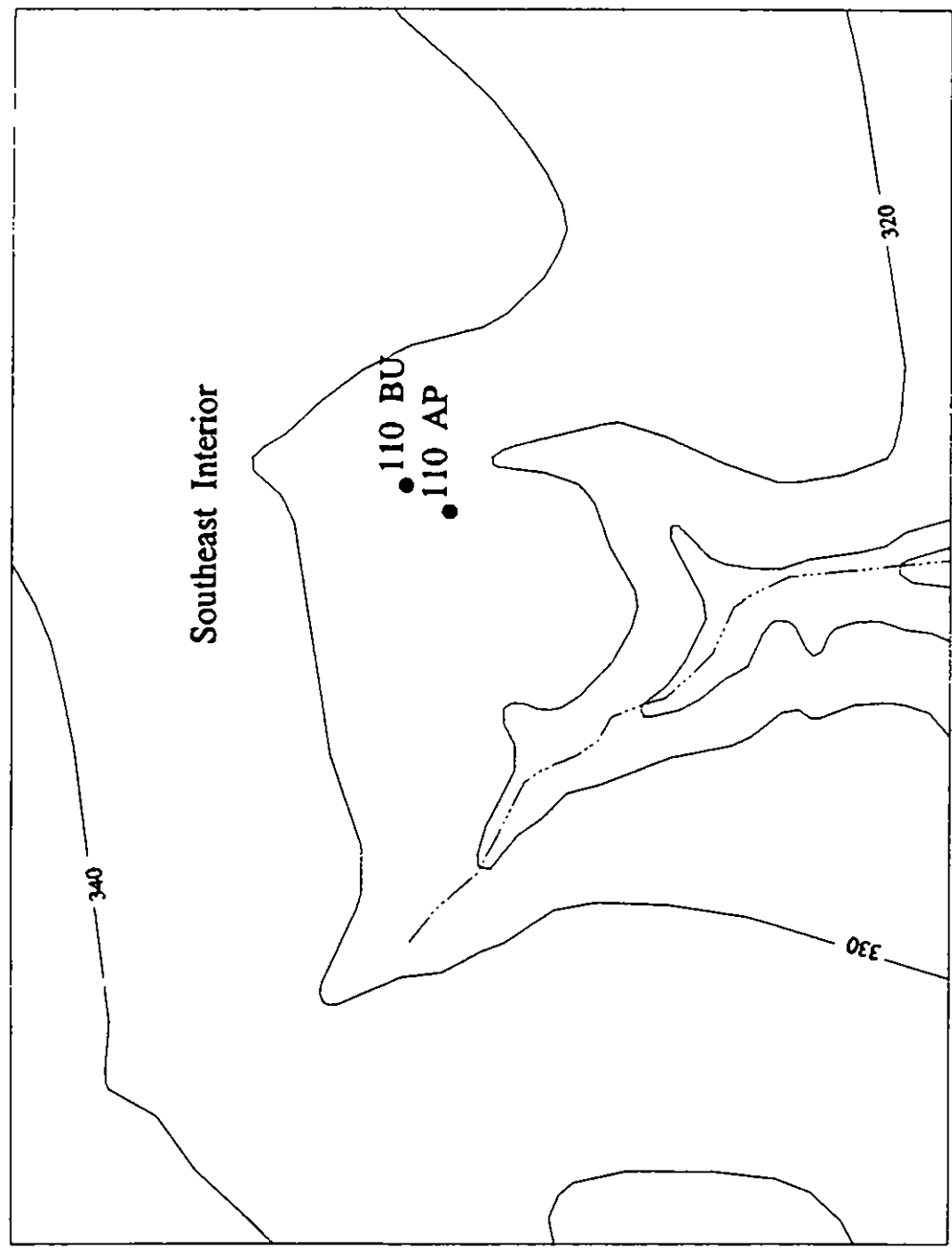
# SOUTHEAST INTERIOR PETROGLYPH SITES

-  Petroglyph site
-  10 meter contours
-  Shoreline
-  Streams

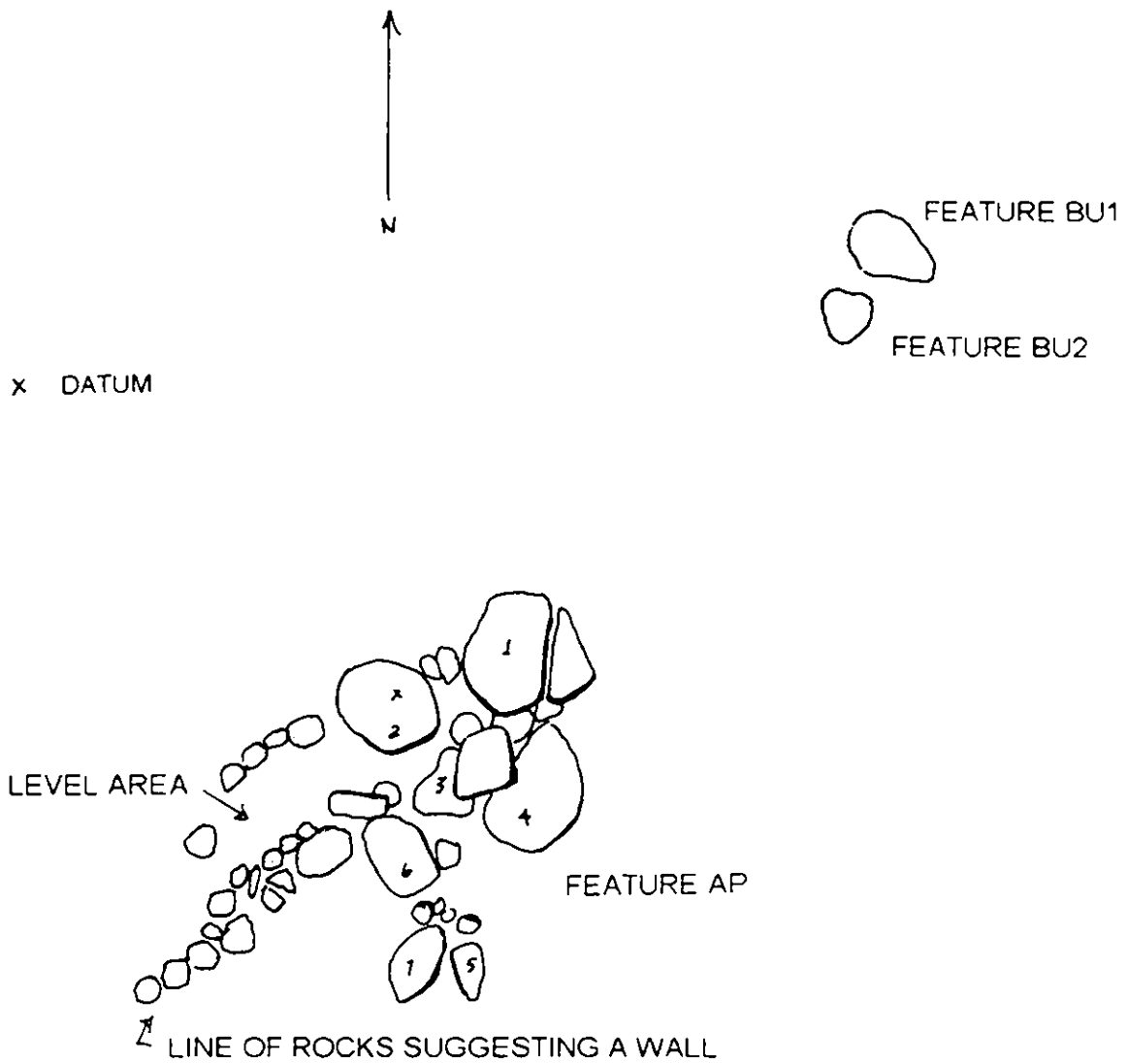
481 N Site & Feature ID



KIOC 1993



CDSI 1993.08.15



SITE 50-20-97-110  
INLAND SITE, LOA'A

## *Inland*

### "Loa`a"

#### Site 50-20-97-110

Petroglyph site 110 is located on the southwestern slope of Pu`u Moaulanui on the road to Kanapou. The ancient name of the site is unknown; it was given the name "Loa`a" by Rubellite Johnson on our first visit to the site. Loa`a can be translated as meaning "find, discover".

The site is spread over a gently sloping stretch of hardpan at an elevation of 350 meters and is very large, consisting of some 72 features, many of them were temporary occupation sites. The area is today basically denuded of vegetation; only a few *kiawe* trees and clumps of grass are now growing here. With erosion and removal of the overlying soil, these sites have deflated and now appear as scatters of fire-cracked rock, midden, and lithic materials lying on the surface of the hardpan.

The portion of the site designated as Feature AP consists of a cluster of large bedrock boulders situated at the southeastern corner of the area. Today these boulders lie less than ten meters from an expanding erosion gully. At the time the site was first discovered, the original survey team noted two firehearths eroding out of the soil just to leeward (south) of the boulders. These hearths were not visible during our recent visits to the site. Flakes of basaltic glass recovered from the vicinity of the boulders by the 1976-80 survey team yielded a date of AD 1486 ± 43.

During our work at 110AP, we noted the presence of what appears to be a short stone alignment running west from the boulder cluster. The earth-floored terrace formed by this alignment is relatively small and shows no outward signs of having served as an occupation site (the area immediately surrounding the boulder cluster is clear of midden debris). The possibility exists that the terrace and boulder cluster once served as the site of a small shrine. At present, however, we possess no concrete evidence to either prove or disprove this assumption (R. Reeve, personal communication 1993).

The original documentation of this site was under the direction of R.J.Hommon, who reported "...at least 75 individual petroglyph units on 14 faces of 7 bedrock boulders...." Our count varies. We documented 91 petroglyphs but relatively few match those he found. It appears that, in some cases, natural features in the rock had been mistaken for man-made elements. It is easy to see how this could be, for the rock has natural "dimples" and other irregularities which can take the appearance of pecking.

Whenever possible, we used the same boulder and panel designation as did Hommon. See map and illustrations at the end of this section.

Site 110 also contains another nearby cluster of petroglyphs which were not recorded by Hommon's survey team. Feature BU, which was discovered during our initial visit to the site, lies 25 meters to the northeast of the Feature AP boulders. It consists of a single large boulder whose flat upper surface is covered with carvings (Panel 1). A smaller stone nearby possesses a single anthropomorphic figure (Panel 2). Both stones presently rest on the edge of the erosion gully and will soon be in imminent danger of collapsing into

it. It is possible that the site once contained additional petroglyph boulders which have already been lost.

The following petroglyphs were recorded in the boulder cluster AP:

Panel 1 is on a large boulder with a crack running through it. It is on the north end of this boulder cluster.

1A. contains two stick figure anthropomorphs, one finely pecked and measuring 16x20; 1B. the other is roughly pecked and apparently unfinished. It lacks legs. Measurement: 10x11. Both figures have one arm raised. Hommon's survey reported seven anthropomorphs on this panel. We saw only these two, neither of which matches his figure 1a2, showing a square-headed figure with a phallus.

Panel 2A, B, C and D are on a large boulder just to the west of #1. Petroglyphs are on three faces of the south side plus the top surface.

2A has one figure.

1. a faint suggestion of a stick figure, finely pecked and measuring 10x24, but apparently unfinished. It shows a torso, legs, and possibly one arm and a phallus. No head, or left arm.

2B contains three figures:

- 1) A stick figure with triangular head, shelf hands and feet, measuring 14x28;
- 2) A headless anthropomorph measuring 12x18; and
- 3) A partial anthropomorph, legless, measuring 20x26. Hommon reported six other figures on this panel, none of which we were able to relocate.

Panel 2C, contains two figures:

- 1) A stick figure measuring 23x29 with extra limbs plus an angled extension. It is roughly pecked.
- 2) Triangular-bodied anthropomorph with curved legs and wide "bird-like" arms. The upper torso is unclear. Figure measures 22x31. Hommon recorded a figure with six limbs, but his measurements are different from ours.

Panel 2D is the top surface; it contains four units: Hommon reported eight figures on this panel; only one of his descriptions matches our recorded figure 2, but his measurements of the figure do not match ours.

- 1) a "V" form measuring 5x9;
- 2) stick figure with what may be extra limbs, phallus, and shelf hands and feet, 15x20;
- 3) unidentified figure, 11x20. This may be a "start" of a figure; and
- 4) a "T" figure measuring 13x14, which has some bird-like qualities.

Panel 3A contains one stick figure, 15x20, with an extra horizontal line in the torso, and shelf-like hands and feet. Hommon reports a male figure, with measurements that are close

to ours, but not identical. Boulder #3 is south of # 1 and 2, and lower; it is partially underneath another large rock.

Panel 3B contains three figures:

- 1) a running figure with one arm raised, 15x18;
- 2) an incomplete stick figure with one arm raised, 10x13; and
- 3) a stick figure with one arm raised, 15x23. Parts of this panel are severely eroded. Hommon illustrated these figures as being connected, which we did not. Our measurements also vary. He drew an exfoliated area as part of figure No. 1.

Panel 4 has three faces; A1 contains two elements, and is located in a niche that is very difficult to access. A large boulder rests on top of both rock #3 and # 4.

- 1) a stick figure with extra limbs, measuring 15x27, and with a triangular head and curved legs; and 2) an unidentified figure, 10x23. These two are in a small niche in the boulder cluster and difficult to see clearly. Hommon's drawing of our figure 1 is similar but proportioned differently; the other figure is fairly close although our measurements (and some details) vary.

Panel 4B is to the outside and south part of the rock which has a large panel containing five elements:

- 1) A stick figure with one arm raised, measuring 13x16.
- 2) A running figure with shelf-like feet, 15x20.
- 3) An armless triangle shaped torso measuring 10x20, with a head formed of peck marks.
- 4) A triangle torso, armless and legless, 12x14. Two projections appear to be 2 necks or heads.
- 5) An unidentified figure, 8x10, plus random peck marks, some very deep.

Hommon's drawing has connected some figures, and added others that we did not locate. However, the rock has many rough areas which could have been so interpreted by him. The differences in measurements may, in large part, be due to the lines he drew as connecting elements.

Panel 4C contains ten figures:

- 1) A one-armed phallic stick figure, measuring 18x24.
- 2) A stick figure with one arm raised and what may be a phallus. The figure measures 19x19.
- 3) A phallic stick figure, 22x37, overlapping a portion of figure 4.
- 4) A phallic stick figure with extra line/limb at torso and shelf-like feet. It measures 18x25.
- 5) An active stick figure, 15x16, has a lobed head which may have been intended to suggest a headdress, and one arm raised. The left foot is shelf-like.
- 6) A stick figure with one arm raised and shelf-like feet and hands. The head is triangular. The figure measures 11x19.
- 7) A phallic stick figure, with one arm raised, triangular head and shelf-like hands and feet measures 22x22. The right foot is exfoliated.



- 8) A line, 9 cm long
- 9) One pecked cupule, 2 cm diameter.
- 10) A possible figure, 14x15, very faint. A recent abrasion is also on this panel, which is eroding and exfoliating. The figures on this panel are very lively showing movement and action. Only four of our figures match Hommon's drawing.

Panel 5A is a smaller rock on the south edge of this cluster; it contains five figures in the same lively style as those in Panel 4C:

- 1) a small stick figure, one arm raised, 10x13;
- 2) stick figure with one arm raised, 15x30;
- 3) stick figure, one arm raised and curved legs, 20x24;
- 4) phallic stick figure, shelf hands and feet, 15x28; and
- 5) phallic stick figure with two-lobed head and short legs, 14x14.

Panel 6A is on a large boulder just south of #3. It contains two figures:

- 1) stick figure with one arm raised and legs in an action pose, possibly running. It is 17x22; and
- 2) small poorly formed stick figure with asymmetrical arms and legs, plus a small cupule below the crotch area. The surface of the rock is very rough. This panel is fairly close to Hommon's drawing although measurements do not match.

Panel 7A was a puzzle. This medium sized boulder is south of the cluster, and next to #5. We only recorded one clear figure here, although Hommon's report claimed to see numerous elements. Aside from the one clear element, there are traces that may suggest several figures but which are too far eroded to see clearly. The clear figure is also shown in Hommon's drawing (with different dimensions), but the rest of the figures in his drawing are simply not on the rock. The few possible traces we noted do not match the elaborate set of figures in his drawing. The surface of this boulder is rough and dimpled with many natural irregularities which must have been mistaken for petroglyphs. A photograph in the Hommon report shows this boulder face with its chalked "images", but the only one that is chalked correctly is the figure we recorded.

1. A phallic stick figure with one arm raised, 18.5x26,

We thus recorded ninety-one petroglyphs in the same area where Hommon reported 75 units. But many of these are not the same motifs as were reported by the earlier survey. Using his site information, including drawings and photographs, we inspected every boulder with care under differing light conditions. Although some petroglyphs could be matched to the earlier report, many times the variation was considerable and in two instances, (Panels 1 and 7) we failed to see anything even remotely like that which was cited in the earlier report. One problem with Hommon's study is that the recorder chalked what he saw, or thought he saw. Thus photographs and drawings made from photographs show the chalked images which are simply natural markings in the rocks.

Following our first brief visit to the site we came away believing that the petroglyphs at 110AP were eroding rapidly and that some had disappeared in the time since Hommon's original study. Our subsequent work at the site has caused us to discard this

theory. The figures which remain and can be clearly seen do not appear to have changed since Hommon's visit to the site. It is unlikely that some would have eroded and others, on the same rock face, remain in good condition. Our conclusion is that whomever drew the images in the early survey was inexperienced with regard to petroglyphs and saw things in the rock that are not actually there.

#### Site 110BU

Feature BU(1) is a large horizontally oriented boulder, possessing some very interesting petroglyphs (12 units plus four lines) as well as a row of 32 cupules (man-made depressions) around its perimeter. The stone itself is relatively flat and rests on a natural pedestal. It resonates when tapped with a stone, giving out a bell-like peal.

The motifs on this boulder include:

- 1) stick figure with shelf feet (15 x23 );
- 2) phallic stick figure with shelf feet and triangular head (33 x34 );
- 3) phallic stick figure with curved legs and lines projecting from the head. The arms appear to be double, ending in wing like forms. (21 x22):
- 4) triangular anthropomorph with triangle shaped head, one arm up, and shelf feet (35 x36 );
- 5) very small and faint stick figure, 13 x15 ;
- 6) unidentified figure 14x16 ;
- 7) triangle anthropomorph with curved legs and round head. The right arm is doubled, wing-like, and similar to the arms on figure 3 (22 x22);
- 8) headless stick figure with both arms up (27 x32);
- 9) stick figure (10 x19);
- 10) stick figure with one arm raised and outsized legs, out of proportion to the rest of the figure (23 x27 );
- 11) small triangle figure, phallic with curtailed legs and arms ( 11x 12); and
- 12) triangle figure, armless (9.5 x19).

The other elements on this panel are long lines, three of which run the length of the surface of the boulder: they measure 220, 210, and 280 cm in length. One has a triangle shape at one end. One line runs off at an angle, connecting to the arm of an anthropomorph. A few cupules are scattered in the panel, but most are around the perimeter of the boulder. The cupules are quite deep and large; sizes range from 3 cm in diameter to 15 cm; depth from .3 to 3.5 cm. This boulder is unique on Kaho'olawe, where cupules are rare.

Feature BU-2, the smaller stone is a few meters south of the cupule boulder; this loci is another new find, not recorded by Hommon. It has a single petroglyph.

1. A stick figure anthropomorph with both arms raised, three fingers on each hand, a phallus and shelf like feet.

## Discussion

Fifty-two percent of the petroglyphs at Loa`a are human figures, but only seven figures represent triangular-bodied anthropomorphs. There are no historic elements at the site, such as petroglyphs of goats, or initials.

Several figures have triangular shaped heads, and many exhibit lively, active stances. No petroglyphs of dogs were noted. There is stylistic unity among many of the anthropomorphs. Outstanding are those figures suggesting a physical activity such as running or dancing. Many figures have one arm raised.

The cupule boulder, called Loa`a, has similar figures but varies because of the deep depressions around the perimeter and the long lines that run across the surface of the panel.

Although there are only a few triangular-bodied figures at this site, among these are the "winged" arm figures on the Loa`a stone (BU1-3, 6). Beckwith (1970:189) tells the legend of Pu`u-o-inaina whose husbands Kaakakai and Kaanahua are able to fly. There are a number of birdman type figures at various sites. If there is a connection between the petroglyphs and the legend, it is impossible to say.

In general, the petroglyphs at this site are quite nicely designed, despite being mostly in the older, stick-figure style. The distinctiveness of some, suggested by the headdresses and the odd heads, contributes to the possibility that this was a sacred site. There is no nearby water source and it is a good distance from the nearest settlement, Hakiowa. There is a noticeable feeling about this place, perhaps a wahi pana, which is enhanced by the presence of the bell rock and the near shrine-like character of the setting of the boulders.

Because of the proliferation of cupules on the Loa`a stone, the imaginative and well-designed figures, and the bell-like qualities when struck, this site stands apart from the other rock art sites on Kaho`olawe. The cupules by themselves represent a unique grouping in Hawai`i. We know of no other single boulder with such a large and ordered grouping of cupules.

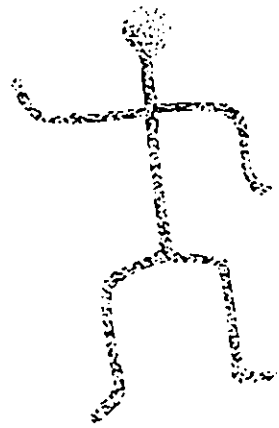
At sunrise and sunset during the spring months, a stick held vertically at either end of the lines casts a shadow which generally follows the line. Likewise, a stick held vertically in a few of the cupules does the same. This may be fortuitous since the majority of the cupules are on the south perimeter of the boulder.

Many of the cupules could be used as containers; we were present after a shower and nearly half of them held water. The fact that many did not, may rule out their use as a reflector of sun, moon, or stars. Some could have been used as containers for a *piko*, a well-established practice at Pu`uloa on the Big Island. It is unlikely, however, that this was their function.

The fact remains that it took great effort to create these cupules. One is 3.5 cm deep and nearly 15 cm in diameter. Pecking and abrading a concavity in basalt is a very long and tedious process, and would require serious motivation. These cupules are refined to a fair degree of smoothness to the touch by some sort of abrasion; the cupule maker attached some importance to smoothing the surfaces. Another possibility is that they were created by abrasion and the smoothness is a by-product of the process. Usually pecking in combination with abrasion is the most efficient method.

Finally, there is the unlikely possibility that these cupules were the result of striking it to make the bell sound. We found that it did produce sounds of a slightly different pitch when struck at different points along its perimeter.

The Loa'a stone supports a very special group of petroglyphs which must be preserved. The boulder is balanced somewhat precariously on a pedestal on the edge of a fast-eroding gulch, and is in danger of falling. It may, in fact, have shifted considerably already. Efforts should be made to stabilize this site before it is too late. It is also vital that information regarding its bell-like qualities be confined to this report and not broadcast about to the public. One has only to see the damage done to the bell-stones of Kaua'i to understand why this is so.

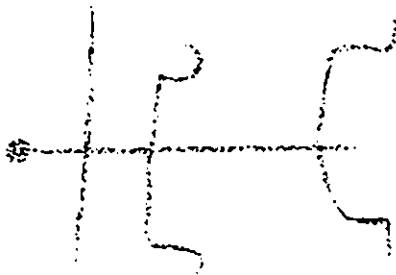


10 CM

SITE 50-20-97-110AP, PANEL 1A



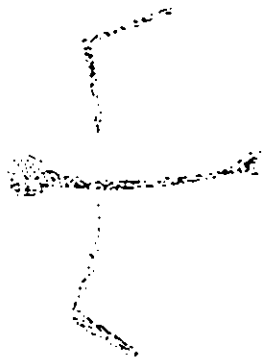
1



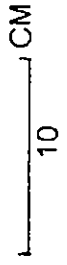
2



3

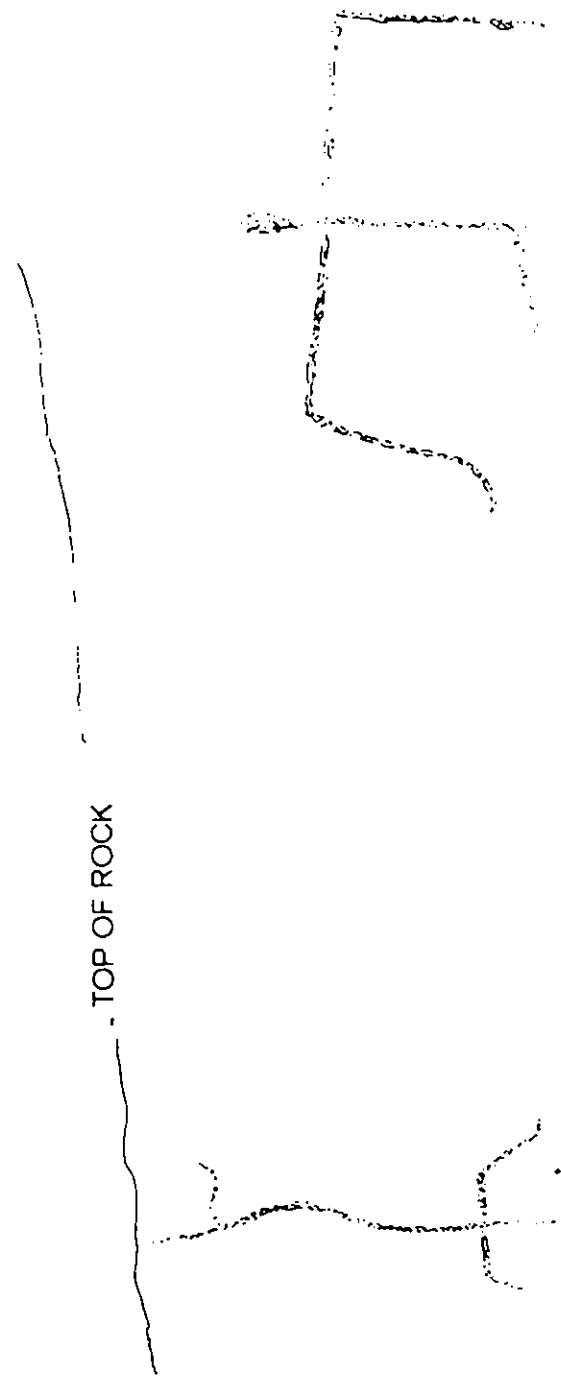


4

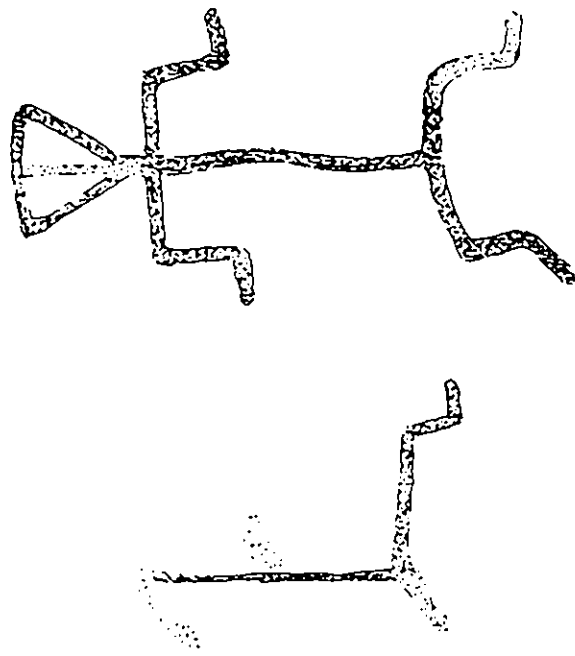


SITE 50-20-97-110AP, PANEL 2D (1-4)

TOP OF ROCK

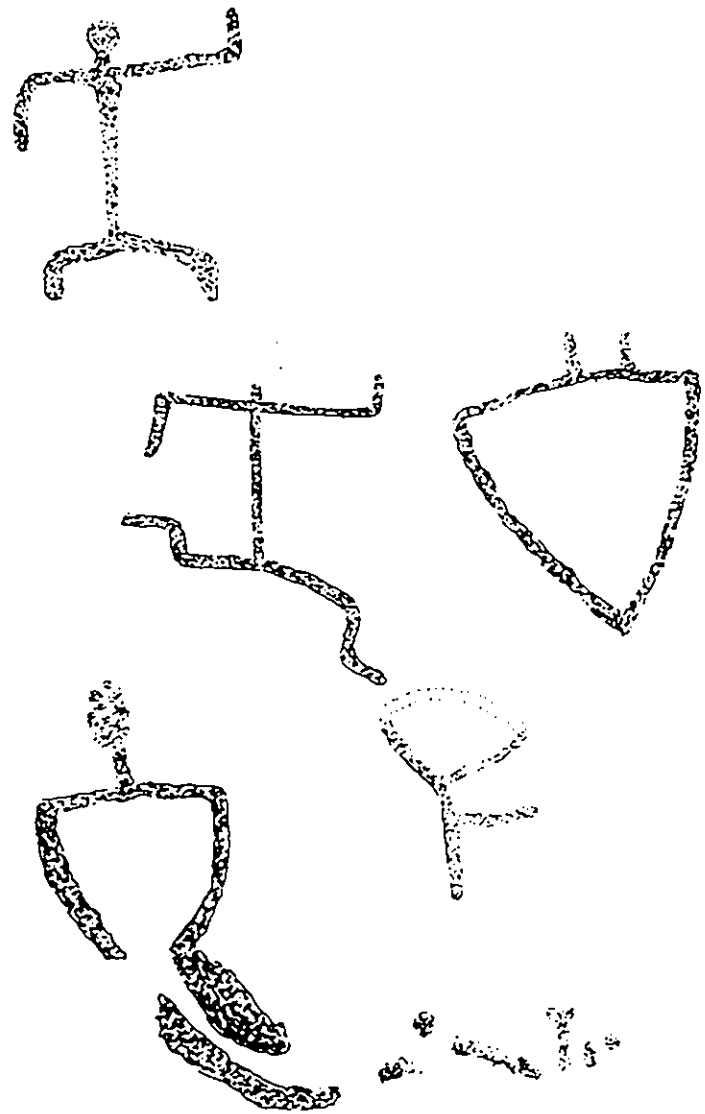


SITE 50-20-97-110AP, PANEL 2A



10 CM

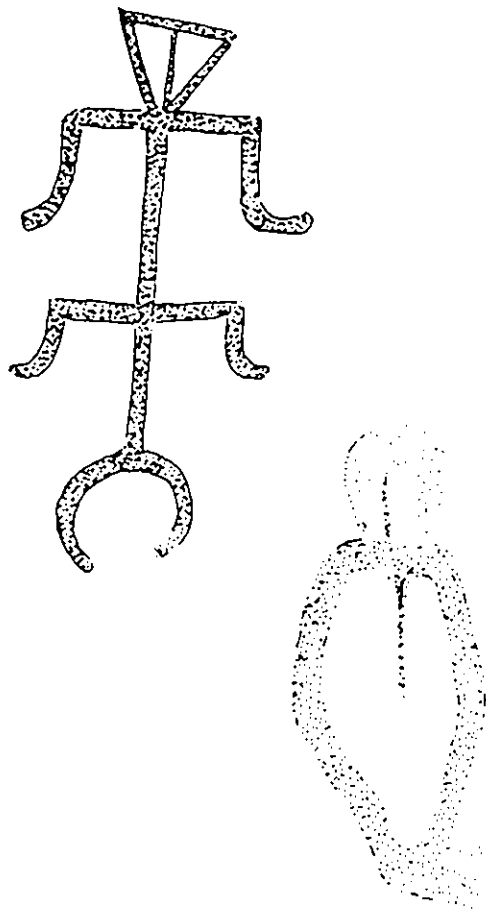
SITE 50-20-97-110AP, PANEL 2B



SITE 50-20-97-110AP, PANEL 4B

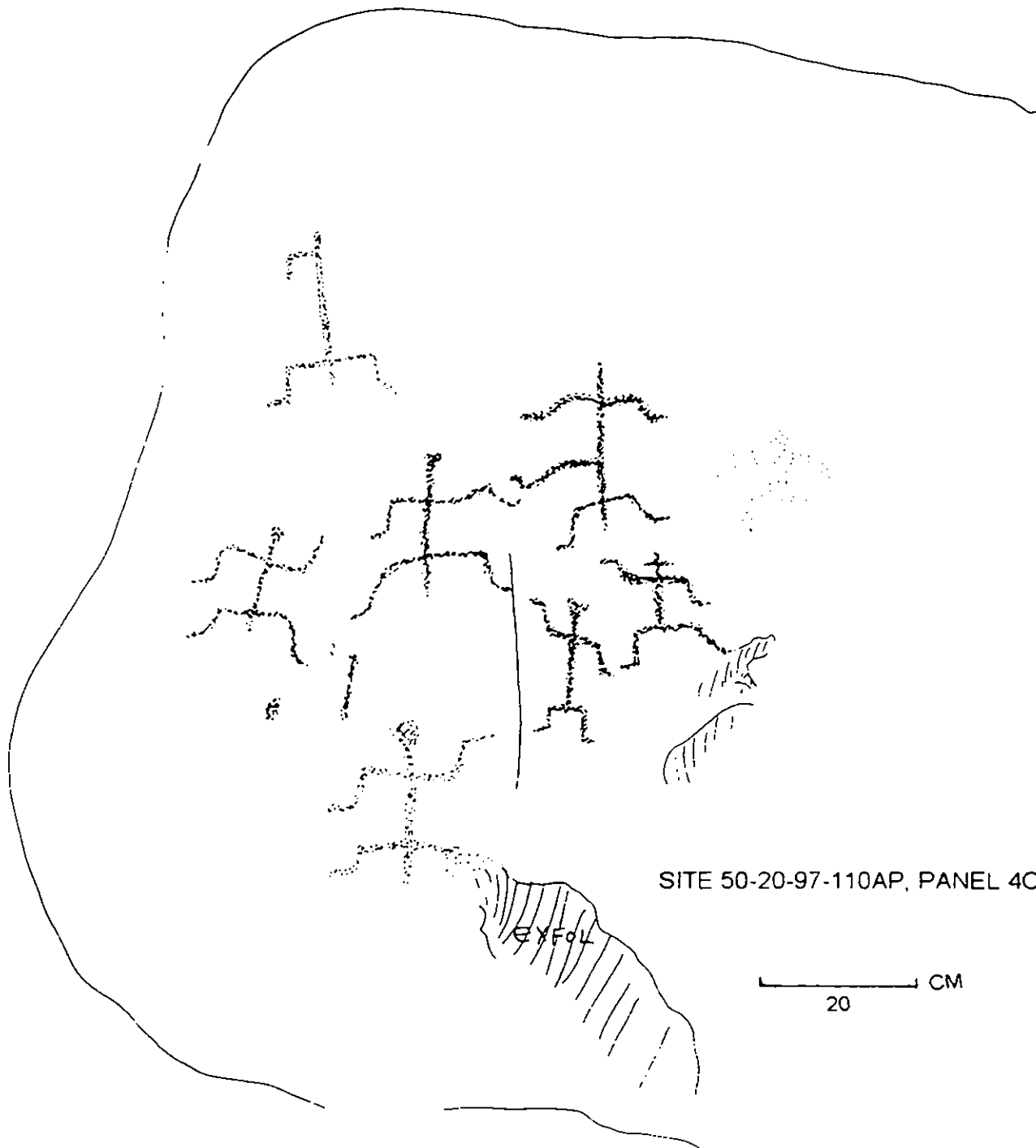
10 CM





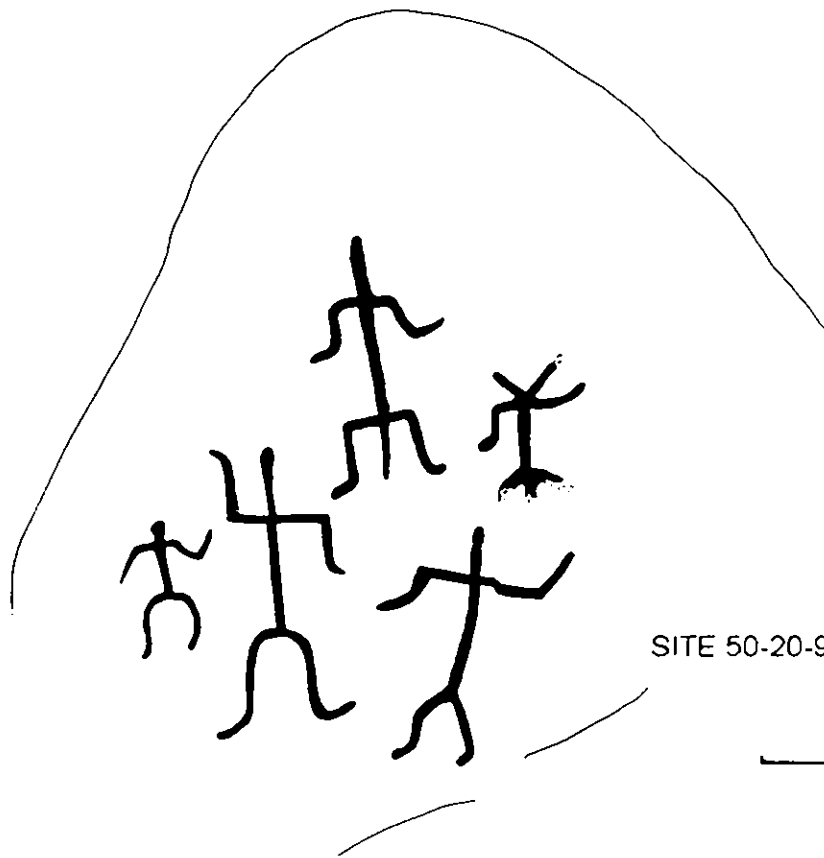
10 CM

SITE 50-20-97-110AP, PANEL 4A (1)

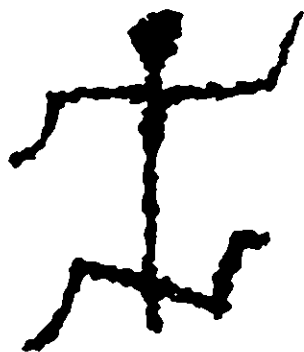
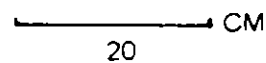


SITE 50-20-97-110AP, PANEL 4C

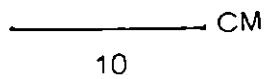
20 CM

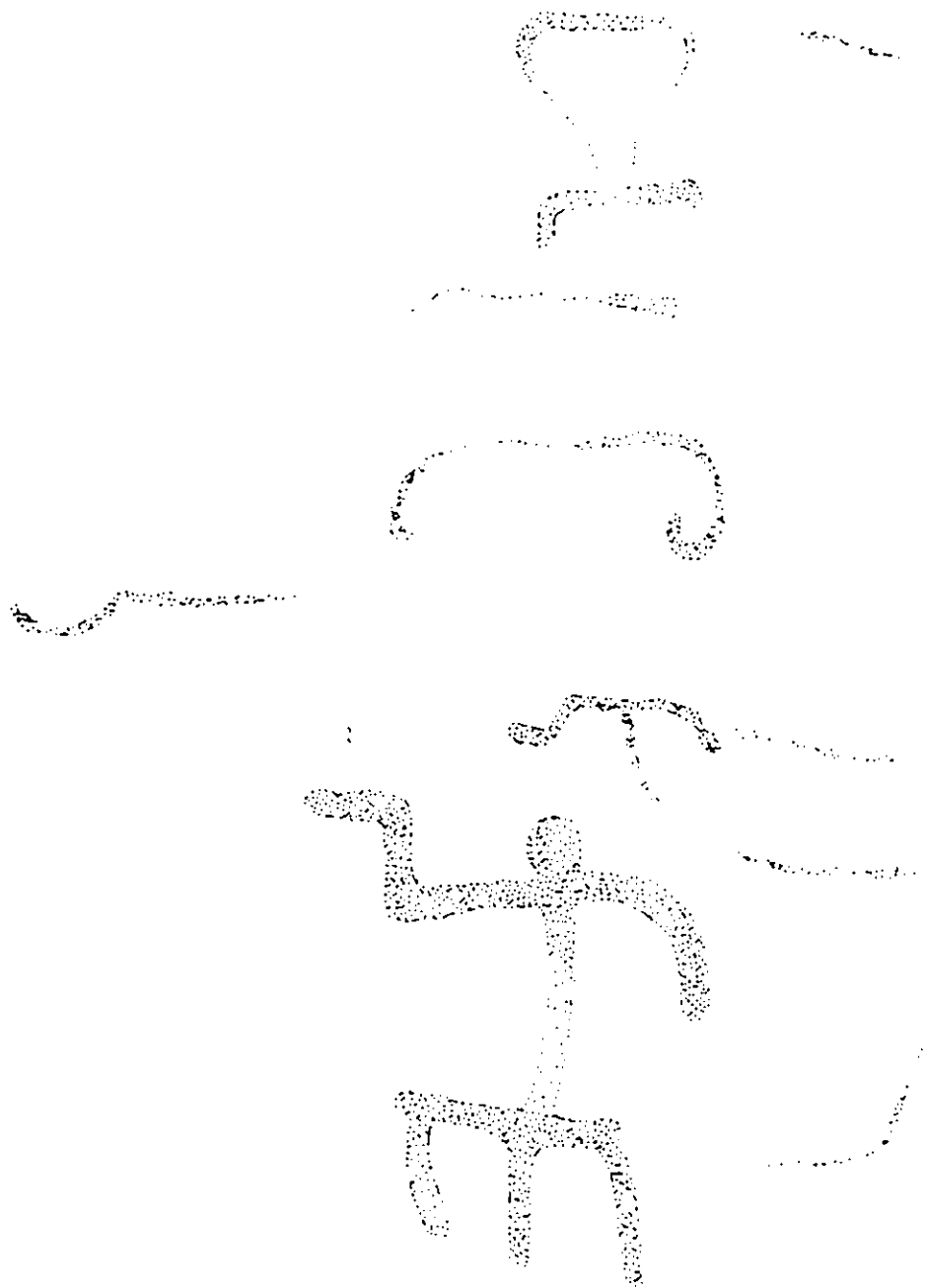


SITE 50-20-97-110AP, PANEL 5A



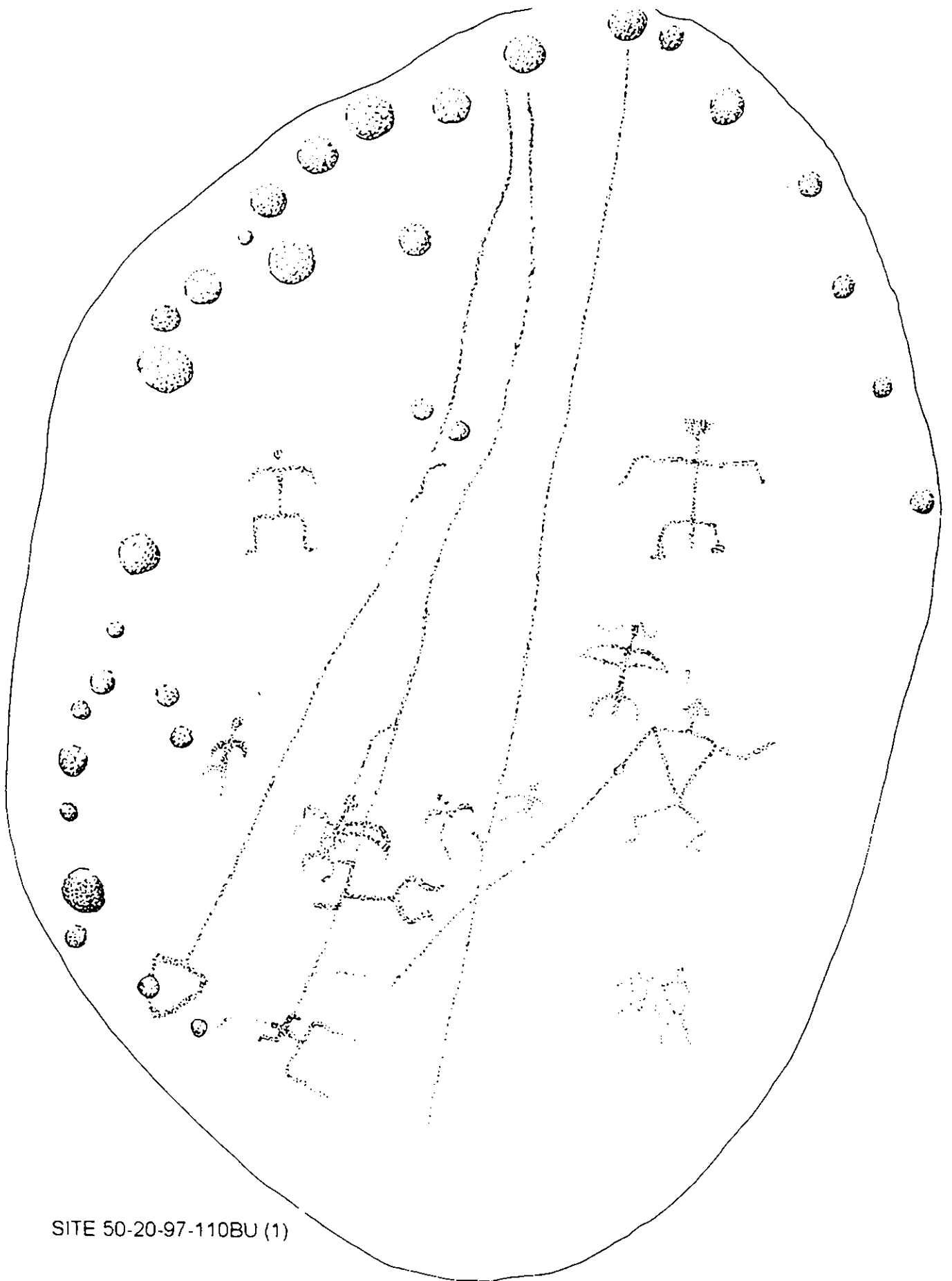
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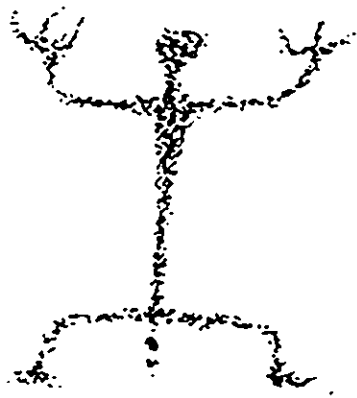
10 CM

SITE 50-20-97-110AP, PANEL 7A

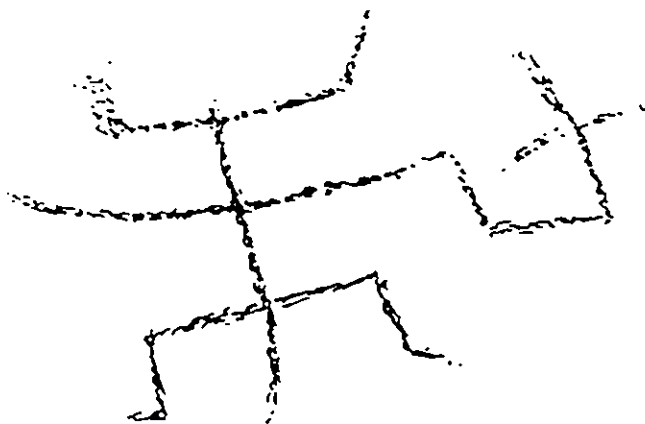


SITE 50-20-97-110BU (1)

— 20 CM



SITE 50-20-97-110BU (2)



SITE 50-20-97-110AP, PANEL 2C

10 CM

## Conclusion

The petroglyphs recorded on Kaho'olawe were found at 82 loci, and include at least 423 (the incised panels were recorded as one unit, not sorting out each incised line from the myriad numbers of lines). The spread sheet included in this report shows the distribution of motifs at the various sites.

Stick figure anthropomorphs outnumber triangular figures (173 to 112), plus there are 15 "special bodied" figures. Thus 71% of all the petroglyphs so far documented represent human figures.

Our recording project documented all the known petroglyph sites we were able to locate, and found more; it is likely that more petroglyphs are still to be found. Time constraints as well as difficulties in getting around to the more isolated parts of the island prevented our searching further.

Petroglyphs take on characteristics depending upon the surface upon which they are carved. The more dense the stone, the more shallow they usually are. Since most of the stone on Kaho'olawe is dense basalt, it is rare to find petroglyphs on the island which are deeply cut. The difficulty inherent in carving images into this dense stone also tends to limit their size, and we found few large figures. Those at Site 669 are the largest images we located.

It was also noted that different sites on the island had a somewhat different ambiance; they do not all follow a single pattern. Perhaps this variation may be due in part to the function of the sites. Most of the island's petroglyphs are narrowly focused around settlement areas, such as at Kaukakupapa, where they rest within the confines of small coastal fishing settlements. At Hakioawa, however, we see a major settlement with small clusters of petroglyphs scattered amongst the house sites and other structures; Site 110 (Loa'a) is a large boulder cluster in the uplands, with probably no permanent nearby habitation. This suggests that the site may have had religious significance.

What little information we have for Kaho'olawe suggests that the island held some special importance in the ancient Hawaiian culture. For example, Moaulaiki is a small cinder cone on northwestern slope of Pu'u Moaulanui; on top of the hill are remains of a stone faced platform which may have been a shrine. Oral traditions suggest that this was the site of a school for astronomy and navigation. Near the platform is a large slab boulder on a pedestal which when struck, rings with a sonorous tone which brings to mind the boulder at Loa'a; however, the Moaulaiki rock has no petroglyphs.

Compared to the petroglyphs in the other islands of Hawai'i, Kaho'olawe's designs most resemble those on Maui and Lana'i, specifically the petroglyphs at Kukui Point, and to a lesser degree, at Kaunalu and Luahiwa. Those at Kuheia are similar to petroglyphs on Maui (although Maui's petroglyphs are among those least documented). It is possible that such resemblances are due to the type of surface, basalt boulders being more difficult to carve than *pahoehoe*. But this would have minimal effect on style.

As for specific special features, there are certain conventions we see on Kaho'olawe that stand out: detached heads, wedge shaped heads, action figures (in running or dancing posture), bird-like images, and zoomorphs. Many of the latter are surely goats although others are clearly meant to depict dogs. In contrast to many other petroglyph sites

in Hawai'i, cupules are a rarity. These cup-shaped man-made depressions are ubiquitous at many sites such as Pu'uloa and Anaho'omalua on the Big Island. They are, however, in *pahoehoe*. The cupule boulder at the inland site of Loa'a is an exception. The petroglyphs are cut into a hard basalt and then abraded until smooth; we know of no other single boulder in Hawai'i with such a large grouping of cupules.

The petroglyphs found on Kaho'olawe span a vast period of time, from the prehistoric period up to the early years of this century. In certain cases, such as at the gulch west of Ahupuiki (Site 121G), historic petroglyphs occur on faces containing what appear to be far more ancient images. At times a historic image, such as a goat, is superimposed on the apparently older figure.

In the early 1800s New England missionaries introduced the art of writing to the Hawaiian Islands. Not long afterward a missionary school was established on Kaho'olawe. Although we know little about the school beyond the number of the students who attended, it seems probable that it consisted of a single native teacher who taught reading, writing and scripture. The people of Kaho'olawe appear to have learned their lessons well, for our surveys revealed a goodly number of petroglyphs written in English script. These appear for the most part to be personal names, but in at least one instance (at Site 137 near Kealaikihiki Point) we have what seems to be a phrase or possibly a title.

In some cases we have been able to link a carved name with a known historic individual. Our earliest example of this is Keliikipi, whom we know to be a young boy living on Kaho'olawe at the time of the 1866 census. Keliikipi carved his name into the surface of a large beach boulder at the bay just east of Ahupu. The concentration of carved names in and around Ahupu bay suggests that this was a major settlement during the historic period (a conclusion which is supported by documentary evidence). Most of the other names for which we have known dates belong to cowboys or visitors to the ranch headquarters at Kuheia.

One of the most interesting characteristics of all these sites, except for Kuheia, is the inconsistency exhibited. There seems little, if any, historical order. This is also true at other sites in the islands but seems exaggerated at Kaho'olawe. This, and other evidence cited earlier, supports the idea that the petroglyph sites were occupied only periodically and that a minimum amount of "local" style developed, with the exception of "wedge" shaped heads, sometimes with a bisecting vertical line, and the goat motifs.

It could be suggested that, despite a subtle Kaho'olawe flavor, there was insufficient quantity of petroglyph making to advance the occasional unique stylistic statement. Kaho'olawe's petroglyphs are anachronistic and generally stylistically heterogeneous within each site (with the now familiar exception, Kuheia), but taken as a whole there is often an elusive element of style and/or technique which comes through--a common thread providing unity and uniqueness.

Style-wise, the triangular heads stand out, particularly those with a bisecting center line. In fact, the proportion of "unusual" heads seems greater than at other important sites in Hawai'i. The heterogeneity may be mostly responsible for this. At major sites such as Puako and Pu'uloa, the standard head is a small dot, usually with a neck. Kaho'olawe's detached heads are not the standard elsewhere.

To summarize, Kaho'olawe's petroglyphs tend to be small, shallow, emphasizing curved lines, and with idiosyncrasies or quirks. They are found almost exclusively near settlements, with the exception of the one inland site. Except for the gulch west of Kuheia,



each site has its own style mix, a clear personality. Such special ambiance is a characteristic for all petroglyph sites in Hawai'i.

At the above mentioned gulch west of Kuheia, almost all of the images are stylistically similar: a small softly triangular body, with curved lines emphasized. This style resembles those at Kukui Point (Lana'i) as well as many of the Maui images. It should be considered that these petroglyphs could have been made by visitors or emigrants from either of those islands, or that they are all connected in some way. There were *ohana* on Kaho'olawe related to *ohana* on Lana'i and Maui. These families were accustomed to fish and camp on and near Kaho'olawe. The petroglyphs are too well made to have been created by someone who had simply seen them on Lana'i or Maui and then tried to copy them from memory.

The overall aesthetic quality may not match the exceptional level of some of the petroglyphs from other islands in Hawai'i but the imagination, inventiveness, and sense of individuality of many of the images holds up well. It seems apparent that each settlement did not have a resident *kahuna* with the talents and skills of the Master of Kaunolu, who created those stunning birdman images of such artistic power. But the Kaho'olawe petroglyphs are purposeful and sincere, revealing the perceptively of their makers. They tell us that there were probably three periods of petroglyph making.

In the earliest period, stick figures were made with both straight and curved lines; the differences were in proportion, size of line, quality and technique. Most were pecked, some were pecked and then abraded.

In the next period, softly curvilinear figures with triangular torsos emerged, possibly at the same time as those with straight edges and squared arms and legs. Stylizations appeared such as the birdman types, and various body types with headdresses, winged arms, unusual proportions, etc. Lana'i and Maui influence and/or connections seem strong during this time.

In the final period, names and words were inscribed. Figures and animals in heterogeneous styles continued to be made and intermingled with older images. The lettering may be attributable to the influence of nearby Lahaina and the printing activity there.

By the above measures, Loa'a may be the oldest site, with Hakioawa the next oldest. Ahupuiki shows the longest period of (probably) intermittent occupancy, and Kaukukapapa also shows a long period of intermittent activity but with a preponderance of anachronistic style mix (i.e., older types being made in later times). Kuheia suggests a brief period of petroglyph making in the middle period. This is not a conclusive analysis but it may not be far from the mark, in regard to the other archaeological evidence.

The Kaho'olawe petroglyphs were undoubtedly made for the same purposes as those of the other islands. It seems evident that they possessed *mana*, or spiritual power. They had the same variety of uses as did writing, e.g., as records; for the commemoration of events, political and historical; recording of legends; proclamation of domain or custodianship; births and perhaps deaths of great significance; battles won or lost; genealogical records; as adjunct or focus of ritual or ceremonial activities; *piko* centered rituals; and so forth.

These symbols carved in stone are the tangible remains of a much broader ceremonial that included chant and prayer. It is our firm belief that they were neither idly nor casually made but are silent reminders of past spiritual power and belief. They deserve

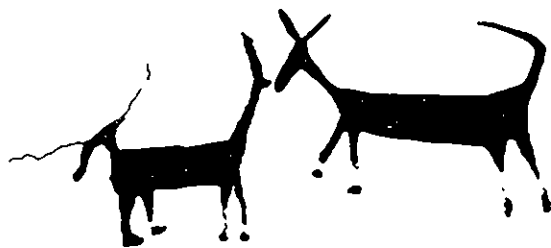
to be preserved and protected for all who treasure the past. The fact that many of the panels we recorded have been damaged by gunfire suggests that conservation of the petroglyphs has previously not been a big issue. We hope that future concerns will address conservation efforts and the general attitude toward rock art protection will change.

## References

- Barrera, W., Jr. 1977. National Register of Historic Places Inventory--Nomination Form. United States Department of the Interior.
- Barrera, W. Jr. 1984. Kaho'olawe Archaeology: An Overview. *Hawaiian Archaeology* 1:31-43.
- Beckwith, Martha. 1982. *Hawaiian Mythology*. University of Hawaii Press. (Reprint)
- Cox, J. Halley and E. Stasack. 1970. *Hawaiian Petroglyphs*. Bishop Museum Press.
- Emerson, N.B. 1915. *Pele and Hiiaka. A myth of Hawaii*. Charles E. Tuttle and Col. Rutland, VT.
- Hommon, R.J. 1980a. Multiple Resources Nomination form for Kaho'olawe Archaeological Sites. Washington, D.C. National Register of Historic Places.
- Hommon, R.J. 1980b. Kaho'olawe: Final report on the archaeological survey. Typescript, Hawaii Marine Research, Inc. U.S. Navy, Pacific Division.
- Hommon, R.J. 1982. Kaho'olawe Archaeological Excavations 1981. Typescript, Science Management Inc. U.S. Navy, Pacific Division.
- Hommon, R.J. 1986. Social evolution in ancient Hawaii. Chapter 7:55-96. *New Directions in Archaeology. Island Societies: Archaeological approaches to evolution and transformation*. Patrick V. Kirch, ed. Cambridge University Press.
- McAllister, J.G. 1933. *Archaeology of Kaho'olawe*. Bishop Museum Bulletin 115.
- Kirch, P.V. 1985. *Feathered Gods and Fishhooks*. University of Hawaii Press. pg.144-154.
- Reeve, Rowland. n.d. [1992]. Na Wahi Pana o Kaho'olawe. Report. Kaho'olawe Conveyance Commission.
- Spriggs, Matthew. 1991. "Preceded by Forest": Changing Interpretations of Landscape Change on Kaho'olawe. *Asian Perspectives* 30(1): 71-116.
- Tomonari-Tuggle, M.J. and Laura A. Carter. 1984. Archaeological Mapping of the Kuhe'cia Bay Ranch Site, Kaho'olawe Island, State of Hawaii. Historic Sites Section, Department of Land and natural Resources, State of Hawaii. Draft manuscript, collection of author.
- Vancouver, G. 1798. *A voyage of discovery to the north Pacific Ocean and round the world...performed in the years 1790-95*. London: G.G. & J. Robinson.



# APPENDIX A



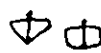




















SITE NAME	SITE NUMBER	DISTRIBUTION OF MOTIF TYPES ON KAHOLOLAWA																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20						
HAKIOAWA	4801	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
	481N	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
	482J	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
	485	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4						
	486	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9						
KAULANA	444																										
KUHEA	128																										
AHURU NE	113																										
AHURU BAY	673																										
AHURU RIDGE	123																										
AHURUKI	121																										
AHURUKI WEST	669																										
KAUKAIKAPAPA	135																										
KEALAIHAKKI PT	137																										
LOAA	142																										
110																											
TOTAL		141	11	113	16	7	19	3	11	4	101	11	12	1	2	13	2	131	1	16	4	1	33	8	2	91	423

- T-FIGURES
- T-FIGURES, VARIATION
- STICK FIGURE ANTHROPOMORPH
- STICK FIGURE, CONNECTED
- STICK FIGURE, EXTRA LIMBS
- PARTIAL FIGURE
- STICK FIGURE WITH HORIZONTAL TORSO LINE
- SPECIAL BODIED ANTHROPOMORPH
- OPEN BODY ANTHROPOMORPH
- TRIANGLE TORSO FIGURE
- TRIANGLE TORSO FIGURE, CONNECTED
- DOG
- FISHHOOK
- HISTORIC SHIP
- GOAT
- OTHER HISTORIC (SPACEMAN)
- LETTERING
- PARALLEL STRAIGHT LINES
- RANDOM STRAIGHT LINES
- CURVED LINES
- CUPULES, RANDOM
- CUPULES, PATTERNED
- OTHER GEOMETRIC
- UNIDENTIFIED




HAWAIIAN ROCK ART TYPOLOGY

Anthropomorph, Type 1-- 1100 to 1700








- 1100 simple T-shaped stick figure, no legs 
- 1101 simple T-shaped stick figure, compound/connected
- 1110 simple T-shaped stick figure, horiz line in torso 
- 1120 simple T-shaped, arms curve to form loops 
- 1200 anthropomorph, simple stick figure 
- 1201 anthropomorph figure, /connected
- 1202 anthropomorph figure, extra legs/arms 
- 1203 anthropomorph figure, extra limbs/connected
- 1204 anthropomorph figure, partial (head/shoulders or legs only) 
- 1210 anthropomorph figure, circle in torso 
- 1220 anthro figure, legs end in circle 
- 1221 anthro figure, legs end in circle/connected
- 1230 anthro figure, horiz line in torso 
- 1231 anthro fig, horiz line in torso/connected
- 1240 scene: 2 or more figures in action pose 
- 
- 1300 anthropomorphic stick figure, special body treatment;  
(closed square, round, or rectangle body). 
- 1301 anthro, rectangle or other special body type, /connected
- 1310 anthropomorph figure, special body treatment: (open body). 
- 
- 1311 anthro. open body type, /connected
- 
- 1400 anthropomorph. triangular body 
- 1401 anthro, triangular figure, /connected 
- 1410 anthropomorph. triangular, open at base 
- 1411 anthro. triangular figure open, /connected
- 1420 anthropomorph. triangular body with muscles 
- 1421 anthro, triangular w/muscles, /connected
- 1422 anthropomorph, open base/ muscled 
- 1430 anthropomorph, triangular body with circle for legs 
- 1431 anthro. triangular body w/circle legs. /connected.

- 1500 anthropomorphic, naturalistic 
- 1600 profile squatting human figure 
- 1601 profile figure/connected
- 1602 two profile figures back to back (or splayed figure) 
- 1700 other anthropomorphic






**Disconnected body parts, Type 2-- 2100 to 2300**

- 2100 eyes 
- 2200 feet 
- 2210 arm
- 2300 vulva 


**Prehistoric Fauna, Type 3-- 3100 to 3500**





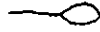





- 3100 dog 
- 3200 pig 
- 3300 chicken 
- 3400 bird 
- 3410 bird tracks 
- 3420 owl 
- 3500 lizard 
- 3600 unidentified zoomorph/bug-like figure

**Sea Forms, Type 4-- 4100 to 4500**

- 4100 turtle 
- 4200 fish 
- 4300 whale 
- 4400 octopus 
- 4410 crab 
- 4500 fabulous sea creature, unidentified

**Material Culture, Type 5-- 5100 to 5700**





- 5100 canoc 

- 5110 double canoe 
- 5120 canoe with sail 
- 5130 sail only 
- 5200 fish hook 
- 5210 fish trap
- 5300 paddle 
- 5400 poi pounder 
- 5500 adze 
- 5510 kite
- 5600 ceremonial regalia: fan 
- 5610 ceremonial regalia: cape 
- 5620 ceremonial regalia: kapu sticks 

**Historic, Type 6-- 6100 to 6610**

- 6100 historic ship
- 6200 anchor
- 6300 church
- 6400 gun
- 6500 horse
- 6510 horse with rider
- 6515 goat
- 6520 other historic motifs
- 6600 lettering
- 6610 script


**Geometric, Type 7-- 7100 to 7700**

- 7100 parallel straight lines, in series 
- 7110 rectangle 
- 7111 rectangle segmented 
- 7115 zigzag 
- 7120 straight line(s), random
- 7121 curved line(s)
- 7122 combination straight/curved line
- 7125 enclosure




7200 circle

7202 linked circles 

7203 circle clusters 

7204 circles, tailed 

7210 circle with interior divisions 

7211 circle with interior design 


7220 semi-circle 

7221 double semi-circle 

7222 open circle 

7230 concentric circles 


7231 open concentric rings 


7310 cupule with tail 

7311 cupule with cross bars 

7312 bar bells 

7400 cupules, random

7401 cup and ring 


7402 cup with more than one ring 

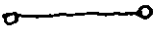
7403 cup and ring with tail

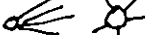
7410 cupules, patterned (not papamu)


7420 papamu


7500 oval

7510 oval with cup inside 

7600 straight lines with circle ends 

7610 circles with lines (incl. possible comets) 

7612 circles with cup plus extending lines 

7614 cupule with radiating lines 

7700 other geometric









7710 polissoir

Unidentified, Type 8










8000

# ANTHROPOMORPHIC FEATURES FOR FIGURE TYPOLOGY






## HEAD:

- A: absent
- L: line over head 
- H: hook shaped head 
- D: headdress 
- B: birdlike 
- T: dots for head, or dots assoc. w/head 
- P: open circle 
- R: regular 
- F: face (eyes, mouth indicated) 
- O: other

## ARMS

- U: up 
- D: down 
- O: opposed 
- B: object in hand 
- I: winglike 
- G: digits 
- T: out 
- M: muscled 
- W: wavy 

## LEGS

- A: action 
- M: muscled 
- W: wavy 
- C: curved 
- R: regular 
- G: digits
- N: no

## GENDER

- M: male
- F: female
- N: no indication

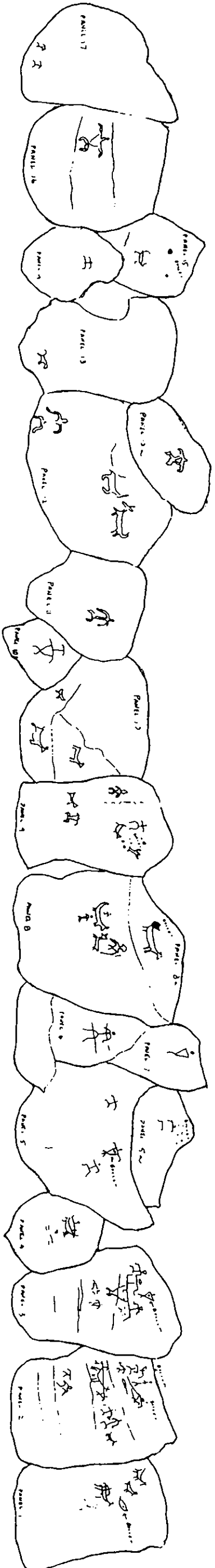
## APPENDIX B

### *Gulch West of Ahupuiki*

Site 120AA is located in the gulch west of Ahupuiki. The previous survey located an unspecified number of petroglyph figures on a natural bedrock escarpment. We were unable to visit this site due to lack of time. When the original compilation of petroglyph sites was made, which served as our guide for the project, Site 120AA and 139 were inadvertently overlooked.

### *Site West of Kealaikahiki*

The petoglyph(s) at Site 139 is located approximately midway between Kealaikahiki (Site 137) and the rock shelter near Kealaikahiki (Site 142). We were unable to visit this site for the same reasons as for Site 120AA.



SITE 50-20-97-121G  
GULCH WEST OF AHUPUKI

PANELS 1, 4, 5, 11, 14, 15, AND 17 FACE THE OCEAN  
PANELS 5A, 8A, AND 12A ARE ON HORIZONTAL SURFACES