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John P. Cook Editor

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Volume 15 Number 2

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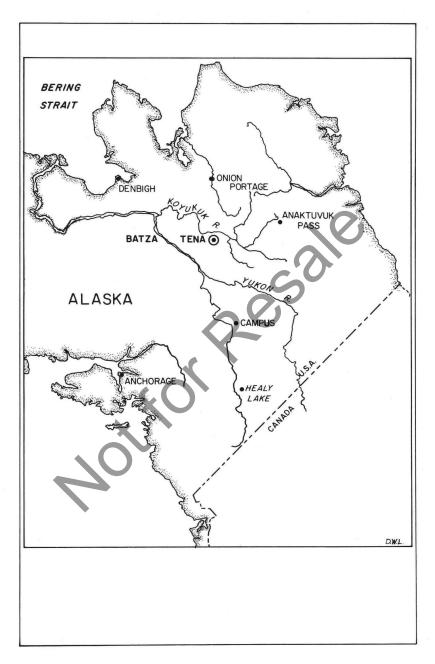


Fig. 1. Map showing the location of Batza Tena and selected major archaeological sites in Alaska.

## ARCHAEOLOGY OF THE BATZA TENA OBSIDIAN SOURCE, WEST-CENTRAL ALASKA

A Preliminary Report of Initial Reconnaissance Surveys

By

Donald W. Clark National Museum of Man

#### INTRODUCTION

Among field projects undertaken by the Archaeology Division of the National Museums of Canada in 1969 and 1970 have been brief reconnaissance surveys of an obsidian source area located southeast of the village of Hughes on the Koyukuk River of west central Alaska (Fig. 1).

The Interior Alaskan occurence of obsidian or volcanic glass was located by W. W. Patton Jr. of the U.S. Geological Survey in 1967, and subsequently, but prior to our knowledge of Patton's activities, it eas reported to us by Koyukon Athabaskan informants at Allakaket in 1968. Dr. Patton kindly provided us with further information about the exact location of the bedrock source, and with Thomas P. Miller, has published a brief description of the source (1970) including neutron activation analyses by the University of Michigan which confirm the probability that the Koyukuk locality (Batza Tena) is the source for obsidian utilized in northwestern Alaska, (Griffin et al 1969; Patton and Miller 1970:761).

Inasmuch as no sources had heretofore been located for the obsidian found in archaeological sites in Alaska, other than for the Aleutian Islands, it was considered highly desirable to examine the natural source area on the Koyukuk in order to determine the presence and nature of archaeological material there. During 21 days on location distributed over parts of two field seasons. A McFadyen Clark and I visited parts of the natural source and collected from 50 sites and small chipping stations.

The source areas reported by native informants are principally the Little Indian River (better called "creek"), small lakes in the same area, and the adjacent uplands. Little Indian River is known as *Batzitna* which translates "Obsidian River," but frequently is referred to as *Batza Tena* which means "Batza Trail" and is the term we have selected to apply to this source area and associated site cluster. Many additional place names in the region contain the stem word *batza* which, according to our informants on the Koyukuk, means obsidian — "that glassy rock" to the exclusion of any other hard materials.

Most of the sites were found on two short ridges, elevation 300 to 500 feet, that form part of the transition between the Koyukuk River flats of ca 250 feet elevation and the upland source area, elevation 800 to 1000 feet, located to the east on the west flank of the Kokrines-Hodzana Highlands. A forest fire of 1968 greatly expedited survey work because some indication of each site was visible on the surface after the ground cover had been burned off. By 1970, however, the burn had become densely carpeted with a new growth of saplings. Several additional sites were found in 1970 at Batzatiga (a local name which translates "Obsidian Hill") located on the lowlands two to three miles east of the Koyukuk River near the mouth of Little Indian River. Further sites were found by R. Reger on ridges to the northeast of the obsidian source during the course of geomorphic investigations in 1969 (D. Reger personal communication 1971).\* Usually a site consists of one to several flake concentrations and also a thin wide scatter of flakes. A flake concentration might range from as little as two feet to more than ten feet in diameter, and in maximum dimensions the sites range from the size of a single cluster to more than 300 feet.

Artifacts are few relative to the large amount of flaking detritus exposed. Among the 400-500 pieces considered as artifacts there is a substantial number of undistinguished or amorphous worked pieces. The most common formal implement is a roughly fashioned bifacially flaked knife blade. The 33 projectile points, mostly bases, include several specimens apparently related to fluted Paleo-Indian points.

<sup>\*</sup> See following paper

#### THE OBSIDIAN

According to Patton and Miller (1970) the primary obsidian source, located in the upland area, consists of mid-Tertiary age pearlitic ash beds in which the obsidian occurs as "Apache tears" or small bombs. The ash beds have disintegrated wherever they are exposed. We examined one major outcrop indicated by Patton (personal communication). The "Apache tears" which we found there generally are one inch or less in average dimensions — much too small for flaking — but some larger pieces were found in frost hummocks downslope from the ash outcrop. Obsidian pebbles also were found in the gravelly soil that mantles Batzatiga and they occur secondarily in stream and lakeshore gravels of the region. Patton and Miller indicate a maximum size of 10 cm which conforms well to the size of the largest artifacts that we recovered.

Colors represented by chipped material are predominately transparent to translucent or various gray, black, and blue-gray hues with or without banding. Many other light gray, brown, caramel and red colors and mottled combinations are occasionally or rarely represented, and there is an uncommon colorless translucent variety liberally dotted with small white inclusions (microlites) and bubbles. Totally opaque obsidian is extremely rare. Obsidian pebbles and decortication flakes exhibit various surface or cortex textures which may be categorized as frosted, pitted, fractured or fissured, silvery with fused edges, and smooth, but intergrades and combinations occur on may specimens. In a preliminary study of surface texture we found that some sites and site clusters are distinctively characterized by one or another cortex variety.

It may be of interest to note that Batza Tena also has the major red-paint-stone source reported to us for the Koyukuk area. We have as yet, however, to examine the outcrop on Little Indian River and no red-paint-stone was found at the flaking stations.

#### THE SITES

Many sites have the same characteristics which can be described summarily. They are now covered with a relatively

sparse growth of small or scrub trees, primarily aspen but also birch, spruce, and alder, with an under-cover, largely burned off at the time of the survey, of bushes, sphagnum moss, cladonia and leaf litter. Most sites simply are tucked away in the forest on slightly elevated flat spots, benches, and knolls along the ridges. With the forest cover present few sites provide any kind of view, but without the forest cover it would in most cases be possible to see from these sites much of the surrounding terrain — flats, valleys, and lakes. At Batzatiga several sites are situated along lake shores and they provide a more restricted perspective. Conditions there also differ from that just described in that this hill was not affected by the 1968 burn.

The soil is sparse and contains considerable stone derived from bedrock which is exposed at some sites. Significantly, however, the area was not covered by late Pleistocene Wisconsin-stage glaciers (Hamilton 1969; maps) and the poor development of soil may be explained by slopewash and solifluction operating in conjunction with frost riving, stirring, and sorting which are evident at Batza Tena. Surface finds consitute a very substantial part of the collections, but at several sites heavy flake concentrations extend into the stony soil to depths of approximately two to six inches. No buried or stratified sites were located. In some cases the flakes appear to have been disturbed and redistributed by soil creep, and in other cases they have been concentrated in the depressed margins between frost hummocks or boils, often in a light colored clay matrix, but there are many striking examples of apparently undisturbed surficial flake concentrations. Some of these undisturbed concentrations may represent camps even though no hearths or structural features are recognized. No organic material was recovered with the exception of a few fragments of burned bone in one site.

The greater part of the collection recovered at Batzatiga in 1970 was picked up on sandy beaches. In two cases the beach sites are correlated with sites on adjacent knolls and possibly represent reworked material that has crept downslope. The origin of other beach occurrences is not adequately accounted for at present.

#### COLLECTIONS

Most significant among the artifacts are 33 projectile point bases or complete points, more than 150 biface blades and fragments, 50 end scrapers, 18 side scrapers, nearly 100 utilized flakes, a notched pebble, a heavy graywacke mattock or axe with a chipped edge and pecked notches, a ground adze blade, several cores of microblades, cores for flakes and blade-like flakes and numerous amorphous items. A few large flakes have been retouched along one edge to serve as knives apparently comparable to the Eskimo ulo.

Indicative of the overwhelming emphasis upon obsidian for artifact production, there are in the 1969 collection 12 chert flakes, 37 chips of basaltic rock, and 22,440 obsidian flakes. Of the last, 180 and 760 flakes belong respectively to the minor speckled and colored varieties. Silicic rock of volcanic origin, other than obsidian is under-represented judging from the recovery of 24 artifacts of this material in the combined 1969-1970 collections. These statistics are not surprising considering that many sites probably were chipping stations owing their existence to the proximity of the obsidian source.

The classification and inventory of the collections is given in Table I. No total is provided inasmuch as many of the artifacts of of such amorphous, unfinished or fragmentary nature that they are of relatively little utility in helping to define the several complexes represented. We will not discuss here the amorphous categories, which would have to be described in detail, or ubiquitous classes such as the retouched and utilized flakes although several specimens not described are illustrated (Fig. 5 E-G; 6 A-B, D).

Attention is drawn, however, to the rough nature of a considerable part of the collection. This condition probably is the result of secondary retouch or major alteration and damage caused by the operation over a period of several thousand years of geomorphic processes which we may collectively term frost action, as well as by the trampling of men and animals. Furthermore, because of an abundance of raw material it was possible to reject malformed pieces at the chipping stations.

Two projectile point types, the side-notched or Tuktu point and particularly the fluted points, are of special interest.

The seven or eight fluted points include one specimen channeled on one side only (Fig. 2 C) and one complete point (Fig. 2 E). Both come from the same site which also yielded two notched points (Fig. 2 G) probably representing mixed components. Generally each fluted point has three channels or flutes on each face (Fig. 2A). The medial flute always was struck off last and the ears and basal concavity were prepared after the lateral flutes, and in part after the medial flutes, had been formed. The lower edges and base usually are lightly to moderately ground. These points differ from the established Clovis and related Paleo-Indian fluted points in that the third or medial flute on the Batza Tena point is relatively small and does not remove any very significant portion of the two lateral flutes. Two specimens from the Brooks Range however show stronger medial fluting (Alexander 1971). In more southerly examples the small lateral flutes are considered as guides and subsequently are largely removed by the main channel flake. The situation in regard to multiple fluted points in central North America is, however, not at all this simple. A definite relationship between the Batza Tena points and Clovis or Clovis-related points may be proposed from the constellation or technological attributes noted above.

### TABLE I

### **CLASSIFICATION OF BATZA TENA ARTIFACTS**

### I. POINTS

- 1. Probable projectile points (33 specimens).
  - a. Fluted points (7-8) (Fig. 2 A-C, E).
  - b. Unfluted points with concave to wide, straight bases (807) Fig. 2 F).
  - Leaf-shaped or lanceolate with highly rounded to narrow straight base (6) Fig. 2D).
  - d. Bipoints (4).
  - e. Side-notched points and variants (5) (Fig. 2 G).

Fig. 2. Projectile Points. A, fluted point 10:36; B, fluted point 1:49; C, fluted point 31:15; D, base of probable lanceolate point, chert, 24:6; E, fluted point 31:60; F, concave point base 28:9 G, side-notched point 31:55. The first component of the catalogue number identifies the site. All except D are obsidian.

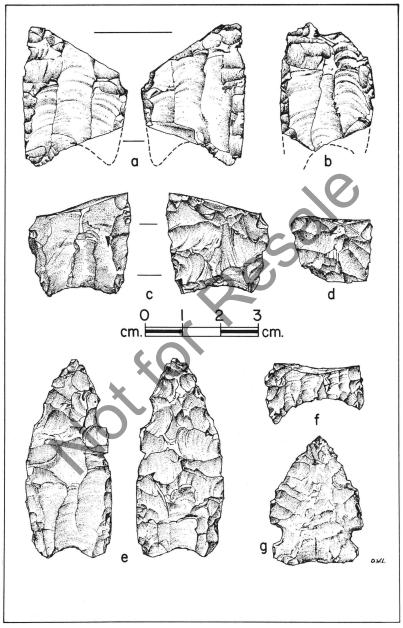


Fig. 2

- f. Square stemmed with shoulders (1).
- g. Unclassified points (2).
- h. Fragments (4).
- 2. Small leaf-shaped bifaces (4).

#### II. MICROBLADE INDUSTRY

- 1. Microblade cores (9) (Fig. 3 A-B).
- 2. Microblades (uncommon ca 20 specimens).
- 3. Core platform tablets and other products of microblade industry (5 tablets and other).

## III. CORES, CORE-BIFACE, RETOUCHED SPLIT PEBBLE, AND BIFACE INDUSTRIES

- 1. Cores for flakes and blade-like flakes (41).
  - a. Platform cores (23) (Fig. 3 C). Probable split platform cores (5)
  - b. Flat-faced cores (9?) (Fig. 3 D)
  - c. Apparent blade cores (3).
  - d. "V"-shaped core (1) (Fig. 4).
  - e. Amorphous cores, core fragments, shattered and split pebbles (not counted, ca 100).
- Core-like Objects.
  - a. Rough biface pebble choppers or cores (8).
  - b. Trimmed pebbles (9).
    - i. Naturally flat pebbles (3).
    - . Split pebbles (6).
- 3. Plano-convex objects ("Turtle backs", biface intergrades, and unfinished implements or blanks) (10).
  - a. Undifferentiated plano-convex objects (10) (Fig. 5 E.
- 4. Biface blades (164)
  - a. Possible biface roughouts, early stages (16) (Fig. 6 D).
  - Biface blades, various forms and degree of preparation (20).
    - i. Leaf-shaped to ovoid pointed bifaces and semi-unifaces (9) (Fig. 6 C).
    - ii. Sub-elliptical biface (1).
    - iii. Single-edged implements
    - iv. Blunt-ended implements (2).
    - v. "Kayuk" blunt-ended knives (2) (Fig. 5 C).
    - vi. Thin asymmetrical side blade (1).
    - vii. Unclassified with sinuous edge (1).

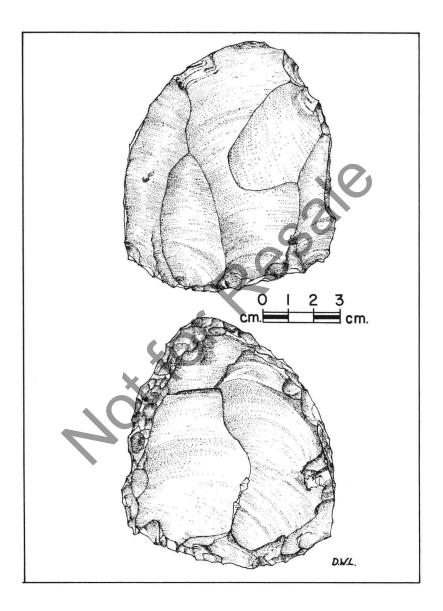


Fig. 4. V-Shaped Core 1:83; Obsidian.

- c. Fragments of biface blades (128 exclusive of v & vi).
  - i. Sub-rectangular and rounded end fragments (73).
  - ii. Semi-pointed ends (44).
  - iii. Sharply pointed ends (5).
  - iv. Midsections (6).
  - v. Small fragments not classified (25).
  - vi. Hinged biface and core edge framents (ca 80).

#### IV. FLAKES AND FLAKE TOOLS

- 1. End scrapers (with convergent scrapers) (50) (Fig. 5 A-B).
- 2. Heavily retouched flakes and unifaces (43).
  - a. High-angle unifacial retouch, thick (scrapers) (16) (Fig. 5 D).
  - a-b. Intergrades (2).
    - b. Low-angle or thin retouch (25).
      - i. Unifacially flaked or retouched (12) (Fig. 6 B)
      - Bifacially retouched (knives) (12).
- 3. Utilized or lightly retouched flakes (47 worn+77 equivocal).
  - a. Concave working edge (11 worn+ 5 equivocal).
  - b. All other forms (36 worn+72 equivocal).
- 4. Blades and blade-like flakes (121)
  - a. Blades (1?).
  - b. Blade-like flakes (120).
    - i. Smoothed through use (5).
    - ii. Possibly retouched but not smoothed (14) (Fig. 5 F-G).
    - iii. No retouch or smoothing; or retouching probably due to natural causes (101).
- 5. Flakes, not intentionally retouched or utilized (ca 40,000).

#### V. PECKED AND GROUND ARTIFACTS MISCELLANEOUS

- 1. Adze blade (1).
- 2. Mattock or axe (1).
- 3. Notched pebbles (2) (Fig. 6 A).
- 4. Hammerstones (1 + 1).
- 5. Boulder flakes and related implements (3 equivocal).
- 6. Other amorphous flaked stone (40).

Three principal types of microblade cores were distinguished in the preliminary analysis of the collections.

(1) A distinctive keeled wedge-shaped core, possibly related to Campus cores but of a greater width and

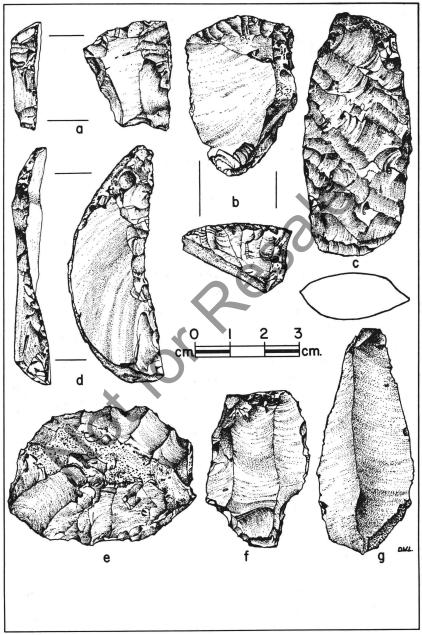


Fig. 5

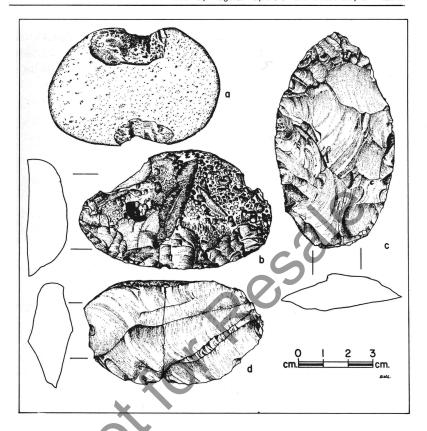


Fig. 6. Knives and Other Artifacts. A, notched pebble 32:52; B, unifacially retouched flake, knife, 46:12; C, leaf-shaped "biface" (primarily unifacial) 2:9; D, probable biface knife blank 12:8. All except A are obsidian.

- significantly different in its having an acute platform angle, which yielded very narrow microblades (one specimen, Fig. 3 A).
- (2a) Less distinctive small tabular Tuktu cores, with flat to curved fluted faces (Fig. 3 B). The specimens in this group intergrade with item 2b below.

Fig. 5. Scrapers, Utilized Flakes and Other Objects. A, end scraper 5:10; B, end scraper 5:9, C, "Kayuk" knife 37:17; D, plano-convex object 18:1; F, blade-like flake, utilized, 13:14; G, blade-like flake, probably utilized, 29:4. All except A are obsidian.

- (2b) Pebbles prepared only at the angled faceted platform (three specimens). There is one apparent blade core or unfinished core blank also of this format which appears to grade into angled platform flake cores.
- (3) Platform cores (decapitated pebbles lacking other preparation with horizontal platforms from which variable sized microblades and small blades have been struck (two specimens).

There are many additional larger platform cores, cobbles prepared only through detachment of a single flake or cap to form a platform, with horizontal to highly angled platforms apparently used in the production of flakes and blade-like flakes (Fig. 3 C).

A flat-faced core with relatively large flake facets is shown (Fig. 3 D) as also is a uniquie V-shaped flake core (Fig. 4).

The majority of the bifaces are fragmentary but it appears that this most numerous artifact usually had a sub-rectangular to rounded base and a more highly rounded end. Pointed symmetrical leaf-shaped bifaces evidently were uncommon (Fig. 7 C). Some specimens of this class are essentially unifaces. Two nearly parallel sided blunt ended specimens with approximate parallel-oblique flaking Fig. 5 C) are comparable to specimens from the Kayuk complex of Anaktuvuk Pass (Campbell 1962: Pl. 216).

Most end scrapers are made from obsidian (Fig. 5 B but proportionately we find more non-obsidian artifacts (Fig. 5 A) in this class than in any other major class of implement. Scrapers are prepared only at the working edge but a few convergent scrapers have a second working edge and others are trimmed along the sides. None of the eleven non-obsidian end scrapers have cortical dorsal surfaces but of the remaining 39 specimens there are 18 with full cortex (excluding retouch) and 13 with partial cortex. Burinated scrapers and true graver spurs at the corners appear to be lacking although some specimens are distinctively cornered at the ends of the working edge.

No burins of any kind were recovered, however, one would not expect burins on obsidian artifacts.

#### DISCUSSION

Although a small number of artifacts flaked from chert and basalt was recovered (about 10 percent of the total artifacts and less than one percent of the flakes), it is apparent from the flake statistics given earlier that primarily obsidian was flaked in the area surveyed even though the basaltic rock and probably some poor grade chert also is available at Batza Tena. Furthermore, the concentration of sites or flaking stations as is found here has not been duplicated elsewhere in the Koyukuk area. Therefore, it appears that Batza Tena owes its existence as such to the proximity of a source of preferred raw material and many of the chipping stations may be analogous to quarry workshop sites.

Considering, however, the archaeological collections in their totality it is apparent from the ground adze, graywacke mattock, notched pebble, well worn scrapers and flake tools, and scattered finds of finished projectile points (not associated with any site) that the area provided something more than a source of stone to be made into implements or to be traded to adjacent regions. The area is moderately rich in game. During our two field trips we saw many moose, three black bear, and also otter, beaver, wolves, muskrat, and geese and various other fowl. Many other species of small game and fur-bearing animals as well as caribou reportedly are available here. Information obtained from informants at Allakaket, Highes, and Huslia indicates that a full range of economic activities (hunting, caribou fence construction, trapping, salmon fishing, spring camp, winter house settlement, and trading) formerly was undertaken within the environs of Batza Tena and the adjacent reaches of the Koyukuk River. We suspect that the same situation prevailed in the more remote past.

From our description of the sites it would be apparent that many sites are likely to have mixed components. This situation seems to be borne out by the recovery of two notched points and two fluted points from one site. On the basis of an initial series of obsidian hydration measurements it even appears that flakes and artifacts of extremely diverse age have been brought together in some secondary flake clusters. Flakes from each of two concentrations which have yielded fluted points have been

dated from a few centuries to more than 12,000 years in age, using a non-linear hydration rate of 1.4 microns squared per 1000 years. The hydration program is being undertaken by Leslie B. Davis of Montana State University. Therefore all superficial or secondary artifact and flake concentrations are suspect and the basic unit of analysis becomes the individual artifact except for very obvious associations as for instance in the case of eleven end scrapers found in a single flake concentration, locus E of Site 1, or in the apparent cache of four basalt artifacts at Site 28.

We hope to find stratified or otherwise sealed sites and also features through future extensions of our surveys, but for Batza Tena proper we are relying heavily upon obsidian hydration measurements and typology to separate and date the mixed components and complexes.

Douglas Anderson briefly examined the artifacts recovered in 1969 and was very helpful in suggesting that with the exception of the fluted points they may relate to the 4500 year-old transition into the Portage Complex of the Onion Portage site on the Kobuk river. The recovery of various microblade cores, side notched points, "Kayuk" knives, a ground adze, and additional fluted points in 1970 has, however, widened the scope of the Batza Tena collections, although much of the material may still be encompassed within what Anderson (1968) has termed the Northern Archaic tradition. The side-notched points would date early in the tradition, to about 4000 B.C. in the Palisades complex although variant forms, also recovered at Batza Tena, may be younger but not as young as the Portage complex. In this context sites with microblades would not belong to the Northern Archaic tradition but would be of either a younger or an older age. In the Tuktu complex of Anaktuvuk Pass, dated to 4500 B.C. (SI-114,  $6510\pm55$  BP), notched points, microblades and micro-cores, and certain other types common to Batza Tena are found in association (Campbell 1962), and the association of microblades and notched points also prevails in other Alaskan sites located east of the Koyukuk River (Cook and McKennan 1970). Presently, notched points and microblades have not been found together at Batza Tena but it would be advisable to obtain further substantative evidence of separate distributions at Batza Tena before declaring for two different traditions on this basis.

Inasmuch as the Kovukuk Indians still possess a knowledge of the obsidian source, recognize it in their place names, and until recently used obsidian flakes to open blood vessels swollen by snow blindness, we also can expect to find late-prehistoric Koyukuk camps at Batza Tena. In addition, we have reliable reports of a small protohistoric and early historic village, appropriately named Batza Tena, which is located a short distance southwest of Batzatiga. At the present time, however, our definition of the cultural complexes represented in the collections has not progressed to the point of permitting us to recognize any late-prehistoric Koyukon complex. Furthermore, none of the preserved bone, stone slab hide scrapers, pottery, red paint stone, and large grooved adzes which we would expect to find in such a complex, on the basis of our ethnographic fieldwork and investigations of early historic or proto-historic houses, have been recovered at Batza Tena. This situation is considered to be an unfilled gap in our preliminary reconnaissance rather than an hiatus in the occupational history of the area.

Probably the most significant aspect of our reconnaissance is its contribution to Paleo-Indian prehistory. To date Batza Tena has been one of the most prolific source for fluted points in Alaska. Other finds are a relatively small but complete specimen found by the U.S. Geological Survey on the Utukok River of northwestern Alaska in 1947 (Thompson 1948); an enigmatic specimen in the Denbigh Flint complex (Giddings 1964: 233); three additional fragmentary specimens, one being only a tip, found in the western and central Brooks Range by the U.S. Geological Survey in 1950 (Solecki 1951); two bases and several unfinished basal fragments also recovered from the Utukok in 1965 and 1966 (Humphrey 1966); two basally thinned points recovered at Healy Lake in 1970 (J. P. Cook, personal communication to A. McFadyen Clark); two fluted bases recovered also in 1970 from the Putu site of the north slope of the Brooks Range (Alexander 1971); a basally thinned obsidian point recovered from an eastern tributory of the Koyukuk during the course of a salvage survey in 1970 (Cook et al 1970: 25) and unpublished specimens reportedly from Bristol Bay (Hall 1969; Lyons 1970:156). Earlier than any of these finds, however, is one from placer mines north of Fairbanks (Hibben 1943: 259 and PL. XV d) which has attracted little further notice, perhaps because of the shortness of the triple flutes or thinning flakes. Wormington (1957:109) has identified the last specimen as a Plainview point. Several of these points display double or triple channels and their relationship to the Batza Tena points need not be questioned.

Only three specimens have been found in dated stratigraphic contexts: that from the Denbigh Flint complex, ca 4000 years old, and the basally thinned Healy Lake specimens which were found in levels dated by radiocarbon approximately to 9,000 and to 10,500 or 11,000 years ago (Cook et al 1970:25, 115; J.p. Cook and R. McKennan personal communications to A. McFadyen Clark and D. Clark 1970 and 1971). Radiocarbon dating also is anticipated for the Putu site.

Prior to the several discoveries in 1969-70 there had been various opinions regarding the age of Alaskan fluted points (cf. Bryan 1969; Giddings 1964, Hall 1969; Haynes 1969a and 969b; Humphrey 1966 and 969). The available evidence (summarized by Hall 1969), but hardly the intuitive feeling of most archaeologists, tended to favor the association with the Denbigh Flint complex. The Batza Tena collections, in which there is no manifestation of the Denbigh Flint complex (Arctic Small Tool Tradition), should effectively demonstrate that these fluted points are not properly a part of the Arctic Small Tool Tradition inventory, while the Healy Lake finds suggest an alternate temporal placement for at least some of the Alaskan points. The basally thinned Healy Lake are not, however conclusively the same thing as the Batza Tena points and therefore are not necessarily of the same age. We anticipate that will be reinforced by obsidian hydration measurements taken on the Kovukuk specimens. This temporal placement, which is only presently becoming available, restricts the theoretical viewpoints that have been based upon Alaskan fluted points from the central part of North America that the question of a southern or an Alaskan origin, and the subsequent direction of diffusion, remains open.

\* A more substantative survey of the western part of the obsidian source area was undertaken by the writer and three assistants during the summer of 1971. This survey greatly increased the collections and number of known sites for Batza Tena but failed to produce any stratified sites. Most sites appear to be essentially flaking stations, although two living areas and a group of house pits were also located and excavated. Several additional fluted point fragments were recovered but no Paleo-Indian sites were recognized. Side notched points were recovered with a broad range of associations including late ceramics and microblades, however, it is likely that some of these associations will turn out to be invalid due to the mixture of components. The house pits which we excavated were located 35 miles southwest of Batza Tena and yielded artifacts showing cross-ties with Norton Culture.

Also subsequent to the preparation of this article a set of obsidian hydration measurements became available for the 1969-1970 collections. Certain of the results are at variance with the expected ages and more work will be done with this dating method before the results are used to periodize the collections.

#### REFERENCES CITED

Alexander, Herbert L.

1971 Early Man Sites: Brooks Range, Alaska. Paper Delivered at the Fourth Annual Meeting of the Canadian Archaeological Association, Calgary, February 26-28, 1971.

Anderson, Douglas D.

1968 A Stone Age Campsite at the Gateway to America. Scientific American 218 (6): 24-33.

Bryan, Alan L.

1969 Early Man in America and the Late Pleistocene Chronology of Western Canada and Alaska. Current Anthropology 10 (4): 339-365 with CA Comment.

Campbell, John M.

1962 Cultural Succession at Anaktuvuk Pass, Arctic Alaska, p. 38-54 in J.M. Campbell, ed., Prehistoric Cultural Relations Between The Arctic and Temperate Zones of North America, Arctic Institute of North America Technical Paper No. 11.

Cook, John P. and R. A. McKennan

The Athabaskan Tradition: A View from Healy Lake in the Yukon-Tanana Upland. Paper read by Robert A. McKennan at the 10th Annual Meeting of the Northeastern Anthropological Association. Ottawa, May 7-9, 1970.

Cook, John P., E. J. Dixon, and C. E. Holmes (title page assigns authorship to Department of Anthropology, University of Alaska)

1970 Report of Archaeological Survey and Excavations along the Alyeska Pipeline Service Company Haulroad and Pipeline Alignments. Xerox. University of Alaska, College, December 1970.

Giddings, James L.

The Denbigh Flint Complex. American Antiquity 16 (3); 193-202.

1962 Onion Portage and Other Flint Sites of the Kobuk River. Arctic Anthropology 1 (1): 6-27.

1964 The Archaeology of Cape Denbigh. Brown University Press.

Griffin, James B. G. A. Wright, and A. A. Gordus

1969 Preliminary Report on Obsidian Samples from Archaeological Sites in Northwestern Alaska. Arctic 22 (2) 152-156.

Hall, Edwin S., Jr.

1969 Comment in A. L. Bryan (1969) Early Man in America and the Late Pleistocene Chronology of Western Canada and Alaska.

Hamilton, Thomas D.

1969 Glacial Geology of the Lower Alatna Valley, Brooks Range, Alaska pp. 181 -223 in Geological Society of America Special Paper 123.

Haynes, C. Vance, Jr.

1969a Comment in A. L. Bryan (1969) Early Man in America and the Late Pleistocene Chronology of Western Canada and Alaska.

1969b The Earliest Americans. Science 166: 709-715.

Hibben, Frank C.

1943 Evidence of Early Man in Alaska. American Antiquity 8 (3): 254-259.

Humphrey, Robert L

The Prehistory of the Utukok River Region Arctic Alaska: Early Fluted Point Tradition with Old World Relationships. Current Anthropoloty 7 (5): 586-588.

1969 Comment in A. L. Bryan (1969) Early Man in America and the Late Pleistocene Chronology of Western Canada and Alaska.

Lyons, Thomas R.

1970 Isochronous Interpretation of Some C-14 Dates - A Technique for Temporal and Regional Studies. *Plains Anthropologist* 15 (49): 153-160.

Patton, William W. Jr. and Thomas P. Miller

1970 A Possible Bedrock Source for Obsidian Found in Archaeological Sites in Northwestern Alaska. Science 169: 760-761.

Rainey, Froelich G.

1940 Archaeological Investigations in Central Alaska. American Antiquity 5 (4) 299-308.

Solecki, Ralph S.

Notes on Two Archaeological Discoveries in Northern Alaska, 1950. American Antiquity 17 (1): 55-57.

Thompson, Raymond M.

Notes on the Archaeology of the Utukok River, Northwestern Alaska. American Antiquity 14 (1): 62-65.

Wormington, H. M.

1957 Ancient Man in North America. Denver Museum of Natural History Popular Series No. 4, Fourth Edition. Denver

## AN ARCHAEOLOGICAL SURVEY IN THE UTOPIA AREA, ALASKA

Ву

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and

Richard D. Reger 2

#### GENERAL STATEMENT

Lithic remains fashioned by early inhabitants of the Utopia area were discovered during the junior author's investigations of altiplanation terraces and glacial geology in the environs of Indian Mountain. The purposes of this paper are (1) to briefly describe the sites from which the remains were collected, (2) to present a description of the artifacts, and (3) to indicate the probable derivation and use of the material.

#### AREAL SETTING

Utopia is located along the banks of the upper Indian River 26.4 km east of Hughes at 58° 59' 33" N. Latitude and 153 31' 35" W. Longitude in the Melozitna D-2 Quadrangle, Alaska.\* This settlement lies at 303 meters within the maturely dissected Indian River Upland Province of western interior Alaska (Wahrhaftig, 1965, pl. 1). Surrounding ridge crests vary from 460 to 1220 meters in elevation and commonly bear well-developed altiplanation terraces above 610 meters. The highest landmark in the vicinity is Indian Mountain with an elevation of 1290 meters; its summit is 8.2 km north of Utopia.

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<sup>\*</sup> U. S. Geological Survey topographic map, scale 1/63,360 (1955).

#### **CLIMATE AND VEGETATION**

The Utopia area has a continental climate typical of western interior Alaska (Watson, 1959; 24). The local mean annual temperature based on an incomplete meteorologic record from January 1951 to December 1961 is -4.8 C. (Fig. 1). July with a mean temperature of 13.8 C. is the warmest month of the year and December with a mean temperature of -24.9 C. is the coldest month. The maximum recorded temperature is 29.4 C. (July) and the minimum is -49.5 C. (December). Mean annual precipitation (50.44 cm) is higher than Fairbanks (29.74 cm) (Pewe, 1954). Heaviest snowfall occurs during January when the mean is 43.9 cm.

The dominant vegetation in poorly drained areas around Utopia is black spruce (Picea mariana) and alder (Alnus spp.). White spruce (Picea glauca), balsam poplar (Populus balsamifera), quaking aspen (Populus tremuloides), and Alaska paper birch (Betula papifera) inhabit better drained situations. Local shrub plants include willows (Salix spp.), Labrador tea (Ledum decumbens), narrow-leafed fireweed (Epilobium angustifolium), prickly rose (Rosa acicularis), and blueberry (Vaccinium uliginosum). Except for trees in protected sites, only alpine tundra exists above 580 meters elevation; it consists primarily of Cladonia spp., Cetraria spp. and other foliose ground lichens with dwarf and resin birches (Betula nana, B. glandulosa), dwarf fireweed (Epilobium latifolium), sedge (Carex spp.), mountain aven (Dryas octopetala), heather (Cassiope tetragona), and bearberry (Arctostaphylos alpina).

#### **GEOLOGY**

A reconnaissance study of the bedrock geology of the Hughes Quadrangle has been done by Patton and Miller (1966). The area of our investigation is underlain by Late Jurassic to Early Cretaceous andesitic tuffs, agglomerates, and flows. These units are intruded by a Late Cretaceous quartz diorite-quartz monzonite pluton along the lower western flanks of Indian Mountain and the Pocahontas Hills west of the area of investigation. East of the study area the bedrock is dark

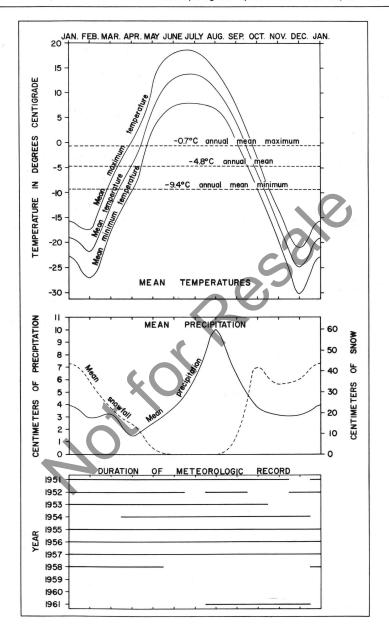


Figure 1. Mean monthly climatic data for Utopia, Alaska. Source is United States Air Force Climatic Center, 1962.

the Norton-Choris ceramics, as, of course, has been suggested by others (e.g., Oswalt 1955).

Summary.—Linear stamping is known from the Norton type site at least as early as the middle of the first millennium B.C. It may appear as late as A.D. 600 or 700 farther south. A variant is the decorated ware of St. Lawrence Island of around A.D. 300 or earlier.

#### **Check Stamped Wares**

At the Norton type site, Norton Check Stamped pottery is described as tempered predominantly with plant fiber, mean wall thickness 7 mm., with the exterior bearing paddled impressions of small rectangles or squares, the sides of which normally measure less than 4 mm (Griffin and Wilmeth 1964). Vessel shape was that of Figure 3, a, b. The temporal occurrence at the type site is apparently the same as that of linear-stamped decoration, here considered to begin somewhere between 700 and 200 B.C.

Farther south at Chagvan Bay, thin pottery stamped with small checks is apparently associated with charcoal dated at A.D.  $210\pm60$ , A.D.  $540\pm60$ , and A.D.  $660\pm250$  (WSU-102, WSU-123, WSU-117; Ackerman 1964). The sherds appear in a Norton-like context, and may have been contemporaneous with linear-stamped pottery. Vessel rims (Ackerman 1964: Fig. 7, f) suggest the vessel form to have been similar to that in Figure 3, a.

Pottery virtually identical to both that of Chagvan Bay and of the Norton type site appears in the Naknek drainage by the second century B.C. Here there is no clear evidence that the check-stamped pottery was associated with linear-stamped ceramics. In the resume of the Naknek material which follows, dates cited in the Christian calendar are derived from a battery of thirty-two separate C-14 determinations, both published (Trautman 1964) and unpublished, which are directly pertinent to cultural material. The Naknek drainage ceramics have been only briefly described in print (Dumond 1962).

Smelt Creek Check Stamp is the local designation of the

#### ARTIFACT DESCRIPTIONS

The artifacts described herein are treated on a site-by-site basis because consideration of them as a single collection suggests a cultural correspondence between sites which cannot be supported by available data. These surface collections must be treated as being mixed both temporally and culturally, especially in view of disturbances by frost action and lack of a stratigraphic framework, so that even the contemporaneity of artifacts within each site is very questionable.

Several of the sites contained nothing more than waste flakes but were collected to assess the extent that terrain was utilized. Other localities contained the projectile points, scrapers, knives, blades, a drill, and retouched flakes listed in the following inventories.

Site 1	65° 59' 04"N; 153° 41' 52"W
	1 retouched flake.
	2 waste flakes

This projectile point was manufactured from a gray coarse-grained chert. It is oblanceolate in form with the widest portion near the middle. The tip is missing. The basal edges have been gound approximately 1/3 of the way toward the tip. The cross section is lenticular. L 50.8 mm W) 23.4 mm T) 6.8 mm Figure 3:J end scraper: I. M. 5(2)

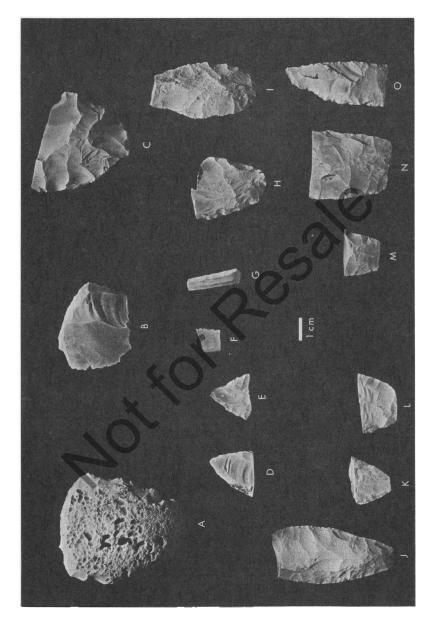


Figure 3. Artifacts from the upper Indian River area, western interior Alaska.

This end scraper was manufactured on a thick cortex flake of black obsidian. The form of this scraper is sub-triangular and is plano-convex in cross-section. Both lateral edges and the front edge have been worked. No attempt was made to remove cortex on the dorsal surface. Some wear can be seen on all edges.

L) 53.5 mm W) 44.0 mm T) 11.9 mm, edge angle 50° Figure 3:A knife: I.M. 5(4)

This knife is made of black obsidian. Although it is only a fragment, the complete specimen was probably bi-convex in form. It is bifacial but the ventral surface was worked minimally. The dorsal surface has been randomly flaked in a collateral fashion. A portion of the original platform for the flake from which this specimen was manufactured still adheres to the base. The platform is a cortical surface. Wear is evident on both edges.

L) 42.9 mm W) 42.0 mm T) 9.4 mm Figure 3:C

Site 6 65° 58' 40"N; 153° 38' 40"W 2 retouched flakes 1 waste flake

Site 7 65° 58' 40"N; 153° 38' 24"W 19 waste flakes projectile point: I.M. 7(8)

The material of this point base is black obsidian. This is a straight-based, probably lanceolate, point, collaterally flaked and basally thinned. It is lenticular in cross section and ground on both edges.

L) 15.9 mm W) 19.9 mm T) 6.3 mm Figure 3:M

projectile point: I.M. 7(9)

This point fragment is made of a fine-grained, light gray, mottled chert. The form is unidentifiable as it is the medial section of a point; the tip and base were removed as a result of snap fractures. A wide flake scar extends longitudinally along the point and probably resulted from one of the snap fractures mentioned above. The edges have been retouched on alternate edges, that is one edge dorsally and the other ventrally. The one surface with the flaked surface intact has been collaterally worked.

L) 15.5 mm W) 24.9 mm T) 5.7 mm Figure 3:L

Site 8 65° 58' 46"N; 153° 38' 11"W
1 retouched flake
5 waste flakes
drill: I.M. 8(10)

This specimen is manufactured of black obsidian. Although it is herein classified as a drill because the tip is worked on alternate edges, some argument could be raised that it is a projectile point. A great deal of care was given to fashioning the basal portion of the specimen. The implement is straight based, has parallel edges and has been formed by taking small flakes from the edges. No flakes extend to the median line of the artifact.

L) 43.6 mm W) 18.2 mm T) 5.5 mm Figure 3:0

Site 9 65° 58' 55"N; 153° 37' 56"W 32 retouched flakes 560 waste flakes projectile point: I.M. 9(11)

This specimen is made of a coarse-grained, dark gray chert and is bi-convex. The widest portion is nearer to the base than to the tip. The base is round and an attempt was apparently made at basal thinning. The flaking is crude, possibly due to the material. The cross section is lenticular. The tip is missing.

L) 45.1 mm W) 23.9 mm T) 8.2 mm Figure 3:I projectile point: I.M. 9(15-16)

The material for this point is black obsidian. The specimen is in two pieces and is broken approximately in half. The two fragments have been analyzed as a composite whole. This point is straight based, lanceolate, basally thinned, shows fine edge retouch and is collaterally flaked. The cross section is lenticular. A large thinning flake was struck from the tip, extending half way down the point. This flake was removed prior to breakage. The tip shows crushing, evidently from impact. The fracture was a snap fracture, possibly due to the point being slightly curved on the longitudinal plane. The break surface on the tip portion of the point shows some minute scars oriented perpendicular to the lateral plane of the artifact. This orientation suggests subsequent use of that fragment as a scraper or chisel.

L) 65.8 mm W 29.6 mm T) 6.1 mm Figure 3: H,N projectile point: I.M. 9(12)

This tip fragment is made of a clear, light gray obsidian. It has been fluted on one surface from the base direction. The opposite surface is randomly, collaterally flaked. The flute was made prior to final shaping as the scars of shaping flakes obliterate the original limits of the fluting scar. The edges are finely retouched and worn.

L) 20.1 mm W) 18.5 mm T) 4.5 mm Figure 3:D

projectile point: I.M. 9(13)

The material for this specimen is a clear, light gray obsidian. It is a tip fragment displaying collateral flaking, some edge retouch and no wear.

L) 17.4 mm W) 19.5 mm T) 5.4 mm Figure 3:E

blade: I.M. 9(14)

This medial blade fragment is made from black obsidian. The cross section is prismatic. The specimen is retouched along both edges. The longest edge appears to have been deliberately retouched, the edge angle is very steep. The shorter, opposite edge appears to have been use retouched. The latter retouch is less regular and is on both dorsal and ventral surfaces. This

blade fragment was probably inset into bone or wood or else used by itself, the more finely worked edge serving as a dulled back side of a cutting blade. Both distal and proximal ends have been snapped.

L) 10.4 mm W) 1.3 mm T) 1.5 mm Figure 3:F

Site 10: 65° 59' 01"N; 153° 37' 25"W
28 retouched flakes
126 waste flakes
projectile point: I.M. 10(18)

This basal fragment is made of clear, light gray obsidian. The complete specimen was probably oblanceolate in form. The base is rounded with one large thinning flake struck from one surface. The opposite surface displays random, collateral flaking. The edges are ground.

L) 18.4 mm W) 19.5 mm T) 4.9 mm Figure 3:K

end scraper: I.M. 10(20)

This scraper is made of brown and black banded obsidian. A large irregular flake was utilized and one scraping edge prepared. There is some random crushing along the lateral edges.

L) 30.5 mm W) 37.8 mm T) 6.2 mm edge angle 65 Figure 3:B

biface fragment: I.M. 10(17)

This lateral edge fragment is manufactured of brown and black obsidian. It has some minor edge retouch. L) 16.5 mm W) 24.6 mm T) 13.8 mm not illustrated

biface fragment: I.M. 10(17)

This blade is made of clear, light gray obsidian. It is prismatic in cross section and missing the proximal end. There is no edge retouch but the distal end has been retouched.

L) 23.4 mm W) 6.5 mm T) 2.8 mm Figure 3:G

Site 11: 65° 59' 07"N; 153° 36' 49"W

2 waste flakes

Site 12: 66° 01' 01"N; 153° 35' 02"W

1 retouched flake 3 waste flakes

#### DISCUSSION

The Indian River area lies within the Athapaskan territory in Alaska, specifically within that region utilized by the Koyukon group (Osgood, 1936). No single monograph deals with the Koyukon culture as a whole, however, works by Jette, Sullivan, and Loyens treat various aspects of the modern culture (Jette, 1907, 1907-09, 1908-09, 1911, 1913; Sullivan, 1942; Loyens, 1964). Koyukon economy has been a seasonal matter, with fishing along the main rivers of primary importance in summer and early fall, while hunting has been most important in late fall (Sullivan, 1942). We have no proof that this pattern was followed in the prehistoric past but the inventory of implements collected during this survey indicates that hunting, at least, was practiced. The geographical distribution and situation of the sites seems to further indicate utilization of the sites as lookouts for spotting game. That all projectile points are broken and consist mainly of point bases indicates the sites were stations where projectiles were re-tipped following breakage.

Archaeological fieldwork in the Koyukuk area has been minimal. So comparisons of material are somewhat premature. Until the 1969 field season, the only work done was conducted by Fredrica de Laguna in 1935; this work was a survey which did not extend into the Indian River area (de Laguna, 1947). During 1969 investigations by D. W. Clark also revealed sites in the general area of the localities reported here (Clark, 1970).\* Although the authors have not examined the material found by

<sup>\*</sup> Also, see preceding paper

Clark, it apparently encompasses all the cateogries of implements we found near Indian Mountain including fluted points (see our site 9), straight- and round-based projectile points, and microblades. Neither party apparently found burins. In addition to the finds by Clark and ourselves, fluted points have been reported from the western Brooks Range by Humphrey (1966), Solecki (1951), and Thompson (1948), and Cook (1970: 114) discussed similar points found in the upper Sagavanirktok River drainage of the central Brooks Range. Obsidian oblanceolate points very similar to those in our collections have been found in Band 5 of Onion Portage and have been dated at 2200-2600 B.C. by Anderson (1968:28).

The obsidian in our collections probably came from deposits existing in the lower Indian River drainage (Patton and Miller, 1970), but final verification must be based on element comparisons. The obsidian sources found by Patton and Miller are centered approximately 24 km southwest of the center of our collection area. The major portion (98%) of our obsidian corresponds in color and banding to the glass reported by Patton and Miller; the obsidian is mainly black and shows some inclusion banding along thin flake edges. Some flakes have a light gray transparency. Cortex on some specimens is heavily pitted and appears to be the original rind of perthitic fragments found in the ash described by Patton and Miller. Only 2% of the obsidian is brown and black banded glass with inclusions.

## **ACKNOWLEDGEMENTS**

The junior author's investigations of altiplanation terraces in the vicinity of Indian Mountain have been conducted under the guidance of Dr. Troy L. Pewe, Department of Geology, Arizona State University. We are grateful for the warm hospitality of Major Lyle Lagasse and others of Utopia. Able assistance in the field was rendered by Albert E. Adams. Funding for this research was granted by U.S. Army Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire, through the assistance of Dr. Jerry Brown, Soils Scientist. We are grateful for the helpful comments on an early draft of this manuscript by Drs. Troy L. Pewe and John P. Cook.

#### BIBLIOGRAPHY

Anderson, D. D.

1968 A Stone Age campsite at the gateway to America, Scientific American, Vol. 218, no. 6, pp. 24-33.

Clark, D. W.

Archaeology of the Batza Tena obsidian source, west central Alaska, paper read at the 21st Alaska Science Conference, College, Alaska.

Cook, J. P.

Report of archaeological survey and excavations along the Alyeska Pipeline Service Company haulroad and pipeline alignments, Department of Anthropology, University of Alaska, College, Alaska.

Humphrey, R. L.

The prehistory of the Utukok River region, arctic Alaska: early fluted point tradition with old world relationships, Current Anthropology, Vol. 7, no. 5, pp. 586-588.

Jette, Julius

1907 On the medicine men of the Ten'a, Journal of the Anthropological Institute of Great Britian, Vol. 37, pp. 157-158.

1907-09 On the language of the Ten'a, Man, Vol. 8, pp. 72-73, Vol. 9, pp. 21-25.

1908-09 On Ten'a folklore, Journal of the Anthropological Institute of Great Britian and Ireland, Vol. 38, pp. 298-367, Vol. 39, pp. 460-505.

1911 On the superstititons of the Ten'a Indians, *Anthropos*, Vol. 6, pp. 95-108, 241-259, 602-723.

1913 Riddles of the Ten'a Indians, *Anthropos*, Vol. 8, pp. 181-201, 630-651.

de Laguna, Fredrica

The prehistory of northern North America as seen from the Yukon, *Memoirs of the Society for American Archeology*, Vol. 12, no. 3, part 2, 370 p.

Loyens, W. J.

The Koyukon Feast of the Dead, Arctic Anthropology, Vol. 2, no. 2, pp. 133-148.

Osgood, Cornelius

1936 The distribution of the northern Athapaskan Indians, Yale University Publications in Anthropology, No. 7.

Patton, W. W. and T. P. Miller

1966 Regional geologic map of the Hughes Quadrangle, Alaska, United States Geological Survey Miscellaneous Geological Investigations Map I-459.

1970 A possible bedrock source for obsidian found in archaeological sites in northwestern Alaska, *Science*, Vol. 169, no. 3947, pp. 760-761.

Pewe, T. L.

1954 Effect of permafrost on cultivated fields, Fairbanks area, Alaska, United States Geological Survey Bulletin 989-F, pp. 315-351.

Solecki, R. S.

Notes on two archaeological discoveries in Alaska, American Antiquity, Vol. 17, pp. 55-57.

Sullivan, Robert

The Ten'a food quest, Catholic University of America Press, Washington, D. C.

Thompson, R. M.

Notes on the Utukok River, northwestern Alaska, American Antiquity, Vol. 14, pp. 62-65.

United States Air Force Climatic Center

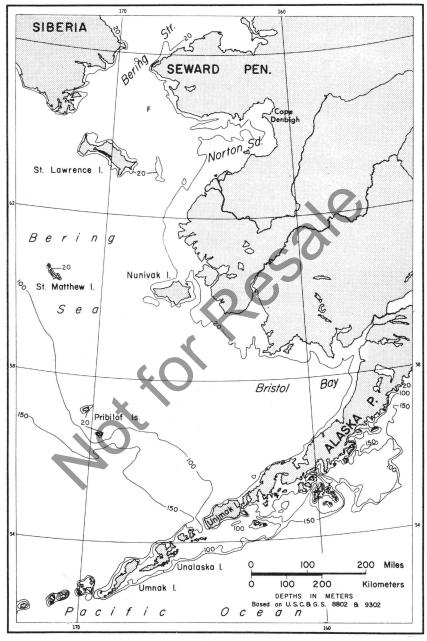
1962 Uniform summary of surface weather observations for Utopia Creek Air Force Station, Alaska, Air Weather Service (MATS), Asheville, 88 p.

Wahrhaftig, Clyde

1965 Physiographic divisions of Alaska, *United States Geological Survey Professional Paper* 482, 52 p.

Watson, C. E.

1959 Climate of Alaska, in Climate of the States: United States Weather Bureau Climatography No. 60-49, 24 p.



Map 1

# CARVED AND INCISED STONES FROM CHALUKA AND ANANGULA

By

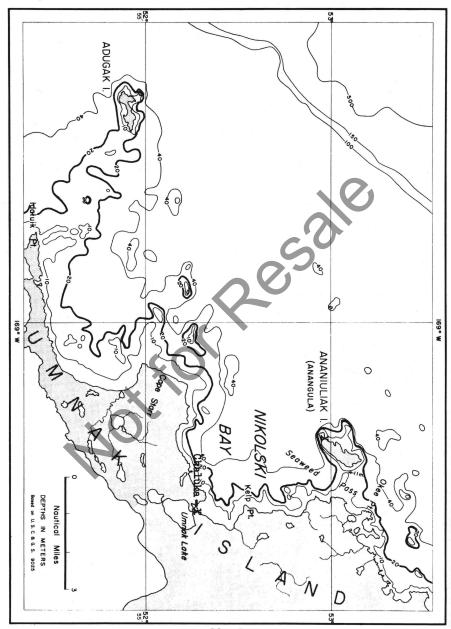
Jean S. Aigner
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During the 1962 work at the Aleut base village, Chaluka. on Nikolski Bay, southwest Umnak Island, Alaska, members of the Aleut-Konyag Prehistory and Ecology Project 1 excavated a number of beach pebbles with incising. (Maps 1, 2). It is now clear that many discarded beach cobbles were also incised but their decoration had been obliterated by mud and soil. Returned with the other cultural materials were several dozen stones. These were mentioned briefly in previous publications (Aigner, 1963, 1966: Fig. 30). In 1968 and 1970 further excavations on Nikolski Bay 2 revealed more incised and carved stones and added 4000-5000 additional years to the presence of this artifact group among Aleuts in the eastern Aleutians. Largely as a result of excavations at the 8,400 B.P. site of Anangula there is compelling evidence of population and cultural continuities between that village and later peoples on Nikolski Bay (Aigner, 1970).

# MATERIALS AND MOTIFS

The majority of foreign stone materials in the Chaluka site, excluding obsidian, basalt and greenstone (chert) artifacts, consists of fine-grained, water-worn pebbles and cobbles

- The project was funded by The National Science Foundation through the University of Wisconsin, Madison, William S. Laughlin and William Reeder co-principal investigators.
- 2. In 1968 Aigner and Laughlin returned to Chaluka under the auspices of the National Broadcasting Company; travel funds were also provided by NSF grant GS 1756, Laughlin and Aigner co-principal investigators. The 1970 work was undertaken as part of the IBP sponsored and NSF funded project Aleut Adaptation to the Bering Land Bridge Coastal Configuration" (GB 18741); principal investigators are Laughlin, Aigner and Robert F. Black, all of the University of Connecticut.



Map 2

collected on the nearby beach. The surfaces of the stones are worn smooth; long bar shapes are most common. Cross sections of the stones which received incising are rectangular and subrectangular; stones with incising vary in length from 4.2 to 19.5 cm. Breadth and thickness are 1.1 to 9.0 cm and 0.6 to 3.3 cm, respectively.

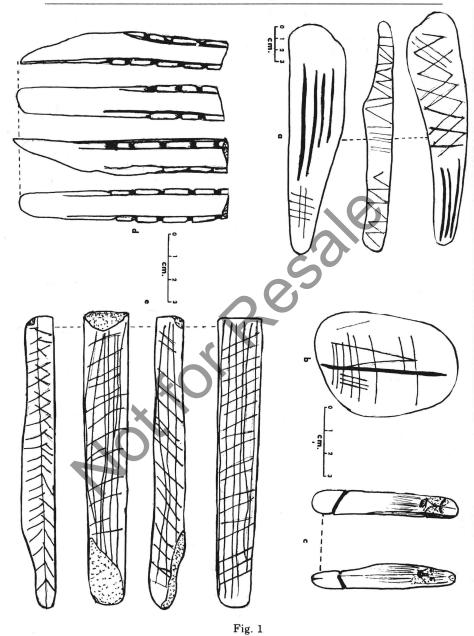
In the 1962 Chaluka collection, 22 examples of incised stones could be assigned provenience. Several examples clearly functioned as awl and needle smoothers and sharpeners (Fig. lab); on these examples grooves are worn into the stone which are shallow at both ends and of uniform depth the rest of their length. Other specimens are difficult to interpret functionally although at least one was suspended (Fig. 1c). Yet another example is a carved replica of a spear or harpoon (Fig. 1d).

There is no one discernible style or characteristic motif. Most pieces are decorated with one or several motifs evidently placed arbitrarily on one or more surfaces. A few examples are decorated on four faces by designs running the length of the stone (Fig. le). In the 1962 collection there are two examples of carved and incised faces, and a possible third (Figs. 1c, 2 ab).<sup>3</sup>

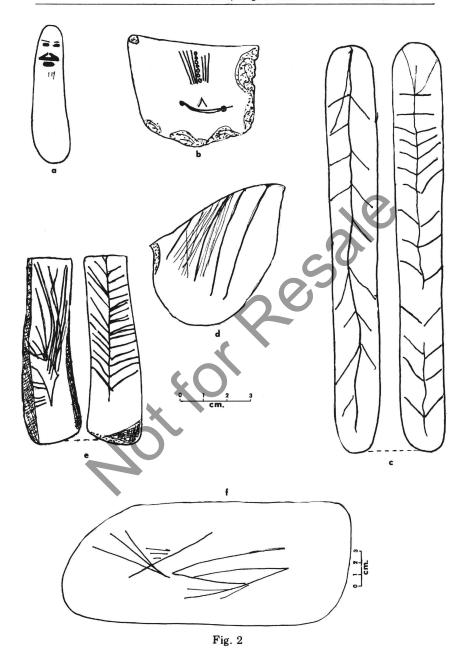
Decoration consists of checkered motifs, cross hatchures, "arrow" motifs, zigzags, feather designs, "X"s, "V"s and inverted "V"s and figure-eights. Cross hatchures, checkers and feather motifs appear most commonly. Faces have lines for the eyes, eyebrows, moth and cheeks; the nose is generally carved in slight relief.

The faces are of particular interest for they appear on bone tools and ornaments in essentially the same form, and are associated with an Image of the Deity from one early Chaluka house, a carved stone face is also associated with one of the 8400 B.P. houses at Anangula. The features of slit or slanting eyes, large nose with a narrow root and broad nostrils and low forehead give the faces an Aleut Mongoloid cast. One late

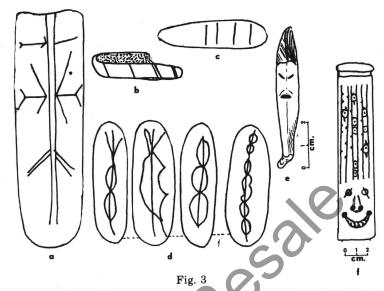
<sup>3.</sup> In the collection there are also two examples of incised faces on bone (Aigner, 1966, Fig. 26.2) and one of a carved face (Aigner, 1966, Fig. 26.1) [Figs. 3e, 5].



Figs. 1-3: Incised and carved stones from Chaluka.



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schematic face (?) is incised on a small flat cobble (Fig. 2b).<sup>4</sup> The mouth is wide, the nose an inverted "V", and at the corners of the mouth circles are drawn (perhaps to represent labrets). Above the nose are seven vertical lines; the third and fourth lines are separated by a column of seven circles.

4. Schematic faces and incised stones are known from elsewhere in Alaska but bear no more than general phenetic similarities to the Aleutian examples. Clark (1964) described incised stone tablets bearing conventionalized human representations from two sites near the town of Kodiak; Monashka Bay and Kizhuyak Bay. Decoration on the majority of his specimens consists mainly of lines representing the mouth and nasal ridge and orbital arches, with or without eyes represented below the arches. Hair and tatooing as well as labrets and clothing are represented. The figurines he describes are found in cultural layers post-dating the Lower Levels at Uyak; they are later than 1000 A.D. according to Clark.

Geographically far distant, and clearly unrelated, Ipiutak incised designs on the one hand (Larsen and Rainey, 1948), Chugach rock paintings (de Laguna, 1956) and paintings found in Cook Inlet (de Laguna, 1934) on the other, like the Kodiak examples, are most concerned with depicting faces (in contrast to geometric incising at Chaluka). At Kodiak, Clark is able to define a "style" of incising for the figurines; this is not the case for Chaluka incising in general. However, in the latter site the conventions for carving human facial features are distinctive and appear to have continuity over thousands of years.

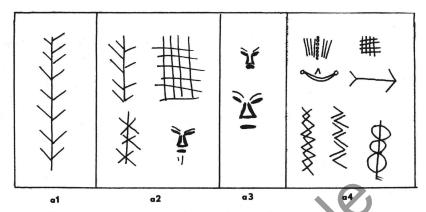


Fig. 4A: Designs on incised and carved stones from Chaluka: 1. 3500-plus B.P.; 2. 3100 B.P.; 3. about 3000 B.P.; 4. as early as 1500 B.P. but mainly more recent than 1000 B.P.

The small sample size from 1962 does not lend itself to sophisticated studies of temporal distributions of motifs, basic shapes and the like (Fig. 4a). Incised stones are distributed throughout the 3500-plus years of the deep Chaluka midder Two date from levels 3500 years old (4b1). These are the carved spear or harpoon and a bar shaped stone with feather motifs on two faces (Figs. 1d, 2c). Five examples date about 3100 years ago (Fig. 4b2); motifs include incised faces, feather motifs, checkering and cross hatchures. One small cobble with two carved schematic faces is girdled for suspension (Fig. 1c); it dates about 3000 B.P.

The fifteen specimens known from the upper part of Chaluka date after 550 A.D. (1400 B.P.) — most are probably later than 1000 A.D. (Fig. 4b4, 4b5). Motifs include checkers and cross hatchures similar to designs present earlier but feather designs are absent in the collection. Zigzags, figure-eights, "V"'s and inverted "V"'s and arrow motifs, not represented in the small collection from earlier levels, are present (Figs. lab, 3a-d).5

In 1970 several weeks were spent excavating an Aleut house interior at Chaluka dating to about 3800-4000 B.P.

5. Details of the considerable bone carving and decorating by incision are not discussed here; some information is available in Aigner, 1966.

(Details are provided elsewhere). <sup>6</sup> From the house floor we recovered one example of a stone with incising; it was clearly an awl sharpener and smoother. In addition, a carved stone Image of the Deity was found on the floor near a wall (Fig. 5). The characteristic features of slit, slanting eyes, long nose with narrow nasal root and broad nostrils, cheeks, and even the philtrum are clearly indicated. This Image of the Deity is only 6 cm long, compared with the 15 cm figure in the round recovered from Chaluka by Laughlin (Aigner, 1966: Fig. 25). As is characteristic of these Images, girdling and suspension are from the head area.

Of interest are the large number of beach stones present on the house floor at Chaluka, none of which appears to have been further altered. The concentrations of these suggest they may have been associated in sacks as amulets or served some other function as a cluster. For example, within a 50 cm radius of the pebble feature (101 small, egg shaped stones) in the east corner of the house, there were 25 small triangular to round flat pebbles, 14 medium sized and less regularly shaped flat stones, and 10 bar shaped pebbles, mainly 5 to 8 cm long. Near the Image of the Deity there were 7 small pebbles, a bar shaped stone and a teardrop shaped stone. In a quarter meter square in the west corner of the house we recovered 4 small pebbles and 2 egg-shaped stones. While only 5 or so pebbles of various sizes and shapes were present in the north corner of the house, along the south-east wall, south of the pebble cluster, 8 small flat pebbles were found within a quarter meter square. Finally, in the area of several subfloor stone lines and unlined depressions, where we recovered 22 awls and needles, pebbles of various shapes are scattered about; however, from one quarter meter adjacent to the two stone slab lined depressions with covers, there were no less than 22 flatish, round to oval pebbles and 9 bar and teardrop shaped pebbles. In addition we found a perforated pebble but no egg shaped stones. The awl-and-needle smoother is from this general area.

Our analysis of the 1963 Anangula remains revealed one flat pebble with incising (Laughlin and Aigner, 1966). The faint

 Aigner, 1971 ms "Activity Zonation within a 4000 Year-old Aleut House from Chaluka Village, Umnak Island, Alaska", submitted for publication.



Fig. 5: Examples of carved faces from Chaluka; left, face carved in bone, girdled for suspension, from 1962 Chaluka excavations, age 2500-3000 B.P.; right, carved stone Image of the Deity, girdled for suspension, from 1970 Chaluka excavation of an early house, age 3800-plus B.P.

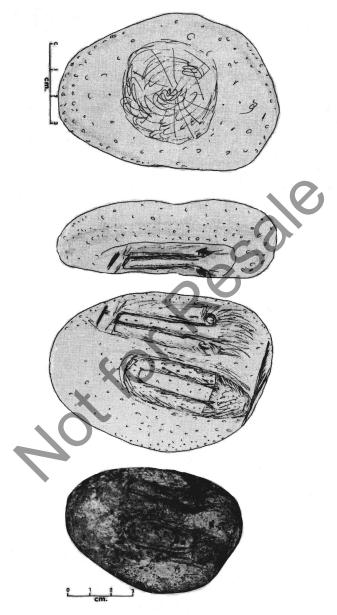


Fig. 6: Carved stone face recovered in 1970 Anangula excavations, age in excess of  $8400\ B.P.$ , associated with a house.

extended back another 4000 years to Anangula is strengthened by our recent studies of that maritime village site.

#### REFERENCES CITED

#### Aigner, Jean S.

- Aleut art from Chaluka, Umnak Island. Paper read at Boulder, Colorado at the joint meeting of the Society for American Archaeology and American Association of Physical Anthropologists.
- Bone tools and decorative motifs from Chaluka, Umnak Island. Arctic Anthro. 3.2: 57-84.
- 1970 Configuration and continuity in Aleut culture, Paper read at the Chicago meeting of the American Association for the advancement of Science, as part of The Aleutian Ecosystem symposeum.

#### Clark, Donald

1964 Incised figurine tablets from Kodiak, Alaska. Arctic Anthro. 2.1: 119-34.

#### de Laguna, Frederica

- The archaeology of Cook Inlet, Alaska. Univer. of Penn., Phila.
- 1956 Chugach Prehistory. Univ. of Wash. Pub. in Anthro. 13, Seattle.

#### Larsen, Helge and F. Rainey

1948 Ipiutak and the arctic whale hunting culture. Am. Mus. Nat. Hist. Anthro. Pap. 42, New York.

#### Laughlin, W. S. and Jean S. Aigner

1966 Preliminary Analysis of the Anangula unifacial core and blade industry. Arctic Anthro. 3.2: 41-56.

#### Quimby, George

1948 Prehistoric art of the Aleutian Islands. Fieldiana: Anthro., Chic. Nat. Hist. Mus. 36.4: 77-92.

THE RECORDS OF THE RUSSIAN-AMERICAN COMPANY AS A SOURCE FOR THE ETHNOHISTORY OF THE NUSHAGAK RIVER REGION, ALASKA

BY

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#### INTRODUCTION

The Records of the Russian-American Company, 1802-1867, particularly the correspondence of the governors general, merit the attention of anthropologists concerned with culture change among the Eskimos, Indians, and Aleuts of Alaska. These scarcely-used documents are the largest extant source of primary information on the Russian administration of Alaskan peoples as well as on the Russian-American Company, a fur-trading and hunting association chartered by the Russian government in 1799. By virtue of the provisions of its charter, the company governed Alaska's native population in the name of the tsar from 1799 until sale of the territory to the United States in 1867.

Written in nineteenth century Russian, the records were transferred to the United States government in accordance with the treaty of cession and are now in the National Archives. Copies are available on 77 microfilm reels, the contents of which are as follows: reels 1-25, letters received by the governors general, 1802-1866; reels 25-65, letters sent by the governors general, 1802-1867; reels 66-76, logs of company ships, 1850-1867; reel 77, journals of exploring expeditions, 1842-1864. Almost all of the records are legible, although the handwriting is sometimes difficult to decipher and a few pages are damaged or blotched with ink.

The Russian-American Company records have been used by historians, particularly economic historians concerned with company political and economic policies in the nineteenth century, but they are only beginning to be appreciated for the important anthropological information they contain. The purpose of this paper is to indicate the ethnohistorical data on the Nushagak River region available in the records. It is hoped that this presentation will not only be useful for future anthropologists interested in southwestern Alaska, but also will serve to call attention to an important source and its potential value to northern specialists whose research is historically oriented and falls within those areas of Alaska administered by the Russian-American Company.

The Nushagak River, the main feature of the area under discussion, has its source in the Nushagak Hills and flows generally southward until it reaches tidewater at Nushagak Bay, one of the arms of Bristol Bay, the first great indentation of the coast line north of the Alaska Peninsula. The three major tributaries of the river, the Mulchatna, Nuyakuk, and Wood rivers drain the impressive array of Wood River and Tikchik lakes to the west, and the southern foothills of the Alaska Range to the east. The area has been occupied in historic times by a coastal population combining fishing with sea mammal hunting, and an interior population emphasizing fishing and land hunting with frequent trips to the coast, particularly during the summer months.

The Nushagak River area is particularly suitable for the study of nineteenth century culture change. The region was penetrated by the Russians early in that century, and the mouth of the river was the site of Aleksanrovskii Redoubt, the first Russian trading post north of the Alaska Peninsula. Constructed in 1818, this redoubt was the base from which the Russians explored the interior of southwestern Alaska and opened the area to the fur trade. The explorer Ivan F. Vasiliev and mixed-blood traders Fedor Kolmakov and Semen Lukin figured prominently in these explorations. A mission of the Russian Orthodox Church was established at Aleksandrovskii Redoubt in 1842 and thereafter a priest or other clergyman traveled extensively throughout the region visiting Eskimo villages and converting the inhabitants.

The activities of these agents of contact and their relations with the Eskimos are the subject of an ethnohistorical study by VanStone (1967) which draws heavily on information in the Russian-American Company records. The reader is referred to

this study for maps and details concerning the explorations and other activities mentioned in the citations listed below.

The company's treatment of mixed-blood and native employees has been detailed by Sarafian (1970). His study is largely based upon information gleaned from the records.

On the basis of his historical research, VanStone prepared an annotated ethnohistorical bibliography for the Nushagak River region (1968a), but it includes no references to the records which are the subject of this paper. The present compilation has been prepared to fill this gap.

The Russian-American Company records are particularly valuable for the specific details they provide about Russian activities in the Nushagak River region. For example, with reference to explorations, the broad outlines can usually be obtained from published sources (see particularly Zagoskin, 1967; Tikhmenev, 1939-40), but specific dates, routes and instructions are for the most part available only in the records. Similarly, with regard to mission activity, the records are particularly specific concerning relations between the mission and the company. This subject is touched on only briefly in the major published source on the Orthodox Church in the Nushagak area, the writings of Bishop Veniaminov (Barsukov, 1886-88; 1897-1901).

Perhaps the most important data in the records concern the mechanics of the fur trade. That is, the internal organization of the trading post, the manner in which decisions to expand activities were made, the way in which traders dealt with the Eskimos for furs, and relations between Eskimos and the post. Of peripheral, but related, interested is the extent to which the records reveal relationships between the general managers at Sitka and their subordinates at Aleksandrovskii Redoubt. Information on these subjects is virtually absent from published sources.

Other subjects on which useful information is provided by the records are the relations that existed between the Kiatagmiut and Aglegmiut, the two Eskimo groups occupying the Nushagak River region, and population movements in the area during the early historic period. This information is particularly important because the presence of a Russian post had more influence on contemporary settlement patterns there than in most other parts of Alaska. There are also detailed references to epidemics and their effects on the population as well as specific comments concerning the introduction of certain material items to the people of the area. In this regard, the attitudes of the company toward the use of firearms and metal traps by the Eskimos is of particular interest.

As might be expected, the records of the Russian-American Company are not an ideal source. There are a number of unexplained omissions that frustrate and disappoint the research worker. The various communications, for example, often mention the inclusion of maps, journals, and lists of trade goods, but these are almost never present and apparently became separated from the main body of records some time prior to their transfer to the United States government.

An equally puzzling and frustrating situation concerns the virtual absence of information on the Nushagak River region in the Communications Received. The only documents in this section dealing with the area are from the Company's main office in St. Petersburg. Whatever may be the reason for this unfortunate situation, whether the relevant communications were never filed or were removed for some purpose and never returned, the absence of all letters from Fedor Kolmakov and other managers at Aleksandrovskii Redoubt to the general managers at Sitka means that virtually an entire dimension to our understanding of events at the post is missing.

Since nearly all the communications annotated below are from the general manager, the chief colonial official in Alaska, it is worthwhile to list the individuals who held this position and the dates of their tenures so that the reader will know who issued the orders and directives.

Aleksandr Baranov 1790 to 11 January 1818
Leontii Gagemeister 11 January 1818 to 24 October 1818
Semen Ianovskii (Acting General Manager)24 October 1818 to 15 September 1820
Matvei Muraviev 15 September 1820 to 22 October 1825
Petr Chistiakov 22 October 1825 to 5 October 1830
Baron Ferdinand Wrangell 5 October 1830 to 29 October 1835

Ivan Kupreianov	29 October 1835 to 1 June 1840
Adolf Etolin	1 June 1840 to 6 July 1845
Mikhail Tebenkov	6 July 1845 to 14 October 1850
Nikolai Rozenberg	14 October 1850 to 31 March 1853
Aleksandr Rudakov	31 March 1853 to 22 April 1854
Stepan Voevodskii	22 April 1854 to 22 June 1859
Ivan Furugelm	22 June 1859 to 17 May 1864
Prince Dmitrii Maksutov	17 May 1964 to 18 October 1867

It will be noted that following the reduction of Alekandrovskii Redoubt to an *odinochka* in 1846, the number of references in the records to the Nushagak River region diminishes rapidly. Thereafter, the center of economic activity in southwestern Alaska shifts to the Kuskokwim and Yukon Rivers with Kolmakvoskii and Mikhailovskii redoubts taking the place of Aleksandrovskii as important administrative and trading centers.

It is characteristic of the records that many communications contain repetitious information and an attempt has been made to eliminate many of these and to select a single course which presents any given data in the most detail. The following terms used in the annotations require some explanation:

baidarshchik the manager of a trading post; literally, the owner of a small skin boat.

odinochka a small trading post of less administrative significance than a redoubt; literally, a place where one man dwells.

prikashchik a clerk or minor administrative official in the employ of the Russian-American Company.

toyon or a Yakut term meaning tribal elder. Used by the Russian-American Company to refer to individuals in native villages who were

representatives of the company and were responsible for maintaining satisfactory trade relations.

All dates in the text are given according to the Julian calendar (old style) which was 12 days behind the western Gregorian calendar (new style) in the nineteenth century. Since Alaska is east of the International Date Line, old style dates in Alaska became 13 days behind new style dates.

# ANNOTATED BIBLIOGRAPHY OF RUSSIAN-AMERICAN COMPANY RECORDS CONCERNING THE NUSHAGAK RIVER REGION

Records of the Russian-American Company, 1802-1866: Correspondence of the Governors General, Communications Received

(1) Vol. 2, no. 171, folios 174-77, March 15, 1821 — main office to General Manager Murayiev.

Aleksandrovskii Redoubt is not to be moved from its original location on the Nushagak River to the mouth of the Kuskokwim River.

(2) Vol. 4, no. 164, folios 52-53, March 5, 1824 — main office to General Manager Muraviev.

Muraviev is to instruct Fedor Kolmakov, the manager of Aleksandrovskii Redoubt, on how to deal with the outbreak of hostilities between the Aglegmiut, Kiatagmiut, and Kuskowagamiut living in the vicinity of Aleksandrovskii Redoubt.

(3) Vol. 6, no. 346, folios 101-104, April 13, 1828 — main office to General Manager Chistiakov.

Chistiakov is informed of the strategic reasons for establishing a settlement on the Kuskokwim River and about previous reports indicating that the Nushagak, Kuskokwim and Yukon rivers are rich in furs.

(4) Vol. 9, no. 284, folios 11-12, March 30, 1834 — main office to General Manager Wrangell.

In evaluating Wrangell's report of October, 1832, on activity at Aleksandrovskii Redoubt, the main office notes the advantages of maintaining friendly relations with the Aglegmiut

and advises him to ensure that Kolmakov keeps their good will by treating them kindly and honestly.

(5) Vol. 13, no. 82, folio 82, April 9, 1840 – main office to General Manager Kupreianov.

Refers to clerk Afanasii Klimovskii's vaccination of the inhabitants of Aleksandrovskii Redoubt against smallpox and his teaching them to vaccinate themselves.

Records of the Russian-American Company, 1802-1867: Correspondence of the Governors General, Communications Sent.

(1) Vol. 1, no. 289, folios 138-40, December 5, 1818 – to the Kodiak office.

A number of Aleuts and ten Russians are being sent for eventual settlement at Aleksandrovskii Redoubt.

(2) Vol. 2, no. 60, folios 16-17, April 15, 1820 – to the main office.

Fedor Kolmakov is appointed baidarshchik at "New-Aleksandrovskii," the proposed post on Hagemeister Island, because he won the friendship of the Aglegmiut and Kuskowagamiut and manages employees well.

(3) Vol. 2, no. 19, folios 160-61, January 17, 1821 – to the main office.

General Manager Muraviev reports his intention to move the newly established post at the mouth of the Nushagak River to Hagemeister Island, listing the advantages of this new location.

(4) Vol. 2, no. 27, folios 169-72, January 18, 1821 – to the main office.

An additional note concerning the proposed transfer of Aleksandrovskii Redoubt at the mouth of the Nushagak River to Hagemeister Island. The schooner *Baranov* commanded by A. K. Etolin is to assist this undertaking.

(5) Vol. 2, no. 37, folios 109-111, April 27, 1821 — to the baidarshchik of Aleksandrovskii Redoubt, Fedor Kolmakov.

Kolmakov is to go to Hagemesister Island to prepare for the establishment of the new post.

- (6) Vol. 2, no. 69, folio 216, May 3, 1821 to Captain Etolin. Etolin is given orders concerning explorations in the Goodnews Bay area, collecting information about the Kuskowagamiut and meeting with V. S. Khromchenko, Captain of the Golovnin.
- (7) Vol. 3, no. 74, folios 13-14, April 11, 1822 to Khromchenko.

Khromchenko is to obtain a report from Kolmakov about Hagemeister Island and determine the advisability of his remaining there.

(8) Vol. 3, no. 164, folios 269-71, May 4, 1823 – to the main office.

Reports the movements of people in the Nushagak River region resulting from Aglegmiut warfare with the Kuskowagmiut and Kiatagmiut and the Aglegmiut settlement of the region around Aleksandrovskii Redoubt.

(9) Vol. 3, no. 223, folios 309-310, May 18, 1823 – to the manager of New-Aleksandrovskii Redoubt, Fedor Kolmakov.

Kolmakov is to reconcile the Aglegmiut with their enemies, the Kiatagmiut and Kuskowagamiut and persuade the Aglegmiut to hunt fur seal for the company on the Pribilov Islands

(10) Vol. 6, no. 114, folios 81-82, May 5, 1828 – to the main office.

Four thousand furs are ready for shipment from Aleksandrovskii Redoubt in February, 1828.

- (11) Vol. 6, no. 243, folios 476-78, September 25, 1829 to the manager of Aleksandrovskii Redoubt, Kolmakov.
- I. F. Vasiliev is to be provided with reliable guides so that his second attempt to penetrate the interior of southwestern Alaska by way of the upper Nushagak River will be more successful than his first attempt in the summer of 1829.
- (12) Vol. 6, no. 244, folios 478-82, September 25, 1829 to Ensign I. F. Vasiliev.

Briefly describes Vasiliev's first expedition into the interior in the summer of 1829 during which he explored Tikchik Lake, Lake Chauekuktuli and probably visited the now abandoned village of Tikchik (see VanStone, 1968b).

(13) Vol. 6, no. 245, folios 482-83, September 25, 1829 - to the manager of the Kodiak office, Nikiforov.

The Kodiak manager is informed that Vasiliev intends to winter at Kodiak before attempting a second time to penetrate the interior of southwestern Alaska during the summer of 1830.

(14) Vol. 7, no. 24, folios 12-13, March 11, 1830 – to Ensign Vasiliev.

Vasiliev is to renew the exploration of the interior of Alaska in the summer of 1830.

(15) Vol. 7, no. 112, folio 136, May 13, 1830 – to the manager of Aleksandrovskii Redoubt.

Vasiliev is ordered to winter at Aleksandrovskii following his explorations undertaken in the summer of 1830.

(16) Vol. 7, no. 141, folios 172-75, May 26, 1830 – to the main office.

Reports the findings of Vasiliev's second expedition in the late summer of 1829 during which he ascended the Wood River and explored one or more of the Wood River Lakes.

(17) Vol. 7, no. 229, folios 245-57, September 27, 1830 – to Ensign Vasiliev.

The general manager congratulates Vasiliev on the completion of his third expedition during the summer of 1830 and gives him permission to return to Sitka because of ill health. A monetary reward for Semen Lukin, Vasiliev's interpreter, is approved.

(18) Vol. 7, no. 257, folios 268-73, October 5, 1830 - to the main office.

The general manager describes in detail Vasiliev's successful trip to the Kuskokwim River during the summer of 1830, includes short excerpts from the latter's diary, estimates the value of Vasiliev's explorations and suggests ways to bring the Eskimos of the interior within the sphere of influence of Aleksandrovskii Redoubt.

(19) Vol. 8, no. 50, folios 28-29, February 17, 1831 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager commends Kolmakov for successfully establishing friendly relations with the Aglegmiut who live in the vicinity of the redoubt, noting that these people have been mistreated by other tribes and are still somewhat suspicious of the Russians.

(20) Vol. 8, no. 191, folios 139-41, April 30, 1831 – to the main office.

General Manager Wrangell comments on Vasiliev's failure to reach the Yukon River but notes that the presence of many beavers and other fur bearing animals in the interior was proved by the expedition. With this in mind, Wrangell proposes to establish a redoubt on Stuart Island, near the mouth of the Yukon to provide better access to the interior than could be achieved by way of Aleksandrovskii Redoubt.

(21) Vol. 8, no. 193, folios 141-42, April 30, 1831 – to the main office.

The general manager points out the significance of the information obtained by Vasiliev for the future of the fur trade in southwestern Alaska and announces that a redoubt is being established on Stuart Island.

(22) Vol. 8, no. 299, folios 230-31, May 7, 1831 — to Ensign Vasiliev.

The general manager congratulates the explorer for his achievements, acknowledges receipt of his journal and maps, and lists the rewards for those who accompanied him.

(23) Vol. 8, no. 321, folios 246-47, May 23, 1831 — to the manager of Aleksandrovskii Redoubt, Kolmakovs,

Kolmakov is officially informed of the death of his son, Ivan, who drowned while en route from Kodiak to Aleksandrovskii in February, 1831. The general manager retuses Kolmakov's request that his oldest son, Petr, be transferred to the Kodiak office as a bookkeeper.

(24) Vol. 8, no. 322, folio 247, May 23, 1831 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is to distribute silver medals only to the most important and powerful leaders in the Eskimo villages and to keep careful record of the medals he awards.

(25) Vol. 9, no. 125, folios 97-98, May 6, 1832 – to the main office.

Since in many of the villages visited by Vasiliev the people were unfriendly to members of his expedition, the general

manager has decided against sending Vasiliev to such villages in the future.

(26) Vol. 9, no. 126, folios 99-100, May 6, 1832 – to the main office.

Wrangell indicates the desirability of establishing a trading post in the interior, especially since the Kuskowagamiut cannot be expected to come to Aleksandrovskii Redoubt with their furs. He also mentions his intention of visiting the redoubt during the coming summer.

(27) Vol. 9, no. 177, folios 152-53, May 6, 1832 – to the main office.

Kolmakov reports a small fish run in the Nushagak River in 1831, fearing that there will be starvation in the villages along the river.

(28) Vol. 9, no. 135, folios 472-73, July 10, 1832 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager instructs Kolmakov to build new buildings at the redoubt and asks him to find one or more local Eskimos who can act as pilots for ships navigating the treacherous area of Nushagak Bay between Cape Constantine and the Redoubt.

(29) Vol. 9, no. 318, folios 478-79, July 10, 1832 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov receives instructions on bartering furs, preparing furs for shipment and allocating expenses for entertaining Eskimos who trade at the redoubt.

(30) Vol. 9, no. 319, folios 479-81, July 10, 1832 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov's assistant shall be left in charge of the redoubt while Kolmakov goes to the Kuskokwim and Khulitna (Holitna) rivers to barter for furs.

(31) Vol. 9, no. 321, folios 482-87, July 10, 1832 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

General Manager Wrangell orders Kolmakov to explore the Kuskokwim River, beginning in the fall of 1832, and barter for beaver furs in the villages of the Kuskowagamiut. At the same time, Kolmakov is instructed to find a suitable place for the construction of an *odinochka*.

(32) Vol. 9, no. 322, folio 487, July 10, 1832 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager cancels the debts of those Aglemiut who formerly worked for the company but have been discharged or have died.

(33) Vol. 9, no. 388, folios 281-83, September 16, 1832 – to the Kodiak Office.

Wrangell reports his arrangements with Kolmakov for a trip to the Kuskokwim River basin beginning in the fall of 1832.

(34) Vol. 9, no. 460, folios 345-51, October 31, 1832 - to the main office.

Wrangell reports the condition of Aleksandrovskii Redoubt at the time of his visit there during the summer of 1832. He recommends the sending of a hunting detachment into the interior (see nos. 26, 30, 33) in order to increase the trade for beaver pelts. The report also contains an evaluation of the usefulness of the Aglegmiut living near the redoubt to the company and a favorable appraisal of the influence of Father Veniaminov's preaching at Aleksandrovskii. Veniaminov, who accompanied Wrangell, was making his second visit to the redoubt.

(35) Vol. 9, no. 555, folio 444, November 16, 1832 - to the main office.

On August 29 Kolmakov began his journey to the Kuskokwim drainage.

(36) Vol. 10, no. 184, folios 102-103, May 9, 1833 – to the captain of the vessel going to Nushagak.

Instructions are given concerning the channel of Nushagak Bay and the necessity of obtaining an Aglegmiut guide at the village of Ekuk. A map of the bay was apparently included with this communication but is now missing.

(37) Vol. 10, no. 185, folio 104, May 9, 1833 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager requests Kolmakov to report in detail about his trip to the Kuskokwim River in 1832-1833 and include an account of the pelts bartered.

(38) Vol. 11, no. 27, folios 18-19, March 11, 1834 – to the Kodiak office.

Wrangell lists the prize money awarded to Kolmakov and the members of his expedition to the Kuskokwim River and refers to a second expedition which Kolmakov led to the same area in 1833-1834.

(39) Vol. 11, no. 58, folios 35-43, April 10, 1834 — to the main office.

Wrangell defends his decision to send Kolmakov on two trips to the Kuskokwim River basin and points out that these expeditions were more useful to the company than those of Vasiliev.

(40) Vol. 11, no. 72, folios 92-95, April 10, 1834 to the main office.

Wrangell reports concerning Kolmakov's journeys to the Kuskokwim in 1832-1834, gives an account of the furs bartered, assesses the value of future expeditions to the area, and discusses the advisability of establishing an *odinochka* on the Kuskokwim.

(41) Vol. 11, no. 73, folios 95-97, April 10, 1834 — to the main office.

A fairly detailed account of Kolmakov's second expedition to the Kuskokwim River basin in 1833-1834, including a report of furs bartered and a reference to a bad flood at Aleksandrovskii Redoubt in October, 1833.

(42) Vol. 11, no. 74, folios 97-98, April 10, 1834 – to the main office.

Wrangell recommends that wolf and wolverine pelts be sent to Aleksandrovskii Redoubt because Kolmakov reports that they are of value for bartering with Kuskokwim River people for beavers.

(43) Vol. 11, no. 272, folios 251-54, May 9, 1834 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager congratulates Kolmakov on the success of his first expedition to the Holitna and Kuskokwim rivers and informs him of the prize money he, Lukin, and other members of the party have been awarded.

(44) Vol. 11, no. 273, folios 254-57, May 9, 1834 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Wrangell writes to Kolmakov about the possibility of shipping furs from the upper Kuskokwim River to Aleksandrovskii Redoubt by way of the mouth of the river and discusses the possibility of establishing an *odinochka* at Goodnews Bay. Meanwhile, Kolmakov is urged to proceed with plans for staffing the *odinochka* near the mouth of the Holitna River and urge more Aglegmiut to work for the company.

(45) Vol. 12, no. 188, folios 177-79, April 30, 1835 – to the main office.

Wrangell notes that Kolmakov has sent his assistant to the Kuskokwim and is himself staying at the redoubt.

(46) Vol. 12, no. 256, folios 151-53, April 30, 1835 – to the main office.

Wrangell doubts the usefulness of trips into the interior from Aleksandrovskii Redoubt, since this results in fewer pelts traded at the post itself. The number of beaver pelts taken between 1827 and 1830 are given and it is noted that an *odinochka* has been established on the Nushagak near the mouth of the Nuyakuk and on the Kuskokwim at the village of Kwigmpainagmiut.

(47) Vol. 12, no. 266, folios 249-50, May 11, 1835 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager complains that the most recent trip to the Kuskokwim River was not as profitable to the company as it should have been, but that the same amounts of prize money as before is being awarded. Kolmakov is urged on to greater efforts.

(48) Vol. 12, no. 267, folios 250-52, May 11, 1835 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Having received Kolmakov's reports of September, 1834 and February, 1835, the general manager congratulates him on the success of his hunting expeditions and his diligent work at the redoubt. Kolmakov is further informed of the decision not to establish an *odinochka* at Goodnews Bay and to allow the "iliamnins" (Tanaina Indians of Iliamna Lake) to hunt in the Nushagak area.

(49) Vol. 12, no. 321, folio 296, September 30, 1835 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov's report of July, 1835 is acknowledged and he is encouraged to promote more successful beaver hunts and to extend the Kuskokwim *odinochka's* activities further into the interior.

(50) Vol. 12, no 327, folios 309-12, October 5, 1835 – to the main office.

The general manager reports the condition of the buildings at Aleksandrovskii Redoubt, the construction of new ones, and the repairs necessitated because of floods.

(51) Vol. 13, no. 357, folios 234-39, May 23, 1836 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is to increase trade with people living near the Kuskokwim *odinochka*, and also with those at the headwaters of the river and further inland. The general manager also wants more information from Kolmakov concerning the advisability of establishing an *odinochka* at Goodnews Bay.

(52) Vol. 14, no. 199, folios 228-30, May 3, 1837 – to the main office.

General Manager Kupreianov reports the activities at Aleksandrovskii Redoubt and the efforts of Lukin to visit peoples of the upper Kuskokwim and bring them into the fur trade.

(53) Vol. 14, no. 234, folios 261-66, May 10, 1837 – to Captain A. F. Kashevarov.

Kashevarov is to report on conditions at Aleksandrovskii Redoubt and not to send ashore the redoubt's supply of rum until all business is completed and he is about to depart. Also, an order concerning the method of accounting for furs received from the redoubt is given.

(54) Vol. 14, no. 242, folios 272-73, May 10, 1837 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The general manager acknowledges Kolmakov's reports for 1836 and 1837 and praises him, urging even greater efforts for the company's benefit. Kolmakov is to report to Captain Kashevarov when the latter arrives at the redoubt.

(55) Vol. 14, no. 243, folios 273-74, May 10, 1837 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is given instructions concerning the shipment of beaver castor, the medals given to *toyons*, and the necessity of practicing economy in the expenditure of redoubt supplies.

(56) Vol. 14, no. 244, folios 274-75, May 10, 1837 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is to send a list of Eskimos baptized by him since Father Veniaminov's visit in 1832, as well as to continue sending ethnographic and natural history specimens.

(57) Vol. 15, no. 455, folios 17-20, November 5, 1837 + to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov's son is rewarded for a successful trip to the Kuskokwim River and is ordered to make a second trip to the same area.

(58) Vol. 15, no. 456, folios 20-21, November 5, 1837 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov's son, Petr, is to prepare a more accurate map of his second journey.

(59) Vol. 15, no. 244, folios 314-15, May 1, 1838 – to the main office.

Prikashchik Klimovskii on a trip (from Kodiak?) to Mikhailovskii Redoubt vaccinated people in various villages including Aleksandrovskii Redoubt against smallpox and also taught the people how to vaccinate themselves.

(60) Vol. 16, no. 365, folios 89-95, May 30, 1838 — to Captain Murashev.

The captain is to report on activities at Aleksandrovskii Redoubt and determine the accuracy of rumors concerning a smallpox epidemic in the area.

(61) Vol. 16, no. 376, folios 104-105, May 30, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is to inform the Aglegmiut who live near the redoubt to prevent sexual relations between their daughters and Eskimos from distant places who come to the redoubt to trade.

(62) Vol. 16, no. 377, folios 106-108, May 30, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is not to sell guns to the Eskimos, but to loan weapons to a few of the most trustworthy individuals.

(63) Vol. 16, no. 379, folios 109-11, May 30, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Children born illegitimately as a result of relations between redoubt employees and Eskimos should not be forced to leave their mothers, but should nevertheless be brought up among Russians whenever possible.

(64) Vol. 16, no. 455, folios 170-71, October 31, 1838 – to the Kodiak office.

Two Kenai (Tanaina) creoles are being sent to Aleksandrovskii Redoubt from Kodiak to act as interpreters.

(65) Vol. 16, no. 462, folio 174, October 31, 1838 – to the Kodiak Office.

Kolmakov and Lukin are rewarded with prize money for their services and Petr Kolmakov is designated an assistant in the management of the redoubt.

(66) Vol. 16, no. 466, folios 175-77, October 31, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

General Manager Kupreianov acknowledges the receipt of Kolmakov's report of July, 1838 and confirms the appointment of Petr Kolmakov as assistant to the manager. Konstantin Kolmakov is also authorized to begin instructing Eskimo boys in reading and writing, providing this does not interfere with their learning useful native occupations.

(67) Vol. 16, no. 467, folios 177-79, October 31, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Condolences are offered to Kolmakov for the many smallpox deaths that he reported. He is ordered to increase trade, if possible, and to encourage the Eskimos to practice conservation with regard to the taking of beavers. Orphans created by the smallpox epidemic are to be taken care of at the redoubt if necessary. The silver medals given to deceased *toyons* should be collected and redistributed to worthy Eskimos.

(68) Vol. 16, no. 468, folios 179-81, October 31, 1838 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov is notified that Kenai (Tanaina) interpreters are being transferred to Aleksandrovskii Redoubt in order to accompany Petr Kolmakov on a trip into the interior. The manager is urged to organize more hunting parties and is notified that five metal traps are being sent to him for use with these parties.

(69) Vol. 16, no. 479, folios 184-89, November 4, 1838 – to the main office.

Kupreianov transmits Kolmakov's report concerning deaths from smallpox at the redoubt and ponders the significance of this outbreak for the future of the fur trade in the area.

(70) Vol. 17, no. 214, folios 192-93, April 29, 1839 – to the main office.

*Prikashchik* Klimovskii is rewarded for vaccinating the Eskimos of Aleksandrovskii Redoubt against smallpox and for teaching them to vaccinate themselves.

(71) Vol. 17, no. 386, folios 368-69, June 4, 1839 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

The manager is urged to deal sternly with any Kuskokwim Eskimos who come to the redoubt and cause trouble among those living peaceably there.

(72) Vol. 17, no. 387, folios 369-71, June 4, 1839 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kolmakov, his son, and Lukin are congratulated on their work and urged to exert themselves even more for the company. The manager is also given instructions regarding silver medals and presents for *toyons*.

- (73) Vol. 17, no. 388, folios 371-72, June 4, 1839. A certificate awarded to a Kuskokwim toyon.
- (74) Vol. 17, no. 392, folios 372-73, June 4, 1839. A certificate awarded to an Aglegmiut toyon.
- (75) Vol. 17, no. 444, folios 424-26, September 6, 1839 to the manager of Aleksandrovskii Redoubt, Kolmakov.

Kupreianov asks for information concerning the smallpox epidemic and the delivery of furs to the redoubt.

(76) Vol. 17, no. 447, folios 430-38, September 6, 1839 - to the Kodiak office.

The Kenai (Tanaina) interpreters sent to Aleksandrovskii Redoubt do not know the language and the Kodiak office is

urged to send another interpreter, one who knows both Russian and the Kuskokwim dialect.

(77) Vol. 17, no. 509, folios 493-97, October 24, 1839 — to the Kodiak office.

The death of Fedor Kolmakov on August 20, 1839 is reported and his son Petr is appointed manager of the redoubt.

(78) Vol. 17, no. 512, folios 498-502, October 24, 1839 — to Petr Kolmakov.

Detailed instructions are given Petr Kolmakov concerning his new duties as manager of the redoubt. He is especially urged to be firm but just in his dealings with the Eskimos.

(79) Vol. 17, no. 513, folios 504-505, October 24, 1839 – to the manager of Aleksandrovskii Redoubt, Kolmakov.

A cash payment and flour allotment is made to Petr Kolmakov for the support of his deceased father's family. He is also warned to be particularly careful since guns have recently been given a few Kuskokwim *toyons* for hunting.

(80) Vol. 18, no. 335, folios 314-17, May 25, 1840 – to the main office.

A report is made concerning a trip into the interior by Petr Kolmakov in 1839, during which he apparently encountered some oppositon from the Eskimos.

(81) Vol. 18, no. 370, folios 348-50, May 31, 1840 – to Captain Kashevarov.

Kashevarov is instructed to report on relations between the Eskimos and personnel of Aleksandrovskii Redoubt and whether there is any threat to the redoubt.

(82) Vol. 18, no. 376, folios 354-56, May 31, 1840 — to Petr Kolmakov.

Kolmakov is to accept orders from Lieutenant Kashevarov and to report to Etolin concerning reported unfriendly behavior on the part of the Eskimos who live in the vicinity of the redoubt.

(83) Vol. 18, no. 378, folios 356-57, May 31, 1840 – to Petr Kolmakov.

Kolmakov is to deal firmly but kindly with the Eskimos and to make every effort to increase trade.

(84) Vol. 19, no. 147, folios 186-89, September 27, 1840 – to the main office.

General Manager Etolin stresses the importance of the southwestern Alaska area to the fur trade, the necessity of spreading Christian influence throughout the entire area, and the need for a traveling priest to convert the Eskimos to Christianity.

(85) Vol. 20, no. 43, folios 51-57, February 25, 1841 – to the manager of the Kodiak office, Kostromitinov.

The Kodiak manager is to report on conditions at Aleksandrovskii Redoubt, relieve Petr Kolmakov as manager, make adjustments in the prices paid for furs, try to establish better connections between Aleksandrovskii and the odinochkas under its jurisdiction, convince the Eskimos that they should hunt beavers at a season of the year when the pelts are in better condition, and establish Kolmakovskii Redoubt on the middle Kuskokwim River.

(86) Vol. 20, no. 486, folios 403-404, October 15, 1841 - to the manager of the Kodiak office, Kostromitinov.

Kostromitinov's report is acknowledged and certain administrative changes are ordered including the appointment of Lukin as *baidarshchik* at the newly established Kolmakovskii Redoubt.

(87) Vol. 21, no. 21, folios 20-21, January 30, 1842 – to the Most Reverend Innokentii, Bishop of Kamchatka, the Kuriles and Aleutian Islands.

Etolin acknowledges a report from the bishop concerning the performing of baptisms and marriage ceremonies by laymen. The general manager notes that a mission has just been established at Aleksandrovskii Redoubt.

(88) Vol. 21, no. 28, folios 24-25, February 11, 1842 – to Captain Kashevarov.

Kashevarov is to transport the newly named priest at Aleksandrovskii, Ilia Petelin, Sexton Shishkin, and the new manager of the redoubt, Volkov, to the post.

(89) Vol. 21, no. 35, folios 31-32, February 11, 1842 – to the Kodiak office.

Etolin announces that he has appointed Volkov manager at Aleksandrovskii with Petr Kolmakov as his assistant.

(90) Vol. 21, no. 43, folios 40-41, February 11, 1842 – to the Kodiak office.

A memorandum concerning the sending of two cannon to Aleksandrovskii Redoubt and four light cannon to Kolmakovskii Redoubt for fortification.

(91) Vol. 21, no. 49, folios 48-49, February 11, 1842 – to Petr Kolmakov.

Petr Kolmakov is notified that Volkov has been named to succeed him.

(92) Vol. 21, no. 50, folios 49-50, February 11, 1842 — to Petr Kolmakov.

Petr Kolmakov is informed of the appointment of Ilia Petelin as priest at Aleksandrovskii, the financial arrangements being made by the church, and the assistance that is to be rendered by the company to the priest.

(93) Vol. 21, no. 16, folios 16-18, February 28, 1842 – to the Most Reverend Innokentii.

The prelate is informed of the arrangements for the arrival of Father Petelin at Aleksandrovskii Redoubt.

(94) Vol. 21, no. 304, folios 232-33, May 9, 1842 – to the main office.

Etolin informs the main office of the reasons for his decision to appoint Volkov manager of Aleksandrovskii Redoubt.

(95) Vol. 23, no. 648, folios 492-93, October 11, 1844 – to the Kodiak office.

Etolin has proposed the abolition of Aleksandrovskii Redoubt and proposes that Kolmakovskii Redoubt be placed under the jurisdiction of Mikhailovskii Redoubt. He therefore requests a complete inventory of the property and people at Kolmakovskii and a detailed list of the annual needs at this redoubt.

(96) Vol. 23, no. 661, folios 497-99, October 11, 1844 – to the manager of the Kodiak office, Murgin.

The general manager notes that he has informed Lukin, the baidarshchik of Kolmakovskii, of the plan to reduce

Aleksandrovskii Redoubt to an *odinochka* and place it under the jurisdiction of Nilolaevskii Redoubt on Cook Inlet. Aleksandrovskii will then be supplied by way of Iliamna *odinochka* and the priest will be transferred to Nikolaevskii.

(97) Vol. 23, no. 703, folios 552-54, December 23, 1844 – to the Most Reverend Innokentii.

The prelate is informed about the impending reduction of Aleksandrovskii Redoubt to an *odinochka* and its transfer to the jurisdiction of Nikolaevskii Redoubt.

(98) Vol. 24, no. 60, folios 48-50, March 2, 1845 – to the Sitka office.

Another directive outlining the reduction of Aleksandrovskii Redoubt to an *odinochka* and its subordination to Nikolaevskii Redoubt. The general manager requests that arrangements be made for supplying Kolmakovskii by way of Mikhailovskii Redoubt.

(99) Vol. 24, no. 72, folios 60-61, March 9, 1845 – to the Kodiak office.

Now that Aleksandrovskii Redoubt has been reduced in status, only necessary supplies are to be sent to it.

(100) Vol. 24, no. 78, folios 75-76, March 9, 1845 - to the manager of the Kodiak office, Murgin.

The Kodiak manager is ordered to visit Aleksandrovskii Redoubt to determine how many men should be left there when the post is reduced to an *odinochka*. The manager is to be removed and a creole appointed *baidarshchik*.

(101) Vol. 25, no. 287, folios 105-106, May 15, 1845 – to the main office.

Etolin reports in full to the main office concerning his decision to reduce Aleksandrovskii Redoubt to an *odinochka* and the arrangements made for administering and supplying it and the other company posts in southwestern Alaska.

(102) Vol. 26, no. 488, folios 381-82, May 12, 1846 – to the Kodiak office.

General Manager Tebenkov notifies the Kodiak office concerning the arrangements made by Bishop Innokentii for the continuation of the mission at Aleksandrovskii Redoubt after the post has been reduced to an *odinochka*.

(103) Vol. 27, no. 665, folio 83, October 4, 1846 – to the Kodiak office.

The manager of Aleksandrovskii Redoubt, Volkov, is ordered to depart for Sitka with the final accounts for the post.

(104) Vol. 27, no. 267, folios 386-87, May 12, 1847 – to the main office.

Tebenkov reports the successful carrying out of his predecessor's proposals concerning the reduction in status of Aleksandrovskii Redoubt.

(105) Vol. 27, no. 325, folios 461-65, May 12, 1847 – to the main office.

Tebenkov reports the departure of Volkov, former manager of Aleksandrovskii Redoubt, for Kodiak along with Father Petelin. The administration of the church is left to the missionary at Nikolaevskii Redoubt.

(106) Vol. 29, no. 113, folios 132-33, April 17, 1848 – to the Kodiak office.

Efim Orlov is named manager of Aleksandrovskii odinochka.

(107) Vol. 32, no. 278, folios 132-33, April 20, 1851 — to the Kodiak office.

Disobedience of the Aglegmiut in the vicinity of Aleksandrovskii *Odinochka* to *baidarshchik* Orlov is reported to the Kodiak office. The general manager says that he would abolish the *odinochka* were it not for the mission of the Orthodox Church located there. He suggests that the Aglegmiut be told that the general manager himself will come to the *odinochka* and drive them away from Russian protection, leaving them once more at the mercy of their enemies, the Kiatagmiut and the Kuskowagamiut.

(108) Vol. 34, no. 382, folio 130, June 6, 1853 – to the Kodiak office.

The "Nushagak odinochka" must continue to be maintained by the company because a priest is being sent there and also because of unnamed "circumstances in the north."

(109) Vol. 34, no. 383, folios 130-31, June 6, 1853 — to the Kodiak office.

Hieromonk Theofil is being sent to Aleksandrovskii *Odinochka* and the general manager orders that a residence be provided for him.

(110) Vol. 23, no. 484, folio 168, June 19, 1853 – to the manager of Kilmakovskii Redoubt.

Lukin is encouraged to retain three Aglegmiut employees at the redoubt or to hire other "loyal Aglegmiut."

(111) Vol. 34, no. 487, folio 169, June 19, 1853 – to the manager of Kolmakovskii Redoubt.

Lukin is to proceed as soon as convenient to Aleksandrovskii *Odinochka* to hire Aglegmiut for service at Kolmakovskii Redoubt.

(112) Vol. 37, no. 147, folio 65, April 9, 1856 – to the main office.

General Manager Voevodskii reports that the Eskimos living in the vicinity of Aleksandrovskii odinochka are complaining about the prices paid for furs, saying it is more profitable for them to trade at Katmai. The general manager proposes that a uniform rate of payment throughout the whole Kodiak division be instituted.

(113) Vol. 38, no. 115, folio 29, April 30, 1857 – to the Sitka office.

Voevodskii notes that he has raised the prices to be paid for furs at Aleksandrovskii *odinochka* so that they conform with prices paid throughout the Kodiak division.

(114) Vol. 38, no. 138, folio 35, May 1, 1857 – to the Kodiak office.

The Kodiak manager is to report on the condition of company buildings at Aleksandrovskii *odinochka* and whether arrangements have been made for repairing the walls of the fortress which have fallen into decay.

(115) Vol. 38, no. 219, folio 58, May 15, 1857 — to the main office.

The main office is informed of the order for the equalization of prices paid for furs at Aleksandrovskii *odinochka* and the reasons for this measure.

(116) Vol. 38, no. 266, folio 79, May 24, 1857 – to the manager of Mikhailovskii Redoubt, Andreianov.

The manager is informed of the increased prices paid for furs at Aleksandrovskii *odinochka* and ordered to raise his own payments gradually as soon as the people hear of the prices being paid at Aleksandrovskii. The manager is also ordered to try and increase the number of "fabrics" bartered for furs.

(117) Vol. 42, no. 53, folio 138, August 23, 1860 – to the manager of Aleksandrovskii odinochka Orlov.

Orlov is ordered to construct a new church and instructions are sent to him concerning the plan and materials.

(118) Vol. 47, no. 127, folio 42, May 4, 1865 – to Lieutenant Tebenkov

The lieutenant, who is making a voyage to Aleksandrovskii odinochka, is ordered to survey the general area and report on its suitability for the establishment for facilities for salting fish.

### **BIBLIOGRAPHY**

#### Barsukov, I. (ed.)

- 1886 Tvoreniya Innokentiya Mitropolita Moskovskago. 3 vols. in 2.
- 1888 Moscow.
- 1897 Pisma Innokentiya Mitropolita Moskovaskago i Kolomenskago
- 1901 1828-1878. 3 vols. St. Petersburg.

#### Sarafian, W. L.

1970 Russian-American Company Employee Policies and Practices, 1799-1867. Ph.D. Dissertation, U.C.L.A. University Microfilms. Ann Arbor.

#### Tikhmenev, P.A.

1939 - The Historical Review of the Formation of the
 1940 Russian-American Company and Its Activity up to the Present
 Time. 2 pts. St. Petersburg. (Translated by Dimitri Krenov,
 Works Progress Administration, Seattle, Washington.)

#### VanStone, J. W.

- 1967 Eskimos of the Nushagak River. An Ethnographic History. University of Washington Press, Seattle.
- 1968a An Annotated Ethnohistorical Bibliography of the Nushagak River Region, Alaska. *Fieldiana: Anthropology*, Vol. 54, No. 2, pp. 149-89 Field Museum of Natural History, Chicago.

1968b Tikchik Village: A Nineteenth Century Riverine Community in Southwestern Alaska. *Fieldana: Anthropology*, Vol. 56, No. 3, pp. 215-368. Chicago.

Zagoskin, L. A.

Lieutenant Zagoskin's Travels in Russian America, 1842-1844.
 Edited by Henry N. Michael. Arctic Institute of North America,
 Anthropology of the North, Translations from Russian Sources,
 No. 7. Toronto.

Palm Springs, California
Field Museum of Natural History
Chicago, Illinois