PRELIMINARY REPORT ON EAST 4 MILE DRAW SOLAR PANEL SITE

Presented by Nancy Jo Arthur Photography by Stephen E. Arthur

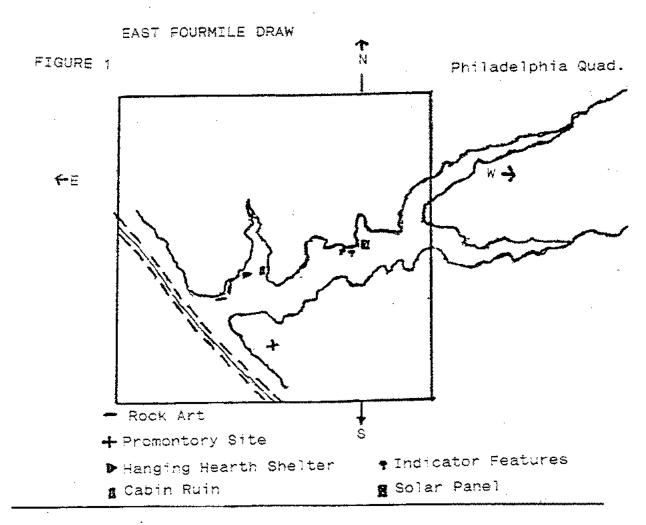
At the time of the symposium, I had only viewed the panel at summer solstice, and the slides taken at that time were the focus of the presentation. With fall equinox coming just 5 days after the symposium I decided to include any action observed then in this report.

The panel is located in East 4 Mile Draw which is a part of the Douglas Creek drainage in Rio Blanco County, Colorado. It is accessible from Colorado 139 south of Rangeley. There is a considerable concentration of archaeological sites in this draw (See Map-Figure 1).

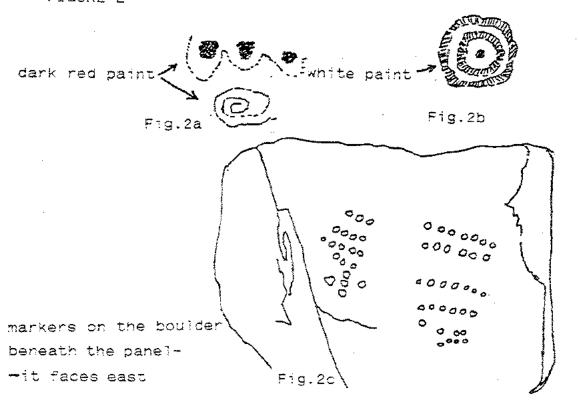
Both petroglyphs and pictographs line the north side of the draw up to the solar panel, which is located just before the draw forks. An excavation is being conducted halfway between the mouth of the draw and the solar panel. This was designated Hanging Hearth Shelter by Dr. F. R. Hauck. He conducted a field school there in 1990 and plans another in 1991, both through Colorado Northwestern Community College in Rangeley. Also to be found at the mouth of the draw is a promontory site that offers promise of being an observatory; with star alignments, lunar rises/settings and solar settings being marked. This site is now under analysis by V. Garth Norman. Preliminary dates of Hanging Hearth Shelter indicate a span of about 2300 years of seasonal occupation. The ruins of a log cabin just east of the Hanging Hearth Shelter site extends the period of occupation of the draw into historic times.

The diversity of rock art style and motif of the draw confirms the great span of time the draw has been occupied. It runs the gamut from Archaic to Cowboy brands. The Fremont style tends to predominate, but the Ute is also represented with depictions of the horse included. The Fremont is present in the typical little trapezoid-bodied anthropomorphic figures with their elaborate headgear. The corn & cornstalk is frequently seen as are the bighorn sheep and wavy lines or meanders. Motifs are done in all techniques; direct & indirect percussion, incised, and painted. Red and white paints are readily apparent, and I suspect some gold ochre, but this has not been substantiated by lab tests or other means than ordinary 35mm camera shots.

The calendar panel is composed of two rock faces making an inside corner approaching 90 degrees and roofed by the overhanging cliff. As you near the panel from the mouth of the draw, you find a small red panel (Fig. 2a) about knee high that is composed of a waving line topped by four dots with a counterclockwise spiral beneath. This is the first indicator of the solar active panel. Approximately 30 yards along the cliff face, you will see white







concentric circles tucked back in a corner. They are head high (Fig. 2b). The solar active panel is directly behind these circles as the cliff bulges out in a corner, which is the second indicator. This set of circles is not directly hit by first light in the morning but the sun strikes the adjoining face at such an angle that it is reflected back and illuminates them.

Directly under the solar active panel is a spalled boulder of some size, which is marked on the east end with cupules or pits placed in even alignments or sets (Fig. 2c). This frequently occurs at calendar sites in this area, so it must be suspected that these marks record the times the panel was used. Another possible use for these pits would be as aids/counts to figure dates or occurrences peripheral to those marked on the panel. These pits are arranged in four groups: top left, four rows of pits 3-4-5-3 for a total of 15 pits; top right, two rows of pits 7-6 for a total of 13 pits; bottom right, four rows of pits 7-6-4-4 for a total of 13 pits; and at the extreme bottom of the left group is a 4 pointed star configuration with one pit in the center for a total of 5 pits. It looks like some marks may have weathered away so the total number may have been greater at one time.

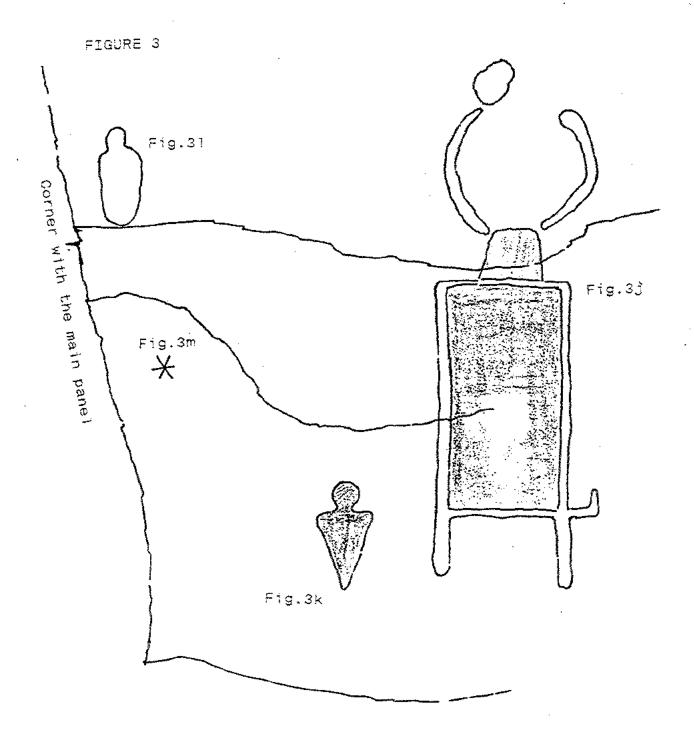
FIGURE 3 ELEMENTS ON THE ADJOINING FACE

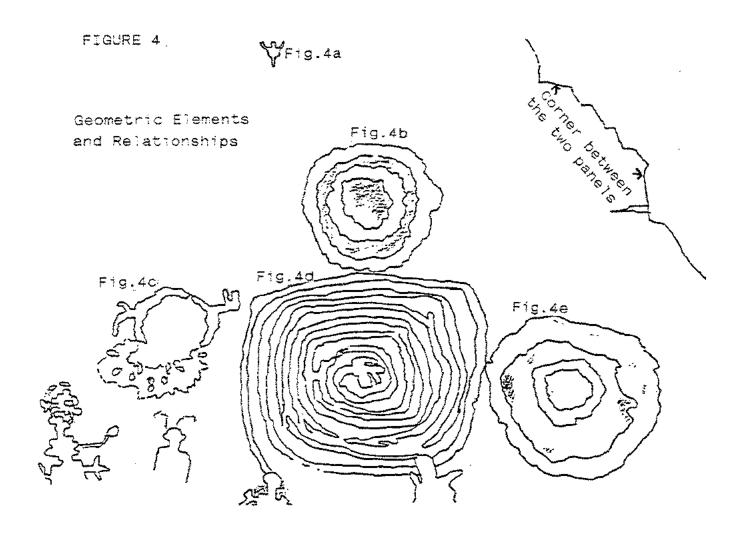
- j....this large red rectangular figure has stick legs and no arms. The head has a trapezoid shape and white horns—the left of which is topped by a large white dot.
- k....this figure is just beside Fig. 3j and is a small roundheaded red figure with a softly triangular body and no appendages.
- 1....this figure is white and shaped like Fig. 3k. It is placed higher on the panel and closer to the main panel on the adjoining face. It is quite degraded.
- m.....there is a possible fourth figure in this area, but it is questionable——it may be just stain washed down from Fig. 31.

Because of the degraded nature of these figures and the angle at which they join the other panel, I will not make a thorough analysis of their relationships with the SL. I believe they are an integral part of the calendar function, but documentation by a second camera equipped with a filter to resolve the outlines would be needed and this was not done.

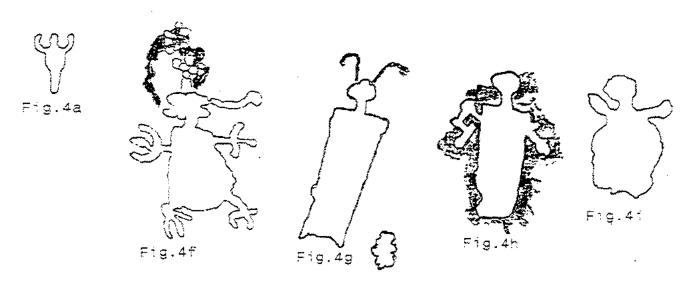
FIGURE 4 PANEL ELEMENTS

- a....this tiny white triangular figure is the first to touch the shadow line, hereafter denoted SL, and is done with very thick, thick paint. It has two upraised arms but no hands or feet.
- b....these concentric circles are white outermost, then red, and then white with a red center. The base of the outer circle is flattened to conform to the spiral directly beneath.
- c....this winged circle in white has a bottom "dissolving" into a scattered pigment, and while one wing is cupped upward the





Anthropomorphic Figures on the Main Panel



- other cups downward.
- d....this white counterclockwise spiral element has a squared appearance with definite shoulder points that relate to the SL. It has a solid center, and it culminates at the head of Fig. 4h with the head of Fig. 4i imposed over the outer two rings.
- e....these concentric circles of white-red-white have an open center, and the white circle is sloped on the top inner side to conform to the SL.
- f....this small rounded figure is pecked. It has very short arms and legs with three digits on both, and an elaborate headgear pecked through a red aura.
- g....this rectangular bodied figure has no appendages. It does have red horn/antenna applied after the figure was pecked and has a dot at the lower right corner.
- h....this figure is pecked through a red aura and has a rectangular body shape. It has no legs but has arms and is carrying a mace/staff. The head is at the culmination of the white spiral.
- i....this is another round-bodied pecked figure with no feet. It has two arms-one upraised touching the outer edge of the white spiral, while the other is straight out at shoulder height. The head obscures the two outer bars of the spiral.

SHADOW LINE (SL): DESCRIPTION AND PROGRESSION

The SL assumes the shape of an inverted pyramid through most of its progression down the two panels. The apex travels the corner between the two panels. The lip of the ceiling formed by the overhanging cliff casts the shadow, with the cornered configuration of the panels dictating the shape. It (SL) is one continuous line hinged between the two panels and reacting with figures on both. The SL is a simple line without points or notches and depends on subtle bends and changes of angle to relate to the various elements of both panels. Each element relies on either placement or slight alteration of form to sustain the relations.

The start of the summer solstice was not observed, but the photo taken 5 minutes after we arrived on site and the photo taken forty-eight minutes into the fall equinox sequence are nearly identical. In both summer solstice and fall equinox, the SL bisects the red dot at the center of the top set of circles (there is a slight difference in angle of 1-2 degrees). I have arbitrarily zeroed the sequences on these photos for comparison and will present a time line of comparison of the two events.

SUMMER SOLSTICE SHADOW LINE (SL)

- 0 at 7:55 a.m.....The SL bisects the red center of the upper set of circles at a slight angle (Fig. 4b).
- 0 + 10....SL settles atop the white spiral (Fig. 4d) and follows it exactly before changing angle upward. On the adjoining face the SL bisects the white dot above the

FIGURE 4 SHADOW LINE-SUMMER SOLSTICE

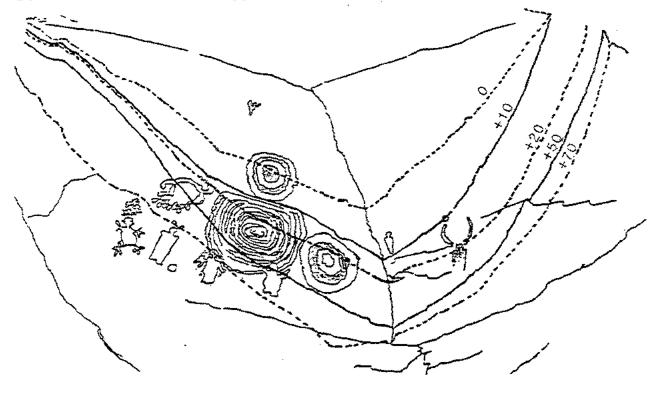
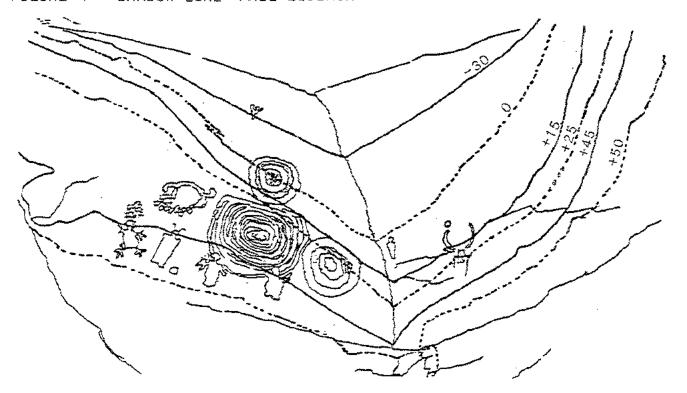


FIGURE 4 SHADOW LINE-FALL EQUINOX



- horns of the large red figure (Fig. 3j), ascribing a gentle arc upward.
- 0 + 20...The change of the angle in the SL halfway across the main panel softens into a slight arc. The SL rests on the upturned wing of the winged circle (Fig. 4c), enters at the shoulder of the spiral (Fig. 4d), and rests along the inner white circle in the lower set of circles (Fig. 4e.). The SL has sustained the position on the shoulder of the spiral (Fig. 4d) for about 5 minutes. SL now involves the large red figure (Fig. 3j) on the adjoining face but has not really changed in arc, just slips down & out.
- concave in the outer portion then becoming convex as it exits the winged circle (Fig. 4c). SL does not extend to the edge of the panel. From the outer edge of the main panel, SL extends downward, enters the winged circle (Fig. 4c) where the downturned wing is attached, exits the lower portion of the circle where it "dissolves", and cuts the lower portion of the spiral (Fig. 4d) and touches both arms of the inner anthropomorph (Fig. 4i), in effect, cutting off its head, and then angles down to the corner.
- 0 + 70...Maximum downward movement of the SL. The apex of the pyramid shaped shadow has flattened at the bottom of the corner on the main panel side. On the adjoining face the SL has immersed all elements in shadow and ascribes a gentle convex arc to the upper corner of the face. On the main panel, figures 4h & 4g & 4d are involved with the SL; all other elements are totally shadowed with the exception of the figure 4f, which a cupping of the SL directly above, exempts.

FALL EQUINOX SHADOW LINE (SL)

- 0 30....The SL cuts through the base of this tiny figure (Fig. 4a) leaving a dot of paint beneath that glows (optical effect due to the contrast of shadow and white paint). This effect is sustained approximately 2 minutes.
- O at 9:33 a.m....The SL bisects the top set of circles (Fig. 4b) at a slightly greater angle than at Summer Solstice, but still enters the red dot at the same place.
- 0 + 15...As the SL deepens, it lies at the bottom juncture of the red and white circles of the top set (Fig. 4b), rests at the top right corner of the white spiral (Fig. 4d), drops to conform to the slope of the outer white circle of the lower set (Fig. 4e), and maintains this angle to the corner. As the SL travels up the adjoining face, it bisects the horns of the large red

FIGURE 4 SHADOW LINE-SUMMER SOLSTICE

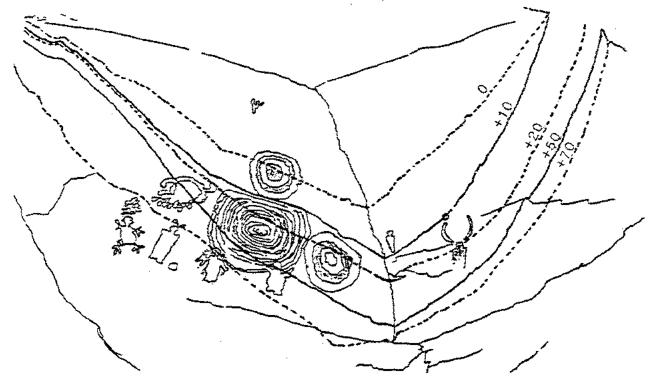


FIGURE 4 SHADOW LINE-FALL EQUINOX

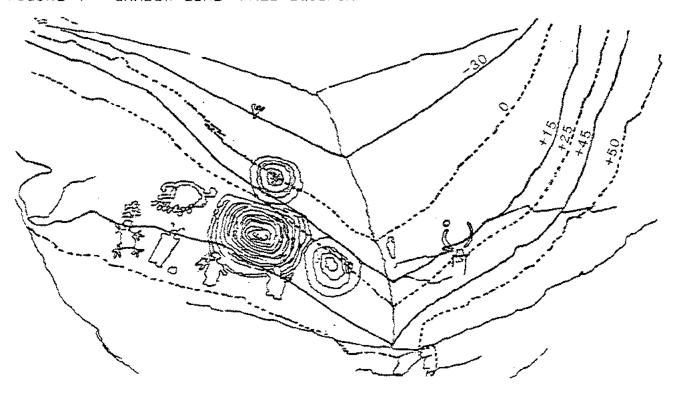


figure (Fig. 3j). This is a configuration that is sustained.

- 0 + 25....The shadow now extends to the outer edge of the main panel and drops down in a horizontal attitude in the outer third of its length before angling down to the corner. SL now involves the base of the upper set of circles (Fig. 4b), cuts the right corner of the spiral (Fig. 4d), and lies along the top of the inner white circle of the lower set of circles (Fig. 4e). It holds the same angle into the corner, and then arcs upward on the adjoining face to the large red figure (Fig. 3j). It conforms to the shoulder line before continuing upward.
- 0 ÷ 45...The shadow now extends in a gentle concave arc from the outer edge of the main panel to the corner. This arc is centered above the head of the anthropomorph with the red aura (Fig. 4h). SL involves figures 4f & 4g & 4i along the bottom of the main panel, exempting only 4h. This is a sustained attitude. From the corner, the SL arcs upward and the large red figure (Fig. 3j) may be standing on the line (speculative).
- 0 + 50.... The apex of the SL in the corner has now flattened, and the shadow extends from edge to edge, involving all the elements.

While this is a preliminary report on the two events at the panel which will undoubtedly feature at least two more (winter solstice and vernal equinox), there is at least one valid conclusion to be reached at this time. This panel ordered and patterned the lives of the people who lived in this sheltered draw for a great many years.

The panel layout is based upon the number <u>four</u>. This is borne out in all elements with the possible exception of the tiny sun/shadow catcher (Fig. 4a) at the very top of the main panel. There are four areas used for markings on the boulder beneath the panel, four anthropomorphic figures arrayed at the base of the main panel, four circular elements above them, and there were probably four anthropomorphs on the adjoining face.

Each of the circular elements is slightly warped to conform to the SL and create points at which the attitude of the SL is sustained or arrested. This makes the SL bend or undulate as it descends over the panel. These points of sustained attitude vary between the summer solstice and the fall equinox. I believe the variation will continue to be apparent at the winter solstice and the vernal equinox.

I have assigned gender to the anthropomorphs at the base of the main panel as follows: 4f & 4i are female, and 4g & 4h are

male. The female designation was based on the globular or vessel shape. The male figures have rectangular bodies—a power symbol (horns on 4g, and 4h holds a staff/mace) and both have a slight protrusion in the genital area.

Figure $\underline{4f}$ & $\underline{4g}$ have head-dresses or decoration, but figures $\underline{4h}$ & $\underline{4i}$ have simple round heads. Because of their placement in relation to the spiral, I consider them sunheaded. Figure $\underline{4h}$ did, in fact, act as a sunhead at the fall equinox, while figure $\underline{4f}$ remained just below the SL at the summer solstice. I expect figure $\underline{4i}$ to perform as a sunhead at the winter solstice because, at both recorded events, there came a time when one figure was exempted from involvement with the SL. I believe these figures are event specific.

There are possible suggestions of out of body experiences, one being the aura of red and random pecks above the head of figure 4f, and the other being the aura of red that figure 4h was pecked through. The spiral at the heads of figures 4h & 4i may imply something similar. Levan Martineau visited this site with me years ago, and he referred to the aura around figure 4h as signifying blood. This symbolism is given some weight as I consider it now—this was the figure exempted by the SL at the fail equinox. Fall would be the time of hunting and filling the storage cysts with Jerky and pemmican for the winter. Fall might also have been the preferred time to raid or make war, because the stores to be captured would be maximized and travel would be easy, but the time remaining for retaliation would be limited by the oncoming winter season. In either case; blood would be significant.

There is a lot that still needs to be adressed about this panel, and I feel that the figures on the adjoining face still have a lot of secrets, but this report is perhaps a start.

REFERENCES

Before listing the various books, paper, and magazine articles that I used in writing this report I would like to list the field references. These people were never too busy to answer a question or discuss a hunch that sometimes became a theory, however nebulous, or as more often was the case, became at least a better understood question. Garth V. Norman, Tom Freestone & the whole bunch from Vernal, and Dr. Richard Hauck were all up East Four Mile Draw and have had a hand in making this happen. Thanks.

Carlson, John B.

1990 America's Ancient Skywatchers. National Geographic Vol. 177 no. 3.

Norman, V. Garth

1984 Identifying Solstice & Equinox Petroglyphs in Northeastern Utah and Their Cultural Relations. Utah Rock Art 4th Annual Symposium Vol. IV.

Warner, Jesse E. & Clifford Rayl 1987 Solar Observations at Pleasant Creek. Utah Rock Art 7th Annual Symposium Vol. VII.

Warner, Jesse E. & Judith S.
1986 Sunheaded Figures: A Study in Symbolism. Utah Rock Art
6th Annual Symposium Vol. VI.

Williamson, Ray A.
1984 Living the Sky. Hougton Mifflin Co.

