

THE ABO PAINTED ROCKS DOCUMENTATION AND ANALYSIS



A report prepared for
Salinas National Monument
New Mexico

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1984

J. Cole
Junction, Colorado

(Illustration from the Watchtower,
Grand Canyon National Park)

ERRATA - Abó Painted Rocks Documentation and Analysis

Page 15, Line 4: insert:"and Schaafsma and Schaafsma (1974) have made" after Schaafsma (1971; 1980).

Page 29, Line 20: insert:"Bandelier (1970:68) notes that the "white-and-black striped figure is one of the chief medicine men of the ne-ue, (Newckwe, probably) whereas the red-and-white, with vertical stripes, is a god: Poyatama. Thus it appears that the same customs and notions prevailed on the east side of the Rio Grande as on the west side." " after Panel 4 Koshare.

Page 29, Line 24: insert:"and are distinct from the historic Acoma wall painting of an Awanyu illustrated by White (1932) (Fig. 2a)." after (Hibben 1975: Fig.34).

Page 33, Line 9: insert:"Historic katoina and societal altars with faces or masks at the tops from Zuni and Acoma are illustrated by Bunzel (1932) and White (1932), respectively (Fig. 4). Kiva wall paintings form the background of the Shalako (Ca 'Lako) and altar at Zuni illustrated by Bunzel in Figure 4a." after attachments.

Reference Page i, Line 06: insert new entry: "1970 The Southwestern Journals of Adolph F. Bandelier: 1883-1884, edited and annotated by Charles H. Lange and Carroll L. Riley with the assistance of Elizabeth M. Lange. University of New Mexico Press, Albuquerque."

Reference Page i, Line 24: insert new entry: "Colter, Mary 1933 Manual for Drivers and Guides descriptive of the Indian Watchtower at Desert View and its Relations, Architecturally, to the Prehistoric Ruins of the Southwest. Fred Harvey, Grand Canyon National Park, Arizona."

Reference Page ii, Line 22: insert new entry: "Keyser, James D., and Linea Sundstrom 1984 Rock art of western South Dakota: the North Cave Hills and the Southern Black Hills. Special Publication of the South Dakota Archaeological Society 9."

Errata -- page 2.

Reference Page iii, Line 21: insert new entry: "1980 Indian Rock Art of the Southwest. School of American Research, Santa Fe."

Reference Page iii, Line 22: insert new entry: "Schaafsma, Polly, and Curtis F. Schaafsma 1974 Evidence for the origins of the Pueblo Katchina Cult as suggested by Southwestern rock art. American Antiquity 39: 535-45."

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A report prepared for
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New Mexico

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Grand Junction, Colorado
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was funded by Southwest
Parks and Monuments
Association

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Plate 1

APPENDIX I

Table 1(A)

- Attachments:
- 1) horizontal, vertical, detail and overview transparencies of the second story ceiling, the Watchtower, Grand Canyon National Park, AZ;
 - 2) duplicate photographs of the 1984 drawings of the Abó Painted Rocks;
 - 3) color transparencies of the Abó Painted Rocks panels;
 - 4) black and white negatives and contact sheets of the Abó Painted Rocks panels;
 - 5) rock art panel forms.

I. Site Description and Project Methodology

Abó Painted Rocks site is located in Abó Pass, adjacent to U.S. Highway 60, approximately 1/2 mile southwest of the Abó Mission and Pueblo Unit of Salinas National Monument, New Mexico. The site includes a northeast-southwest trending sandstone cliff of the Abó formation. The latter is above a talus slope which is bisected by a shallow arroyo, containing a number of boulders. U.S. Highway 60 has been cut through the extreme northwestern portion of the site. The primary features of the site are the rock paintings and petroglyphs and, probably as a result of heavy, long-term visitation to the site by the public, there are few surface artifacts visible. However, two black-on-white pottery sherds, a few lithic flakes, and groundstone in the form of boulder metates were observed during the rock art documentation project.

The rock art at Painted Rocks is extensive, covering a horizontal distance of at least 115 meters. A large amount of overpainting or superimposition of elements occurs at Painted Rocks, especially on the southwest portion of the site (Panels 3 and 4). Additionally, almost every vertical face, both large and small, high and low, has been used for rock art. Overhead rock surfaces, both high and low, have also been used for rock art. The majority of rock art is rock paintings, both monochrome and polychrome. Painted elements range in size from a few centimeters to life-size, however, small figures predominate. Representational elements predominate and include anthropomorphs, birds, snakes and masks. Masks are a major representation at Painted Rocks, and vary in size from larger than life-size to less than 10 cm. Colors present in the rock paintings include yellow-brown, dark and bright reds, gray,

charcoal and black, white, pink, green, and greenish-gray. Overall, the pigments vary little in chroma or hue from panel to panel, suggesting a continuity of pigment sources. All colors were matched to the Munsell Soil Color Chart, if not too mottled to read. There is a lot of fading and spalling of pigments at the Painted Rocks site. Petroglyphs at Painted Rocks are primarily found on boulders on the talus slope, at the foot of the cliff, and in the shallow arroyo; although, a few petroglyphs occur on the cliff face (Panel 9). Petroglyphs are primarily of pawprints or bird tracks, plant forms or abstract designs. In general, these designs are small; with some pawprints being life-size.

A large amount of vandalism is present at the Painted Rocks site, primarily in the form of modern graffiti. Names and letters appear, both large and small, scratched and painted over and beside the rock art. The most noticeable vandalism is in the northeast section, at Panel 10, where large painted words cover many rock art elements and make them unrecognizable. Scratches appear on many painted figures, sometimes as words or letters, and sometimes randomly. In at least one case, an anthropomorphic figure from Panel 8a, which was documented by photograph in 1932 (see II below), had been extensively scratched by that period. The figure looks essentially the same today. Weathering has taken a toll on the rock art at Painted Rocks, but many paintings appear quite bright and virtually complete. The latter are primarily located beneath overhanging rocks in areas protected from strong wind currents and water. Petroglyphs at Painted Rocks site are in good condition. No vandalism was noted during the documentation, however, there are some elements which are covered by lichen and many which have completely repatinated. The latter are difficult to see.

Documentation of the Painted Rocks site consists of four parts, each designed to overlap and clarify the information provided by the other. These four parts are: 1) Panel Designation and Map; 2) Rock Art Panel Forms; 3) Photography; 4) Drawings.

1) Mapping.

Systematic documentation of Painted Rocks site required that the rock art be divided into panels, having a workable size, continuity of subject, and recognizable physical boundaries. This was accomplished by identifying 14 panels, horizontally located along the cliff base and talus slope, moving from southwest to northeast, across the site. Multiple boulders, with few elements per boulder, such as Panels 6 and 14, were grouped under a single panel number designator, with each boulder given a letter designation. In the cases of decorated boulders located in close proximity to and within the horizontal boundaries of a cliff face panel (Panels 8 and 9), the boulders have been designated by the same panel number as the cliff panel. Both the cliff panel and boulders have been given letter designations.

Once the panels were located, a map was prepared giving the relative location of each panel within the site and tying the panels to reference points believed to be of a long-lasting nature. It was requested by Salinas National Monument that all compass readings to determine location would be stated in terms of true north as of 1984. A magnetic declination of 15 degrees east of true north was used to determine true north. Compass readings were taken in the field by a hand-held Silva Ranger compass. Points of reference established for the mapping of Painted Rocks include three datums, numbered 1, 2, and 3. Datum 1 is a U.S. Highway 60 right-of-way

boundary marker of heavy-duty yellow metal which is near the southwest end of the Painted Rocks site. From Datum 1, the angle of the line of site across U.S. Highway 60 to the center of the southwest of two Santa Fe Railroad bridges is 125 degrees. Angles and distances were measured from Datum 1 to rock art Panels 1-9 and to Datum 2. In the case of small rock art panels, such as those on a single boulder, a single angle and distance measurement to the center of the feature was taken. In the case of large, continuous cliff panels, angles and distances were taken to the extreme left and right edges of the panels. All measurements were made with a 30 meter, fiberglass tape, over broken and often uphill terrain, between Datum 1 and the rock art panels. As stated above, Datum 2 was referenced to Datum 1 and, in turn, Datum 3 to Datum 2. The same procedure was followed from Datums 2 and 3 to map rock art Panels 10-14, as that procedure outlined above for Datum 1. A site datum (Abó 110) stake placed by Salinas National Monument was mapped into the rock art panel locational map as an additional reference point. Datum 2 is a wooden stake placed during the subject documentation, and Datum 3 is a U.S. Highway 60 right-of-way marker. All datums were flagged with yellow ribbons and identified with black ink.

Panel 14 is not completely visible from Datums 1, 2, or 3. Panel 14 was not located following the original mapping of the site, and to avoid establishing another datum, the extreme right or northeast edge of Panel 9 was used as a reference point from which Panel 14 could be mapped.

A scaled map was prepared of the Abó Painted Rock site. To aid in field relocation of panels, distinctive rock art elements from the panels were put on the map (when space allowed), in the appropriate places. Attached

(Table 1) is a written description of the relative location of the rock art panels at Painted Rocks site.

Photogrammetric recording or mapping of the Painted Rocks site is presently being prepared by Jake Ivy and Dave Battle, of the National Park Service, Southwest Regional Office. The resulting map will accurately depict the rock formations of the site, as well as the relevant rock art panel locations. With such a map, changes in the rock surfaces and positions can be monitored through time. Also, panel locations can be easily recognized and located in the field. The photogrammetric map panel locations are keyed to those of the scaled map which features distinctive rock art elements and was prepared in the field.

2. Rock Art Panel Forms

Rock Art Panel supplement forms were prepared for each of the 14 panels at Abó Painted Rock site. Information on the panel forms is concerned with the physical description of the panel, including exposure, identification and number of elements, panel dimensions, superimpositions of elements, and the colors of pigments or rock surface patina. The latter are keyed to the Munsell Soil Color Chart. In the case of surface rock patina of petroglyphs, relative aging may be observed by comparing color changes through time. Rock art panel forms for Painted Rocks site reference and augment information from the related documentation records. Rock art panel forms for Panels 1-14 are attached to this report.

3. Photography

A basic and complete documentation of Painted Rocks is provided by a set of 35 mm., Kodachrome 64 ASA color transparencies and 125 ASA black and white contact sheets and negatives. The majority of the rock art was photographed using a normal, 50 mm. lens, to avoid any distortion of elements and placement. A 28 mm. wide-angle lens was used in two instances (Panel 8a; Panel 13), and a 200 mm. lens was used in one instance (Panel 13). All of the rock art elements at Painted Rocks were photographed, including indistinct and unidentifiable elements. Whenever feasible, rock art panels are presented in overviews and in details, so that the details can be properly placed. In the case of panels too large or scattered for meaningful overview photographs, the panels were photographed by overviews of sections and by details. All of the rock art panels were photographed from left to right and from upper to lower (where applicable), with upper left being the first photo of any panel. In general, close-up, detail photographs emphasize distinct elements and small groupings, while indistinct elements are included in details of groupings or sections. All film documentation of Painted Rocks is scaled with black and white scales marked in 10 cm. increments. Exceptions to this rule include duplicate transparencies made for aesthetic purposes.

4. Drawings

Drawings of selected rock art elements, groupings, and entire panels, were prepared as part of the Abó Painted Rocks documentation. Polly Schaafsma of Santa Fe, New Mexico, prepared drawings from Panels 3, 4, 5, 7, and 8a. The writer prepared drawings from Panels 8a, 8b, 10, 11, and 13. All drawings are scaled and painted with water colors which, as closely as possible, match the appropriate Munsell colors and rock art pigments. One drawing from

Panel 8b is of petroglyphs, and the drawing colors only approximate the actual rock patina colors at that location. Scales for the drawings are either line-drawn or written on each drawing. Drawn scale lines equal 10 cm. in actual size. Paper for the drawings of the rock paintings is 100% rag, to provide good surface and lasting quality. The rock art reproduced in drawings was chosen based on its visibility, distinctiveness, stylistic qualities, subject matter, and context. Essential to the process was visibility, as drawings are valuable only insofar as they enhance the understanding of the rock art by exhibiting the rock art without the confusion of uneven rock faces, graffiti, chalking, etc. Attempting to draw an indistinct or incomplete element results in a subjective effort which may distort the rock art imagery and future studies. Even with the above selection process, the prepared drawings exhibit a number of areas where artist interpretation was necessary to execute details and color. Every attempt was made to be accurate, and incomplete or indistinct rock art is presented as such in the subject documentation drawings.

The drawing of Panel 4 deserves particular attention. On this drawing is represented a black and white Koshare figure superimposed by a feathered or horned snake. The heads of both the Koshare and snake are missing. Also, the feet of the Koshare are missing. This is the appearance of these figures in 1984 and was supposedly the appearance in 1938 or 1939 (Hurt documentation, Section II below). However, in 1908, Schweizer (Section II below) drew the Koshare with both head and feet and the snake with a head. In addition, Schweizer drew the Koshare stepping out of a pot-like element. These latter elements have spalled and/or faded from the rock surface of Panel 4. A clear scar remains in the area where the Koshare head would be located. Presumably,

some of the damage to the Koshare and snake occurred at the time of road construction for U.S. Highway 60. In 1933, Colter reports that the head is missing, probably due to the highway construction.

II. Historic Documentation of the Abó Painted Rocks

The first written description of the Abó Painted Rocks site was given by Adolf Bandelier in 1892:

The Mesa or "Loma" on which these small houses stood overlooks a gorge bordered by low cliffs, called the Canon de la Pintada. The name is derived from a number of aboriginal pictographs executed in red, yellow, green, black, brown, and white, in sheltered places on the walls of the cliffs. They are mostly human figures, and their colors lead me to suspect that they date from the historical period, for the yellow looks like chrome-yellow, and the green is far too bright not to be some paint unknown to the primitive Pueblo Indian. Some of the figures are interesting; for example, a man in yellow with a round cap on his head. This figure is called, by the people of Abó, "El Capitan." Really important are two figures of an Indian dancer, one of them masked, showing the naked and painted chest and the gawdy kilt worn by the men on solemn occasions. The other plainly represents a "delight maker", or jesture, with his body painted black and white after the manner of the Koshare, Kosare, Kuenshare, or Shi-p'hung, as these clowns are called among the Queres, Tehuas, Jemez, and Tiguas. By the side of the human figure stands a snake, apparently rising to or descending from the face of the dancer. When I showed a copy of this pictography to one of the leading Shamans of San Juan, he appeared startled, and finally confessed that it was a record of the snake dance in the shape of a Koshare, playing with the reptile. As the paintings are probably of the time when New Mexico was already Spanish, I believe that the Piros of Abó made them. The snake dance is a Cachina, and these pictographs, therefore, confirm what my Indian friend from Cochiti stated in regard to the paintings at the Cueva Pintada--that such records of the Cachinas were usually executed whenever a pueblo was to be forever abandoned. Should this hold good in the light of future investigations, it is quite likely that the paintings in the Canon de la Pintada date from the time when Abó was definitely abandoned, or from about 1671. Beside the human figures, there are various symbols, such as the rain, shields, and headdresses, all of which figure in Pueblo Indian dances, and more particularly, in the Cachinas (Bandelier 1892:276-277).

In 1908, Herman Schweizer of Albuquerque, New Mexico, walked to the Abó Painted Rocks site and drew portions of the rock art and made notes as to

approximate sizes and colors of the elements drawn (Colter 1933). In 1932, Schweizer's drawings provided the subject for polychrome paintings which were placed on the second floor gallery ceiling of the Watchtower, at the south rim of the Grand Canyon, Arizona. The Watchtower was built by the Fred Harvey Company and designed by architect, Mary Colter, who described the subject and origin of the ceiling art in a 1933 manual titled, "The Indian Watchtower at Desert View and its Relation, Architecturally, to the Prehistoric Ruins of the Southwest." Colter (1933) describes the current conditions (1932 to 1933) of the Abó rock art and contrasts that with the conditions which Schweizer found in 1908. U.S. Highway 60(?) had been built following Schweizer's initial documentation. The construction of the highway reportedly resulted in the spalling of rock surfaces at the Abó site, as well as leading to the defacing of the rock art by vandalism (Colter 1933). Colter (1933) reports that photographs were taken of the Schweizer drawing. At least two of these photographs are on file at the Study Collection, Grand Canyon National Park, Arizona. One photograph features a Koshare figure, stepping from a pot-like element or a bowl. The Koshare is superimposed by a large snake with horns or feathers protruding from the body. These figures clearly fit the description of a Koshare and snake described above by Bandelier (1892) and presently documented at Panel 4. The other photograph features a "star-figure" (an anthropomorphized equilateral star) which is titled, "Star-frog." Figures similar to the latter are presently documented at Panel 10. However, it is probable that the figure drawn by Schweizer is from Panels 3-8a and is no longer visible. The above photographs of Schweizer's drawings are accompanied by a photograph of an original rock painting at the Abó site, Panel 8a, which was presumably taken around 1932 or 1933 by Colter or her agent (Study Collection, Grand Canyon National Park). The

above original photograph shows a large yellow-brown anthropomorphic figure from Panel 8a. Importantly, the early photograph shows a number of scratches on the anthropomorph, something noted during the current documentation of the panel. It is assumed by the writer that the scratches represent vandalism to the figure (and, as such, the scratches were not included on the drawing of the figure). However, it should be noted that the presence of the scratches in the 1932 or 1933 photos dates the scratches to at least that period. Unfortunately, without Schweizer's original 1908 notes, there is no record of whether the scratches were present at that early date. Had the scratches been present prior to the building of U.S. Highway 60, it is possible that the scratches are from the prehistoric, protohistoric or Spanish occupation periods.

Colter (1933) asserts that artist Fred Geary, who painted the ceiling at the Watchtower, accurately copied the 1908 drawing of Herman Schweizer. However, Fred Geary's paintings at the Watchtower cannot be used as a completely detailed record of the rock art at Abó as several omissions are noted on the Geary paintings. It is not known if Schweizer's original drawings also omitted such details. A complete set of color transparencies of the second story ceiling paintings at the Watchtower are included in the subject documentation material for the present Abó study, and are attached to this report. Each photo view is labeled with the relevant panel numbers from the Abó site. Appendix I of this report includes a listing of each transparency and details of panel locations of the elements and any discrepancies noted between the Geary representations and the rock art at the Abó site. Despite detail omissions, the Schweizer/Geary work is a clear contribution to the documentation of the Abó site, especially as it dates from a period prior to the building of U.S. Highway 60 and resultant damage to the site. A copy of Schweizer's

original drawings would obviously be of great value, insofar as he may have included details later omitted by Geary and may have drawn more elements from Abó than those painted by Geary at the Watchtower. Of major significance are the representations in a photograph of Schweizer's drawing (Study Collection, Grand Canyon National Park) and in Geary's painting of the black and white Koshare figure stepping from a bowl with a superimposed snake, both of which have been described above and will be described below. It is obvious from the Colter manual (1933) and the photograph of the 1908 Schweizer drawing (Study Collection, Grand Canyon National Park) of the Koshare and snake, that the head of the Koshare and the bowl, as well as details of the snake, were drawn in the field by Schweizer. However, it is not clear if the Koshare head, the bowl, or the head of the snake drawn by Schweizer are accurate or represent an attempt by him to present the figures as whole. It appears that Colter accepted Schweizer's 1908 record or, at least, the presence of a head on the Koshare as she notes in a 1932 scrapbook (Study Collection, Grand Canyon National Park) that the head "has since disappeared." No note is made of the presence or absence of the bowl or the snake's head in the 1932 scrapbook. (A copy of the Geary painting is on the cover of this report.)

In 1939 (?), Wesley R. Hurt, of Indiana University Museum, prepared a report on the Abó Painted Rocks site, including adjacent petroglyphs to the north of the site, which are not covered in the present study. Hurt's report includes line drawings and a summary verbal description of the rock art, as well as a classification of the rock paintings and petroglyphs. In addition, Hurt analyzes the Abó rock art in terms of the distribution of element-types in rock art of various regions in the United States and in the context of available archaeological and ethnographic data. Hurt also addresses the function of the rock art and discusses various interpretive concepts. It

is not clear whether Hurt examined all of the rock paintings at Abó as his "pictograph" count of 81 "conventionalized, naturalistic" figures and 28 "geometric" designs seems low in light of the approximately 182 clear "representational" and "abstract" painted elements counted in the current study, especially as it is assumed that Hurt had the opportunity to see elements which are presently less visible. However, Hurt remarks that many elements were weathered beyond recognition. Hurt does not describe vandalism at the Painted Rocks, and it is assumed that at least some of the vandalism presently at the site was not present in 1938 or 1939 when Hurt was working at the site, although, from the Colter photographs and various notes (1932; 1933) it is known that some vandalism was evident as early as 1932. Plate II of Hurt's report (1939?) depicts the various elements from the Abó Painted Rocks which are discussed in the report. A copy of Hurt's Plate II is attached to this report (Figure 1) and the various elements are identified as to their present panel location. It is noted that the Koshare and snake (Panel 4) described by Bandelier and depicted by Schweizer above, are described and depicted by Hurt (1939:11; Plate II) (Figure 1). The latter Koshare is shown without a head and without the pot-like element from which it steps in the Schweizer/Geary drawings. The snake is also shown without a head in the Hurt drawings, unlike those of Schweizer/Geary.

The works of Bandelier, Schweizer, and Hurt will be referenced in the analysis portion of this report (Section III).

III. Rock Art Analysis

A. Archaeology of the Salinas Province. The historic pueblo of Abó is culturally part of the Salinas Province of south central New Mexico.

The prehistory of that province indicates that by A.D. 1100 horticultural-hunting and trading populations were occupying above-ground stone and adobe structures, which were built behind underground kivas. The latter were earlier traits in the Rio Grande Province to the north of the Salinas and on the Colorado Plateau. Pottery, up until the 1100's, had been of a Mogollon tradition (an undecorated reddish-brown ware), but this was now joined by the black-on-white Chupadero which was manufactured in the southeastern portion of the Salinas Province and widely traded. Stimuli for both the above-ground structures and the Chupadero pottery are seen as coming from the Little Colorado River Anasazi of the Cibola District, historically associated with the pueblo of Zuni. After approximately A.D. 1300, a period associated with classic Pueblo IV architecture of stone apartment houses built around kivas and plazas in the Rio Grande and Salinas Provinces, Abó began to manufacture red painted clay-pottery which has origins to the southwest of Zuni. However, after 1545, Abó did not share in the making of Tabirá pottery which replaced Chupadero ware in the southern Salinas pueblos. This introduction of Tabirá pottery, as well as cremation practices, to the southern Salinas Province (in particular, to historic Gran Quivira) is credited to a sizable population shift from the Cibola District into the Salinas (Hayes 1982). It is assumed that the above cultural impact on the southern Salinas Province pueblos would have, to some extent, influenced the people of Abó.

B. The History of Abó Pueblo. Spanish contact with Abó Pueblo is first reported by the Rodriguez-Chamuscado Expedition of A.D. 1581-1582, in which 11 pueblos of the Salinas Province are identified. Abó was attributed with having a population of 800 people (Schroeder 1979:240). In 1598, Oñate recorded that the people of Abó (along with those of the Pueblo de las Jumanas) (Gran Quivira)

and supposedly Tenabó, spoke the language, Tompiro. In 1598, a captain of Abó was named Chili (Schroeder 1979:240). In 1601, people from Abó started a revolt and killed two Spanish soldiers; the revolt was joined by people from nearby Quarai Pueblo. A resultant battle fought near the pueblo of Acoloco caused Indian casualties and led to their capture and surrender. Abó Pueblo fell under the annual tribute system required by the *encomiendas* Governor Oñate and by 1620, Franciscan missionaries had reached the Salinas Province. The building of churches and the establishment of missions began after that period, and the church of San Gregorio was constructed at Abó.

In the 1660's, conflict between the clergy and the civil government of New Mexico resulted in heavy labor by some of the Salinas Indians and occasional encouragement to the Indians to publicly practice Katsina dances which had been suppressed earlier. Droughts, famine, and Apache raids, combined with the stresses of Spanish civil and clerical demands on the Indians of the Salinas Pueblos, resulted in the abandonment of Abó, Jumanas, Chilili, and Tajique in 1672. The population of Abó at the time of abandonment was given at more than 300 people (Schroeder 1979:241).

C. Description of the Abó Painted Rocks Site. The rock art at Abó Painted Rocks is culturally and stylistically affiliated with the prehistoric and historic Pueblo IV and V populations of the Colorado Plateau and the Rio Grande region. Rock art elements documented in the present study at Abó do not reflect Euro-American ideology, and, as such, are presumed to have been made prior to A.D. 1600-1620 or to be indicative of Pueblo cultural resistance to Spanish attempts at Christian conversion and suppression of native beliefs and ceremonies.

The rock art at Abó Painted Rocks is made in the Rio Grande Style as described by Schaafsma (1971; 1980) for the rock art and kiva art of the post-A.D. 1300 Pueblo population of the Colorado Plateau and the Rio Grande/Salinas Provinces of New Mexico. Schaafsma (1971; 1980) has made convincing arguments for the advent of the Rio Grande Style coinciding with the introduction of the Katsina Cult. Strong stylistic relationships may be seen between the rock art masks of the Jornada Mogollon (Davis and Toness, 1974; Schaafsma, 1980) and those of the Rio Grande Style. Mexican deities, such as Tlaloc (a rain god) are recognizable in the Jornada (Mogollon) Style masks of the twelfth century at Hueco Tanks, Texas, and at Alamo Mountain, New Mexico (Schaafsma 1980:203-211). Archaeological relationships between the Toltec trading center of Casas Grandes, Mexico, and the Jornada Mogollon have been established. The latter supports arguments that the Toltecs are responsible for introducing the agricultural Meso-American religious and ceremonial ideas of sacrifice and renewal to the Mogollon/Anasazi when those cultures were undergoing various stresses and were receptive to such ceremonies. After A.D. 1200, in the Rio Grande and Salinas Provinces populations were expanding to accommodate the Anasazi abandonment of the northern Colorado Plateau and the Four Corners area. To the south and east, the Mogollon culture was in a decline. Stylistic relationships between the rock art and pottery art of the Mimbres (Jornada Mogollon) and elements of the Rio Grande Style are obvious. The latter is especially true in the case of full-figure, profile anthropomorphs and stylized zoomorphs and geometric motifs. Both rock art and kiva art have a long tradition among the Anasazi of the Colorado Plateau. A rock art tradition of somewhat less complexity endured through time in the Rio Grande and Salinas Provinces and on the desert and plains of New Mexico prior to A.D. 1300. It is the combining of both rock art traditions with the strong imagery of the Katsina

Cult which forms the basis of the Rio Grande Style. Rio Grande Style rock art is characterized by anthropomorphs, both naturalistic and active, as well as stylized, often exhibiting masks and headdresses as well as jewelry, weapons, and clothing of the post-A.D. 1300 Pueblo. Masks, as independent elements, are one of the dominant motifs seen in the style. Zoomorphs depicted in the Rio Grande Style include insects, reptiles, birds, cats, bears, canines, and deer or elk, antelope and various small mammals such as skunks. Pawprints and bird tracks are, also, often depicted. Various plant forms, including corn plants, are depicted. Shields and shield-figures, feathers, and elaborate geometric motifs of "cloud" terraces and blanket or pottery-like designs complete a summary list of Rio Grande Style elements.

An additional influence on Rio Grande Style rock art may be the rock art and material culture of the Great Plains. Certainly, motifs such as "fringed leggings", bison-horned headdresses, mocassins and "Thunderbirds" are suggestive of Plains influences. The making of dragonflies, (non-Christian) crosses, and equilateral and equilinear stars are common to the rock art and material culture of both the Plains and the post A.D. 1300 Anasazi (Keyser and Sundstrom 1984; McCoy 1984). Many of the eastern Pueblos, including those of the Salinas Province, lived on the edge of the Plains and had a long tradition of trading with Plains populations. At the time of Spanish contact, the Pueblo of Gran Quivira traded extensively with the Apache. Lange (1979) describes extensive interaction between Pueblo and Plains cultures over time and space, including common language, ceremonies, clothing, and hairstyles.

A summary of the representational elements present and clearly visible at Painted Rocks site includes: anthropomorphs (partial and whole)-69; zoomorphs

(predominately birds)-13; masks-74; other (hand or pawprints, shields, "rabbit-sticks", stars, crosses, bows, plants, etc.)-48. At Painted Rocks, anthropomorphs are both naturalistic and static and appear in profile and with a frontal view. Naturalistic figures are more often in profile and may indicate motion. The Koshare figure from Panel 4 (discussed above, Section I; II) is quite naturalistic and appears as if partially turned. A star-face anthropomorph is at Panel 10, and one may have been present at Panels 3-8a (Colter 1933), but is now not recognizable. Anthropomorphs at Panels 3 and 13 appear holding curved "rabbit-sticks." Bows are held by a pair of anthropomorphs at Panel 10. A series of "fringed leggings" at Panels 3, 4 and 5 may have been part of rows of anthropomorphs but now appear as independent elements. Additional clothing depicted at Painted Rocks includes a manta at Panel 4 and various kilts and sashes. Elaborate body paints or costumes are also depicted, along with jewelry and armbands. Jewelry includes a pendant, necklaces, bracelets and earrings. (Rock art panel forms, Panels 1-14, attached.) Small, solidly-painted anthropomorphs occur at Panels 3, 4, and 10. The latter panel includes two possibly hunch-backed figures. Shield figures (anthropomorphs with large shields in front of their bodies) are present at Panels 3 and 10.

Polychrome masks are a predominant element at the Painted Rocks and occur being worn by anthropomorphs and as individual elements. Interestingly, only one clearly defined petroglyph mask occurs at the portion of the Painted Rocks site documented in the present study. Adjacent petroglyphs, to the west of the study area, however, are known to include masks. Masks range from simple, round outlined elements to elaborate rectangular or bowl-shaped masks painted with various designs. At Painted Rocks, masks with down-turned "mouths" or

chin areas are common, as are angled stripes of paint across the eye and/or cheek areas. What are assumed to be feathered headdresses are common on masks and anthropomorphs at the Painted Rocks. The most common headdress is a simple row of vertical lines across the top of the head. The latter are often red or brown lines protruding from a red base (see the drawing of Panel 8a anthropomorph). Faces associated with this headdress often do not appear to be masked as the faces are often blank. Related to the latter headdresses may be the following account by Schroeder (1979:240) of the Rodriguez-Chamuscado Expedition of 1581-1582 to the Tompiro Pueblos:

The first Pueblos had two plazas with four kivas (Tenabó) where they danced and bathed. These also served as community centers and lodging for strangers. In front of each stood a black stone "four-fingers" thick, two feet wide, and about five and one-half feet high, on which an Indian with a flaming crown was painted. Each of the two pueblos (the second pueblo was Abó) housed 800 people.

At Painted Rocks site, Panels 3, 8a, and 10, masks occur on or around the corners of rock faces. Masks on corners also occur at Hueco Tanks, Texas, in the Jornada Mogollon Style and in Meso-American mask sculpture art. Schaafsma (1972; 1980) notes that masks on corners are common in the Rio Grande Style. A small carved cobble removed from the historic level of Kiva D at Gran Quivira (Vivian 1979:119-120) exhibits a round mask, not unlike those at the Painted Rocks site. (Rock art panel forms, Panels 1-14, attached.)

Zoomorphic elements at Painted Rocks site include a fawn or a lamb, a mountain sheep, several birds, both small and large (all similarly depicted with a flared tail and squared wings, "Thunderbird-like"), several simple dragonflies, and snakes. Bird effigies made from fossil brachiopods are reported from Mound 7 at Gran Quivira (Young 1981:134). The latter are stylistically similar to birds depicted at Abó Painted Rocks. Snakes include two stylized "feathered" or "horned" snakes which are similar in appearance,

one to the other. The more complete of the two occurs at Panel 4, where it superimposes the now headless Koshare discussed above. The less complete of the two occurs at Panel 8a, where it superimposes a mask-like element. Other less elaborate snakes occur at Painted Rocks petroglyph panels. Panels 9b; c, exhibit motifs which may be tadpoles or seed sprouts. Tadpole elements are common in Rio Grande Style rock art as are sprouting seeds. (Rock art panel forms, Panels 1-14, attached.)

Handprints, both positive and negative, occur at Panels 3, 4, and 5 of Painted Rocks. At Panel 3, there is a clear "mutilated" handprint with a partially missing finger. Handprints are common to the Rio Grande Style rock art as they were to the rock art of the Colorado Plateau Anasazi. Hand designs are also common on post-A.D. 1300 Pueblo pottery and are seen on Katsina masks and clothing. Pawprints and bird tracks occur only as petroglyph elements in the present study area of Painted Rocks. Most of the prints are relatively crude, but a few are skillfully executed, and some prints are highly stylized. Animals possibly represented at Panels 6, 9, 10, and 14 are mountain lions, badgers, bears, and small mammals, cats or canines. Three-prong bird tracks may represent the turkey, and there is at least one representation at Panel 6a of a Roadrunner track. In a few instances (Panels 8 and 9), paws are depicted with the forearms. Rock art representations of pawprints are common to the Mogollon (Schaafsma 1972) as well as the prehistoric and Historic Hopi Pueblo people of northeastern Arizona. The Hopi are participants in the making of Rio Grande Style rock art. Among the Hopi, various pawprints may be used to designate visitation by clan members to a particular location. A famous site featuring hundreds of such symbols is Willow Springs, Arizona. The Willow Springs site is a sacred spring along a traditional route used by the Hopi to

collect salt. A possible analogy could be drawn between the Painted Rocks site and Willow Springs, insofar as Abó Pass, prehistorically and historically, provided access to Indians seeking the Estancia Valley salt beds. The Abó Painted Rocks site is also located near a spring. Other clan symbols used by the Hopi at Willow Springs include plant forms, snakes, spirals (and other abstracts) and masks. Similar motifs are noted among the petroglyphs at Painted Rocks. However, many of the petroglyph symbols discussed above are ethnographically known to have multiple meanings and uses among the Pueblos, and, thus, cannot be assumed to represent clan symbols or totems at the Painted Rocks. Hurt (1939?:9-10) remarks that it is possible that the pictographs (versus the petroglyphs) at Painted Rocks were made by various (non-Abó) Indians utilizing salt from the Estancia Valley or using the Abó Pass for other reasons. The reasoning behind the latter theory seems to be based on the closer proximity of the petroglyphs (those not included in the present study) to the Mission of Abó and the observed differences between the subject matter and techniques of the pictographs (rock paintings) and the petroglyphs. There is no known archaeological or stylistic reason to support such a theory, and the distance from the Abó Mission does not seem relevant as Bandelier (1892) reports structures on the hill above the pass, and petroglyphs are present at the painted art location. Subject matter and technique differences between the painted and pecked art at Abó may relate to different functions for the two forms of art. The latter concepts will be discussed later in this paper. In addition, the presence of clans or similar social structures among the groups making the above petroglyphs at Abó cannot be ascertained. Shields at Abó Painted Rocks are primarily seen in the form of shield-figures discussed earlier. Equilateral stars are seen as star-faces (discussed above) and as independent elements, as seen in Panel 13. Curved "rabbit-sticks" and bows

are usually seen being held by anthropomorphs at the Painted Rocks site. Rabbit-sticks, at Panels 4 and 13, are painted rainbow-like. Rainbows are a common theme in Rio Grande Style rock art and in Pueblo mythology. Katsina masks frequently display rainbow-like stripes. Feathers occur in abundance at Painted Rocks, primarily seen in headdresses, and chiefly in Panels 3, 4, and 5. At Panels 3 and 7, anthropomorphs are shown holding flute-like elements, and at Panel 10, two anthropomorphs hold sticks. (Rock art panel forms, Panels 1-14, attached.)

Abstract motifs common to Painted Rocks include a terrace design, rows of vertical lines (open and enclosed), simple (non-Christian) crosses or stars (which may be insects), curved or wavy lines and various circles. Many painted, and some petroglyph elements at Painted Rocks, remain unidentified. The latter may be all that remain of representational or abstract designs, or may be random, abstract elements which were never more than they appear at the present. Obviously, much of the painted art at the site has been removed by weathering and vandalism. Indistinct or incomplete designs are often impossible to classify. In conclusion of the description of elements present at the Painted Rocks site, it should be pointed out that the cultural continuity of the Salinas Province is displayed in designs from Tabirā black-on-white pottery which features representational and abstract elements typical of both the Rio Grande Style and the rock art of Painted Rocks (Vivian, 1979: Figures 31-36; Figure 42).

Rock paintings at the Abo Painted Rocks site exhibit at least seven colors: dark and light red, black, pinkish-white, (blue or grayish-green), brownish-yellow, yellow (Note: these are general descriptive colors. See rock art panel forms for Munsell colors). Additionally, the paintings show

evidence of the mixing of the seven colors resulting in varied shades such as pink, orange or coral, gray or charcoal, and yellowish-green. Pigment sources for the paintings are assumed to have been stable over time, as there is a great deal of consistency between colors at the various panels of the site and between elements, which are both superimposed and superimpose. Possible sources for the above paints are suggested by the pigments analysis of the Pueblo IV Jeddito Murals of Awatovi and Kawaika-a, Arizona, which are in the Rio Grande Style (Smith 1952:22-24):

Yellow-Goethite or limonite;
 Red-Hematite or clay or sandstone containing hematite;
 Red ocher (iron oxide);
 Brown-Manganese dioxide with iron or ferric carbonate with impurities;
 Blue (gray)-Carbon with white silicious material or clay (natural or artificial);
 Green-Malachite or yellow iron oxide with carbon particles and other;
 Black-Charcoal; bone black; carbon-iron; manganese;
 White-Kaolin; silica and gypsum; calcium-carbonate (chalk).

Suggestions as to the nature of pigment binders (Smith 1952:30) are: saliva chewed with seeds or plants; water. There is no archaeological evidence to support Bandelier's (1892:276) statement (reprinted in Section II of this paper) that the colors at Painted Rocks are too varied for the prehistoric Pueblo Indians, and, therefore, must date from a period following Spanish contact. The prehistoric rock art and material culture of the Southwest is replete with a variety of colors, including those present at Painted Rocks. Ample evidence of the great variety of paints and colors available to the prehistoric Pueblo Indians is found in the Kiva Murals of Awatovi and Kawaika-a (Smith 1952), Kuaua (Dutton 1963) and Pottery Mound (Hibben 1975).

A majority of the paintings at Painted Rocks were undoubtedly placed on the wall with brushes, something also true of the Jeddito Murals (Smith 1952). Many of the paintings at Abó are so carefully executed as to not allow for

finger paintings or other less controlled ways of spreading paint. During the documentation of Panel 3, it was noted that the red and white vertical stripes on one anthropomorph are so straight that the use of a straight edge must have been necessary when the painting was executed. Negative handprints such as those seen in Panels 3 and 5 at Painted Rocks are produced by blowing pigment around a hand pressed against the wall. Positive handprints are made by placing a painted hand on the wall. Other techniques of painting noted at Painted Rocks include a large number of outlined elements, either in white, to contrast with dark interior colors, or in the same color as the interior (see drawings of Panel 3). Smith (1952:115-116) discusses extensive use of contrast and separation outlining in the Jeddito Murals. Overpainting of elements for detail is a technique also present at both Painted Rocks and in the Jeddito Murals. This is apparent at Panel 8a, where the legs of an anthropomorph were painted yellowish-brown and a white kilt, or sash or "girdle", was painted over the legs. The white has since faded, leaving only the legs and groin area exposed. It is assumed that the kilt of the latter figure was never intended to be a full or solid kilt, and that the "see-through" characteristic is intentional. This is discussed later in this paper.

A trait common to the Jeddito Murals is a consistent replastering of kiva walls to remove from sight earlier paintings, or to make space for new paintings. Partial walls were replastered, indicating the need for a specific space on the wall. The latter situation was also noted at Kuaua (Dutton 1963:37). Smith (1952:320-321) proposes that the Jeddito Kiva Murals may have been used to represent ceremonies featuring both natural and supernatural participants and may have bordered or actually replaced upright altars or screens (Figure 3a, b) which were ceremonially positioned in front of specific

kiva walls. The removal of such images from the wall, following a ceremonial period, or at regular intervals, is consistent with historic Pueblo ceremonial practices, as well as with events observed by the Spanish and reported by Villagra¹ in 1598 at Puarai (Tigua or Keres village of the Rio Grande Province): "The walls of their rooms have been recently whitewashed and the rooms were cleanly swept. The next day, however, when the whitewash had dried, we were able to see, through the whitewash, paintings of scenes . . ." (Smith, 1952:74). A somewhat related situation is present at the Abo¹ Painted Rocks where various paintings appear as if coated with a white paint, making them no longer clearly visible. An example of this exists at Panel 10, where two of a series of four masks (or mask or shield-like elements) (see drawing of Panel 10) are covered with white paint. Weathering has reduced the thickness of the white covering, revealing a variety of colors and forms from beneath. However, it is not clear at the Painted Rocks which (if any) new elements have been placed over the white, or how many times the paintings have been covered; but it is clear that non-obliterated elements are adjacent to the white areas. At Panel 4-upper, red paintings appear over white and cream-colored rock surfaces which appear to have been coated with a paint of some description. Another situation at Painted Rocks, which is perhaps ideologically and functionally related to the replastering and repainting of kiva walls, is the bold and repeated superimposition of single elements and groupings. Such superimposition among the rock paintings is especially obvious at Panels 3 and 4, where up to four layers of superimposed elements are present. There is also a noticeable crowding of painted elements at various locations (Panel 3, 4, 5, 8a, 10, 11, 13), an act which may also be ideologically and functionally related to a renewal of ceremonial images. Whitewashing previously painted images or new rock faces may not have always been effective on the rough sandstone walls at the

Painted Rocks site. It is possible that portions, if not all, of Painted Rocks, were used as kivas with specific areas of the cliff designated for repeated use in certain ceremonies. The idea that the Painted Rocks may have been used as a kiva is supported by Chapman's (1938:147) documentation of mural paintings in caves of the Pajarito Plateau (Rito de las Frijoles) which were once used as kivas (Smith 1952:69). Superimpositions occur at Painted Rocks at eight of fourteen panels. The painted superimpositions do not change stylistically until what appears to be the most recent art. Hurt (1939?:9) notes that the most recent painted art at the site is geometric designs of a cream color (see drawing of Panel 13). It was noted in the present study that the thickly painted designs do represent the most recent art and are somewhat atypical of the usually carefully executed Rio Grande Style art. However, a number of elements at Painted Rocks may have been painted with the same thick pigment, and the latter represent typical Rio Grande Style elements. An example is a red and white-striped bird at Panel 10 (see drawing of Panel 10). The atypical elements may merely represent a period of decline in the ceremonial usage of the site.

Because of the similarities between Rio Grande Style rock art sites and kiva (and other structure) paintings in subject, theme, and form, it is necessary to look closely at elements, compositions and techniques, to try to determine the functions of the various locations. It is probable that the Pueblos made a variety of images to satisfy a number of social and religious functions, ranging from education to healing and katchina rituals. Schaafsma (1975:59-60) reports that a number of circular structures, which possibly served as shrines, are located near Rio Grande Style rock art at Cochiti, New Mexico. Also, at Cochiti, Schaafsma reports that stretches along the

river were known to have been used ceremonially, and that high places are recognized as special places or shrines. Springs which serve as shrines near Zuni (Young and Bartman 1981) exhibit rock art and offerings dating from the Basketmaker period to the present. A review of the reported Rio Grande Style rock art sites reveals that there is a relatively small amount of superimposition among the elements, however, crowding of elements is common at petroglyph sites such as Cochiti, Galisteo, and San Cristobal, New Mexico, and Abó (adjacent to the present study area) (Schaafsma 1972; 1975; 1980). The majority of reported Rio Grande Style rock art, including the above sites, are composed of petroglyphs. Rock paintings, such as those at Tenabó (Schaafsma 1972: Fig. 111; 1980: Fig. 203), and kiva paintings are generally free of superimposition, but may be crowded. Obviously, the renewable kiva paintings have no need to be superimposed unless it is necessary for expression of an idea or creation of a design. Petroglyphs may be rarely superimposed because of the technique of manufacture one which, by its very nature, would prevent a clear element being placed over another; and the crowding of elements may enable a single location to be repeatedly utilized for art. Basically, there does not appear to be a clear relationship between site location, technique, and function of Rio Grande Style art. However, Abó Painted Rocks appears to be unique in the relative amount of superimpositions present, as well as in the number of katchina-like figures present at a rock art site. Possible explanations for these facts include: Pueblo use of the site as a kiva, special ceremonial significance of the site (a shrine) over a long period of time, and intense ceremonial utilization of the site during the time when kiva and other village ceremonies were suppressed by the Spanish. It is possible that the Abó Painted Rocks site has been used for all of the above reasons. Certainly, the elements, in large part, reflect the ceremonialism of kiva

paintings, and analogies have been made between specific rock art representations and katchina representations found in kiva murals (see below). The sense of ritual practice is strong at the Painted Rocks, however, the petroglyphs adjacent and to the southwest of the present study area are closer to the Abó spring (a probable shrine location) and do not reflect the same intensity of ceremonialism or katchina-like elements as do the Painted Rocks. Petroglyphs within the present study area (described above) are not suggestive of kiva ceremonies and may indicate multiple utilization of the site over time.

D. Archaeological and Ethnographic Relationships to the Abó Painted Rocks.

In addition to the general stylistic relationships, specific rock art elements and motifs of the Abó Painted Rocks are known to occur at other Rio Grande Style rock art and kiva art sites, as well as in the material culture of the modern Pueblo population. Equilinear crosses, such as those at Panel 1, are common in Pueblo IV and V rock art and may represent stars or insects. The latter occasionally occur with the double-wing (or cross) motif (Panel 8a) which is believed to represent a dragonfly. Both motifs occur in various rock art sites and in the Jeddito Kiva Murals, as well as in those of Pottery Mound and Kuaua. Smith (1952:223) reports that dragonflies are known to symbolize water and growth and are a cure for sore eyes at Zuni. A "mutilated" handprint, described earlier in this paper, is present at Panel 3 (Plate 1). The function of this and other handprints at Painted Rocks is not known, but it is known that a handprint has been utilized by historic Pueblos as a sign of ownership, and handprints have been used worldwide to indicate supplication and greetings. The Hopi and Zuni impersonate a Hand Katchina. The significance of the "mutilated" finger is not known, and it can merely represent the accidental loss of a finger. However, an ideological or physical relationship

with Plains' cultures could also be represented by the "mutilated" hand. Historic Plains populations practiced sacrificial finger mutilation. Archaeological and historical relationships between the Plains and the Salinas Province Pueblo have been discussed above. At Panel 4 (see drawing of Panel 4), a striped anthropomorph (similar to one in Panel 3) holds a curved rainbow-like object believed to represent a rabbit-stick. In Panel 13 (see drawing of Panel 13), an anthropomorph holds another curved and rainbow-like rabbit-stick. The latter figure also holds a torch or branch-like item and other unidentified elements. At Kuaua, Dutton (1963:54; Fig. 61) reports a painting from Layer 0-43 which pictures an anthropomorph Chà Kwena' okya (Ancient Woman at Zuni), a flaming tree with a fire torch, rabbit-stick, lightning and prayer sticks, tracks and feathers. In general, these elements resemble those at Panel 13. Dutton (1963:54) describes the painting as depicting a ceremonial rabbit hunt, involving the participation of the hunters' fraternity, Rain Priests and Bow Priests, and the katchinas. The rainbow-like nature of the Abo rabbit-sticks probably evokes the concept of "way" or path from the sky to the earth and the concept of rain. The rabbit hunt of the supernaturals described by Dutton is part of the Zuni initiation of males into the Kiva or Katchina society. The red-striped figure holding the rabbit-stick at Panel 4, is depicted by Hurt (1939?: Plate 2) as having wings, but Hurt reports that the figure is not typical of Pueblo bird dancers. The elements presently surrounding the striped figure are badly eroded, but it appears that part of what Hurt reproduces as wings are actually "fringed leggings" which are part of another element or elements.

An elaborate red and white-striped anthropomorph with a turquoise "cap" and a possibly tall elaborate headdress is present at Panel 3 (see drawing of

Panel 3). Unfortunately, half of the above figure is now missing, however, it is possible to see a rainbow-like down-turned "mouth" or mask design. The figure is also similar to the striped figure in Panel 4 which holds the rainbow-like rabbit-stick (discussed above). Three katchinas illustrated by Fewkes (1982: Plates XX, XXXIV, XXXV) have red bodies and feature down-turned, rainbow-like motifs on their masks: Owa (appears in the Powamû festival); C; toto (appears in Palûlûkõnti), and Tacab (Naac tadjâ, a Navajo katchina which appears in Palûlûkõnti). The Calako mana of Hopi also features a down-turned rainbow-like mouth as do figurines of corn maidens (Fewkes 1983: Plates LVI, XXVII).

At Panel 4, the much discussed Koshare and snake figures are present. If the Koshare image, drawn by Schweizer in 1908 (discussed in Section II of this paper), is taken as accurate, it most closely resembles the Eastern Pueblo Koshare, which is described by White (1932:97) as having a white body with black horizontal bands, black rings around the eyes and mouth, a corn-husk headdress, a black breechcloth, and barefoot. A wall painting of a Koshare from Acoma, New Mexico (White 1932: PL. 11), is attached to this report (Fig. 2b). In the Acoma painting, the Koshare appears to have a *black* body with white stripes (opposite of White's statement). White-on-black is consistent with the general appearance of the Panel 4 Koshare. The snake figure superimposing the Koshare at Panel 4 appears to be the Awanyu, or Great-Horned Serpent, or Water Serpent of Pueblo mythology. Interestingly, the decorative motifs and shape of Awanyu at Panel 4 (and one at Panel 8a), closely resemble an Awanyu at Pottery Mound (Hibben 1975: Fig. 34). White (1932:97) reports that at Acoma, the K'acole, or Rio Grande Koshare society, involves itself in both clown and war functions. A war-like symbolism is

Tikewise associated with the "feathered serpent." The snake or Awanyu, is one of the most significant of the beast gods of the Pueblo Indians (Smith 1952: 212) and is a symbol associated with the ceremonies of the Snake and Antelope societies. In the 1908 Schweizer drawing, the Koshare appears to be stepping out of a jar or pot-like element. Nusbaum (Colter 1933: Note for Part Three, Chapter IV, Page 58) associates the jar with a Zuni Kiva jar:

. . . This may be a representation of the Koshare, or the Koshare spirit stepping from a jar. Evidently, these drawings, as I recall, bear many characteristics which are very strongly Zuni, and you may have here a mingling of Koyemsi, or mudheads, with the Koshare of the Rio Grande Pueblos, and the influence of Zuni ceremonial jars with the mask-like openings. Perhaps, behind it all there is a spirit of the individual emerging from the jar into a Zuni spirit world in off-ceremony season

Bandelier (1892:276) reports that a Shaman from San Juan (Pueblo) said that the Painted Rocks' drawing of a Koshare with the superimposed snake is a record of the Snake Dance. Fewkes (1982:114; PL. XXVI) illustrates and describes an event from Hopi, Arizona, which strongly evokes the Koshare and snake of Panel 4: a struggle between a clown (Tatcüküti) and the Great Snake (Palülü kōn) which rises from a jar, is played out in the March (Añkwānti) Festival (Figure 3). Schaafsma (1975:131) relates a Koshare with a snake found in Galisteo Basin, New Mexico, petroglyphs. Sims (1963: PL. A, 2a) illustrates a horned serpent from Galisteo, which is combined with masks. The latter is somewhat similar to that seen at Painted Rocks in Panel 8a (see drawing of Panel 8a) where a remnant of a snake similar to the one at Panel 4 superimposes unidentified mask-like elements. Adjacent to the snake are dragonflies, two diamonds, and another mask, which may relate to the kadcina, Palakwayo, the Red Hawk; Kwahu, the Eagle Kadcina, or Woe Kadcina. All of the above feature a Chevron across the nose and appear in the Powamû ceremonies at Hopi. In each case, the kadcinas are symbolic of the Sun or Sky god (Fewkes 1982:74; 93; Pl. VI; Pl. XV). Diamond-shaped eyes are found in an old mask of the

Honau or Bear Clan at Hopi (Fewkes 1982:160; PL. XLVIII). Fewkes (1982:157) believes that a general similarity in all the old masks, Bear chief, Snake chief, and Katcina chief, implies a common symbolic origin, such as that of Calako (Shalako at Zuni). Shalako, likewise, is symbolic of the sky. Thus, it may be that the above group of paintings at Panel 8a symbolizes various representations of the Powamû ceremony.

A simple yellowish-brown mask with a down-turned mouth at Panel 4 may represent that of a clown. Schaafsma (1975:57) notes that down-turned mouths are seen on clown masks at Hopi. It is noted that the subject Hopi clowns are the Hano clowns or Koshare. A white mask or face with negative eyes at Panel 4 is similar to the mask of the Acoma Katcina, G'o'mai o wic (probably also identifiable as a Koyemsi or mudhead clown), which may be red or white. These katchinas are present at various ceremonies where they are side dancers with Tsitsũnits. At the Fight ceremony at Acoma, the G'o'mai o wic are scouts or messengers. The latter ceremony involves the participation of the Antelope and Warrior people (White 1932:79, 88-94; PL. 10). War symbolism, perhaps related to ceremonies of the Antelope society, is strong at Panel 4. As discussed above, the Koshare has war and clown duties, one of which may have been a ceremonial struggle with the Great Serpent. The Snake Dance, which involves the participation of the Antelope and Flute societies, may be symbolized by the Great Serpent at Panel 4, which also has war symbolism.

At upper Panel 4, there is a small anthropomorph with a red kilt and a horizontal headdress. Facing the latter on an adjoining rock face is a quadruped which appears to be a fawn or a lamb (or even a calf). Whether the two figures are intentionally related is unknown, but they appear to be,

insofar as they are executed in similar pigments and are distinct from adjacent art. Two katchinas which may be related to the above figures are K ä na'kwe Mosona (Zuni) and Mucaias Mana (Hopi). The former, as described by Bunzel (1932:1009; PL. 33a) is related to the Corn Clan and belongs to the war-fertility complex at Zuni. Interestingly, the origin myth of K ä na kwe Mosona is closely associated with deer and deer symbolism. The Mucaias Mana appear at the Buffalo Dance at Hopi (Fewkes:1982; 124-125; PL. XXXI).

At Panel 5 at Painted Rocks (see drawing of Panel 5), there is a red and yellow "blanket-design" rectangle or panel with three heads or masks protruding from or over the top. Above all of these is a tilted mask-like element which is reminiscent of the mask from the Tenabó area illustrated by Schaafsma (1980: Fig. 203). However, the latter may be a basket as it displays a handle-like device on the side. The elements all appear to be compositionally related as the painting styles and colors are the same. Schaafsma (1975:131) describes the blanket-like motif as being similar to those of the Jornada Style rock art. This is especially true for the Hueco Tanks motifs featuring Tlaloc-like masks at the top (Schaafsma 1980: Fig. 163; Davis and Toness Fig. 28-A). Within the Rio Grande Style, more simple blanket-like panels or rectangles with heads or masks protruding from the top are seen at Cochiti, New Mexico (Schaafsma, 1975: Fig. 49). In his analysis of the kiva paintings at Awatovi and Kawaika-a, Smith discusses the role played by altars and screens in modern Pueblo and kiva ceremonies. Briefly, altars are composed of narrow, vertical slats of wood, variously painted and carved (Figure 4a, b). Objects related to the ceremonial process may be hung on or over the altar or placed against the altar. Such objects may include masks, fetishes, prayer feathers, and various symbols related to the ceremony. An altar such as the latter may be replaced by a

painted screen which is "unrolled and hung against the wall in much the same manner and purpose of the back-drop in a modern theatre" (Smith 1952:319). Smith (1952:320-321) argues that kiva mural paintings often serve to represent altars or screens and the necessary forms which would be attached to or painted on the altar or screens. Smith argues for the existence of altars and screens during the Pueblo IV period, when kiva mural art of the Rio Grande Style emerged. It is possible to view the Rio Grande Style rectangles or panels with heads above them as representing either altars or painted screens with mask attachments. Historic Pueblo use of screens for ceremonial puppet shows may also relate to the panel-and-head rock art representations. Whether any of the latter relates to the Jornada Mogollon (Jornada Style) motif is unknown, but, given the earlier reference by Dutton (1963:167) to a katchina figure on a pre-A.D. 1200 Mimbres bowl, it is possible that both practice and motif spread from the Mogollon to the Pueblo. Elsewhere on Panel 5, is a white mask identifiable as a beast or animal mask by the presence of a snout. The mouth of the mask appears to be open. The beast katchinas are among the most powerful and appear at the Powamû (Fewkes 1982:37).

Panel 7 (see drawing of Panel 7) features a large rectangular mask and an elaborate black and white bird. The latter is probably an eagle (Schaafsma, 1972:131) and is stylistically similar to petroglyphs at Abo, and elsewhere, including the Kuaua Murals and wall paintings at Acoma (White 1932: PL. 126). Dutton (1963) discusses the role of the eagle at Kuaua as a messenger from the sky to the earth. The large mask at Panel 7 is possibly related to the Hopi Soyal Katchina, Ahülani, as it appears during the Flute dance (Fewkes 1982: Pl. LX). Fewkes writes:

. . . So, Ahülani is the "returned Katchina making," or the returning son of the Patji, as Ahul is the returning son of the Katchina Clan. Both these names are attributable names of the sun.

Although Ahūlani, as his picture shows, has no sun symbolism in his mask, his crescent eyes are often seen as sun symbols. There is another indication that he may be, in some way, connected with the sun. A personation of Ahul Katcina is said to appear in some of the other pueblos in place of Ahūlani, which substitution indicates their identity. In the dance in the kiva the night before Ahūlani and the Soyal manas, appear, there is a man representing a bird, which the author interprets as a personation of the sun; (Kwatoku, Eagle-sky-one, High-sky-eagle; one of the sunbirds). The Soyal manas are regarded as either germ goddesses or cult heroines of the Water-house or Raincloud Clan. In kiva exercises, the personation of the sun takes an eagle form, which is not assumed in public, although the same god is personated in the plaza under the name Ahūlani (Fewkes 1982:183).

Thus, it may be that a portion of the art at Panel 7 relates to the Soyalūna Flute ceremony, with a representation of Ahūlani and an eagle representing either the sun or a messenger of the sun. It is interesting that at Hopi, the sun only appears as a bird in the kiva and as Ahūlani in public. The latter suggests that kiva-like ceremonies were once held at Painted Rocks. Differences are noted between the Hopi Ahūlani mask, pictured by Fewkes, and that at Panel 7: the presence of a headdress and a rope-like border in the Fewkes representation; the presence of various short marks in the interior of the mask at Panel 7, a rainbow-like border, and no headdress. At Kuaua, Dutton (1963: PL. XX) illustrates a mural depicting Salimopiya in a ceremonial rabbit hunt which precedes a katcina society initiation. Salimopiya are identified as "seed bearers", and one element in the mural is a rectangular "pouch of varicolored seeds" which is very similar in appearance to the mask element with marks in the interior which is found at Panel 7. Another illustration of a "pollen pouch" containing cornmeal, pollen, and turquoise (Dutton, 1963: PL. XVII) from the Summer Solstice rain ceremony, also resemble the mask at Panel 7. Such images suggest ideas associated with the Summer Solstice or planting ceremonies at Zuni. The rainbow imagery on the border of the Panel 7 mask suggests both rain and the pathway from sky to earth, a concept duplicated in the eagle symbolism. In a related theme,

it is noted that another kadcina which may be represented by the mask at Panel 7 is that of Kerwan (Fewkes 1982: 78; PL. VIII). Kerwan appears at Powanû in a ceremony related to fertility and the distribution of newly sprouted beans. In the latter sense, the eagle at Panel 7 may be representative of a messenger or the Eagle Kadcina which also appears during Powanû at Hopi.

On Panel 8a (northeast of the snake and masks discussed above with Panel 4 - see second drawing of Panel 8a) appear two large yellowish-brown anthropomorphs, the same personage. The southwest-most figure is smaller and trimmer than the other, which is shown as obese. Also, the kilt on the southwest-most figure is depicted as solid, while the kilt on the larger figure is drawn as if it is transparent. The latter figure wears a belt, but the kilt is indicated by a suggestion of white paint and a red line, allowing the legs and groin of the anthropomorph to show as if he were naked. At Kuaua, Dutton (1963: Fig. 23), illustrates an obese Ololowishka, who is painted yellow and outlined in red and appears naked except for a girdle and sash. It is possible that the larger anthropomorph at Panel 8a represents Ololowishka. In an account of Ololowishka, Dutton (1963:166) records his appearance at a 1927 ceremonial rain dance at Zuni. Ololowishka appeared in the ceremony with flute players, dancers, and maidens with corn. Ololowishka was aided by the Koyemsi to "urinate" in two bowls of cornmeal. The above ceremony was designed to aid the women of the Pueblo in grinding and to purify the men for curing venereal disease. Dutton (1963:168) relates the above ceremony to a depiction of the universe and the ancient gods, including Ololowishka, found in the Kuaua Murals. The Kuaua depiction of Ololowishka, shows him with a necklace of multiple strands of white beads, with one strand hanging low, something also seen on the larger anthropomorph at Panel 8a. The largely missing headdress of Ololowishka at

at Kuaua is thought to have been large with red feathers. The Abó headdress is partially red and feathered but not elaborate. Other details related to the Ololowishka figure at Kuaua are not noted at Panel 8a but one will be discussed in Appendix I. (Note that the subject anthropomorph is the one with scratches on the body discussed in Section I and II above.) Dutton (1963:166-167) reports that petroglyphs of Ololowishka are located at Cienaga and at Zuni, New Mexico, and that a depiction of Ololowishka with various ceremonial features is on a pre-A.D. 1200 Mimbres polychrome bowl from Mattocks Ruin, Mimbres, New Mexico.

Panel 10 (see drawing of Panel 10) has the best-preserved representation of what is assumed to be a mask of Paiyatuma (or Leñya), the Flute Katsina, as identified by Sims (1963: PL. A) at Comanche Gap, New Mexico, and as illustrated by Fewkes (1982: PL. XXXIX). Other possible representations of the Flute Katsina occur at Panel 4 and elsewhere at Panel 10. The down-turned mouth or chin area typical of Abó and Tenabó masks is not reflected in the Sims and Fewkes representations. Leñya is a Soyohim Katsina (Fewkes 1982: 141). A mask just to the northeast of the subject Flute Katsina at Panel 10 may be a representation of a Hahai wüqti (Fewkes 1982:75; PL. VII) which appears in kiva ceremonies during Powamû and is associated with Snakes and Beast or Monster katsinas. (Note that the subject portion of Panel 10 has been coated with white paint as discussed earlier.) Hahai wüqti has red horse-hair bangs. A star-face anthropomorph is at Panel 10 and presumably one was present at or near Panel 4 (Colter 1933: "star-frog"). Schaafsma (1980:265) describes stars and star-faces from the Galisteo area and notes that they are often associated with snakes. At Pottery Mound, New Mexico, an Awanyu is depicted in composition with a star-face (Hibben 1975: Fig. 34). The latter is interesting in light of the fact that the Awanyu with Koshare is located

at Panel 4. It is possible that the symbolism of the star and snake, more specifically the star motif and the horned or feathered serpent, are related to the Mexican influence on the Jornada Style. Symbols of the Mexican Warrior societies included the star, Venus, and Quetzalcoatl, the feathered serpent. Star-faces or "star-frogs" at Painted Rocks may be representations of the Star Katsina (Fewkes 1982: 119; PL. XXVIII) which appears in Palülükōñti at Hopi. Also, at Panel 10, are four shield-figures and, at least two representations of shields, a motif which is typical of the Rio Grande Style rock art, and occurs in elaborate form at Comanche Gap and Cochiti, New Mexico (Schaafsma 1980:223). Elaborate shield-figures are depicted at Pottery Mound in a row of sixteen (Hibben 1975: Figs. 102-104). Two shield-figures also occur at Painted Rocks at Panel 8a. Two figures facing each other and holding bows and an arrow quiver are depicted at Panel 10. It is presumed that these figures are related to ceremonies of the Bow priesthood, which, at Zuni, involve a younger and an older Bow priest (Dutton 1963:52). It is possible that the above figures are represented at Panel 10. A red and white-striped bird at Panel 10 is presumed to be an eagle (see drawing of Panel 10). A very similar eagle depiction is illustrated by White (1932: PL. 12b) from a wall painting at Acoma. The eagle image was present on a chamber wall during a medicine society initiation.

At Panel 11 is a very small and detailed mask (see drawing of Panel 11). The mask has an interesting headdress which may be related to those of Püükōñ Katsina and Püükōñ Hoya (Fewkes 1982:120; PLS. XXIX, XXX). The Püükōñ Katsinas (the greater and lesser War gods) dance in the Añkwañti ceremony at Hopi and are seen wearing similar masks and netted headdresses. A Zuni Katsina Pakwabi, documented by Fewkes (1982:154; PL. XLVI) also wears

a headdress similar to those of the Püükoñ Katcinas and, likewise, represents a war theme. Pakwaki is a warrior.

The petroglyphs at Panel 6, 8, 9, and 14, were described earlier as exhibiting various pawprints, bird tracks, eagle-like birds, plants, tadpoles, and abstracts. The dominant motif among the petroglyphs is pawprints, which have been described above. Schaafsma (1980) notes that pawprints are endemic to Mogollon rock art and documents their presence in the Rio Grande Style. Smith (1952:203-206) discusses the significance of various animals and a few pawprints found in the Jeddito Murals. (One bird track at Panel 5 is in the painted art at Abó.) The mountain lion is depicted at Hopi in the ceremonies of the War and Snake-Antelope society, a fact that is consistent with the mountain lion representation in various Rio Grande Pueblos and at Zuni. The mountain lion is also associated with the various curing ceremonies, and is symbolic of the cardinal direction, north or northwest. A representation of a mountain lion paw is seen in the Jeddito Murals as an arrangement of large claws in a whirl around a circular foot. A pawprint of that type is present at Painted Rocks at Panel 14f. Other possible lion paws are at Panel 8c (see drawing of Panel 8c). The latter also possibly represent badger paws (Badger Katcina doll, personal collection). Bears and bear paws are associated with the Snake and War societies at Hopi; with the War Gods, the Little and Great Fire fraternities, and the Sword Swallowers' society at Zuni. Bear paws appear on walls and altars at Acoma, Cochiti, Santo Domingo, Laguna, Isleta, and Santa Clara, where they relate to Hunters' and Fire and various medicine societies. Bear and badger pawprints are found on the masks of the twin War Gods at Hopi, and on those of the u'wannami (rain makers) at Zuni. The bear may represent the west or southwest cardinal direction. Possible bear paws

appear at all of the petroglyph panels at the Painted Rocks site. The latter vary in shape significantly, but are assumed to be bear prints because of the size and general appearance. Other mammals possibly represented in the Jeddito Murals are: the dog, wolf, coyote, badger, wildcat, ringtail cat, deer, and antelope. In addition to the above animals, Rio Grande rock art represents skunks, deer, and bighorn sheep. The murals of Kuaua and Pottery Mound also exhibit many of the above mammals, which, like the Jeddito Murals and Rio Grande rock art, are often elaborate. Many of the mammals discussed above may be represented by pawprints at Painted Rocks, but, due to the fact that such animals are represented almost entirely by pawprints, the expression of totemic or clan affiliation, rather than the representations of ceremonies, is suggested for much of the petroglyphic rock art at Painted Rocks. Certainly, the making of totemic or clan symbols is undoubtedly associated with a ceremony (such as is the case of the Willow Springs, Arizona, art discussed earlier). However, such ceremonies and symbols can be distinguished from katchina or medicine ceremonies of the modern Pueblo, and it is assumed that these distinctions would exist through time.

Two archaeological sites which are assumed to have been prehistorically and historically related to Abó are the pueblos of Tenabó and Gran Quivira, all of which were Tompiro villages. In the above discussions, rock paintings from the Tenabó area have been compared to some from Painted Rocks. Petroglyphs at Tenabó have been documented by Susan Marshall and Stuart J. Baldwin (1982) of the University of Calgary and the Central New Mexico Research Association, Inc. An examination of the Tenabó petroglyphs reveals expected similarities with the rock art at Painted Rocks. Related subject matter includes representations of birds, snakes, Awanyus, plants, abstracts,

pawprints and bird tracks, masks, and both simple and elaborate anthropomorphs. However, more similarities may exist between the Tenabó petroglyphs and the petroglyphs to the southwest of the present study area at Abó. One obvious distinction between the present study area and the Tenabó petroglyphs are the relatively large number of mammal and bird depictions at Tenabó. Basically, only the eagle-type or "Thunderbird" is present at Painted Rocks, while the Tenabó rock art exhibits a variety of bird types, including a turkey. Mammal depictions at Painted Rocks may have been as low as two (presently visible), and they are simple figures. Tenabó petroglyphs exhibit both naturalistic and fantastic mammals. The face of an Awanyu at LA 33036 (Marshall and Baldwin: 1982) resembles, to some extent, the face of the Awanyu once visible at Panel 4 and drawn by Schweizer in 1908. Anthropomorphs and masks in the Tenabó petroglyphs are much less elaborate than are those at Painted Rocks, and events involving anthropomorphs are depicted with much more naturalism and/or activity in the Tenabó petroglyphs. Such characteristics suggest different functions for the Abó painted art as opposed to the petroglyphs at Tenabó. This is interesting in light of previous discussion concerning differences between Rio Grande Style petroglyphic art, painted kiva art, and the paintings at Abó. The Tenabó comparisons suggest that Rio Grande Style petroglyphic art may have been related to ceremonies distinct from kiva-related ceremonies. Shrine visitations by Pueblo priests and various society members may account for much Rio Grande Style petroglyphic art. Of course, it is assumed that a certain amount of all rock art was made during idle time for individual reasons. The nature of the rock paintings at Abó are generally suggestive of kiva-related ceremonies and mural art.

The Gran Quivira Mound 7 kiva murals do not share as many stylistic similarities with the Abó Painted Rocks art as do the murals from Pottery Mound (Hibben 1975) or Kuaua (Dutton 1963). The Jeddito Murals, which are stylistically and ideographically related to all of the above, are more elaborate and stylized. Undoubtedly, one reason for the lack of comparisons between the Abó rock paintings and the Gran Quivira murals, is the sparse number of complete elements or compositions from the latter. Anthropomorphic figures from Figure 47 (Peckham 1980) at Mound 7 exhibit general similarities with anthropomorphs at Panels 3-5 and 13 at Abó. A white figure from Figure 47 holds what may be a curved rabbit-stick similar to those held by an anthropomorphs at Panels 4 and 13 and discussed earlier. The row of anthropomorphs in Figure 47 is suggestive of the rows of "fringed leggings" at Panels 3 and 5 at Painted Rocks. Feathers and feathered headdress types in Figure 47 are similar to those seen on masks and faces throughout the Abó site, especially those at Panels 3 and 4. A dragonfly, birds, mask, plants and a shield-figure from Mound 7 at Gran Quivira are also part of the Abó element inventory. It is significant that the murals of Gran Quivira are dated from the A.D. 1400's to abandonment in 1672 (Peckham, 1980:15), something which suggests a time frame for the Abó rock art.

The down-turned mouth and stylized features of the masks of Abó and Tenabó are distinctly similar to masks of Kuaua (Dutton 1963), Pottery Mound (Hibben 1975), and the masks of the Jornada Style. Based on these and other stylistic and ideological similarities discussed above in this paper, it seems appropriate to suggest that the Rio Grande Style rock art of Painted Rocks probably dates from between A.D. 1300 to 1672 when the Pueblo was abandoned, along with that of Gran Quivira. However, it is possible

that the petroglyphs at the site continued to be made after 1672, if such art is related to general Indian use of Abó Pass. It seems appropriate to address Bandelier's (1892:276) information from a Cochiti woman concerning the making of rock paintings, such as those at Abó, just before a pueblo was about to be deserted forever. There is no archaeological evidence to support this theory. The paintings at Abó appear to have been made over a period of time, as indicated by the weathering patterns and the amount of superimposition. Also, the making of paintings such as those at Abó is consistent with the continual making of pueblo murals and wall paintings, which are known to date from the prehistoric period into the historic period. It may be possible that painting activity at the Painted Rocks site intensified (or even began) after Spanish contact, due to stresses on the Pueblo religious, social, and economic structures. However, stylistic relationships with Mogollon rock art suggests earlier beginning dates for the art at Painted Rocks.

In summary, the Abó Painted Rocks site exhibits rock art typical of the Rio Grande Style (Schaafsma 1975; 1980), which is reflective of cultural relationships between the Jornada Mogollon and the Plateau and Rio Grande Pueblo IV and V. The rock art at Abó Painted Rocks is indicative of kiva-like ceremonial representations, related to the post-A.D. 1300 Pueblo Katchina Cult and related medicine and communal societies.

IV. Documentation Material Curation and Resource Management Recommendations.

A. The following recommendations are made for the storage of the black and white negative and color transparencies of the rock art at Abó Painted Rocks and for the paintings on the ceiling of the second story gallery, the Watchtower, Grand Canyon National Park, Arizona:

1. film should be stored in a cool, dark place;
2. film should be stored in acid-free containers, e.g., metal or acid-free paper;
3. black and white film can be expected to curate for 100 or so years; at some point, high contrast black and white print should be made from the film to ensure that duplicate images are available for study, etc.;
4. the colors in color film can be expected to fade or change over time. Fifty years is probably the limit on storage of the color transparencies. Before that time, the rock art and ceiling at the Watchtower should be rephotographed or copies should be made of the present transparencies. The latter may be preferred because of the continued deterioration of the rock art and possibly the Watchtower paintings. When film copies are made, they should be done with every possible attention to faithfully reproducing the colors in the present transparencies. It is possible that within a few years a more stable color film with a longer curation life will be available. If so, it will be worth duplicating the present transparencies with such film before the present colors have changed at all.

B. The drawings made of the rock art at Painted Rocks should be stored in acid-free containers. If framed, the drawings should be matted with acid-free board and framed behind glass. If possible, the glass should be of a type which retards ultraviolet rays. At any rate, the drawings should not be stored or hung where they are exposed to direct sunlight (this is to prevent fading of the colors). If the drawings are exhibited, the drawing of Panel 4 should be displayed next to an enlarged photograph of the drawing made by Herman Schweizer in 1908 of the Koshare and snake. The photograph may be a copy of the black and white photograph presently at the Study Collection, Grand Canyon National Park, or an enlargement of the color photograph of the Watchtower paintings by Geary.

C. The large field map of Abó Painted Rocks is of indestructible mylar. However, the lettering is made with transfer letters, which will crack if folded or exposed to heat. The latter should be avoided. Permanent ink drawings on the map should last as long as the mylar.

D. It is recommended that the National Park Service purchase the Abó Painted Rocks site for the Salinas National Monument. The petroglyphs, which are adjacent to the present study area and to the southwest, should also be included in the Salinas National Monument purchase. The art of both locations is seen as integral to both the preservation and the understanding of the prehistoric and historic cultures of Abó.

Upon purchase, the National Park Service should replace the present U.S. Highway 60 right-of-way boundary fence with another fence, perhaps a six-foot high hurricane-type fence, *painted an earth color*. All attempts should be made to avoid the appearance of a high-security fence, as this will only encourage deliberate vandalism to the rock art by those who wish to defy the restricted access. The site should be posted with discrete signs of two types: 1) a NPS boundary sign which states that the site is to be entered with permission or permit only; 2) an informative sign which briefly describes the significance of the site and points out the need for preservation. In addition, the latter sign should prohibit touching of the rock art or climbing on the rocks. The NPS should establish a permit system for visitation to the site. Ranger-guided tours from Abó Mission, along the drainage by the spring and around the hill to the painted art, would be a good idea for large public groups.

It is very important that the majority of the very visible graffiti present at the Painted Rocks site be removed because it only encourages more graffiti. It is recommended that the NPS consult with Constance Silver, rock art conservationist, present address unknown. (Her address should be available from the Office of the State Archaeologist, Santa Fe, New Mexico; Adrienne Anderson, Regional Archaeologist, National Park Service, Rocky Mountain Regional Office, Denver, Colorado, or from the ARARA, P.O. Box 1545, El Toro, California). Ms. Silver should be able to remove much of the paint and chalk around the paintings and advise the National Park Service on the removal on the large spray painted graffiti present in the northeast section of the site. Removal of rock art, now beneath some of the painted graffiti, should be avoided if possible. Hopefully, much of the graffiti can be removed by selective sandblasting or chemical application.

E. Attached (Appendix I, Table 1) is a series of inventory numbers for material related to the second-story ceiling paintings at the Watchtower, Grand Canyon National Park, Arizona. The material is presently curated at the Study Collection, Grand Canyon National Park. It is recommended that Salinas National Monument obtain copies from the Study Collection of pertinent photographs and written material concerning the Herman Schweizer 1908 documentation of the Abó Painted Rock site and the resulting Watchtower paintings by Geary.

Finally, it is recommended that a copy of this report be sent to Jan Balsom, Park Archaeologist, Grand Canyon National Park, Arizona (or to the Superintendent, Grand Canyon National Park, Arizona, to be forwarded to Jan Balsom), and that a copy be given to the Cisneros family (as requested by

the Cisneros). Photographic prints of the drawings made of the site should accompany each copy of the report. (Two copies of each photo are enclosed with this report.)

REFERENCES

Bandelier, Adolph F.

1892 Final Report of Investigations Among the Indians of the Southwestern United States, Carried on Mainly in the Years from 1880 to 1885, Part II. Papers of the Archaeological Institute of America, Vol. 4, Cambridge.

Bunzel, Ruth L.

1932 "Zuni Katchinas: An Analytical Study," Forty-seventh Annual Report of the Bureau of American Ethnology, 1929-1930 (1932: 837-1086), Washington.

Cole, Sally J.

1983 Interim Rock Art Report for the Ft. Carson-Pinon Canyon (Las Animas County, Colorado) Archaeological Project: 1983 Field Season. University of Denver, A.R.I.

1984 "Analysis of a San Juan (Basketmaker) Style Painted Mask in Grand Gulch, Utah," Southwestern Lore 50 (1):1-6.

1984 "The Material Culture of the Early Anasazi as seen in San Juan River Rock Art," The Rambler 61 (8). Wasatch Mountain Club, Salt Lake City.

1984 Grand Gulch: The Outdoor Museum. A report prepared for White Mesa Institute, College of Eastern Utah, Blanding.

1984-1985 Additional Information on Basketmaker Mask or Face Representations in Rock Art of Southeastern Utah. MS. Accepted for publication in Southwestern Lore.

Davis, John V., and Kay S. Toness

1974 A Rock Art Inventory at Hueco Tanks State Park, Texas. El Paso Archaeological Society Special Report No. 12.

Dutton, Bertha P.

1963 Sun Father's Way, The Kiva Murals of Kuaua (Coronado State Monument, New Mexico). University of New Mexico Press, Albuquerque.

Fewkes, Jesse Walter

1982 Hopi Katchinas Drawn by Native Artists, Smithsonian Institution, Bureau of American Ethnology Annual Report, 1903. Rio Grande Press, Glorieta, NM.

Grattan, Virginia L.

1980 Mary Colter, Builder Upon the Red Earth. Northland Press, Flagstaff.

Hayes, Alden C.

1981 Excavation of Mound 7, Gran Quivira National Monument, New Mexico. National Park Service Publications in Archaeology 16, Washington.

Hibben, Frank C.

1975 Kiva Art of the Anasazi at Pottery Mound. KC Publications, Las Vegas, NV.

Hurt, Wesley R.

1939? The Abó Series of Pictographs and Petroglyphs. MS. Indiana University Museum, Bloomington.

Lange, Charles H.

1979 "Relations of the Southwest with the Plains and Great Basin," Handbook of North American Indians, Southwest, ed. W.C. Sturtevant and A. Ortiz. Smithsonian Institution, Washington.

Marshall, Susan, and Stuart J. Baldwin

1982 Inventory Data and Analytical Notes on Petroglyph Sites near Tenabó, MS. Central New Mexico Research Association, Inc., Mountainair, NM.

McCoy, Ronald

1984 "Circles of Power." Plateau (55(4)).

Munsell Soil Color Charts

1975 Munsell Color. Macbeth Division of Kollmorgen Corporation, Baltimore.

Murphy, Dan

1982 "Salinas: A View Through Time," Exploration, ed. D.G. Noble. School of American Research Annual Bulletin, Santa Fe.

Peckham, Barbara A.

1980 "Pueblo IV Murals at Mound 7," Contributions to Gran Quivira Archaeology, ed. Alden C. Hayes. National Park Service, Washington.

Reed, Erik K.

1980 "Human Skeletal Material from the Gran Quivira District," Contributions to Gran Quivira Archaeology, ed. A.C. Hayes. National Park Service, Washington.

Schaafsma, Polly

1965 Kiva Murals from Pueblo del Encierro (LA:70). El Palacio (72(3)), Santa Fe.

1972 Rock Art in New Mexico. State Planning Office, Santa Fe.

1975 Rock Art in the Cochiti Reservoir District, Museum of New Mexico Papers in Anthropology No. 16, Santa Fe.

Schroeder, Albert H.

1979 "Pueblos Abandoned in Historic Times" Handbook of North American Indians, Southwest, ed. W.C. Sturtevant and A. Ortiz. Volume 9, Smithsonian Institution, Washington.

Sims, Agnes C.

1963 "Rock Carvings, A Record of Folk History," Sun Father's Way, ed. Bertha P. Dutton. University of New Mexico Press, Albuquerque.

Smith, Watson

- 1952 Kiva Mural Decorations at Awatovi and Kawaika-a. Papers of the Peabody Museum of Archaeology and Ethnology, Vol. 37, Cambridge.

Vivian, Gordon

- 1979 Gran Quivira, Excavations in a 17th-Century Jumano Pueblo. National Park Service Archaeological Research Series No. 8, Washington.

Wellman, Klaus F.

- 1979 A Survey of North American Indian Rock Art. Akademische Druck- und Verlagsanstalt, Graz, Austria.

White, Leslie A.

- 1932 "The Acoma Indians," Forty-seventh Annual Report of the Bureau of American Ethnology. 1929-1930 (1932:23-190), Washington.

Wilson, John P.

- 1982 "Quarai: A Turbulent History," Exploration, ed. D.G. Noble. School of American Research Annual Bulletin, Santa Fe.

Young, Jon Nathan

- 1981 Excavations of Mound 7, Gran Quivira National Monument, New Mexico. National Park Service Publications in Archaeology 16, Washington.

Young, M. Jane, and Nancy L. Bartman,

- 1981 Rock Art of the Zuni-Cibola Region. Pueblo of Zuni, NM.

Table 1, which is titled “Relative Locations of 14 Rock Art Panels at the Abo Painted Rocks Site, New Mexico,” has been redacted because it contains specific site data.

TABLE 2

LOCATIONAL DESCRIPTION OF THE DRAWINGS OF "PICTOGRAPHS"
AT ABO PAINTED ROCKS SITE, BY WESLEY R. HURT (1939?)

Top Row, Fig. 1 (left to right):	1) anthropomorph at Panel 8a 2) unknown 3) mask at Panel 7 4) anthropomorph at Panel 10 (mask with neck is possibly placed over an earlier torso.
Second Row, Fig. 1 (left to right):	5) anthropomorph at Panel 3 6) Koshare and snake at Panel 4 7) anthropomorph at Panel 4 ("wings" are different than 1984 documentation.)
Third Row, Fig. 1 (left to right):	8) leggings and feet at Panel 5 9) bird at Panel 10 10) mask at Panel 10 11) bird at Panel 7 12) deer or lamb at Panel 4-upper.
Fourth Row, Fig. 1 (left to right):	13) a mask possibly at Panel 4 14) bicolored masks at Panel 10 (Headdress on this mask is depicted differently than the photo documentation of 1984) 15) mask possibly at Panel 5 16) mask at Panel 5 17) mask or face on anthropomorph at Panel 4 (this mask or face is located elsewhere at the site) 18) mask at Panel 5

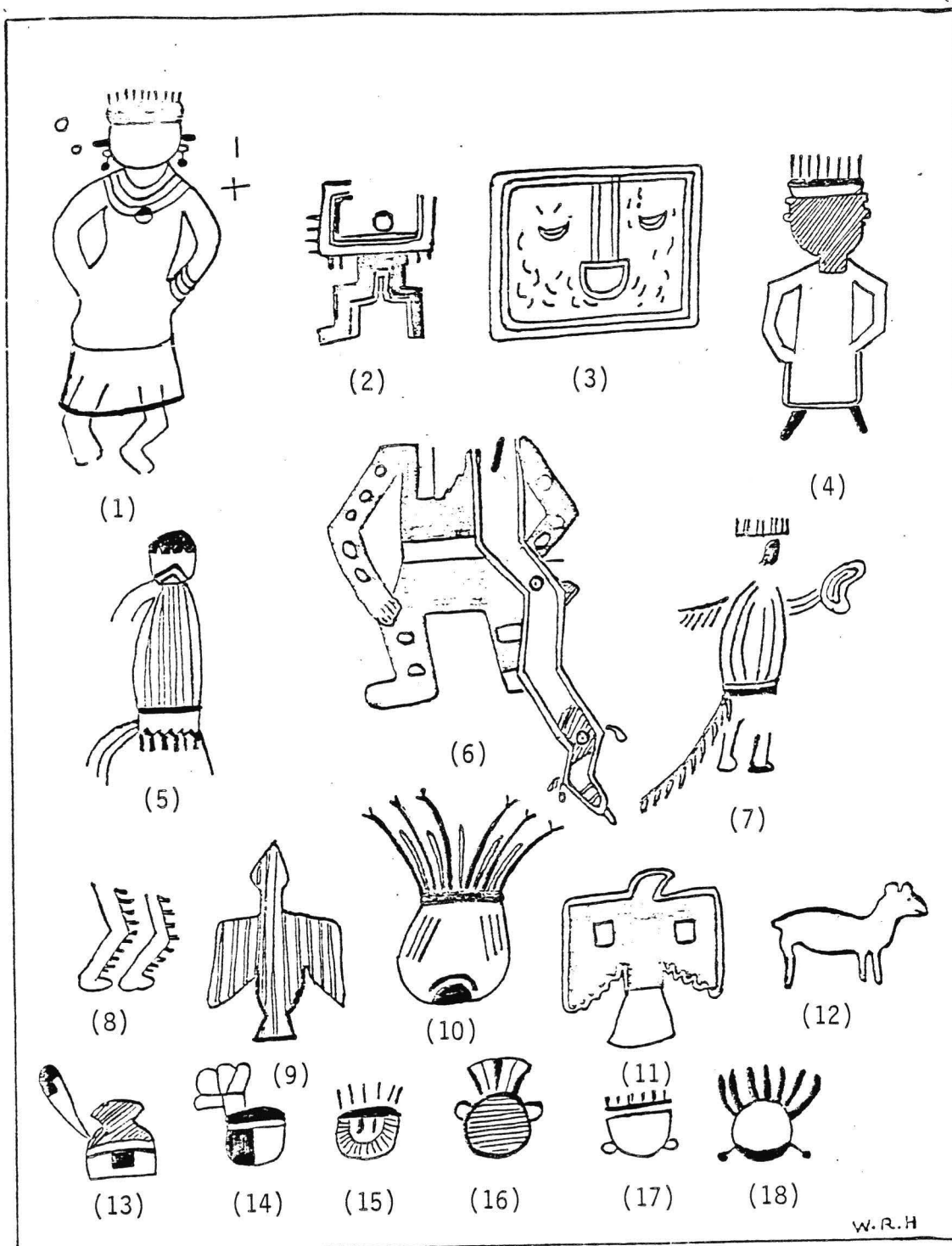
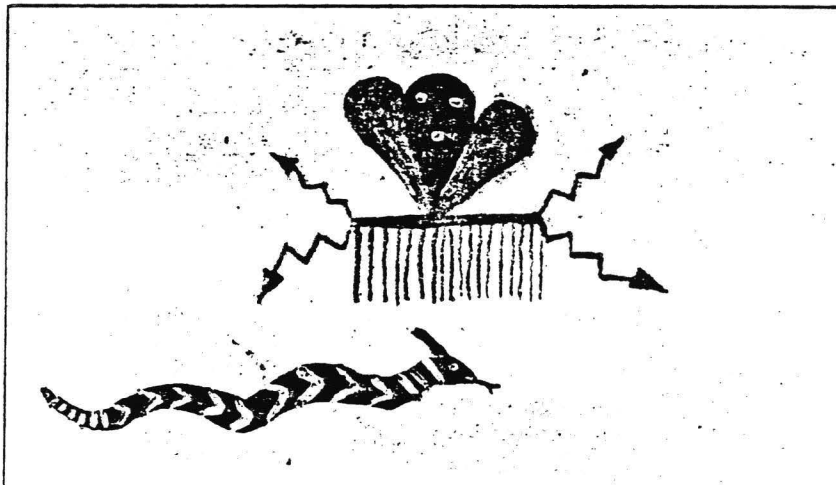


Plate 2

FIGURE 1. Illustration from Hurt (1939?: 55; Plate 2). (Number designations are added.) "Pictographs" from Abo, NM.



a. Cloud, rain, and lightning symbols, with horned snake



b. Representation of a Koshare standing on the moon, holding corn in each hand. The four marks on either side mean that rain will fall for four days before and after each moon

WALL PAINTINGS

FIGURE 2. Illustrations from White (1932: Plate 11a, b). Koshare, snake and cloud from wall paintings at Acoma, New Mexico. The Acoma Koshare is typical of the Rio Grande Pueblo Koshare.



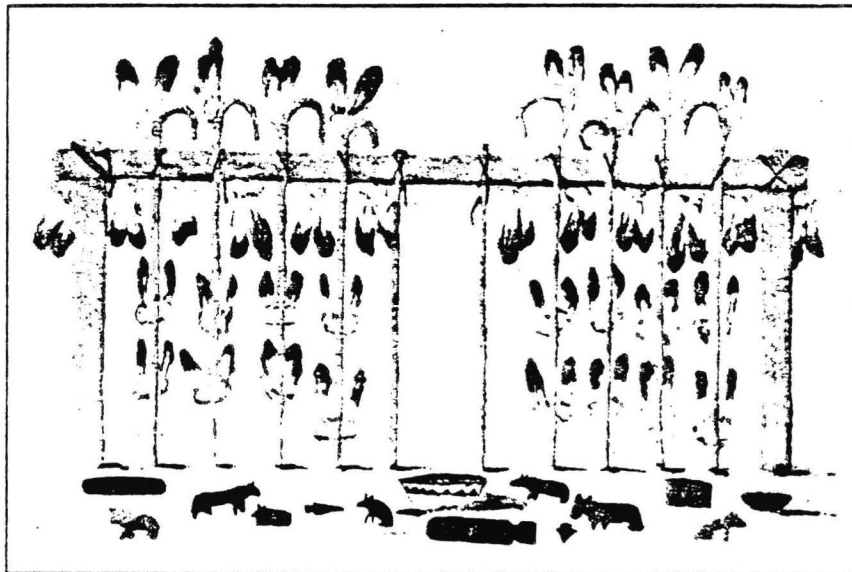
PALÜLÜKON AND TATCÜKTI

FIGURE 3. Illustration from Fewkes (1982: Plate XXVI). Clown struggling with Palülükon (Awanyu) which rises from a pot.

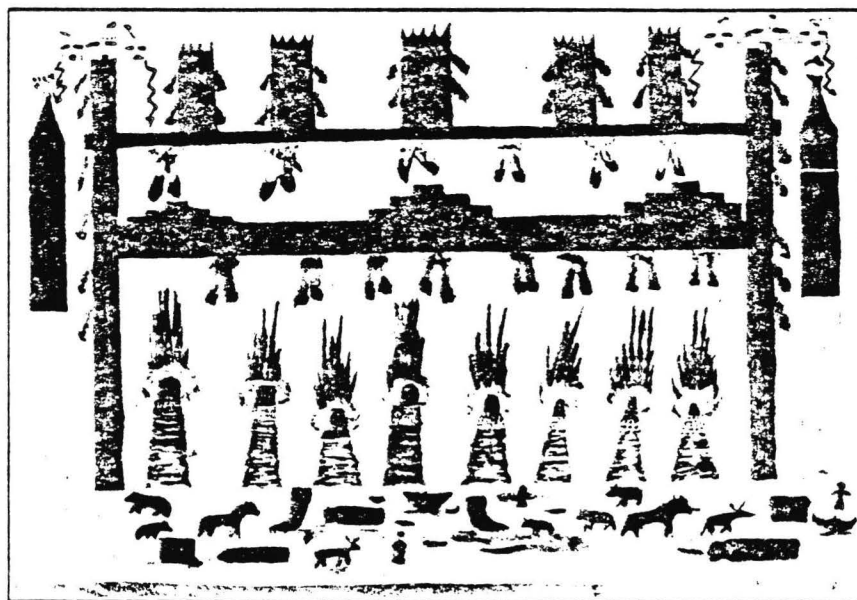


THE CA'LAKO HOUSE

FIGURE 4(a). Illustration from Bunzel (1932: Plate 26). Kiva interior showing screen (upper left), wall paintings and altar (right) at Zuni, New Mexico.



a. THE CACIQUE'S ALTAR



b. ALTAR OF A MEDICINE SOCIETY

FIGURE 4(b) and (c). Illustrations from White (1932: Plate 1a; b). Kiva altars from Acoma with feathers, fetishes, bowls, and masks.



Plate 1. "Multilated" hand at Panel 3.

APPENDIX I

THE SCHWEIZER/GEARY DRAWINGS ON THE CEILING OF THE SECOND STORY GALLERY, THE WATCHTOWER, GRAND CANYON NATIONAL PARK

During the documentation of the Abó Painted Rocks, a complete photographic documentation was made of the Geary paintings (see Section II of this paper) on the second story gallery ceiling of the Watchtower, Grand Canyon National Park. The documentation involved flash photography using 28 mm and 50 mm lenses while standing or lying on the second story floor. A series of color transparencies (64 ASA) were produced of the ceiling paintings. The above includes 22 horizontal views, 36 vertical views, 13 details, and 3 overviews of the ceiling. The natural light in the Watchtower varied considerably during the photography, but, in general, the horizontal transparencies are lighter than the vertical transparencies. The vertical views include some details difficult to identify in the horizontal views, but the two series of transparencies contain complete recordation of the ceiling imagery. The photography started each time above the second story stairwell, south side. For the horizontal views, it was necessary to take, first, the outer "band" of paintings and then the inner, always moving from south-to-north-to-south in a circle. Because the paintings are not separated into defined bands, there are overlaps between the inner and outer images allowing one to place the elements and groupings in space. Vertical photography involved moving the same direction as did the horizontal photography, but more narrow views were taken which included both the inner and the outer "bands" of paintings. A series of detail photos were taken to focus on specific important images which are dominant in the Abó paintings and in the historic documentation records of the sites. Overviews were taken to provide a record of a large

segment of the Watchtower ceiling and the paintings. All of the above transparencies of the Watchtower paintings are numbered and lettered (H = Horizontal; V = Vertical). The transparencies are enclosed with this report.

It was determined, for the purposes of this report, to reference only the horizontal transparencies to identify the various elements and the respective panel locations at Abó Painted Rocks. The vertical views duplicate, in greater detail, the horizontal views. Below are listed the horizontal and vertical transparency (view) numbers, with identification of the major elements present. Major elements are defined as larger elements, obviously distinct from the "background" elements, which will be discussed below. Because many of the horizontal views of adjacent paintings feature the same imagery from different angles, or possibly include only one major element not visible in the views directly preceding or following it, it is not necessary to reference all of the views. However, for continuity, all the views are listed. In the case of unknown major elements, the same is stated.

A general description of the Geary paintings is necessary. The Watchtower ceiling is covered with paintings. It is understood from the Colter manual (1933), that Geary attempted to impart the feelings of the Abó Painted Rocks site to the Watchtower ceiling, as well as to faithfully duplicate Schweizer's 1908 drawings. The result is that the over-painting and superimposition of the Abó site are graphically reproduced and symbolized by Geary on the Watchtower ceiling. The latter is accomplished by scattering images, including small, solidly-painted anthropomorphs and zoomorphs (bighorn sheep, deer or elk with antlers) (usually blue or red), stars and crosses (usually green), short and long marks of varied colors, and handprints (usually negative)

around and over much of the major imagery on the Watchtower ceiling. The latter clearly creates a scene which evokes the superimpositions present at Panel 3 at Abó Painted Rocks. It is not known whether Geary visited Abó before doing the Watchtower paintings, but it is possible that he did, as Colter, or an agent of hers, took the 1932 photo of a figure from Panel 8a (referenced in Sections II and IV of this report). The small representational and abstract elements described above form a sort of background for the major elements depicted on the ceiling. It is not known if all of the background elements are taken from the Abó Painted Rocks site. The aforementioned blue or red zoomorphs are not all known from the present study, but various crosses, dragonflies and stars are present at Abó. The small anthropomorphs may be any of a large number of small, often difficult to see, anthropomorphs at the Abó site. Possible locations of the latter include the upper and lower portions of Panel 4; Panel 5, and Panel 10. Blue zoomorphs of any variety are not known, but various crosses and dragonflies at Abó are painted blue or gray-green. Stars at Abó are not known to be green but occur most often in red. Small, solidly-painted anthropomorphs at Abó are most often white, red, or brown.

The above paragraph introduces the question of color authenticity in the Watchtower ceiling paintings. To a great extent, Geary has faithfully reproduced the respective colors found in the major elements at Abó. However, the shades of the colors are often too bright or harsh, possibly resulting from an attempt to duplicate earth tones from artificial pigments, or, as a result of working from memory or notes concerning the actual colors. In several cases, Geary has not painted major elements in the authentic colors seen at Abó. It seems likely that this was done to create a variety in the colors exhibited on the ceiling and to provide contrast with neighboring colors. As

a result, anthropomorphs which are yellow or yellowish-brown at Abó are white at the Watchtowers. The latter color change, yellow-to-white, is the most often noted.

Geary has taken some liberty with the element depictions at the Watchtower (of course, Schweizer may have drawn the images the same as Geary depicts them). One example of the latter includes an anthropomorph shown inside a white circle. These elements from Panel 10, in the 1984 study, are seen as a yellow anthropomorph, partially superimposed by a white circle. An Abó representation, which has been abstracted by Geary, is the elaborate anthropomorph with the green headdress, rainbow-like "mouth" and red and white-striped torso at Panel 3. In 1984, only half of this figure survived. The latter has been abstracted by Geary to appear as a negative and red-striped figure which is complete and subtly superimposes other elements. An interesting quality to this figure, in addition to its completeness, is the headdress. The latter is depicted by Geary as a tall, pointed cap with a high plume attached at the top. A similar plume-like (feather) is visible at Abó and was documented in the 1984 study. However, the tall, pointed cap is not presently visible. Whether the headdress drawn by Geary represents the headdress which originally appeared at Panel 3 is, of course, unknown, and it is not known how Schweizer drew the headdress (or the figure itself). It is noted that conical headdresses in Pueblo art are often associated with the War Gods (Schaafsma 1975:57). The Tacab (Naactadji) Katsina described by Fewkes (1982:134; PL. XXXV) is identified as a Navajo katsina and shown with a conical and feathered headdress and a down-turned, rainbow-like mouth. Tacab may be related to the subject anthropomorph in Panel 3 if the figure originally was depicted as drawn by Geary. Another katsina possibly related to the figure in Panel 3,

as drawn by Geary, is the kadcina, Citoto (Fewkes 1982:130; PL. XXXIV). The Citoto Kadcina appears in the March Festival (Añkwañti) at Hopi. This kadcina was described earlier in a discussion of the figure at Panel 3 (Section III above) of this paper.

Another interesting interpretation by Geary in the Watchtower paintings is a depiction of an insect-like anthropomorph with a round, white and black horizontally-striped body, with yellow wings and an arrow-like tail. The latter figure is from Panel 5 and is interpreted in the present study as being a black and white-striped mask with green ear-like extensions and no tail. However, a headdress at the top center of the mask could appear to be a head or face. No arrow-like tail can be discerned at Panel 5, although there is a dark stain on the rock below the figure. In general, Watchtower painted elements which are observed to be different from those at the Abó Painted Rocks are primarily the result of a simplification of the design by Geary. Anthropomorph dress in the Watchtower paintings rarely shows all of the details shown at Abó, and the elaborate masks of "Ahülani" from Panel 7 does not show the interior markings present (in the original).

Finally, two important depictions by Geary are noted: 1) the large anthropomorph from Panel 8a is carefully drawn on the Watchtower ceiling, and appears to be largely accurate when compared to drawings from 1939? (Hurt) and the present (Cole). Interestingly, Geary has drawn short, vertical red lines around the waist of the figure. Such a depiction closely resembles the girdle of Ololowishka as seen in the Kuaua Mural (Dutton, 1963: Fig. 23). (Discussed in Section III of this paper.) The vertical red lines are not presently discernible on the large anthropomorph at Panel 8a.

Geary has drawn the kilt of the Panel 8a anthropomorph as if it was solid white with no legs showing through. This is not the case in 1984, and apparently was not in 1939? (Hurt). However, it is possible that a substantial amount of any white pigment on the kilt area could have eroded after 1908; 2) Geary's depictions of the Koshare and snake from Panel 4 at Abó Painted Rocks (depicted on the cover of this report) remains in question as to its authenticity. However, it can be said that the Geary's paintings very closely duplicate those drawings made by Schweizer in 1908 and shown in the black and white photographs presently curated at the Study Collection, Grand Canyon National Park, Arizona. (A photocopy of the latter photograph was delivered to Salinas National Monument.) The nature of the Schweizer drawing was discussed in Section II of this report. In Section III of this report a Koshare from Acoma was discussed (Figure 2). It is apparent from the comparisons between the Koshare depicted by Schweizer/Geary and the Acoma Koshare, that there is a great deal of similarity. Therefore, it is possible that the Koshare figure drawn by Schweizer/Geary is accurate insofar as it closely resembles the Rio Grande Pueblo Koshare figures as described by White (1932) and discussed in Section III of this paper. It seems unlikely that Schweizer would have made-up such a faithful rendition of the Koshare figure at Panel 4 in light of the obvious errors seen in some of the other renditions, supposedly carefully duplicated by Geary in the Watchtower paintings. (Although, it is reported that Schweizer had knowledge of various Indian groups in the Southwest.) Also, the addition of the jar or bowl from which the Koshare steps seems to be an effect which would not have been added by Schweizer to the drawing unless the bowl was visible. As discussed and figured in Section III of this paper, the concept of the clown, the Awanyu, and the pot is very close to the Hopi ceremony of Palūlūkon and Tātčūkti which is performed during the March Festival.

HORIZONTAL VIEWS OF THE WATCHTOWER CEILING PAINTINGS

The following is a listing of the color transparencies, horizontal and vertical views, containing or exhibiting the Watchtower ceiling paintings. Major elements of the photographic views are defined as to the panel location at Abó Painted Rocks site.

Transparency or View Number

- 1H: 1) red and white-striped anthropomorph at Panel 4 (and two partial anthropomorphs at Panel 3);
- 2) round mask with green horizontal stripes on the cheeks at Panel 4 (mask at Panel 4 has red stripes on the cheeks);
- 3) yellow anthropomorph with red headdress at Panel 4 (red on body may represent manta present at Panel 4);
- 4) white bighorn sheep, possibly at Panel 12;
- 5) square, white mask with red headdress unknown (This could be a stylized representation of various figures at the Abó Painted Rocks.);
- 6) white snake or zig-zag lines unknown (This could be a stylized or abstracted version of the snake at Panel 8a.);
- 2H: 1) handprints probably from Panels 3 or 5;
- 2) diamonds at Panel 8a;
- 3) white bird inside of red and white circle unknown;
- 4) pot from which Koshare steps at Panel 4.
- 3H: 1) white anthropomorph with red headdress which appears to be dancing at Panels 3 or 5 or 13 (Note negative stripe on the torso of the subject anthropomorph. Anthropomorph at Panel 5 has a green and red-striped torso, however, the head and headdress of the anthropomorph at Panel 5 have eroded and are no longer visible.);

3H:(cont'd)

- 2) row of red, green, and yellow circles inside rectangles unknown.

4H: 1) Major elements are the same as preceding slides.

5H: 1) white anthropomorph with upraised arms possibly at Panel 10 (Figure at Panel 10 is yellow.);

- 2) large blue and yellow anthropomorph holding a stick unknown.

6H: 1) White snake with yellow tail may be abstracted version of snake at Panel 4.

- 2) green, yellow, white, and red "pinwheel"-like design at Panel 7;

7H: 1) red and yellow bicolored mask with a white mask with a red headdress over the left top at Panel 10 (It appears that Geary has translated the headdress on the top of the bicolored mask at Panel 10 to a representation of a second mask. At Panel 10 the headdress does not appear to be another mask and is much smaller than the headdress represented by Geary.);

- 2) a yellow circle with a "bow knot" in the interior unknown;

- 3) small white mask with red headdress unknown (Mask could be at various panels at the site.);

- 4) single black and white feather on the top of a blue, yellow, and red mask at Panel 4;

8H: 1) Major elements the same as preceding slides;

9H: 1) red and blue "star-frog" possibly at Panel 10 (A similar figure may have been at Panel 3-8a.);

- 2) red and yellow vertically striped masks at Panel 10 (Watchtower version has been abstracted);

- 3) green cross at Panel 8a.

- 10H: 1) blue-green, yellow and red mask with single feather at Panel 4
(Mask colors are black and green at Panel 4.);
- 2) white bird with red stripes at Panel 10 (At Panel 10 bird has
vertical red stripes.);
- 11H: 1) green circle with white snake in the interior unknown;
- 2) white anthropomorph with upraised arms and red feathered headdress
possibly at Panel 10 (Anthropomorph at Panel 10 is yellow.).
- 12H: 1) at red, black, and white abstract mask at Panel 5.
- 13H: 1) yellow and red mask with terrace-like mouth unknown.
- 14H: 1) white bird and interior of red and white circle unknown;
- 2) Koshare, snake, and bowl at Panel 4; large red and negative striped
anthropomorph at Panel 3 (Anthropomorph at Panel 3 is red and white
striped and has a green headdress and green and red rainbow-like
mouth. The headdress on the Watchtower painting is not visible in
its entirety at Panel 3.);
- 3) black and white horizontally striped insect-like anthropomorph at
Panel 5 (Element at Panel 5 is interpreted as a mask with green
ear-like appendages and a headdress. At the Watchtower the ear-like
appendages are presented as wings and are yellow. The black arrow-
like tail on the Watchtower painting is not visible at Panel 5.).
- 15H: 1) blanket-like, rectangular motifs at Panel 5.
- 16H: 1) black and white bird at Panel 7;
- 2) red and yellow vertically striped masks at Panel 10 (Watchtower
version has been abstracted.);
- 3) green cross at Panel 8a.

- 17H: 1) yellow anthropomorph with red headress and upraised arms inside a green and white circle possibly anthropomorph and white circle at Panel 10 (Green is not present at Panel 10, and white circle superimposes anthropomorph at Panel 10.);
- 2) white deer or lamb at Panel 4-upper;
- 3) diamond at Panel 8a;
- 4) large yellow and white anthropomorph with red headdress at Panel 8a;
- 5) yellow, red, and blue mask at Panel 4.
- 18H: 1) White stick-figure anthropomorph facing deer or lamb at Panel 4-upper.
- 2) black abstract mask at Panel 5 (Mask at Panel 5 is white. Watchtower painting is made in the negative.);
- 3) white mask with horizontal stripes on cheek at Panel 4;
- 4) small white anthropomorph with a red stripe down the center at Panel 4-upper (The latter anthropomorph could possibly be an abstraction of various red and white-striped anthropomorphs at Panels 3 and 4.).
- 19H: 1) Element present in this view has been discussed above.
- 20H: 1) rectangular white-with-green mask at Panel 7 (Interior marks of masks at Panel 7 are not present in the Watchtower painting.);
- 2) black and white circle with a white interior zig-zag unknown.
- 21H: 1) Element present in this view has been discussed above.
- 22H: 1) black, red, and white abstract masks at Panel 5;
- 2) yellow and red masks with single feather and terrace-like lower portion unknown;
- 3) white mask with green interior at Panel 7 (discussed above).
- 4) green cross at Panel 8a:
- 5) red stick-figure anthropomorphs holding bows at Panel 10 (At Panel 10 the anthropomorphs are white full-figures with red outline and bow.).

DETAILS

- 1 Detail: black and white bird at Panel 7;
- 2 Detail: yellow anthropomorph with a red headdress inside a green and white circle at Panel 10 (these figures discussed above);
- 2a Detail: yellow and red anthropomorph with red headdress at Panel 4 (figure discussed above);
- 2b Detail: round, white mask with horizontal stripes on the cheek at Panel 4 (mask discussed above);
- 3 Detail: red and white striped anthropomorph with green accent at Panel 4 (anthropomorph discussed above);
- 4 Detail: blue, yellow and red mask with a single black and white feather at Panel 4 (mask discussed above);
- 5 Detail: a) yellow and red anthropomorph inside a green and white circle at Panel 10 (figures discussed above); b) white anthropomorph with red stripes down the center and red side-type headdress at Panel 4-upper;
- 6 Detail: red and negative striped anthropomorph at Panel 3 (figure discussed above);
- 7 Detail: Koshare, snake, and bowl at Panel 4;
- 8 Detail: same as Detail 7;
- 9 Detail: anthropomorph with white body and negative vertical stripes and red headdress possibly at Panel 5 (figures discussed above).
- 10 Detail: red and yellow bicolored mask with white feathered headdress at the top at Panel 10 (masks discussed above);
- 11 Detail: red, yellow and white mask at Panel 10 (mask discussed above);

- 12 Detail: anthropomorph with red, yellow and blue-green mask and a single black and white feather on the top at Panel 4 (figure discussed above);
- 13 Detail: red and yellow rectangular mask with terrace-like lower portion and white and green feather at the top unknown.

OVERVIEWS

- 1 Overview: the southwest portion of the second story gallery ceiling, the Watchtower. The latter view includes the center of the ceiling.
- 2 Overview: the center of the second story gallery ceiling, the Watchtower.
- 3 Overview: the southeastern section, second floor gallery ceiling, the Watchtower.

TABLE 1(A) - APPENDIX

INVENTORY NUMBERS AND MATERIAL CURATED IN THE STUDY COLLECTION,
GRAND CANYON NATIONAL PARK, ARIZONA

<u>Source</u>	<u>Material</u>
1) A scrapbook presently stored in the vault, Study Collection, Grand Canyon National Park, Arizona: "Indian Watchtower Desert View", Grand Canyon National Park, Arizona. Volume IV Pictographs. Fred Harvey Company (1a-c). Inventory No. 22-615 (131.01) (1a) Inventory No. 22-616 (131.02) (1a) Inventory No. 22-598 (131.01) (1b)	a) One black-and-white photograph: "Star-frog" from the second story ceiling paintings at the Watchtower (photo of a Herman Schweizer drawing). b) One black and white photograph: "Koshare with snake" (photograph of a Herman Schweizer drawing). c) One black and white photograph taken in 1932? of an anthropomorphic figure (Panel 8a, Abo Painted Rocks). This is an original photograph of a rock painting showing an anthropomorph with a headdress and scratches on the body.
2) Inventory No. 22-674 (131.01)	One black and white photograph: portion of the ceiling of the second story gallery parapet, walls and ceilings, the Watchtower, Grand Canyon National Park, Arizona.
3) Inventory No. 22-691 (131.01)	One black and white photograph: complete ceiling view, second story gallery, the Watchtower, Grand Canyon National Park.
4) "Manual for Drivers and Guides descriptive of the Indian Watchtower at Desert View and its Relations, Architecturally, to the Prehistoric Ruins of the Southwest," Fred Harvey (Grand Canyon National Park, Arizona), 1933.	Pages 25-60; note - Part Three, Chapter VI, Page 58. In the scrapbook listed above, there is certain textual information accompanying the photographs related to the second story ceiling decorations at the Watchtower. That textual information is interesting insofar as it sheds a light on the condition of the paintings in 1932 or 1933, when the scrapbook was prepared. It would be valuable to have a copy of the text from the scrapbook as well as from the Driver's Manual, guide to the Indian Watchtower.

The above material may be obtained from the Study Collection at the Grand Canyon National Park, Arizona, by writing: Ed Chamberlain, P.O. Box 129, Grand Canyon National Park, Arizona. The telephone number for the Study Collection at Grand Canyon National Park is (602) 638-7769.