ANIAKCHAK NATIONAL MONUMENT AND PRESERVE

FIELD SEASON  1984

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National Park Service
Aniakchak National Monument and Preserve
King Salmon Alaska 99613
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INTRODUCTION

The 1984 Aniakchak field season was of shorter duration than the 1983 season, and emphasized the Aniakchak coast to a greater extent. We spent from June 9-27 at the APA cabin near the mouth of the Aniakchak River, and had use of a Zodiac Mark III (with 35 hp engine) to contact commercial fishermen and patrol coastal areas. Specific 1984 goals included: (1) Contact commercial fishermen and establish an NPS presence in the preserve, (2) Experiment with use and logistics of the Zodiac and (3) Continue with 1983 projects, such as cabin documentation and natural resource observations.

Having use of the Zodiac was a significant follow-up to the 1983 season and greatly complimented it. Being familiar with inland areas, and having a general feel for activities occurring within the monument and preserve, we were able to benefit from contact with fishermen and speak more knowledgeable of the Aniakchak environs. We were fortunate in having two weeks of "good" weather, and did not encounter much bear activity, practically negating our largest concerns for this initial season with a boat.

Other than fishermen contacts and boat use, information in this report is meant to supplement the 1983 report. Several patrols were taken along coastal regions for the purpose of locating cabins, documenting wildlife, and reporting on the general nature of the coastal bays. As with the 1983 season, a daily journal, additional slides and black and white photographs, and map and library file additions are all filed in King Salmon. The report for the July and August Katmai Coast patrols will also cover boat use and general recommendations that might apply to Aniakchak.

We felt the season, albeit short, to be productive. We would recommend continuing a seasonal Aniakchak presence, concentrating on times that have not yet been covered: the last three weeks of July and early August. Use also occurs in May and into the fall (sport hunters and fishermen), but logistical drawbacks could outweigh the information gained during those times.

Maintaining an intermittent base of operations at the APA cabin continues to be a workable arrangement, the fact that it is also used by sport hunters does not cause a conflict due to the timing. Should there be an interest in the historical/cultural aspects of the cabin and environs, it should be noted that NPS "improvements" on the cabin could encourage more extensive use and additional changes to the cabin itself.
The Aniakchak coastline is certainly the "backyard" of commercial fishermen, even though actual use of preserve lands is limited. The visitor use statistics at Aniakchak are likely to remain low—considering commercial fishing, sport hunting, and the recreational potential inland and along the coast, an NPS presence now seems a positive step towards effectively managing Aniakchak when the need arises.

VISITOR USE

The only activity observed was commercial fishing. From our 6/9 arrival until 6/27 departure, purse seineing for sockeye salmon was in operation on the south side of Aniakchak Bay, except for a four day closure from 6/21-6/24. This corresponds with activity observed in 1983. Six boats were commonly present, and at least one tender from Chignik. Most of the commercial salmon fishing off of preserve lands is done in this area of Aniakchak.

No recreational users were known about during this field season. At least two hunting guides used the APA cabin in May of '84—Lee Holen and Gary King Jr. left a note at the cabin saying they had been using it as their base camp since 1962. One helicopter was observed near the Aniakchak River mouth, and two planes in association with the fishing boats. Fishermen do go ashore but seemingly not a great deal. Recreational clamming is done on the south side of the Bay by some fishermen. Impacts from fishermen mostly fall under natural/cultural resource concerns: feeding wildlife, leaving garbage, and affecting sites of historic/cultural interest. The effects of sport hunting in the preserve needs to be further researched.

No activity was observed from special use permits for Aniakchak.

VISITOR CONTACTS

We contacted about 20 people, boarding seiners or talking to crew members from alongside. Contacts ranged from 15 minute conversations and less than exuberance at our presence, to staying aboard several hours and observing a catch. The seiners are from Chignik district, and several fishermen have been at Aniakchak Bay for 20-27 years. Conversations covered the gamut: fishing, inland areas of Aniakchak, and what on earth the NPS was doing there. We attempted with each contact to explain Aniakchak land status, give out xeroxed maps, and address the feeding of wildlife and the degradation of cabins and historic sites. No law enforcement contacts were necessary.

Recommendations for future seasonal staff: contact boats not yet visited (see appendix), and have maps, xeroxed articles and historical information available, be updated and informed on all pertinent regulations.
LOGISTICS

Zodiac Use and Safety

The Mark III with 35 hp engine worked well, and we recommend using that combination for future patrols. As the operation at Aniakchak is run now, boat manageability is an important consideration— it can be handled by two people for loading and unloading and for trips from beach to APA cabin when necessary. Performing coastal patrols without a boat at Aniakchak is not suggested, but future NPS staff should be aware that Zodiac use and care at Aniakchak is very time and energy consuming.

As an initial season with the Zodiac our concerns/ emphases were:

1.) Anchoring: protection from bears and weather was a concern with the anchoring system. Taking the boat out of the water after each use was not realistic.

Recommendations: Anchor boat in cove to East of APA cabin, where some protection against winds and waves is provided. Anchor far enough out to have boat in water at the lowest tides encountered. (250-350'). A 55 gallon drum is anchored in the cove, and a pulley system works well for retrieving the boat. (See appendix)

Needed supplies: 600' nylon rope (3/8")
Anchor, float
Marine pulleys and caribiners
Two metal posts and several short lengths chain

2.) Safety: including engine failure, emergency bivouacs, boat swamping, boating techniques, and general backcountry travel safety concerns.

Recommendations: Do not travel alone. Have a checklist of procedures before travel is begun in Zodiac. Always carry emergency items in boat. Have engine and Zodiac in top form at beginning of season. Always wear float coats or survival suits. Be constantly alert for changing weather/ocean conditions.

Supplies carried in boat: Anchor and anchor line
Extra fuel
Survival kit: food, MSR stove, bivy sac or tent, change clothes.
Repair kit: plugs, prop, patch supplies, tool kit.
ELT and Marine Flares
Radio and small kicker motor recommended—see recommended purchases.
3.) Care of Zodiac and engine: the difficulty of resupplying at Aniakchak gives Zodiac and engine care added importance.

Recommendations:

- Assemble Zodiac in sand-free area, APA cabin porch works well.
- Keep boat as free of sand and pebbles as possible; under floorboards and keel are critical. Use indoor-outdoor carpet on floor of boat.
- Clean Zodiac valves periodically.
- Keep all fuel connections clean.
- Keep engine as free of saltwater as possible; change plugs on a regular basis; WD 40 metal parts.
- Rinse Zodiac with fresh water from river periodically.
- Watch the hulls of fishing boats when tied alongside for metal; secure boat carefully.

Additional comments:

- About 40 gallons of fuel were used during our three week stay, we'd recommend 60 gallons for the same time period to assure enough fuel for more extended trips or greater Zodiac use.

- The Zodiac oars need to be better attached for travel in rough water conditions.

- An outfitter waterproof bag works well as a front seat and can carry emergency supplies/spare gear.

- A small kicker motor is strongly recommended in case of engine failure.

- We encountered large swells and encountered tricky shoreline landings even when ocean conditions looked calm in front of APA cabin- be exceedingly CAUTIOUS with Zodiac use at Aniakchak. Wind direction makes travel in certain coastal sections particularly hazardous—local fishermen are an excellent source of information.
Communications

HF radio communications were an improvement over the 1983 season, two out of three nights we had contact with either Brooks Camp or Nonvianuk. Checking in with Brooks Camp at 2100 hrs. worked well, this year 5907.5 was an effective frequency. We used a dipole antenna, the multi-frequency ladder antenna was not needed and might be saved for lengthier Aniakchak stays.

We also had two portable VHF park radios which allowed us to communicate with each other strictly locally, we'd suggest continuing with these.

A hand held VHF Marine Band radio is recommended for contact with fishing boats and as an added safety measure.

Recommendations for HF radio use (see also 1983 report):

- With the base set operational at Brooks, transmissions can often be heard but not sent. Use blind broadcasts for information of importance.

- Cleaning/drying the coax connections can make a big difference in quality of contacts.

Transportation and Air Support

Peninsula Airways was used for both drop-off and pick-up, with no problems encountered. On the return trip, the Zodiac and other supplies were dropped off on the Katmai Coast for subsequent patrols, involving 3.4 hours of air time from King Salmon to King Salmon. (@$380./hr. for the Goose)

Pre-planned air support should be arranged if the duration of the Aniakchak stay exceeds about three weeks, incase of boat/engine problems or a need for additional supplies.

Housing

See cabins section for changes to the APA cabin. In 1983, we left some supplies (fuel, old stove, odds & ends) at the APA cabin over the winter as an experiment, and only the odds & ends were still there when we returned in '84. Because the cabin receives other use, re-supplying every year may be a necessity, or a storage mechanism devised that would see things safely through the winter. A cot, two wooden boxes, two metal chairs, and miscellaneous pieces of wood were left at the cabin this year.
CABINS/HISTORICAL SITES

Three additional cabins/historic sites were located this season and are described on the following pages. Other items of note include:

- Fishermen made reference to a fish trap that used to be operated south of Elephant Head Point. This is also mentioned in Alan Robinson's interviews on file in King Salmon. We did not have a chance to look for any indications of this on shore.

- The dwelling on Kumlik Island, while not in preserve lands, is of interest in its historical association with Aniakchak. According to Tuten, and local fishermen, this was used (and built?) by the Carlson family. The boat remains in the same area apparently are not associated with the dwelling.

- A cabin is marked on the 1:250,000 topo map, to the west and inland of Elephant Head Point. We heard reference to this cabin, no details. It may be the "Nielson's cabin" in Tuten's report.

- The "Sandy Joy", ruined boat remains, located on the south shore of Aniakchak Bay: (T 40S, R52 W, S 35). According to fishermen: swamped on 7/1/66, in a storm that "blew the anemometer off a tender".

Changes to the APA cabin at Aniakchak Bay

The Alaska Packer's Bunkhouse cabin is described in the 1983 report, but changes since the 1983 season include:

- More tongue and groove panels were removed over the winter/spring, particularly on the "ceiling" of the front porch.

- The "kitchen" area improvised on the northeast corner of cabin was made into a sauna room, again sometime over the winter/spring.

- Rusting pipe was diverted closer to the cabin from the creek at northeast corner of cabin.

- We made few changes to the cabin and area other than cleaning up a lot of trash left from previous users. Several small holes in the roof were patched, and a table was built attached to the east wall.
MAIN CREEK

West side of Main Creek, about 2.5 miles upstream from Amber Bay. (T38S, R51W, S 28)
On Sutwik Island D-5 quadrangle (1963), topo map shows correct location.

Referred to as "Ball Eyed Charlie's" cabin in Tuten's report, these cabin remains are visible from the river, and form an impressive collection of structures/remains in a scenic location. The largest structure is mostly collapsed, but appears to have been a solid and well-built cabin. A bed and other paraphernalia remain inside. A standing, small structure (smokehouse?) is located about 70 feet to the east, nearly completely hidden in the alders. Near this is a pit-house type dwelling which is not obvious from a distance. About 75' north of the main cabin is an additional small, collapsed structure.

This collection of remains struck us as significant due to its location, still standing structure, the pit depressions in the area, and the absence of junk laying about the area. It's history should be researched.
"CLAM CANNERY"

Shore of Aniakchak Bay (T40S, R52W, S 34)
On Sutwik Island C-5 quadrangle, topo map shows correct location.

The remains of the "clam cannery". About 200 feet inland, with two areas of concentrated remains. One area has boiler (visible from the water), remains of a vehicle, and cans: all rusted and in disrepair. To SW of boiler are remains of a building that is entirely collapsed.

From Merry Allyn Tuten's study: "A few industrious individuals, believed to have been from Kodiak, tried to begin a clam cannery on the shores of Aniakchak Lagoon sometime between 1932 and 1937. Razor clams were gathered from Aniakchak's beaches and carried to the cannery in an automobile. The cannery only lasted a few years and local sources have suggested that the cannery failed because the clams were too sandy, transportation costs too high, and that the clam population declined under harvesting pressure." The location of the cannery on Tuten's map is vague and misleading.

Commercial fishermen presently use this area for recreational clamming.
ANIAKCHAK LAGOON

(T40S, R 52W, S21)
On Sutwik Island C-5 quadrangle (1963), topo map shows correct location.

Close to shore of Aniakchak Lagoon, remains of two structures—one a building and one possibly a ramp. Located on tundra above shoreline, not visible from the water. Remains of building include parts of roof, large timbers, and miscellaneous debris. About 75' to south a 3' post remains, with timbers in the area.

This entire site rotting into the tundra, and probably will be difficult to find much evidence of in the future.

See slides in the Aniakchak slide file. We have no information on the history of this site.
COASTAL PATROLS

Aniakchak Bay was extensively visited, including Aniakchak Lagoon and the area near Elephant Head Point. Commercial fishing activity is concentrated between these two areas, thus the 6-8 mile trip from the APA cabin was a common route. We found that route navigable in different weather and tide conditions, landings can be tricky when the swells stack up as they are prone to do by Aniakchak Lagoon. The lagoon is navigable throughout at high tides and with caution it can be entered at lower tides. Reefs are generally located on the maps, but the northeast part of the bay— from east of the APA cabin to Cape Ayutka— has extensive reefs extending offshore, the whole area is potentially hazardous to props. The Aniakchak River could probably be travelled upstream at a high tide, the first 1½ miles with its tidal influence and sandbars is the greatest obstacle.

Amber Bay and Cape Kunmik Two patrols were made in this area, one to Main Creek in Amber Bay, and another following the shoreline of Amber Bay to the northern preserve boundary on Cape Kunmik. No commercial fishing activity was observed. Main Creek was travelled upstream at high tide for about two miles to locate a cabin. The reef on the northeast section of the bay marked on the topo map is in fact more extensive than shown, there is also a reef on the west side, its location is shown on the permanent map file.

The area from Amber Bay to Cape Kunmik is rugged coastline and scenic. Eight bald eagle nests were located on this stretch, and caribou were seen onshore.

Kejulik Bay was not visited this season, but it would be a possible day trip in good weather conditions. Fishermen caution of west winds when entering and travelling in Kejulik Bay.
NATURAL RESOURCES

Noteworthy observations from this field season are mentioned here, along with a list of flora and fauna not catalogued in 1983.

Weather patterns were similar to those of 1983, although we had "better" weather this season. Only during the last week of our stay did weather prohibit or seriously alter our activities. Measured precipitation was 1.85" for the 6/9-26 period. East/southeast winds generally present the worst conditions for boat travel at Aniakchak Bay.

Bears. The heaviest bear activity in 1983 was from about 6/25 to 7/4, thus our stays did not correspond to make a direct and objective comparison on bear activity. Bear observations around the Aniakchak River mouth and other visited areas seemed less than in 1983, however. Bears were observed feeding on dead salmon washed ashore in late June of '83, these were not seen in any numbers this year by the time we left. Bears observed included a sow with 3 yearlings seen on several occasions, and a lone bear- all in the area east of the APA cabin. Fishermen reported seeing a sow with yearlings (or 2½ yr. olds?) on the south side of the bay on several occasions, more than likely her presence was correlated with feeding by fishermen.

The feeding of bears will need to be continually addressed in future seasons; they are fed fish and a dead sea lion was known to be thrown ashore by fishermen for the purpose of observing bears.

The harvest reported by ADF&G for game management unit 9E for the fall of 1983 totaled 95 bears (62 males, 33 females). The harvest reported for the entire unit 9, spring of 1984 was 224, the sub-unit breakdowns have not been compiled. (from: R. Sellars, ADF&G)

Salmon. Sockeye salmon are the mainstay for commercial fishermen at Aniakchak Bay, beginning in May and lasting intermittently throughout the season. The sockeye catch this year was reported to be excellent, some fishermen commented it being the best year since 1947. Pinks and chums were caught incidentally in June, and were observed in numbers along the Aniakchak Bay shoreline by the third week of June. As seen in 1983, there is also a silver run later on in the season.
Birds. Three new species were observed in 1984, they are listed here along with other species warranting comment. More details can be found in the daily field journal. Location of the active eagle nests are marked on the map file in King Salmon.

- Common Eider (Somateria mollissima). Not seen in 1983. Small groups observed on four occasions, the largest group with one male and 12 first spring birds.


- Northern Harrier (Circus cyaneus). One female seen on 6/15 near Main Creek.

- Rough Legged Hawk (Buteo lagopus). Nesting 3/4 mile upstream from Aniakchak River mouth along the North side. One very light-phased individual.

- Bald Eagle (Haliaeetus leucocephalus). Eleven active nests observed: 8 along the NE side of Amber Bay and along Cape Kunmik; 1 on west side Amber Bay; 1 on small island south of APA cabin; 1 approximately 1 mile west of Elephant Head Point along shore.

- Common Murre (Uria aalge). Common on Aniakchak Bay in groups up to 40 individuals. No thick-billed murres were seen.

- Pigeon Guillemot (Cepphus columba). Common on Aniakchak and Amber Bays. Nesting activity observed along the west side of Amber Bay and on small island south of APA cabin.

- Tufted Puffin (Fratercula cirrhata). Not seen in 1983. One group of 8 seen on 6/18 near Elephant Head Point. Horned Puffins were common on Aniakchak Bay.

Fish. In addition to species listed in 1983, Pacific Halibut (Hippoglossus stenolepis) and Great Sculpin (Myoxocephalus polyacanthocephalus) were caught in Aniakchak Bay.

Mammals. No new mammal species were seen this season. More Northern Sea Lions (Eumetopias jubatus) were seen due to being in the open water to a greater extent this year, they were common in Aniakchak Bay. One porcupine (Erethizon dorsatum) was seen at the APA cabin, Aniakchak Bay.
Plants not catalogued in 1983:

-Primula egaliaksensis (Greenland Primrose). 6/15 flowering along banks of Main Creek, about 2½ miles upstream from mouth of Main Creek.

-Melandrium apetalum. 6/24 at 900' elevation, on rocky tundra to NW of APA cabin.

-Veronica Wormskjoldii. Flowering 6/24 at 800' elevation, along the banks of the largest creek that has to be crossed hiking NW 1½ miles from the APA cabin.
PURCHASING RECOMMENDATIONS

Rope: (2) 600' lengths 3/8" nylon
Caribeners: (8) oval (2) locking
Marine pulleys: (pulley/swivel combination for 3/8" rope)
Spare prop: for Evinrude 35 or whatever motor used
Kicker motor: small and light, 2-4 hp.
Zodiac foot pump: with hose, for spare
Zodiac patch kit: extra patch material and glue
Maps: Navigational chart for Aniakchak coast (2) sets 1:63,000 topo maps for field/office use
Coleman parts: lantern mantles, (2) generators for 413H stove
Spotting scope and tripod: if not available from Katmai.

Items that should be ordered for Ranger use - a larger supply would probably be useful for other field stations as well:

Duct tape: (5) rolls
Work gloves: (3) pairs
Large flashlight and batteries: (2/4)

WINTER PROJECTS

-Routine engine maintenance: so engine in top form at beginning of season.
-Duplicate Aniakchak slide file and store master file.
-See also 1983 report for other long-range projects.
Equipment brought to Anvikshak

Appendix
1984

Zodiac Mark III
35 HP Evinrude motor
Fuel: 
- 28 gallon in collapsible Zodiac tanks
- 6 gallon metal tank
Oil - some fuel already mixed; some not.
Spare parts - 2 extra props, plugs
- 2 pieces plywood
Materials for boat anchor system: pipe, chain, rope (500 feet in 4 lengths; need continuous length for anchoring system)
Marine Flare Kit / Regular Flares
- 2 Float Coats
- 2 Mustang Survival Suits
ELT
- Sigtron 12 g. Revolver Stw. Model 19
- 3 snap-lid drums for food & equipment storage
HF Radio Equipment: SAC radio, Spidelray, dipole & ladder antennas
- 10 watt & portable radio
Weather Kit and Rain Gauge
Tool Kit
- Coleman Stove & lantern & Coleman Oven / Cooking Supplies & utensils
- maps - 1:250,000; 1:63,000; sketches of monument & present for visitors
Waterproof Bags - assorted phenolic & rubber bags @ 5 total
- Large plastic trash compactor bags
# Commercial Fishing Boats

## Seiners
- **Amber Bay 43565**: Dick Sharpe
- **Ms. Valerie (Chignik) 20453**: Ted Siemion
- **Susan Rae 35956**: Paul Johnson
- **Royal Lady (Juneau) 38635**: Milton Cronk
- **Tiffany Alyssa**
- **Cheryl Ann 6421**
- **El Gusto (sp?)**
- **Anihilator**

## Tenders
- **Odyssey (Juneau)**: Chignik Pride
- **North Wind**
# WEATHER OBSERVATIONS JUNE 1984

All observations Aniakchak Bay (T39S, R52W, S 36)
Temperatures at 1800 hrs. unless noted
Precipitation for 24hrs. previous to 1800 hr. reading

<table>
<thead>
<tr>
<th>Date</th>
<th>Temp. °C</th>
<th>Precip. &quot;</th>
<th>Wind Dir.</th>
<th>Speed</th>
<th>Cloud Cover and Ceiling</th>
<th>Comments</th>
</tr>
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<tr>
<td>6/9</td>
<td>8</td>
<td>—</td>
<td>E/SE</td>
<td>5-10</td>
<td>100% stratus 1500'</td>
<td>Intermittent Rain.</td>
</tr>
<tr>
<td>6/10</td>
<td>13</td>
<td>0.18</td>
<td>E/SE</td>
<td>0-10</td>
<td>90% 1000' a.m. 30% 2500' p.m.</td>
<td>Intermittent Rain a.m. Clearing &amp; wind from W afternoon.</td>
</tr>
<tr>
<td>6/11</td>
<td>15</td>
<td>0.00</td>
<td>W</td>
<td>0-5</td>
<td>60% 4000'</td>
<td>Mix day Evening clear and calm Brief clearing in afternoon.</td>
</tr>
<tr>
<td>6/12</td>
<td>9</td>
<td>0.02</td>
<td>E/SE</td>
<td>0-5</td>
<td>90% 3000'</td>
<td>Heavy rain during, night and Swell in bay.</td>
</tr>
<tr>
<td></td>
<td>(1900 hrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Max. 19°C Winds increasing from W during day. Clear all day.</td>
</tr>
<tr>
<td>6/13</td>
<td>12</td>
<td>0.27</td>
<td>E/SE</td>
<td>0-10</td>
<td>60% 2000'</td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/14</td>
<td>10</td>
<td>Trace</td>
<td>W</td>
<td>0-10</td>
<td>50% 100% inland</td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/15</td>
<td>15</td>
<td>0.00</td>
<td>W</td>
<td>10-20</td>
<td>10% scattered high clouds</td>
<td>Clear all day. Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td></td>
<td>(2030 hrs)</td>
<td></td>
<td>E/SE</td>
<td>0-10</td>
<td></td>
<td>Clear all day. Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/16</td>
<td>10</td>
<td>0.00</td>
<td>E/SE</td>
<td>0-5</td>
<td>100% 500'</td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td></td>
<td>(2030 hrs)</td>
<td></td>
<td>E/SE</td>
<td>10-15</td>
<td></td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/17</td>
<td>10</td>
<td>0.12</td>
<td>E/SE</td>
<td>0-10</td>
<td>100% 0-200'</td>
<td>Clear all day. Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/18</td>
<td>10</td>
<td>0.28</td>
<td>E/SE</td>
<td>5-15</td>
<td>100% Variable</td>
<td>Clear all day. Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/19</td>
<td>12</td>
<td>0.00</td>
<td>E/SE</td>
<td>0-5</td>
<td>100% 4000'</td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
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<tr>
<td>6/20</td>
<td>12</td>
<td>0.06</td>
<td>S E</td>
<td>5-10</td>
<td>90% 500'- 200'</td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
<tr>
<td>6/21</td>
<td>14</td>
<td>0.15</td>
<td>Variable MPH &amp; direction</td>
<td>80%</td>
<td></td>
<td>Calm in the evening. Ceiling lowered during day. Swells and gusts in bay. Rain during night and day. &lt; 1/2 mile visibility.</td>
</tr>
</tbody>
</table>
### WEATHER OBSERVATIONS  JUNE 1984

All observations Aniakchak Bay (T39S, R52W, S 36)
Temperatures at 1800 hrs. unless noted
Precipitation for 24hrs. previous to 1800 hr. reading

<table>
<thead>
<tr>
<th>Date</th>
<th>Temp. °C</th>
<th>Precip. &quot;</th>
<th>Wind Dir.</th>
<th>Speed</th>
<th>Cloud Cover and Ceiling</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/22</td>
<td>10°</td>
<td>0.02</td>
<td>SE</td>
<td>5-15</td>
<td>100%</td>
<td>Variable 0-1000' Rain in evening Large waves as well.</td>
</tr>
<tr>
<td>4/23</td>
<td>9°</td>
<td>0.08</td>
<td>SE</td>
<td>5-10</td>
<td>100%</td>
<td>Variable 0-1500' Visibility lowering during day.</td>
</tr>
<tr>
<td>6/24</td>
<td>10°</td>
<td>0.12</td>
<td>E/SE</td>
<td>5-10</td>
<td>100%</td>
<td>0-2000' Rain afternoon &amp; evening</td>
</tr>
<tr>
<td>6/25</td>
<td>11°</td>
<td>0.44</td>
<td>E/SE</td>
<td>0-5</td>
<td>100%</td>
<td>5000-2000' Rain in milk rain</td>
</tr>
<tr>
<td>6/26</td>
<td>11°</td>
<td>0.11</td>
<td>Calm</td>
<td></td>
<td>80%</td>
<td>4000' Clearing evening 4-9' Good visibility</td>
</tr>
</tbody>
</table>

ARO-ANIA_RF_N1643.max
ADDENDUM - VISITOR USE

November 1984

We learned of one eight day recreational visit to Aniakchak during the 1984 summer season. Mr. John Bachman flew to Port Heiden and attempted to walk into the caldera via Birthday Pass. Birthday Pass is a 2000 ft. notch on the southwest side of the caldera at the headwaters of Birthday Creek. Birthday Pass has been the route that at least two parties have successfully used to enter the crater.

Originally planned as a 12 day trip, weather conditions and hazardous terrain led to Mr. Bachman returning to Meshik 4 days early. Apparently he hiked from Meshik to the western edge of the caldera, north of Birthday Creek, then tried to follow the crater rim south to Birthday Pass. Before reaching Birthday Pass he was confronted with a precipitous drop off and determined that it would take two additional days to backtrack and enter the crater up the Birthday Creek drainage.

Talking with John Bachman on the phone, he was very enthusiastic about his trip and has plans to return next summer to hike inside the caldera.

Contact: John Bachman  (312) 951-5425
           310 S. Michigan Ave.
           Chicago, Illinois  60604