PROGRESS REPORT: 1984 WALRUS HARVEST, HEALTH AND WELFARE STUDY AT NOME, ALASKA



This document is restricted to internal U.S. Fish and Wildlife Service use.

Scott L. Schliebe Marine Mammal Project U.S. Fish and Wildlife Service 1011 East Tudor Road Anchorage, Alaska

ARLIS

Alaska Resources Library & Information Services Anchorage: Alaska

TABLE OF CONTENTS

ABSTRACT

INTRODUCTION

METHODS

Specimen Collection Hunter Contact Incidental Observations

RESULTS AND DISCUSSION

LIST OF TABLES AND APPENDICES

List of Tables and Appendices

- Table 1. Comparison of 1981, 1982 and 1983 documented walrus harvest at Nome, Alaska.
- Table 2. Recorded walrus harvest during the spring of 1984, Nome and King Island, Alaska
- Table 3. Recorded incidental marine mammal harvest during the spring of 1984 Nome and King Island, Alaska.
- Table 4. Comparison of 1981, 1982, and 1983 documented walrus harvest at Cape Wooley and King Island, Alaska.
- Table 5. Teeth collected during 1984 spring walrus harvest, Nome, Alaska.
- Appendix 1. National Weather Service local climatological data.
- Appendix 2. National Weather Service Bering Sea satellite ice imagry.

ARLIS

Alaska Resources
Library & Information Services
Anchorosom Maska

ABSTRACT

Walrus (Odobenus resmarus) harvest data was collected for the Nome and King Island area from May 10 to July 10, 1984 by the U.S. Fish and Wildlife Service (FWS) with cooperation from the Eskimo Walrus Commission (EWC). The documented minimum retrieved harvest for Nome and King Island, respectivey, was 46 and 111 walruses, far below harvest levels experienced during the preceeding four years. The harvest from King Island was comprised of a majority of female walruses for the first time. Changes in the sex ratio of the harvest from Nome were inconclusive due to the low number of animals taken. Forty-five pairs of teeth, for ageing purposes, and three sets of specimens for contaminant analysis were acquired. Take of other marine mammals for Nome and King Island incidental to walrus hunting included a minimum of 91 bearded seal (Erignathus barbatus), 25 ringed seal (Phoca hispida), spotted seal (Phoca largha), 2 unidentified seals and 1 polar bear (Ursus maritimus). Prolonged consolidated ice conditions in the Norton Sound were believed to have limited hunting success.

INTRODUCTION

The spring walrus (Odobenus rosmarus divergens) harvest was monitored in Nome during the spring of 1984. This year marked the 5th year of a continuing 5-village study located in the northern Bering Sea. The Eskimo Walrus Commission (EWC) cooperated in the study. Objectives of the harvest monitoring program were:

- 1. To record the number, sex, and chronology of harvested walruses.
- 2. To collect teeth from harvested walruses to determine age composition.
- 3. To collect samples of fat, kidney, liver and heart tissues for heavey-metal and organoclorine contaminant analysis.
- 4. To record incidental harvests of other marine mammals and birds.

The Nome harvest was monitored from May 10 to June 6 by the Service biologist, Scott Schliebe, with the assistance of Ed Muktoyuk Sr. a local resident who later was solely responsible for the harvest at Cape Wooley and King Island from June to July 10, 1984.

STUDY AREA

Nome is located on the southern coastline of the Seward Peninsula afronting Norton Sound. An admixture of Yupik and Inupiat Natives co-exist in the community of predominantly non-Natives. Nome is the regional center for the outlying areas. The King Islanders maintain a distinct social and cultural community within Nome. Walrus hunting out of Nome was repopularized by a small group of individuals who had relocated to Nome from St. Lawrence Island. Their successes eventually led to the hunt of todays proportion. Weather and ice conditions in Norton Sound and the Bering Sea determine hunter accessibility to migrating walrus herds. The winter of 1983-84 was characterized as the heaviest ice year since 1977 and was comparable to 1977's extreme southern extension of the polar sea ice. Spring walrus hunting normally begins from early to mid-May and ends in early June. Hunting activity in the Bering Sea adjacent to King Island and Cape Wooley generally occurs one month later.

METHODS

A vehicle was used to partrol the road system located adjacent to the beach. Hunters were recorded as they departed and boats were met and assisted in unloading upon return. The walrus kill was recorded according to sex and age (calf or adult). The number and species of other marine mammals and birds taken were noted. Hunting time, directions, crew size, boat lengths, motor sizes were sampled. Due to the diffuse nature of launching areas and sporadic nature of hunter lauching and returning, some crews were missed. Boat captains were contacted later if they were missed on the beach. Unretrieved loss information was recorded if the boat captain or crew member volunteered the information. However, no systematic method was devised for determining crippling rates.

SPECIMEN COLLECTION

Collection of specimens in 1983 was limited to a goal of 100 pairs of lower canines, and kidney, liver heart and blubber contaminant specimens from 10 older-age animals. The sex ratio of comtaminant specimens collected was to approximate 50:50 while tooth specimens were to be collected randomly through the harvest period.

Tooth specimens were assigned an accession number, sealed in a paper envelop marked with the date of harvest, sex of walrus and name of the boat captain. Tissue specimens were initally frozen on the exterior in the ADF&G freezer. After a thin hard frozen crust developed a core plug was extracted using steel surgical scalpel blades in order to remove contamination which may have occurred during butchering of the animal or during transport back to the beach. Core samples were wrapped in aluminum foil and individually labeled and sealed in small zip lock plastic bags. Tooth specimens accompanied contaminants specimens. Noticable tissue abnormalities and hunter information concerning the observed physical condition of the animal were recorded. Samples await analysis at the Patuxent National Wildlife Research Laboratory.

HUNTER CONTACT

A marine mammal hunters meeting was held after arrival in Nome at the King Island hall. Results from past programs were explained and details of the objectives of this years' program presented. Dan Mayer presented the Law Enforcement program slated for this spring's walrus harvest season and answered questions at the meeting. All boat captains were visited individually at home during May. Hunter kits were distributed and a one to one discussion of the harvest program and hunter questions were covered.

INCIDENTAL OBSERVATIONS

Incidental observations included hunting conditions (weather and ice, National Weather Service Local Climatological Data and Satellite Ice Imagry Appendix 2), seal harvest, and bird harvests. Recording the chronology and abundance of spring migratory birds was not attempted. Henry Springer, a local birding enthusiast, has published results of his extensive observations and surveys.

RESULTS AND DISCUSSION

The documented minimum Nome harvest during the observation period was 46 walruses consisting of 15 adult males (32.6%), 14 adult females (30.4%), no calves and 17 adult sex unknown (37.0%). A 52:48 male to female sex ratio existed among known sex animals (Tables 1 and 2). The higher than normal sex unknown category resulted from diffuse hunting effort and difficulty in encountering hunters at the beach. Animals lost were included if the hunter volunteered the information, however, hunters were not questioned concerning unretrieved walurses which sunk, and therefore the figure should not be considered to represent minimum loss rates.

Statistical comparison of sex ratio will not be conducted due to the small number of walruses harvested. The sex ratio of the 1984 harvest appear approximately that of 1983 while the harvest of adult females predominated in 1981 and 1982. The magnitude of the 1984 harvest was substantially reduced from previous spring harvests; (11%) of 1983, (45%) of 1982, and (9%) of 1981. No calves were harvested during 1984 although nursery herds were present for a short period. Hunters stated that these animals were hauled out in the interior portion of ice floes and were inaccessible. Nome walrus hunters have not shown a preference toward harvesting calf walrus. One calf walrus was shipped to a zoo in the Lower 48 following the Service's spring harvest monitoring.

Documented harvests of other marine mammals from Nome included a minimum of 76 bearded seals (Erignathus barbatus), 24 ringed seals (Phoca hispida), one spotted seal (Phoca largha), and 2 unidentified seals (Table 3).

Tooth specimens were acquired from 45 walruses, 20 (44%) males and 25 (56%) females. Contaminant specimens were collected from 3 walruses (Table 5).

Nome hunters experienced a poor walrus harvest season during 1984. The primary factor hindering hunter success was consolidated ice conditions within Norton Sound. Departure of shore fast ice occurred on May 20. slightly, 3-10 days later than anytime in the preceeding 4 years. Retreat of ice in the Bering Sea did not begin until May while normal retreat patterns generally begin around mid-April. The southern portion of Norton Sound remained ice covered and walrus herds which may normally enter the southern sound and exit near the northern sound did not have access to Norton Sound and by-passed via the Bering Sea route. National Weather Service Climatological Data and Ice Imagry Appendix 1 and 2). Walrus herds encountered in Norton Sound were few according to area hunters. A sampling of 17 hunting efforts involving 742 man-hours with a harvest of 12 walruses showed a 61.8 hour effort expenditure per walrus harvested. Although the sampling size is small and is easily influenced by a single successful hunting attempt, it does display the relative increased effort per unit return which occurred in Nome during the spring of 1984. Boat motor sizes were unchanged from previous years. A 22' fiberglass boat with 145HP. Suzuki experienced motor problems after two hunting attempts. A 26' bowpicker was not used in this spring hunt.

The documented harvest at Cape Wooley and King Island from June 1 to July 10 was 111 walruses. This consisted of 12 (10.8%) males, 12 (10.8%) females, 1 (0.9%) calf and 86 (77.5%) adults of unknown sex (Table 4). The unknown sex category is comprised primarily of female walruses taken between King Island and Little Diomede, however, an accurate proportionment is not possible. This is the first year that more female than male walruses were harvested by King Island hunters. In previous years male walruses hauling out on King Island were readily available. This was not the case this year although earlier over flights of King Island by Ed Muktoyuk and Exxon during late April and May revealed large numbers of walruses hauled out on King Island. Male herds migrating on the last of the retreating ice pack are normally pursued. This year ice

remained further south for a greater period of time and became rotten and unsuitable for hauling out. It appears that late migrating walrus were required to swim north in search of suitable ice conditions. It may not be prudent, nor economically feasible to solely hunt for swimming walruses. Time expenditures, fuel costs, low retrieval rates and the danger of hunting open seas without adequate ice cover may limit this activity.

Only 2 bearded seals (1 sunk) and a ringed seal were noted to have been harvested while 3 (unidentified) whales and numerous unidentified whales were sited on June 8 and June 17, respectively. No tissues for contaminant analysis were collected from the King Island or Cape Wooley. Twenty-seven pairs of teeth 9 (33%) males 18 (67%) females were collected. Eleven pairs of teeth were matched at a later date. If aging reveals these samples to be unmatched they will be discarded.

Table 1. Comparison of 1981, 1982, and 1983 documented walrus harvest at Nome, Alaska (Data from Schliebe 1981, 1982 and 1983). (Adults are all animals older than calves.)

| | Adult | . Adult | | Adult | |
|-----------------------|-------|---------|----------|-------------|-------|
| | Males | Females | Calves | Sex Unknown | Total |
| 1981 | 110 | 371 | 8 | | 489 |
| % of Total | 22.5 | 75.9 | 8 1.6 | | |
| Z of Known Sex Adults | 22.9 | 77.1 | | | |
| 1982 | 27 | 63 | 6 | 6 | 102 |
| % of Total | 26.4 | 61.8 | 5.9 | 5.9 | |
| % of Known Sex Adults | 30.0 | 70.0 | | | |
| 1983 | 166 | 143 | 5 | 93 | 407 |
| % of Total | 40.8 | 35.1 | 1.2 | 22.9 | |
| % of Known Sex Adults | 53.7 | 46.3 | × | | |
| 1984 | 15 | 14 | 0 | 17 | 46 |
| % of Total | 32.6 | 30.4 | - | 37.0 | |
| Z of Known Sex Adults | 51.7 | 48.3 | | | |

Table 2. Recorded walrus harvest during the spring of 1984, Nome and King Island, Alaska.

| Date | Males | <u>Females</u> | Calves | Unknown | Total |
|-------|---------|----------------|--------|--------------------------------|-------|
| 5/20 | · | | | | |
| 5/26 | | | | | |
| 5/27 | 9 | 13 | | 2 | 24 |
| 5/28 | ľ | 1 | | | 2 |
| 5/29 | | | | 1 | 1 |
| 5/30 | 2 | | | 2 | 4 |
| 5/31 | 2 1b | • . | | | 1 |
| 6/2 | 11c,1b | 8c4b,c | • | | 24 |
| 6/3 | 1 | | ì | 6,84° | 91 |
| 6/8 | 10 | | , | • | 1 |
| 6/9 | | | Ic | 6 ^b ,2 ^c | . 9 |
| TOTAL | 27 | 26 | 1 | 103 | 157 |

a Sunk unretrieved, 2 males, 9 sex unknown

Dead floatingKing Island hunting effort

Table 3. Recorded incidental marine mammal harvest during the spring of 1984 Nome and King Island, Alaska.

SEALS

| Date | Bearded | Ringed | Spotted | Unidentified | Polar Bears | Whales |
|-------|------------------|--------|---------|--------------|----------------|---------------|
| 5/20 | 6. | • | | | | |
| 5/20 | . 6 ⁻ | 3 | | | | |
| 5/21 | 6 | 2 | | | | |
| 5/22 | 7 | | | · | - | |
| 5/23 | 2 | | - | | · . | |
| 5/24 | * ; | 4 | | 1 | | |
| 5/27 | 17 ^a | 4 | 1 | 2 | 1 | |
| 5/30 | 4 | | | • | | • |
| 5/31 | 7 | 6 | | | | |
| 6/1 | 3 | | • | • | | |
| 6/2 | 27 ^b | - 6c | | | | |
| 6/3 | 6 | | | • | | , |
| 6/8 | - | • • • | | | • | 3d |
| 6/17 | | | | • | | * |
| -•• | , | • | | • | (abun | dant unid.) d |
| TOTAL | 91 | 25 | 1 | . 2 | 1 | 3 |

a 5 Bearded seals were taken between this date and May 22.

b 2 Bearded seal sank, 1 bearded seal taken during King Island c 1 Ringed seal taken during King Island hunt

Reported near King Island, probably gray whales.

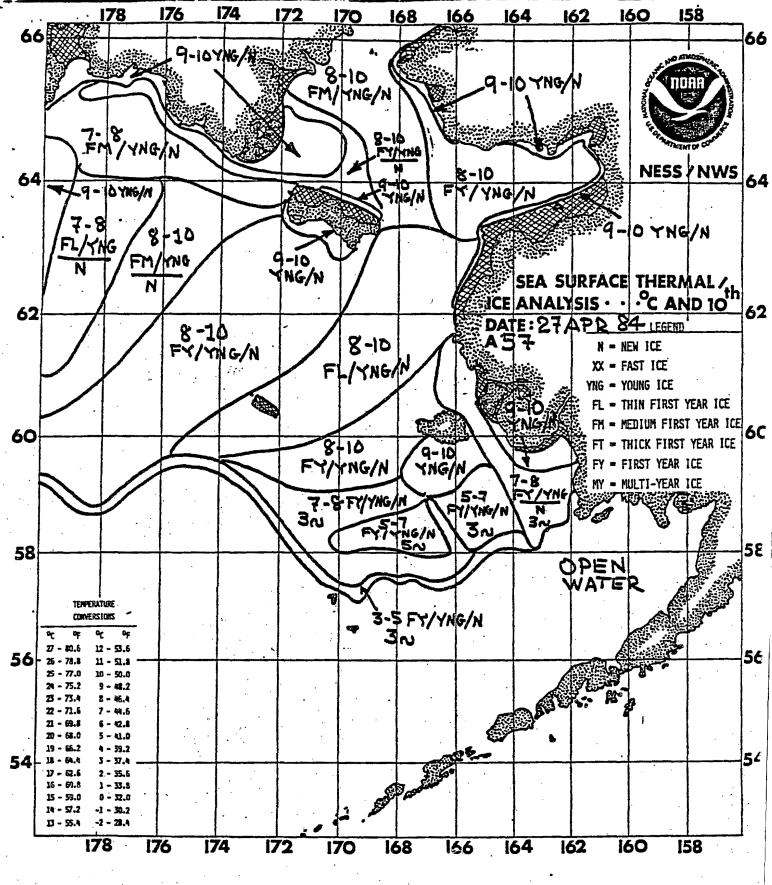
Table 4. Comparison of 1981, 1982, and 1983 documented walrus harvest at Cape Wooley and King Island. Data from Ed Muktoyuk Sr.

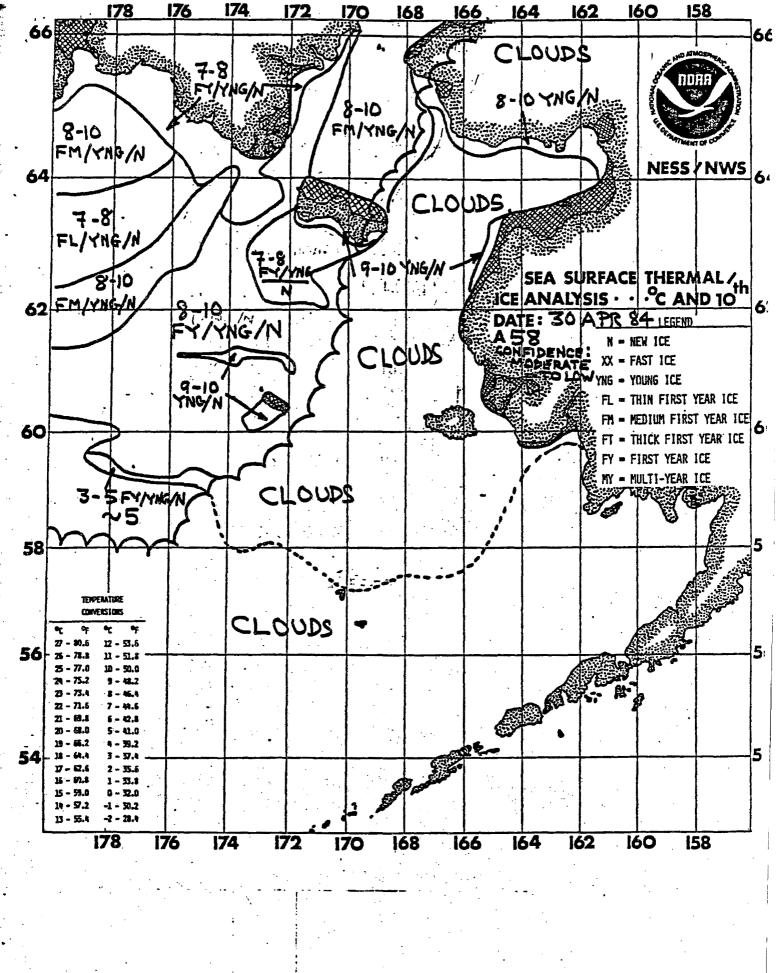
| | Adult | Adult | | Adult | |
|-----------------------|-------|---------|--------|-------------|-------|
| | Males | Females | Calves | Sex Unknown | Total |
| 1981 | 269 | • | 1 | | 270 |
| % of Total | 99.7 | | .3 | | |
| % of Known Sex Adults | 100.0 | | | | |
| 1982 | 517 | 57 | 1 | 40 | 615 |
| % of Total | 84.0 | 9.3 | • 2 | 6.5 | |
| 7 of Known Sex Adults | 90.0 | 10.0 | | | |
| 1983 | 111 | 12 | v | 107 | 230 |
| % of Total | 48.3 | 5.2 | | 46.5 | |
| 7 of Known Sex Adults | 90.2 | 9.8 | | | |
| 1984 | 13 | 12 | 1 | 86 | 111 |
| % of Total | 11.6 | 10.7 | .9 | 76.8 | |
| % of Known Sex Adults | 52 | 48 | - | • | |

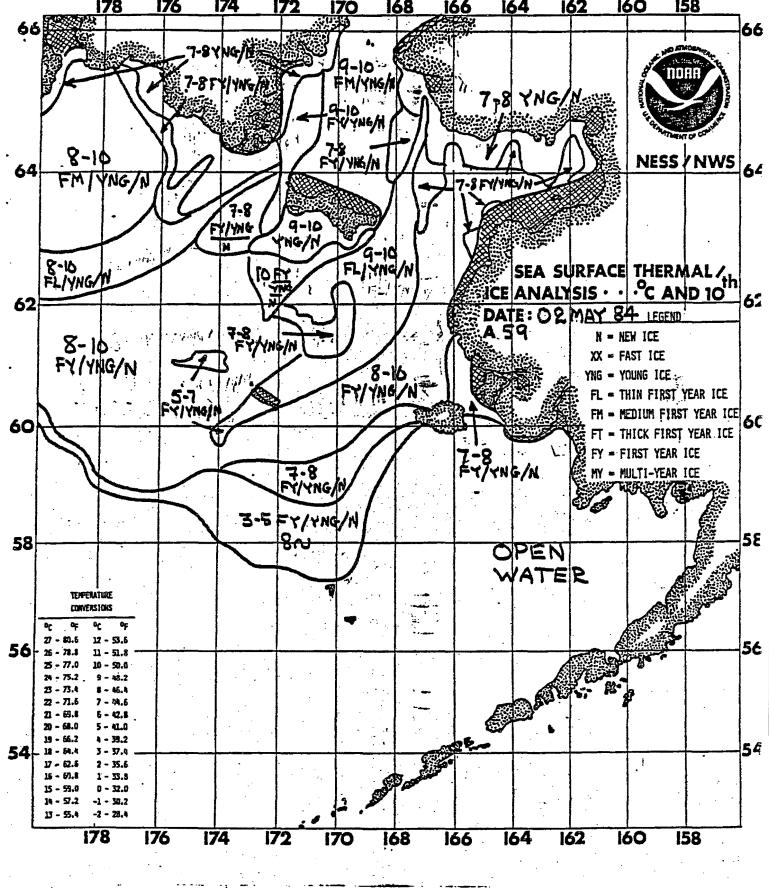
Table 5. Teeth collected during 1984 spring walrus harvest, Nome, Alaska.

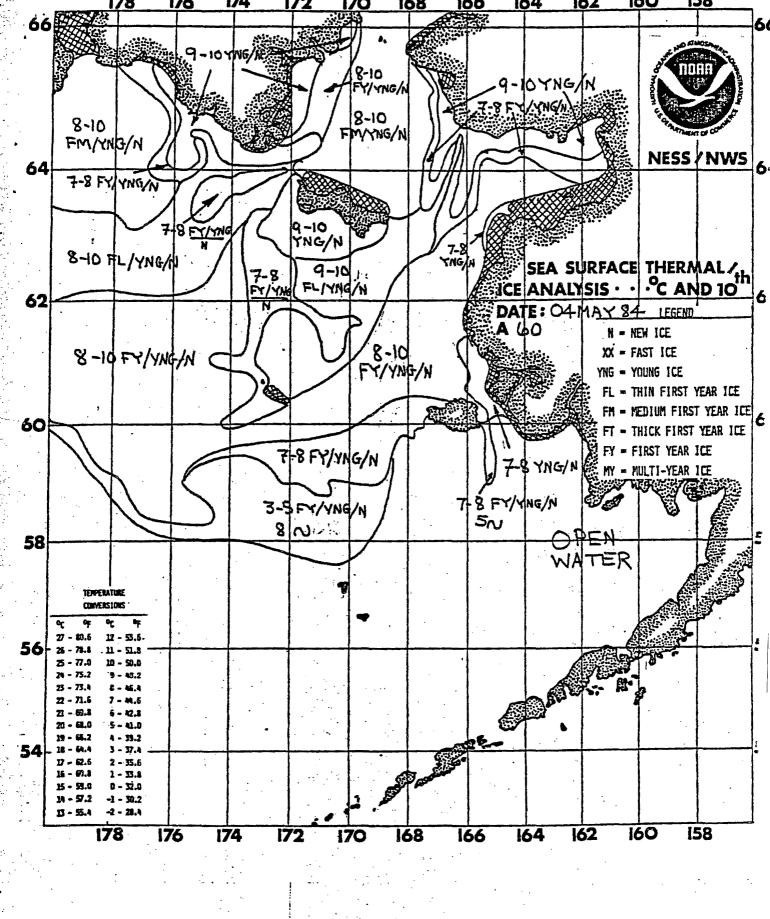
| Accession No. | Date 5/07 | Sex | Hunter |
|---------------|--------------|----------|--|
| NW-1-84 | 5/27 5/28 | F | I. PushroukC. Johnson |
| 2 3 | 5/28 | M M | C. Johnson |
| 4 | 5/28 | M | C. Johnson |
| 5 | 5/28 | M | C. Johnson |
| 6 | 5/28 | M M | C. Johnson |
| 7 | 5/28 | M | C. Johnson |
| 8 | 5/28 | F | C. Johnson |
| 9 | 5/28 | F | M. Howard |
| 10 | 5/28 | F | M. Howard |
| 11 | 5/28 | ř | M. Howard |
| 12 | 5/29 | F | C. Dotamain |
| 13 | 5/29 | | C. Dotamain |
| 14 | 5/30 | M M | F. Olanna |
| 15 | 5/30 | | • • |
| | 5/30 5/30 | M | J. Benke F. Olanna |
| 16 17 | 6/2 | M .F | |
| 18 | 6/2 | | |
| | | F | M. Saclamana M. Saclamana |
| 19 | 6/2 | F | |
| 20 | 6/2 | M | M. Saclamana |
| 21 | 6/2 | F | M. Saclamana |
| 22 | 6/2 | F · | M. Saclamana |
| 23 | 6/2 | M | M. Saclamana |
| 24 | 6/2 | · M | M. Saclamana |
| 25 | 6/2 | M | M. Saclamana |
| 26 | 6/2 | M | M. Saclamana |
| 27 | 6/2 | F | M. Saclamana |
| 28 | 6/2 | M | M. Saclamana |
| 29 | 6/2 | M | M. Saclamana |
| 30 | 6/2 | M | M. Saclamana |
| 31 | 6/2 | F | M. Saclamana |
| 32 | 6/2 | M | M. Saclamana |
| 33 | 6/2 | F | M. Saclamana |
| 34 | 440 | M | L. Milligrock |
| 35 | 6/3 | · F | S. Ayek |
| 36 | 6/3 | F | S. Ayek |
| 37 | 6/3 | F | S. Ayek |
| 38 | 6/3 | . | S. Ayek |
| 39 | 6/3 | F | S. Ayek |
| 40 | 6/3 | F | S. Ayek |
| 41 | Missing | | |
| 42 | 6/3 | F | S. Ayek |
| 43 | 6/3 | F | S. Ayek |
| 44 | 6/3 | F | S. Ayek |
| 45 | 6/3 | F | S. Ayek |
| 46 | 6/3 | F | S. Ayek |
| | | | |

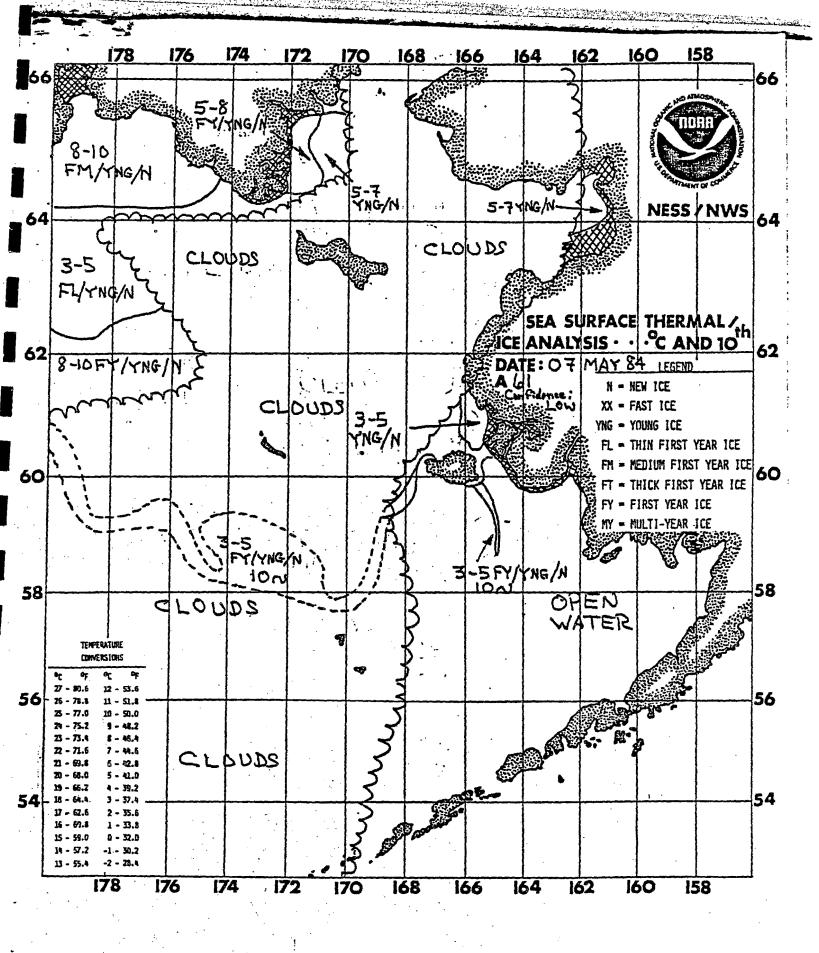
SCHLIEBE:mb:8/8/84(2531g)

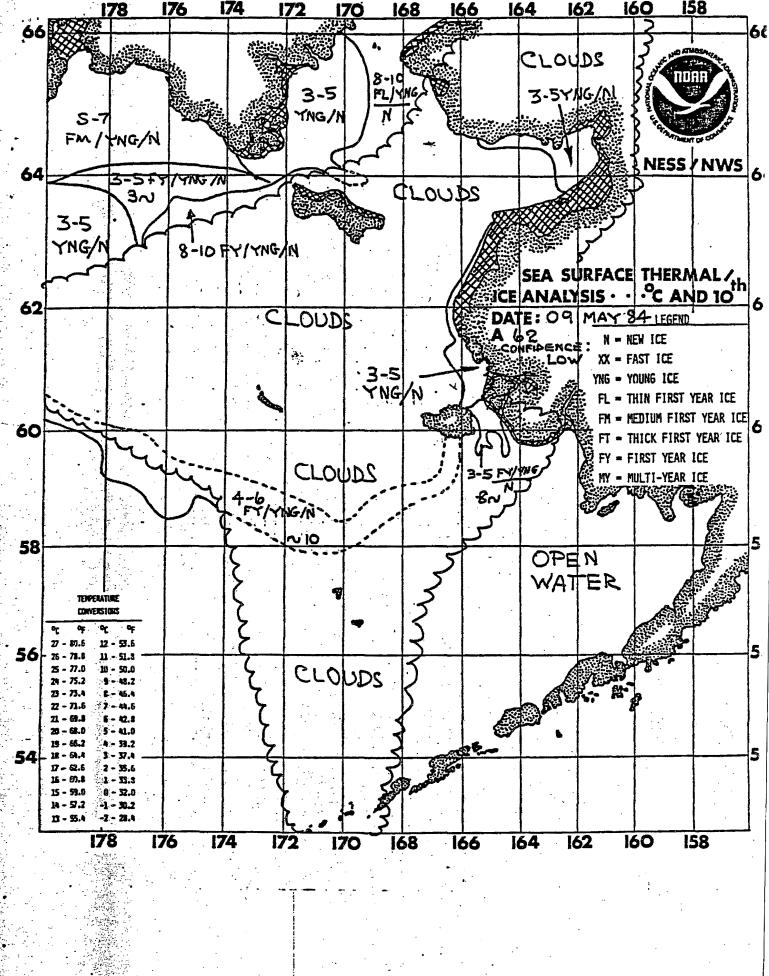


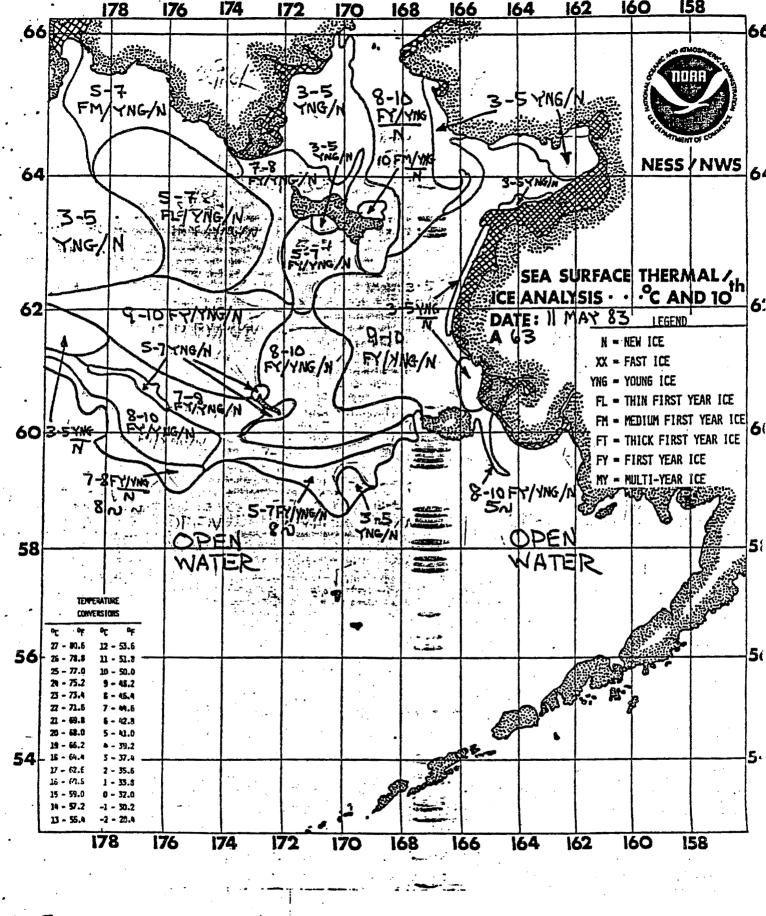


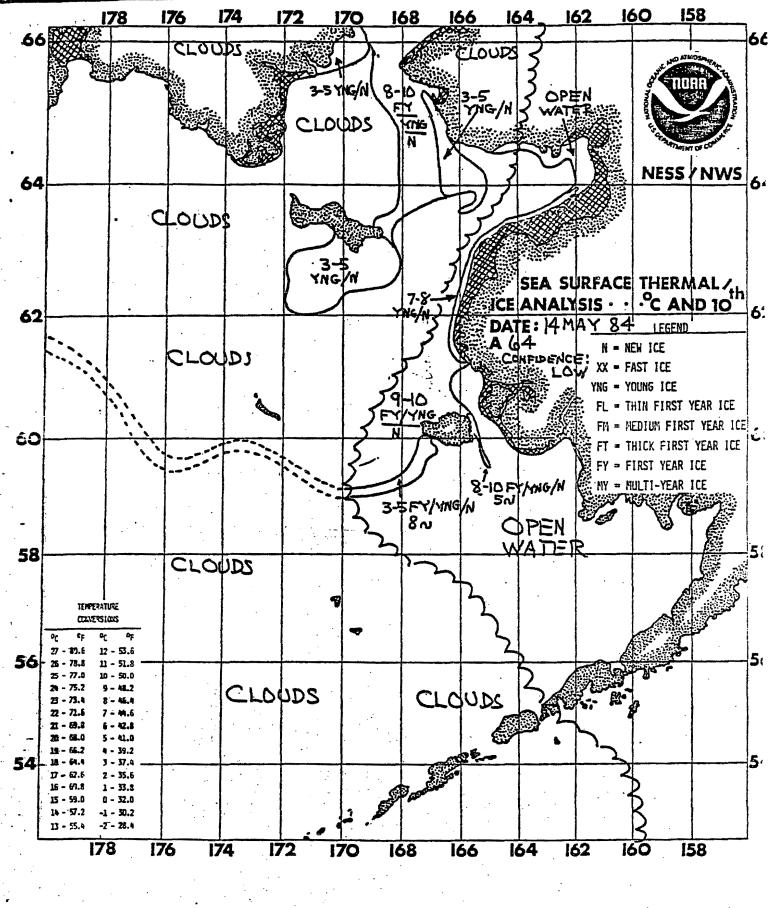


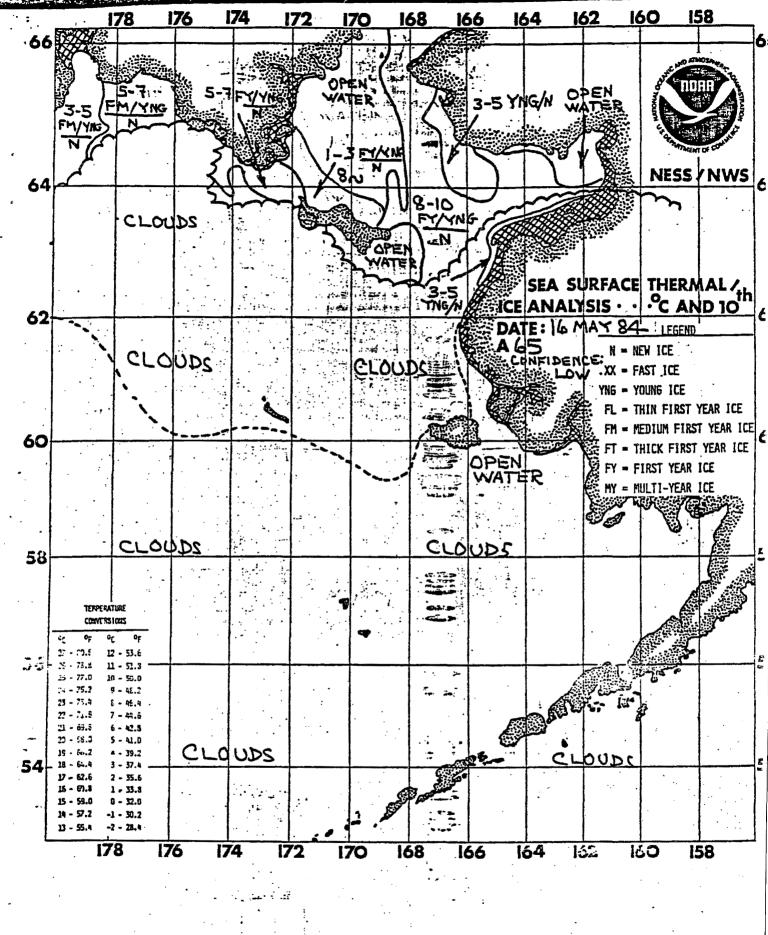


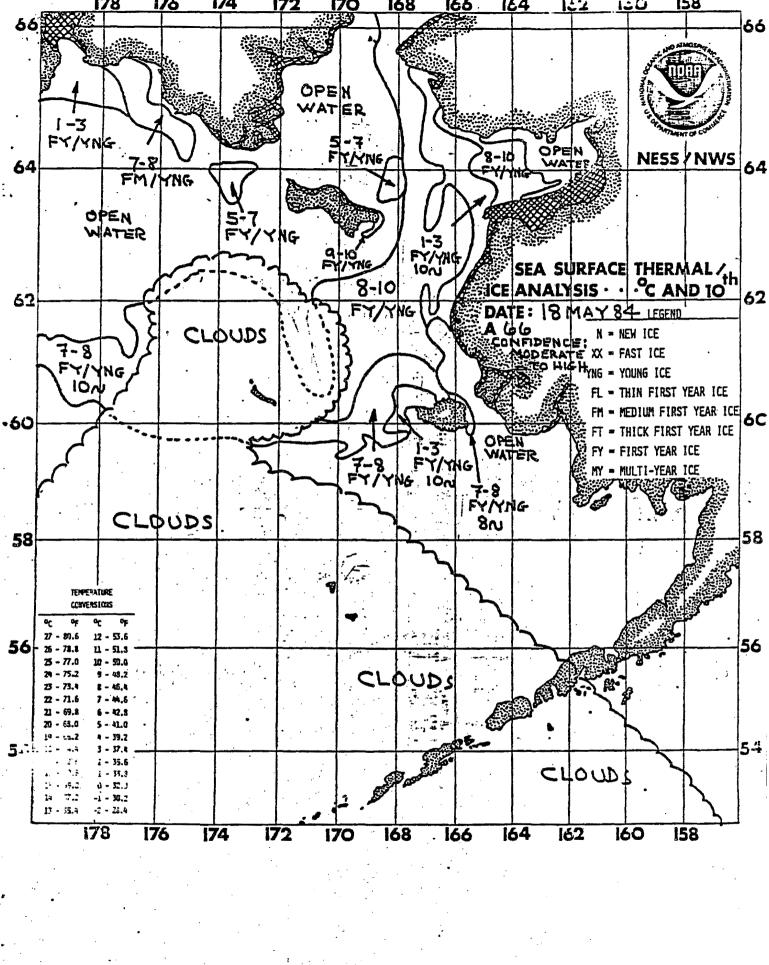


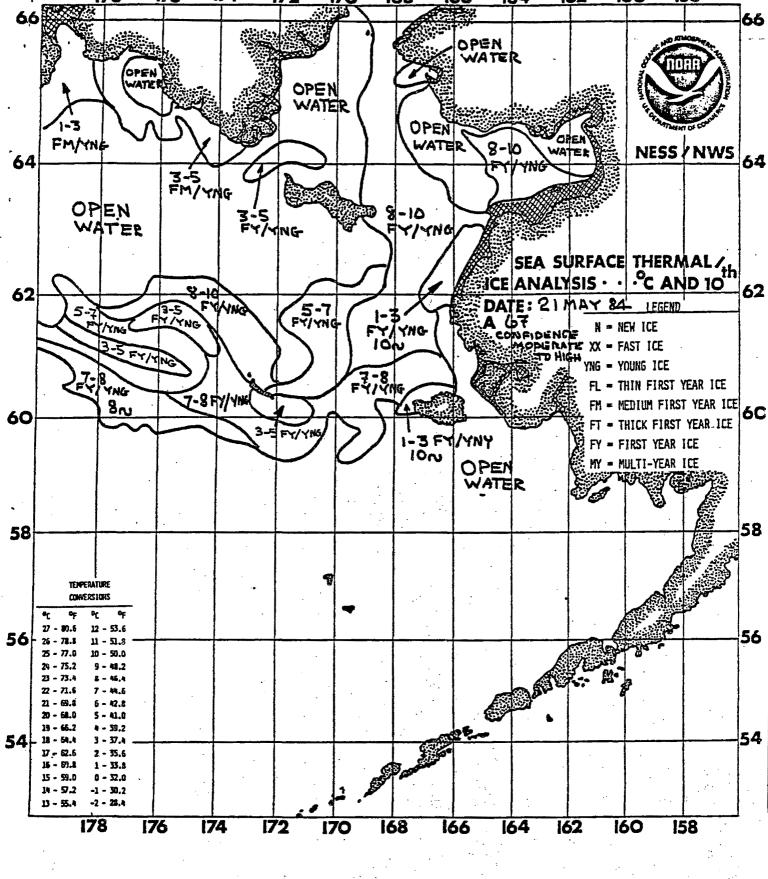


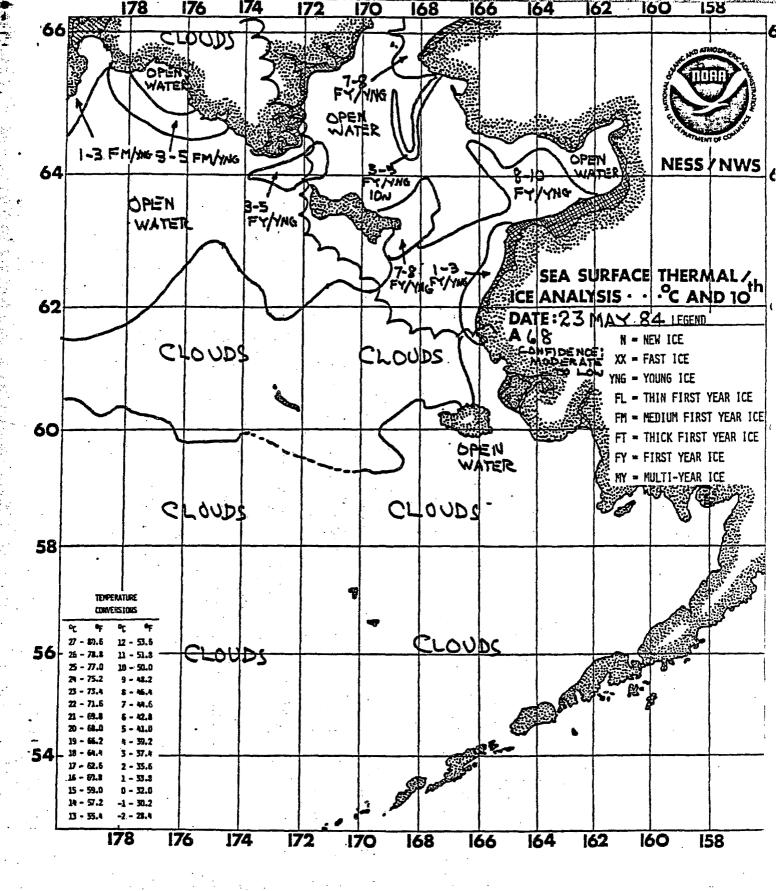


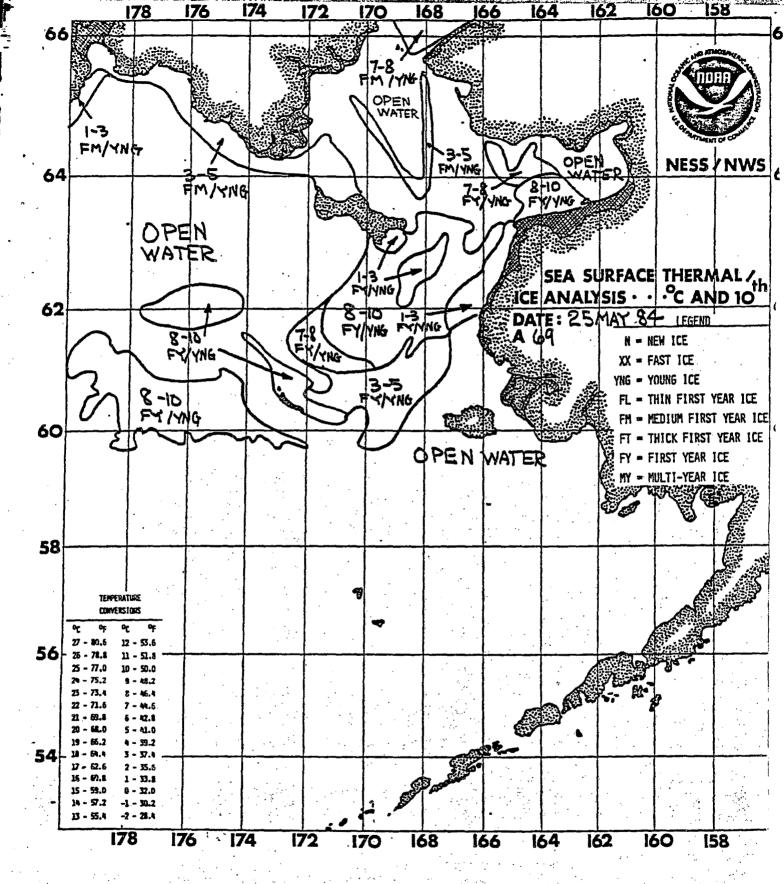


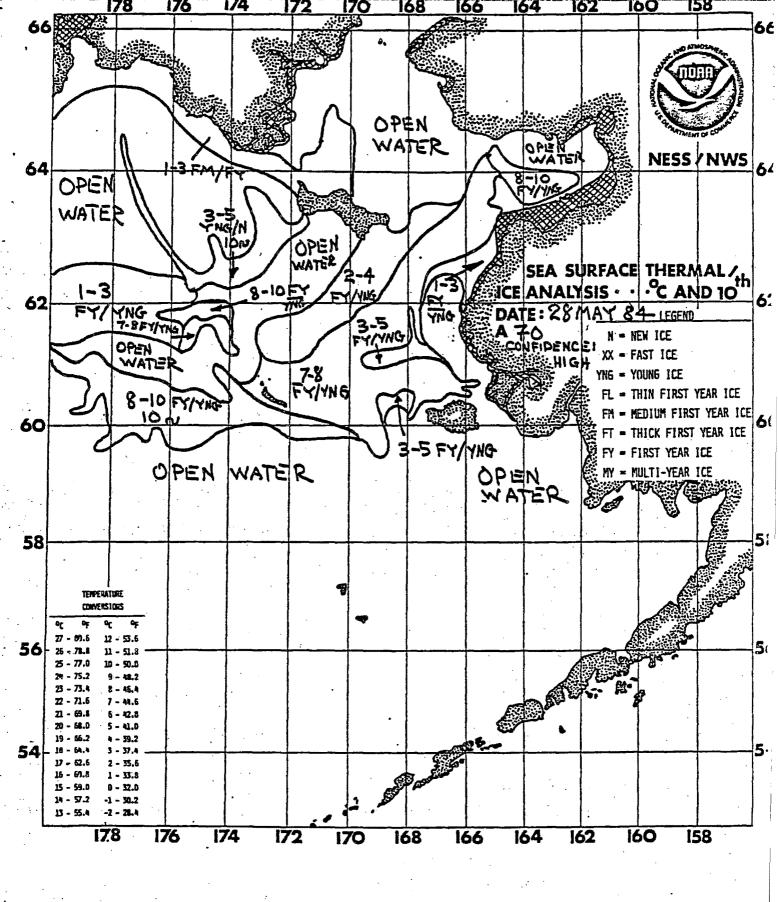


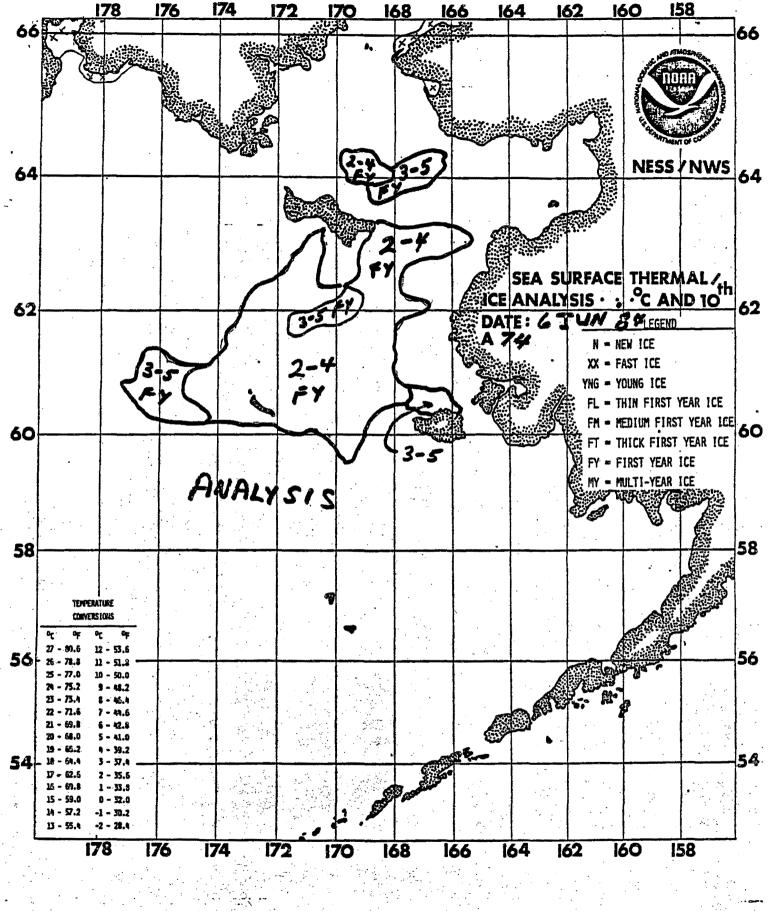


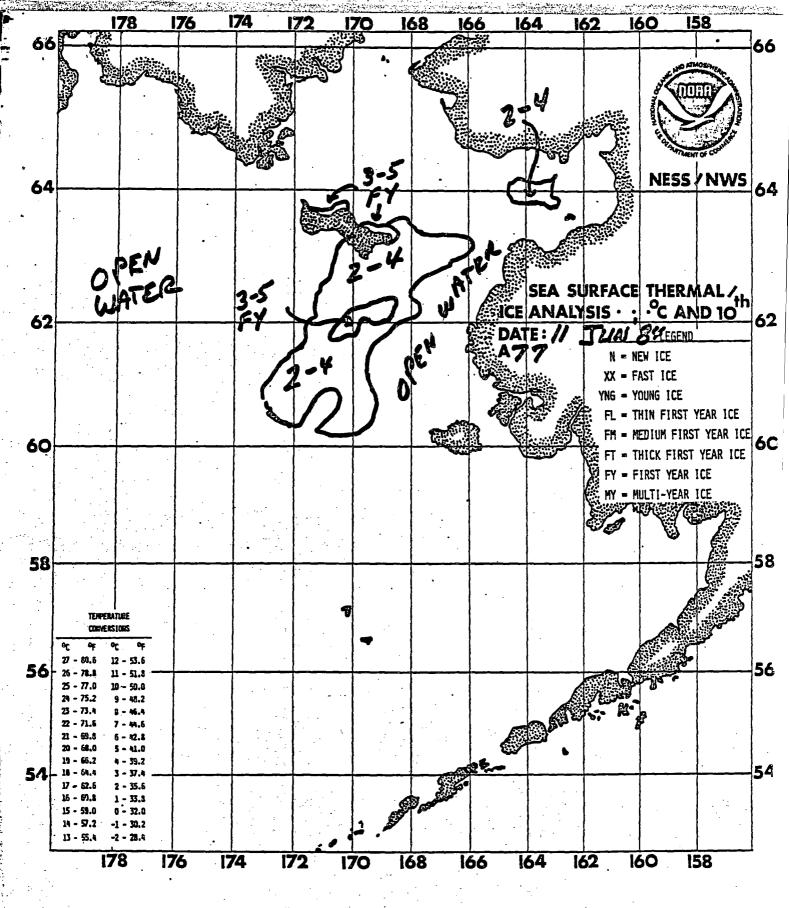












LOCAL CLIMATOLOGICAL DATA ISSN 0198-0408

MUNICIPAL AIRPORT

Monthly Summary

| | | LATET | DDE 64 | * 30 <i>*</i> | | CONSTRUC | E 15 | 5*26 ' | ELEVA | TION (END | | 13 F | EET | | IME 2 | ONE A | ALASKA | | | 266 | 17 |
|----------------------------|----------------------------------|--------------------------------|-----------------------------|---------------------------------|-----------------------------|---|----------------------------|--|--|--------------------------------------|---------------------------------|--|--|----------------------|----------------------------|----------------------------|---------------------------------|------------------------------|------------------------|------------------------|----------------------------|
| | | TEMPE | RATURE | °F | Ų. | DEGREE BASE | 65°F | | SHON ICE PELLETS | PRECIPI | TAT1QU | AYERAGE STATION PRESSURE | | HIND H.P.H | | | SUNSHI | NE | SKY CO | | |
| _ DATE | 2 HARINGH | - HININUN | → AVERAGE | S PRATURE FROM NORMAL | S AVERAGE S DEN POINT | - HEATING ISEASON P DEGINS HITH JULI | COOLING ISEASON OF BELLING | 2 MEATY FOG 3 THUMOERSTORM 4 TCE PELLETS 5 MAIL 6 GLAZE 7 DUSTSTORM 8 SHOME, MAZE 9 BLOWING SHOW 8 | ICE ON ERGUND AT 0700 INCHES | - MATER COUTALENT - LINCHEST | SKON, ICE PELLETS - ITACHEST | INCRES ELEY. 22 FEET ABOYE H.S.L. 12 | E RESULTANT DIR. | S AVERAGE SPEED | | EST #01103810.7 | | PENCENT OF TOTAL POSSIBLE | SUMRISE O 10 SUNSET | 145 HOW 01 1 | 22 BA |
| 01 02 03 04 05 | 36 31 29 31 26 | 26 18 12 18 18 | 31 25 21 25 22 | 20 14 9 13 10 | 26 21 15 14 6 | 34 40 44 40 43 | 80000 | 1 | 24432 | 0.16 0.00 0.00 0.00 | 0.0 | 29.690 29.820 29.980 29.830 29.730 | 02 2.4 | 22.1 | 12 7 12 36 35 | 06 09 34 03 | 156 116 794 745 | 0 19 14 95 89 | 10 9 1 10 | 10 9 7 1 7 | 01 02 03 04 05 |
| 06 07 08 09 10 | 22 4 0 5 5 | 3 -12 -18± -14 -10 | 13 -4 -9# -5 -3 | -17 -23 -19 -18 | -18 -20 -12 -11 | 52 69 74 70 68 | 0 0 0 | | 2 1 1 1 | 0.00 00.0 00.0 T | 0.0 0.0 0.0 T | 29.785 29.720 29.680 29.880 29.960 | 3410.2 33 7.5 36 4.7 | 11.1 9.1 6.0 | 30 21 24 13 17 | 03 30 31 29 30 | 848 773 861 781 699 | 100 91 100 90 60 | 0 5 0 1 2 | 03022 | 06 07 08 09 10 |
| 11 12 13 14 15 | 7 11 15 17 18 | -9 -11 -8 -6 -3 | -10468 | -16 -16 -12 -11 -9 | -10 -6 -5 -1 0 | 56 65 61 59 57 | 0 0 0 0 | 1 | 1 1 1 | 00.0 00.0 00.0 | 0.0 0.1 0.0 0.0 | 30.140 30.240 30.250 29.985 29.730 | 31 2. 23 0. 25 4. 28 5. | 3.9 | 15 14 12 14 20 | 30 28 30 25 26 | 861 778 895 902 819 | 100 89 100 100 | 0 1 0 0 7 | 01005 | 11 12 13 14 15 |
| 16 17 18 19 20 | 6 17 16 17 | -2 -9 -1 2 0 | 2 -1 8 9 | -16 -19 -11 -10 -11 | -10 -6 -1 -3 -5 | 63 57 56 56 | 0 0 | 1 | 1 1 | 0.00 T 0.04 0.00 0.00 | 0.0 0.2 0.4 0.0 | 29.800 30.000 29.940 30.010 29.840 | 2911.1 25 3.5 0211.6 36 3.3 | 5.7 13.0 8.0 | 20 15 21 15 14 | 28 28 03 04 33 | 791 800 485 859 685 | 86 87 52 92 73 | 1 7 10 6 9 | 271056 | 16 17 18 19 20 |
| 21 22 23 24 25 | 24 25 21 25 25 26 | 12 6 5 20 | 15 19 14 15 23 | -6 -2 -8 -7 | 1 2 5 7 20 | 50 46 51 50 42 | 0 0 | | 1 1 1 2 | 0.00 0.00 T 0.01 9.05 | 0.0 0.0 1 0.2 0.9 | 29.631 29.881 29.991 30.201 30.221 | 03 4.1 30 4.4 25 9.1 | 10.6 7.8 11.4 | 17 23 17 18 23 | 33 33 29 21 22 | 849 851 510 668 | 89 89 53 69 0 | 2 4 4 10 | 7 2 3 10 | 21 22 23 24 25 |
| 26 27 28 29 30 | 35 39* 28 33 29 | 16 25 20 20 11 | 26 32x 24 27 20 | -1 1 -7 | 11 20 18 19 16 | 39 33 41 - 38 45 | 0 0 | | 2 2 2 5 6 | 0.00 0.12 0.35 0.04 0.10 | 0.0 0.9 4.0 0.5 1.0 | 30.310 29.920 29.710 29.680 29.630 | 0512.0 0311.0 0216.9 0115.0 3610.3 | 13.0 17.1 17.7 | 18 21 23 15 16 | 05 02 02 01 35 | 312 | 91 30 0 31 45 | 10 10 10 7 | 10 10 10 7 | 26 27 28 29 30 |
| | SUM 606 AVE. | AV6. | AVG. | DEP. | | | TOTAL O DEP | NUMBER OF | | TOTAL O.B7 DEP. | TOTAL 9.6 | 29.91 | | 10.1 | | | PRESIDUE | T FWB | • SUN 158 AVG. | SUN 143 AV6. | |
| · · · | 20.2 | | | rs Ithun t | EMP. | 101AL 12643 | TO DATE | > 1.0 INCH INUNDERSTORMS | LETS 3 | PRECIP | TATION | SNON | | LETS | | | 27350 DEPTH OF PELLET! | GROU GR 1 | | DATE | |
| | > 70 0 | 26 | 3(| _ | 13 | DEP. -232 | .0£P. | HEAVY FOG | PARILY | | 1 27-2 8 | B+ 4 CLOUDY | 27 | -28 | | | 1 | 30 | | (1.00 | ٠. |

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE ANDUMT.
ALSO ON EARLIER DATE(S).
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR HORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT HIND IS THE VECTOR SUR OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. ONE OF THREE HIND SPEEDS IS GIVEN UNDER FASTEST MILE: F

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28001

noaa

merromin DETAILS ME NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

ELIMATIC GATA CENTED ASSESTILLE MONTH CAMPLINA DIRECTOR NATIONAL CLINATIC DATA CENTER

| _ | т. | , | | | | | | | | 089 | SER | VATI | | | I-HC | UR | IN | TER | IVAL | S | | | APR | 1984 | ASKA | | 26 | 617 | | | - |
|-----------|--|--|--|------------|---------|--|--|---|--|--|--|--|--|------------|-------|--|---|--|--|---|---|--|--|----------------------|--------|--|--|---|---|--|---------------|
| | <u>.</u> | | 8171 A121 | ī | | TEM | PERA | TURE | | MI | MD | = | PILI | i | | TEM | PERA | TURE | | ul nd | | | VIS BIL | 1984 - AL - TY | | TEM | PERAI | TURE | | HIN | D |
| 1 3 1 409 | SKT COVER LIENINS! | CELLING IN FEET | MADLE MILES | TETUS MILE | EATHER | A11 of | HET BULL OF | Je 11104 110 | REL MUNICITY & | DIRECTION | SPECB (KNOTS) | SKT COVER HENTERS | NHOLE ALLES | NEA NEA | THER | 418 of | NET BULD OF | DEM POINT OF | MEL HUMIDITY X | SPEE (KNOTS) | SKY COYFE LIFEINS | CELLING IN FIEL | NHOLE BILES | | ATHER | All of | ME BULL OF | OFN POINT OF | AEL AUNINITY & | DIRECTION | SPEED INNEES! |
| | J | | | A | PR 1st | _ | | | | | | | | APR | 2nd | | ***** | | | | T | | | AF | 8 3rd | | | · | • | | ٦ |
| 00000 | 3 10 10 10 10 10 10 10 10 10 10 | 29 23 18 12 15 6 | 10 10 35 1 10 4 7 | | SF. | 34 31 32 33 35 31 29 26 | 31 30 31 33 30 27 24 | 26 24 25 28 29 27 24 20 | 73 75 75 82 79 85 82 78 | 06 01 35 02 35 25 00 24 | 106545705 | 10 10 10 10 10 10 10 10 4 2 UN | 7 7 4 7 7 20 20 35 | 6F | | 25 25 30 29 31 23 18 | 23 23 28 27 29 21 | 20 20 20 23 23 24 17 | 81 3 81 2 75 0 78 1 78 0 81 3 | 0 7 6 0 8 5 7 5 | 1 | 4 UML 7 47 7 60 0 60 9 UML 9 UML 9 UML | 15 15 35 35 35 35 15 | | | 15 13 20 25 26 28 22 20 | 14 12 18 23 24 25 20 18 | 10 8 14 18 19 20 15 | 80 78 75 75 72 74 | 01 02 12 00 15 00 03 34 | 43405060 |
| | , | | 40 | Ā | PR 4th | | | | | | | | | APR | 5th | _ | | | | | 1 | | | AF | R 6th | | | | | | 1 |
| 00011122 | 36 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | UNL UNL UNL UNL UNL UNL UNL UNL | 15 35 35 35 10 | | | 20 24 28 28 25 25 25 | 18 21 24 25 22 20 22 | 13 12 13 15 17 14 14 13 | 74 71 63 58 63 63 68 | 36 36 04 03 04 04 04 | 11 10 19 19 21 27 28 25 | 0 UN 1 UN 10 UN 10 UN 10 20 10 UN 9 UN 6 UN | 10 35 35 35 35 35 35 35 35 | | | 26 24 23 23 25 23 19 | 22 21 18 18 20 18 | 14 125 5 6 4 1 7 | 60 (60 (46 3 46 (44 (45 (39 (| 4 2 2 1 1 2 1 1 2 1 1 2 2 2 2 2 2 2 2 2 | | O UNL O UNL O UNL O UNL O UNL | 15 35 35 35 35 35 | | | 17 17 20 20 21 16 | 13 16 16 17 13 | -1-3428 | 41 45 43 47 48 54 45 | 01 1 36 2 36 2 36 1 36 1 36 1 | 65089207 |
| | | | | A | PR 7th | | | | | | | l | | APR | 8th | <u></u> | . 17 | | | <u> </u> | + | AL GUL | ب د لا | | R-9th | 13 | | FIZ | 1.571 | 371 | ᅱ |
| ממיייים | 3 0 6 0 9 1 2 4 5 10 8 4 1 0 | ONT ONT ONT ONT ONT ONT ONT ONT ONT ONT | 15 35 35 35 35 35 35 | | | -4-22-12-912 | -25-40-23-93 | -18 -19 -16 -15 -16 -22 -25 | 42 48 41 42 51 51 49 | 34 36 33 36 30 35 35 | 8 10 7 18 10 14 | MU 0 | 15 35 35 35 35 35 35 | | • | -15 -16 -2 -2 -3 -7 | -16 -17 -14 -7 -3 -2 -4 -8 | -27 -27 -25 -20 -16 -14 -16 -18 | 54 54 50 51 51 53 58 | 4 1 6 4 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | O UNL 2 UNL 0 UNL 0 UNL 0 UNL 7 UNL | 15 15 35 35 35 35 | S | | 138-2453- | -10 -14 -3 -3 1 | -22 -17 -14 -8 -6 -9 | 58 63 64 56 57 60 60 68 | 00 | 63050567 |
| L | | | | Al | PR 1011 | | | | | | | | | APR | 11th | 1 | | | | | T | | | AP | R 12th | 1 | | | | | |
| 200-1-200 | 3 0 6 0 9 0 7 7 5 3 8 0 9 0 | OMF OMF OMF OMF OMF | 10 20 35 35 35 35 35 | | | -3505 | -10 -9 0 1 3 -1 -6 | 1165-11-105-15 | 68 71 71 62 52 54 62 61 | 02 35 00 30 27 29 29 27 | 92 05 12 14 10 | O UN O UN O UN O UM O UM O UM | 15 15 35 35 35 35 20 | - | | 7-8555631 | 89633412 | -17 -18 -14 -5 -10 -8 -10 | 61 65 63 49 52 60 65 | 0 4 8 11 1 11 2 1 | | O UNL O UNL O UNL O UNL 2 UNL O UNL | 35 35 35 35 20 35 20 | | • | -6-5-7-9-11-6-1 | 7 10 -6 5 7 9 4 0 | -15 -16 -12 -4 -1 -4 -8 | 64 71 60 70 64 63 65 | 01 00 12 15 25 30 1 | 50005710 |
| L | | Lauri | 100 | AF | PR 13t1 | ١ | | | | | | | | APR | 14th | | | | | | | | | AP | R 15th | • | | | | | |
| DOC HOO | 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | ONF ONF ONF ONF ONF ONF | 25 35 35 35 35 35 20 | | | -7 -5 7 10 14 12 -1 | -5 6 11 10 -2 | -11 -14 -12 -3 -1 -1 0 2 | 71 71 63 61 53 | 28 31 00 21 20 21 08 34 | 54033435 | 0 UM 0 UM 0 UM 0 UM 0 UM 0 UM 0 UM | 20 35 35 35 35 35 10 | | | -2 -5 -2 14 16 10 2 | -3 -7 -3 7 12 14 9 | -82-805845 | 75 75 75 67 67 71 77 | 0 0 1 5 1 7 | 1 | 1 UNL 4 UNL 8 120 5 UNL 0 40 8 UNL 6 UNL | 10 15 10 20 20 25 15 | s | H . | -3 -2 3 13 17 16 12 3 | -4 -3 2 11 16 14 10 2 | -9 -1 6 13 7 2 | 751 72 83 73 64 68 64 63 | 00 00 00 23 26 1 26 1 36 | 00070387 |
| | , , | stme t | 121 | AV | PA 16tl | ١ - | , . | , ' Lea | 1 64 | | L'A | 94 4 | , | APR | 1:7th | | | | | | 1 | | | AP | A 18th | 1 | | | | | |
| 000 | 000000000000000000000000000000000000000 | UML UML UML UML UML UML UML | 15 20 35 35 35 35 35 | | | 30056612 | -22344-3 | 136 14 -7 -10 -12 | 461525292 | 31 32 34 29 27 27 27 26 | 12 10 11 13 16 10 | 7-30 BM 7-1-80 2 | 150 20 30 30 20 30 | 2 SE | •. | -3-5-57-51 | -4-7-6-14-650 | 12 12 12 12 12 12 12 12 12 12 12 12 12 1 | 65 64 71 59 69 83 | 7 0 5 7 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | 1 | 0 18 0 19 0 14 0 120 0 UNL 0 UNL | 20 20 35 35 35 | | | 4 6 11 15 15 12 | 135 9 12 12 9 4 | -20-22123 | 83 69 67 54 55 | 05 1 06 1 03 1 03 1 02 1 35 | 03246486 |

WEATHER CODES

| * T & RH ZR L | TORNADO THENDERSTORM SQUALL RAIN RAIN SHOKERS FREEZING RAIN DRIZZLE | | 74 SS SS SS IC IP | FREEZING DRIZZLE SNOW SHOWERS SNOW GRAINS SNOW PELLETS ICE CRYSTALS ICE PELLETS | | IP A F IF GF BD | N ICE PELLET SHOWN HAIL FOG ICE FOG GROUND FOG BLOHING DUST | ERS | BN BS BY K H O | BLOHING SAND BLOHING SNOH BLOHING SPRAY SMOKE HAZE DUST |
|---------------|---|--|-------------------|--|--|--------------------------------|--|-----|-------------------------------|--|
|---------------|---|--|-------------------|--|--|--------------------------------|--|-----|-------------------------------|--|

CEILING: UNL INDICATES UNLIHITED
HIND DIRECTION: DIRECTIONS ARE THOSE FROM HHICH THE HIND BLOHS, INDICATED IN TENS OF DEGREES
FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR HEST. AM ENTRY OF
OO INDICATES CALM
SPEED: THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH=KNOTS X 1.15).

| | | | | | | | | | | | 08 | SER | ۷A | TIO | NS | A | T 3- | ·HO | UR | IN | TEF | NV A | LS | | | | APR NONE | 198 | 4 Laska | | | 266 | 17 | _ | |
|---|----------------------------------|--|----------------------------------|------------|-------------|------|--|--|--|--|--|--|--------------------|--|--|----------------|-------|-----|--|--|--|--|--|--|---|---|----------------------------------|-----|----------------------|---|---------------------------------------|--|--|--|---|
| | = | | VIS BIL | LIT. | 1 | · | TEN | PERA | URE | | WI | MD | = | | VIS |] - [| | | TEMP | ERAT | URE | | . Mi | ND | | | VISI Bili | - | | 11 | ERPE | RATI | IRE | T | HIND |
| 1 4048 1.5.1. | (SHIN3) #3403 135 | CELLING TO TELL MONDOLES OF TELE | UNDLE RILES | ISTRS MILE | HEAT | HER | AIR OF | MET BULD OF | DEN POINT OF | SEL MUNIBILL S | DIRECTION | SPEED HENDES! | SKY COVER LICHTHS! | AURDREDS OF FEET | \$ | . JILE BILLE . | HEATI | iER | Alt of | 4. CINE JA | Jo 18194 830 | MEL NUMBBIRY & | DIRECTION | SPEED ICHOTS! | ISHINGII UGADO AXS | MANNERS OF FIELD | _ | | HE A THI | ER | | HEI BULB OF | oth Paint of | MEL MUNICIPA & | SPEED (KNOTS) |
| L. | ١. | | | _ | APR · | 19th | | | | | | | i . | | _ | | APR 2 | Oth | | | | | | | | | | A | PR 21 | st | | | | | |
| 030000000000000000000000000000000000000 | 8 6 7 8 9 1 0 | 90 UNL UNL UNL 200 UNL UNL | 25 35 35 35 35 35 | | , | | 6361351582 | 12 12 6 | -7 -6 -1 -0 -3 -10 | 55 63 57 58 62 51 60 57 | 30 33 32 13 16 07 02 34 | 7 6 6 7 6 4 7 11 | 070000 | CAL CAL CAL CAL CAL CAL CAL | 55555555555555555555555555555555555555 | | | | 21318 1014 149 8 | 1771775 | 1130-511-5 | 54 54 55 55 55 56 53 | 02 04 01 35 02 35 01 | 5 3 4 7 12 10 10 10 10 | 10 8 10 10 10 10 | 33 100 100 45 UNL | 15 20 20 20 35 35 | | , | | 57181306 | 3595 | قبابدهممنا | 49 58 55 55 55 65 43 | 32 13 33 3 18 5 22 6 18 5 35 13 33 9 35 12 |
| | ١. | | | _ | APR : | 22nd | | | | ٠. | | | ł | | | | APR 2 | 3rd | | | | | | | | | | 1 | PR 24 | th | | | | • | |
| 03 05 05 15 18 21 | 11 | ANT ONT ONT ONT ONT | 35 35 35 35 35 35 | | | | 13 14 17 20 20 22 29 15 | 10 10 13 16 17 19 17 | -5-4-1-6-10-9-6 | 44 40 39 43 54 60 62 67 | 36 33 36 09 08 18 | 10 12 11 13 7 5 | 1045000 | CHT CHT CHT CHT CHT CHT CHT CHT CHT CHT | 20 35 35 35 30 35 35 | | | | 11 13 11 17 20 20 17 | 10 8 15 17 17 14 8 | 2 -1 -3 10 10 -1 | 67 53 53 65 65 62 61 | 00 09 00 26 29 29 32 | 050 10 10 13 4 11 | 000000000000000000000000000000000000000 | UNL UNL UNL UNL 16, 14 | 35 35 35 30 22 2 | | SN SN SN SN | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 9 6 9 4 7 13 14 | 7 4 7 12 15 20 22 23 | -3 -4 -2 10 16 19 20 | 58 63 64 74 85 | 29 8 36 4 29 7 29 12 25 8 24 10 21 14 22 15 |
| L. | | | | | | 25th | | ٠ | | | | | l | | | | APR 2 | 6th | | | | | | | | | | . 4 | PR 27 | th | | | | | |
| 03000 | 10 10 10 10 10 10 | 97 87 77 77 75 | 1 | | S | | 23 23 21 24 24 25 25 25 | 22 22 20 23 23 24 24 19 | 19 19 20 20 21 21 15 | 85 95 95 85 85 85 | 22 22 22 20 21 20 10 07 | 17 12 9 14 10 7 5 | 00005700 | ANT ANT ANT ANT ANT ANT | 35 35 35 35 35 35 35 | | | | 18 18 21 28 31 33 30 25 | 16 16 17 23 26 27 24 21 | 12 12 6 8 13 12 11 | 77 77 52 43 47 42 45 55 | 05 05 05 05 04 03 05 | 10 12 12 10 12 12 12 12 | 10 10 10 10 10 10 | UNL 80 70 11 25 19 21 | 20 35 35 62 52 | | S N S N S N | | 7 10 17 15 15 12 16 | 22 25 30 31 32 31 30 25 | 11 12 16 21 25 27 27 22 | 51 47 42 55 70 89 82 85 | 02 9 04 11 07 12 06 8 35 10 36 9 02 18 03 17 |
| L. | ١., | | | | | 28th | | • | | | | _ | ١. | | | | APR 2 | 9th | | | | | | | | | | A | PR 30 | th | | | | | |
| D3 06 09 125 121 24 | 10 10 10 10 10 10 | 18 19 26 8 10 10 26 26 | 3 0 10 | 1 | Š | , , | 27 26 26 23 24 23 22 22 21 | 25 24 24 22 22 22 22 20 19 | 22 20 19 18 18 18 15 | 81 78 75 81 78 81 74 | 02 36 02 02 02 36 04 | 14 15 13 18 17 14 10 | 10010 | 26 23 39 80 10 15 26 | 10 30 15 35 35 15 | | 555 | | 22 23 25 28 32 27 28 28 28 | 19 20 23 26 28 26 26 26 | 13 14 18 21 20 21 22 23 | 68 75 75 61 72 78 82 | 01 00 25 00 06 04 36 35 | 10 5 0 8 10 9 10 | 10 10 10 10 10 70 | 20 21 26 23 UNL UNL | 25 30 35 35 30 | | \$ \$ \$ | 222222 | 7 6 4 4 5 3 6 1 | 26 24 22 22 22 20 14 | 23 20 19 19 15 15 | 85 78 81 65 65 64 | 36 3 35 11 36 10 35 11 36 12 36 12 36 12 |
| | | | i | 1 | F | | - | r F | t . | [] | ٠., | F | ŀ | | | | | | | | | | . ; | e | | : . | | | | | . , | ٠. | | | |
| | | | | | | • | | | : | | ; | | | ·: . | | | | | ` | | : | ٠. | | | | | | ٠. | | | | | . ` • | | |
| | | | | | | | | | | | | | | | | | ٠. | | | , | | | | ٠. | | | | | | ٠. | | | | | |
| | | | , | 1 | | , | | 1 | | | | ٠. | | | • | | 3 | , | | | ., | | | | | ; | | | | | | | | | |
| - | 1 | [| | | 1 | | 1 | 1 | | 1 | | Ì | | | | • | | | | | . • | | | | | | ~ | | | | | | | | |

SUMMARY BY HOURS

| | | | . VA | ERAG | ES | | | | LTANT |
|--|--------------------|--|---------------------------------|----------------------------|--------------|--|---|--|--|
| | £S. | | TEN | PERA | TURE | | _ | H | IND |
| MOUN 1.5.1 | SKY COVER LICKTHS? | STATION PRESSURE LINCHESI | AIN TENP OF | HET BULD OF | DEN POINT OF | REL HUMIDITY & | MIND SPEED INPHI | DIRECTION | SPEED LIPHI |
| 03 06 09 12 15 16 21 24 | 5-655 | 29.910 29.910 29.910 29.915 29.910 29.900 29.900 | 9 10 16 18 18 14 | 8 13 15 12 8 13 15 12 8 | | 65 65 64 62 63 64 64 65 | 9.8 8.1 9.9 11.2 10.8 10.3 | 36 36 36 35 36 35 36 35 | 5.8 5.4 3.4 6.1 6.7 6.1 |

| | | | <u> H(</u> | OURL | Y P | | | | | (WA | TER | EQU | IVAL | ENT | IN | IN | CHES | 1 | APR | 1984 . Ala | SKA | | 25517 | Į. | |
|----------------------------|----|---|----------------------|------|--------|-------|-------|-------|------|------|-----|-----|------|-----|------|----|------|----------|------|---------------|----------------------|----|-------|--------|----------------------------|
| DATE | | | A | M. | HO | JR E | NDI | NG / | AT | | | | | | F | M. | НО | UR | ENDI | | AT | | | | <u></u> |
| 0 | 1_ | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 8 |
| 01 02 | • | | T | | | | | | | | | | · | | 0.16 | | | | | | T | | | | 01 |
| 01 02 03 04 05 | | | | | | | | | | | | | | | | | | l | | | | | | | 01 02 03 04 05 |
| | | | | | | | | | | | | | | | | | | | | | | | | į | 1 |
| 06 07 08 09 | | | | | | | | ŀ | , | | | | | | | | | | | | | | | ı | 06 07 08 09 10 |
| | | | T | | l | | | | ' | | | | | | | | | | | | | | | ! | 10 |
| 11 12 13 | | | | | | | | | ٠. | | | | | | | | | | | | T | | | | 11 12 |
| 14 15 | | | | | | | | | T | | | | | | τ . | | | | | • | , | | | | 11 12 13 14 15 |
| 16 17 | | | | | ļ. | | ŀ | | | | | | 1 | | , | | | | | | ; | | | | 1 |
| 15 17 18 19 20 | | | T | | | | | | 0.03 | | | | 1 | | 0.01 | | | | | | ' | | | - | 16 17 18 19 20 |
| | | | | | | | | | | | , | | | | | | | | | | | | | i | 1 |
| 21 22 23 24 25 | | | | | | ĺ | | | | | | | | | , | | | | ٠. | | | | | | 22 |
| 24 25 | | | 0.02 | | | | | • | 0.02 | , | | | | | 0.01 | | | | | | 0,01 | | | | 21 22 23 24 25 |
| 26 27 28 29 30 | | ĺ | T | | | | • | | | | | . j | | | T | | | | | | 0.10 | | | | |
| 28 29 | | | 0.08 0.01 0.06 | | | | | · | 0.01 | | | | | | 0.17 | | | | | | 0.10 0.10 0.01 | | | | 26 27 28 29 30 |
| | l. | Ī | ŀ | t | RE 6- | מונחנ | ACCUM | G ATT | 0.03 | L | | | | | 0.04 | | | <u> </u> | | | | | | | 30 |

MAXIMUM PCPM DATA NOT RECORDED.

MAXIMUM SHORT DURATION PRECIPITATION

| TIME PERIOD (MINUTES) | 5 | 10 | 15 | 20 - | 30 | 45 | 60 | 80 | 100 | 120 | 150 | 180 |
|------------------------|---|----|----|------|----|----|----|----|-----|-----|-----|-----|
| PRECIPITATION (INCHES) | | | | | | | | | : | | | |
| ENDED: DATE | | | | | | | · | | | | | |
| ENDED: TIME | | | | | | | | , | | | | |

THE PRECIPITATION AROUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE ANOUNTS.

SUBSCRIPTION PRICE AND URDERING INFORMATION AVAILABLE FROM: THE MATICHAL CLIMATIC DATA CENTER, FEDERAL BUILDING ASHEVILLE, NORTH CAROLINA 28801 ATTM: PUBLICATIONS

MOHE, ALASKA USCOMM - NOAA - ASHEVILLE, NC

185

U.S. DEPARTMENT OF COMMERCE NATIONAL CLIMATIC DATA CENTER FEDERAL BUILDING ASHEVILLE, N.C. 28801

. POSTAGE AND FEES PAID U.S. DEPARTMENT OF COMMERCE

COM 210



FIRST CLASS

LCU-50-26617-WS

NATIONAL WEATHER SERVICE FORECAST OFFICE US FEDERAL BLOG. & COURT HOUSE 701 C ST, BOX 23

ANCHGRAGE AK

99513

LOCAL CLIMATOLOGICAL DATA

MUNICIPAL AIRPORT

Monthly Summary

| _ | , | | LATET | UDE 64 | *30 | | LONGITU | DE 16 | 5*26 * | ELEYA | ition (GRC | lumo i | 13 f | EET | 1 | TEME 2 | CONE | ALASKA | | | - 26(| 617 |
|----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------------------------------|--------------------|--|--------------------------------|---------------------------------------|---------------------------------|--|----------------------------------|---|----------------------------|----------------------------|--|-------------------------------------|---------------------------|--------------------------|----------------------------------|
| | | | TEMPE | RATURE | ok | | DEGRE | 65°F | HEATHER TYPES | SNOH ICE PELLETS | PRECIPI | | STATION PRESSURE | | H1M0 (M.P.H | . 1 | | SUKSK | INE | SET C (TEN) | | |
| | DATE | S HAK INUM | NINININ ~ | - AVERAGE | S PEPARTURE FROM NORMAL | OEN POINT | WESTING ISEASON PEGINS NITH JULI | WE BEGINS HITH JAN | 2 HEAVY FOG 3 THUMBERSTORM 4 ICE PELLETS 5 HAIL 6 ELAZE 7 DUSTSTORM 0 SHOKE, MAZE 9 BLOWING SHOW 8 | SHOUND AT 0700 TRCHES | MATER EQUIVALENT O LINCHESI | SHOW, REF PELLETS TINCHESI | IN INCHES ELEY. 22 FEET ABOVE H.S.L. 12 | C RESULTANT DIR. | 1 - | 6 Sept. | 1651 16 NO 110 3810 17 | STINUES | PERCENT OF TOTAL POSSIBLE | _ | THOMICH! | S DAIE |
| | 01 02 03 04 05 | 21 17 17 17 17 20 | 6 -3 -4 -48 | 14 10 7 7* 8 | -13 -18 -22 -22 -22 | -1 -1 0 2 | 51 55 58 58 57 | 0 0 0 | | 7 7 6 6 | 0.00 0.00 0.00 0.00 | 0.0 0.0 0.0 0.0 | 29.720 29.870 30.010 30.080 30.190 | 29 2. | 2 7.9 3 4.3 1 3.9 | 18 17 8 8 7 | 34 32 01 01 | 1016 1024 970 1037 1044 | 100 100 14 100 100 | 0 0 3 0 3 | 00702 | 01 02 03 04 05 |
| ١ | 06 07 08 09 10 | 29 33 34 32 33 | 5 28 30 28 19 | 17 31 32 30 26 | -14 0 0 -3 -7 | 15 27 27 27 27 19 | 48 34 33 35 35 | 0 0 0 0 | 1 1 2 | 4 6 6 5 | 0.12 0.06 T | 1.5 0.7 T T 0.0 | 30.240 30.290 30.220 30.100 30.160 | 23 9. 2511. 25 9. | 0 13.9 2 10.3 0 11.5 1 9.4 7 6.6 | 18 17 16 15 12 | 18 19 27 28 33 | 0 0 0 170 981 | 0 0 16 91 | 10 10 10 10 2 | 9 10 10 10 2 | 06 07 08 09 10 |
| | 11 12 13 14 15 | 31 32 36 48 48 | 11 28 29 27 41 | 21 30 33 38 45 | -13 -4 -2 3 | 18 25 24 26 30 | 44 35 32 -27 -20 | 0 0 0 | 1 | 4 3 3 2 2 | 0.01 T 0.00 0.00 | 0.1 T 0.0 0.0 | 30.100 29.990 30.030 29.920 29.790 | 23 7. 10 2. 0610. | 6 6.0 | 12 12 12 18 17 | 22 25 10 07 | 215 0 448 1105 867 | 21 0 41 100 78 | 9 10 6 1 5 | 8 10 6 1 6 | 11 12 13 14 15 |
| | 16 17 18 19 20 | 51 50= 46 48 | 38 46 40 34 31 | 45 50 50= 40 40 | 13 13 2 2 | 33 33 31 29 31 | 20 15 15 25 25 | 0 | | 1 T T | 0.00 0.00 0.00 0.00 | 0.0 0.0 0.0 0.0 | 29.760 29.720 29.690 29.640 29.580 | 3611. | 5 12.9 | 14 21 18 13 10 | 08 03 01 25 26 | 1125 1133 1139 883 | 0 100 100 100 100 77 | 10 3 0 0 5 | 10 3 0 0 | 16 17 18 19 20 |
| | 21 22 23 24 25 | 43 49 49 43 34 | 36 34 34 27 27 | 40 42 42 35 31 | 3 75 -9 | 32 30 22 24 24 26 | 25 23 23 30 34 | 0 0 | 1 | T T T | 0.00 0.00 0.00 0.13 | 0.0 0.0 0.0 0.0 1.3 | 29.700 29.789 29.770 29.800 29.840 | 29 3. 34 5. 26 8. | 7 6.8 4 9.2 5 10.9 6 10.0 8 12.6 | 17 16 16 18 21 | 13 27 04 26 26 | 871 584 1165 1131 0 | 76 50 100 97 0 | 9 5 0 1 | 9 5 0 1 9 | 21 22 23 24 25 |
| | 26 27 28 29 30 31 | 36 39 41 40 42 45 | 29 25 30 31 28 27 | 33 32 36 36 35 36 | -7 -9 -5 -5 -7 -6 | 28 26 27 28 24 24 | 32 33 29 29 30 29 | 0 0 0 0 | 1 | 1 1 0 0 | 0.12 -0.01 0.00 0.00 0.00 | 1.2 0.0 0.0 0.0 | 29.750 29.940 29.970 30.030 30.040 | 12 4. 2710. 29 2. 25 7. | 2 8.7 0 7.1 0 11.0 7 9.6 5 8.9 8 6.0 | 15 13 21 16 20 | 19 16 26 07 26 | 401 120 220 403 1209 1215 | 34 10 18 36 100 | 10 9 7 8 0 | 10 8 8 0 0 | 26 27 28 29 30 31 |
| | | 5UR 1174 AV6. 37.9 | SUM 754 AV6. 24.3 | AV6. | DEP. -4.6 | AV6. | 101AL 1043 DEP. 135 | TOTAL O DEP. | PRECIPITATION 3 OF THEM | MYS | 0.45 0.45 0EP. | TOTAL | 29.930 | FOR T | | | 26 | 10TAL 20476 PRESIDER | 1981A | SUN 156 AVG. | SUR 152 AV6. | |
| `. | | | | R OF DAY | S | , | SEASON TOTAL | TO DATE | SNOW, ICE PELI > 1.0 IRCH | 3 | -0.09 | | .24 KOU | | • | | | 31728 DEPTH ON PELLETS | | ID OF | 4.9 | |
| | • | 5° 70° | 320 | NIN ₹ 32 | | Ço. | 13606 BEP. | | THUNDERSTORMS HEAVY FOR | - ? | PRECIPI | 14110H | | 1CE PE | | 1300 | -, 100 | FELLE 13 | 02+ | | PAIL | |

^{*} EXTREME FOR THE HOWTH - LAST OCCURRENCE IF MORE THAM ONE. T TRACE AMOUNT. * ALSO ON EARLIER DATELS: HEAVY FOG: VISIBILITY 1/4 MILE OR LESS. BLANK ENTRIES DEHOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR HORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT MIND IS THE VECTOR SUM OF MIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. DNE OF THREE WIND SPEEDS IS GIVEN UNDER FASTEST MILE: FASTEST MILE - HIGHEST RECORDED SPEED FOR HIGHEN A MILE OF HIDD PASSES STATION IDIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE MIND - HIGHEST OME MINUTE SPEED IDIRECTION IN TENS OF DEGREES). PEAK GUST - HIGHEST 'INSTANTANEOUS MIND SPEED [A / APPEARS IN THE DIRECTION COLUMNI. ERRORS MILL BE CORRECTED AND CHANGES IN SUMMARY DATA MILL BE ANNOTATED IN THE ANNUAL PUBLICATION.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLINATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28801

noaa

NOME, ALASKA

MITTON

EMPIROMENTAL SATELLITE, DATA AND INCOMPATION SERVICE

CLIMATIC DATA CENTER ASPETILLE MONTH CAROLINA DIRECTOR MATIONAL CLIMATIC DATA CENTER

| _ | | , | -71 | _ | | | | | | | 08 | SER | VAT | 10 | NS | AT | 3-H | OUR | IN | ITE | RVA | LS | | | | MAY | 196 | LASKA | | 26 | 617 | | | |
|--|----------------------------------|---|----------------------------|-------------|--------------------------|------|--|--|--|--|--|--------------------------------------|----------------------------------|--|--|--|-------|--|--|--|--|--|---------------------------------------|-------------------------|--|--|---------|----------------------------|---|--|--|--|--|----------------------------------|
| | ıs | | | 117 | | | TEH | PERA | TURE | | MI | NO | = | | VISI BILII | | | TEN | PERA | TURE | | WI | MD | | | VIS Dili | - | | TEM | ERA | TURE | | N | NO |
| MOUN 1.5.7. | (SHIR31) H3403 INS | SCHOOL STATE | WHOLE MILES | 16 INS BILE | HEA | THER | AIR of | NET BULB OF | DEN POINT OF | MEL HUMIDITY X | DIRECTION | SPEED IKHOIS) | SKY COFER (JENINS) | NUMBERS OF THE | _ | | ATHER | A18 •£ | 30 0108 13H | DEN POINT OF | NEL MUDIOLITY I | DIRECTION | SPEED IKNOIS! | SKY COYER (TERINS) | CENCING IN NUMBERS OF FEET | BILES | | WEATHER | ALR OF | MET BULB OF | BER POIRI OF | REL MUNICITY & | R01133410 | SPEED IKNOTS! |
| | | | | | HAY | 1st | | | | | _ | | | | | ĦĄ | Y 2nd | | | | | | | | * | | | MAY 3rd | | | | - | | |
| 03 05 05 12 15 18 12 14 | 00000000 | ONT ONT ONT ONT ONT ONT | 3000 | | | W | 11 12 16 19 18 12 7 | 7 10 14 16 15 10 5 | -226641-4 | 55 61 64 65 57 54 61 | 01 04 36 36 36 33 33 | 12 15 14 15 15 15 | 0000000 | CHT CHT CHT CHT CHT CHT | 30 30 30 30 30 30 | | | 7 5 9 12 14 14 11 | 537 1011 1293 | | 58 61 56 61 54 72 | 36 37 14 15 36 00 | 80845550 | 737800 | UNL UNL 23 UNL UNL UNL UNL | 15 30 30 30 30 35 | | | 2 -3 5 11 14 14 14 14 2 | 1 -4 3 9 11 12 12 | 711-63-35-5-4 | 66 60 70 67 67 67 | 00 00 34 07 06 21 22 01 | 00565537 |
| - | | | | | MAY | 4th | | | | | | | 1 | | | MA | Y 5tt | | | | | | | | | | 1 | HAY 6th | | | | | | |
| 0369 050 050 050 050 050 050 050 050 050 05 | 0000-00 | ONT ONT ONT ONT ONT ONT | 2(3) 3) 3) 3) | | | | -1 -2 8 14 15 17 14 4 | -2 -3 7 11 13 14 12 7 | -017666 | 72 72 70 56 70 62 70 63 | 36 00 01 27 20 27 30 35 | 30446653 | 00040700 | ONT ONT ONT ONT | 20 35 35 35 35 35 35 | | | -3 -1 16 19 19 19 8 | -4 -2 7 14 17 15 16 6 | -9 -10 10 9 -1 | 75 65 70 74 68 43 65 | 00 00 00 18 20 17 08 | 00045653 | 10 10 10 10 10 10 | UNL 23 23 26 10 | 15 10 3 20 1 | - 1 | 555 555 555 | 8 15 18 23 27 27 28 28 | 14 16 21 25 26 27 | 12 16 20 23 24 | 56 77 75 75 85 85 | 08 08 09 11 16 17 18 | 50 14 13 15 15 15 |
| | | | | | | 7th | | | | | | | | | | HA | Y Sth | | | - | 1-8.81 | -Z.L. | | — | Y | | _ | MAY 9th | | | 162 | 1 8 7 | 1.7 | "- |
| 03 06 06 07 17 17 17 17 17 17 17 17 17 17 17 17 17 | 10 10 10 10 10 10 | 6 8 6 5 4 26 26 | | 8 | SF SF F f SF | | 30 30 31 32 32 32 30 | 28 29 30 31 31 30 29 | 26 26 28 29 29 27 27 | 89 85 92 89 89 82 85 | 20 19 22 26 26 26 25 27 | 11 10 10 8 7 7 | 10 10 10 10 10 10 | 26 7 29 11 10 13 19 | 7 3 5 4 7 2 | SI S | : | 30 31 32 32 33 32 30 | 29 29 30 31 31 31 31 29 | 26 26 27 28 28 28 29 27 | 85 85 85 85 89 89 | 24 24 25 27 25 23 27 | 10 10 12 13 7 | 1000000 | 5 3 4 3 6 6 | 0 0 2 2 4 4 7 | 12 | F F F L F F | 29 28 29 30 31 32 32 | 28 27 29 29 30 31 31 | 26 27 29 28 28 29 27 28 | 92 92 92 92 93 85 | 28 25 25 24 25 27 21 24 | 1397107456 |
| L. | | 1 | | | MAY | 10th | _ | | | | | | | | | BAT | 11t | | | | | | | ĺ | | | # | AY 12th | | | | | | |
| 0692558124 | 30801000 | ONT ONT ONT ONT ONT | 3 | - | | | 25 21 25 28 29 29 27 21 | 24 20 22 26 26 27 25 19 | 21 16 14 22 21 22 22 22 14 | 85 81 63 78 72 75 81 74 | 36 28 33 24 15 18 13 | 54437656 | 7 10 10 10 10 10 | UNL 33 13 13 13 7 6 8 | 20 30 30 7 7 4 3 | s. FFSI | | 13 14 20 25 29 30 30 25 | 12 12 18 23 27 28 29 28 | 13 20 23 25 27 26 | 80 74 74 81 78 82 89 89 | 02 00 00 13 21 22 22 24 | 300606 | 100100 | 14 11 10 10 10 11 11 | 6 6 10 7 4 7 | \perp | SF SF SF S S | 28 29 30 31 31 30 30 | 27 28 28 28 29 29 29 28 29 28 | 25 26 25 24 26 26 26 24 23 | 89 85 78 82 78 75 | 24 25 26 27 20 24 24 | 77676844 |
| | | | | | | 13th | | | | | | | ١. | | | 推升 | 14ti | 6 | | | | | | | | | Ħ | AT 15th | • | | | | | |
| D36977581 | 100600 | 13 12 11 13 13 UHL UHL UHL | 2033 | | S | | 29 29 30 32 33 32 30 | 27 27 28 30 30 30 26 | 23 23 22 23 25 25 25 19 | 78 78 75 75 75 76 76 | 27 19 05 09 10 09 24 33 | 334610737 | 10011144 | UNL UNL UNL UNL UNL | 35 35 35 35 35 35 35 | | | 27 35 44 44 46 47 45 44 | 24 29 37 37 39 40 39 38 | 16 19 25 27 30 31 31 29 | 50 47 51 54 54 58 | 36 08 08 07 07 06 06 | 3 10 11 12 14 12 15 | 7 10 4 5 10 | UNLLUNLLUNLLUNCSO | 35 35 35 35 35 35 35 | | | 43 45 45 44 48 44 42 | 37 37 38 39 41 38 37 | 29 29 31 31 32 30 30 | 58 58 58 58 58 58 58 58 | 06 06 07 09 09 09 | 12131512899 |
| | | | | | HAY | 16th | | | | | | | l | | | MAY | 171 | | | | | | | " | | | Ħ | AY 18th | | | | | | |
| 03 05 05 15 15 15 15 15 15 15 15 15 15 15 15 15 | 10000000 | 40 45 47 47 80 33 | 35 | | | | 39 38 44 42 46 45 45 | 36 35 39 38 41 42 41 38 | 31 32 33 35 35 35 | 73 51 55 55 | 26 27 08 09 10 08 05 35 | 53 6 10 10 10 10 7 | 00745500 | CAT CAT CAT CAT CAT | 35 35 35 35 35 | × | | 43 43 54 55 55 53 7 | 37 38 42 45 46 47 44 | 30 30 33 34 36 35 32 | 55 60 54 47 49 42 45 | 35 36 01 34 36 36 | 10 8 7 10 12 10 | 00-1000 | OMF OMF OMF OMF OMF | 35 35 35 35 35 35 | | | 46 48 51 57 57 57 | 38 40 42 45 46 46 43 | 27 28 30 32 33 34 32 | 484424248 4444448 | 01 36 36 36 37 35 | 10 14 14 10 15 17 |

WEATHER CODES

| | and the second s | | | | | | |
|-----------------------------|--|----------------------------------|--|---------------------------------|---|-------------------------------|--|
| O SQUA A RAIN RW RAIN | DERSTORM LL SHOHERS ZING RAIN | ZL SH SG SP IC IP | FREEZING DRIZZLE SNOW SNOW SHOWERS SNOW GRAINS SNOW PELLETS ICE CRYSTALS ICE PELLETS | IPH A F IF SF BD | ICE PELLET SHOKERS HATL FOG ICE FOG GROUND FOG BLOHING DUST | BN BS BY K H D | BLOHING SAND BLOHING SNOH BLOHING SPRAY SHOKE HAZE DUST |

CEILING: UNL INDICATES UNLIMITED
HIND DIRECTION: DIRECTIONS ARE THOSE FROM WHICH THE HIND BLOWS, INDICATED IN TENS OF DEGREES
FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. AN ENTRY OF
OD INDICATES CALM

SPEED: THE OBSERVED AVERAGE ONE-HINUTE VALUE, EXPRESSED IN KNOTS (NPH=KNOTS X 1.15).

| | | | | | | | | | | | 0B | SER | VA: | | | AI | 3. | -H0 | IUR | IN | TEF | NA | LS | | | | MAY | 191 E. | alaska Ba | i | | 26 | 617 | | | |
|--|------------------------------------|---|---|---|-------------------|------|--|--|--|--|--|---|--|--|--|------------|--|------|--|--|--|--|--|--|---|---|--|------------|--------------|------|--|--|--|---|---|--------------------------------------|
| | 2 | | VIII BIL | ΪŢ | - | | TEN | PERA | TURE | | H! | ND | 2 | | VIS BILI | Ī | | | TEN | ERA | URE | | HI | ND | = | | 915 UU | IT | • | I | ENP | RAT | URE | \prod | HIN | |
| NOUR 1.5.1. | SKT COVER LIENTUS | CELLING TO ADDORESS OF FEET | WHOLE MILES | 16745 MILE | HEA | THER | ¥ 117 | 30 8708 13H | DEN POINT OF | AEL NURIGITY & | DIRECTION | SPEED IXEGIS! | SKT COVER 17ERTUS | CELLEG 18 NUMBERS DF FEET | NADLE ATLES | IGTHS AILE | WERT | HER | 418 of | AFT BULL OF | DEN POINT OF | AEL NUMBOLIY I | DIRECTION | SPEED (KNOTS) | SKT COVER ITERINS | 1333 30 SE3WOR NA 11 3811133 | HHOLE NILES | ISTHS RILL | MEATH | , | 4. HT | HET BULB OF | Jo INIOO NJO | MEL NUMBOLITY & | DIRECTION | SPEED IKNOISI |
| | ١. | | | od. | HAY | 19th | | | | | | | | | | . ! | HAY 2 | Oth | | | - | | | | Г | | | i | MAY 21 | st | - | | | | ₹. | ٦ |
| 06 06 15 15 15 12 12 14 | 0000000 | UNL UNL UNL UNL UNL UNL UNL | 33333333 | 555555 | | | 36 34 42 43 43 45 38 36 | 32 31 36 37 38 39 35 34 | 26 26 28 29 30 30 31 30 | 58 58 58 56 56 75 | 26 26 24 24 25 21 | 0 4 6 8 11 8 | 0 1 8 4 1 5 5 5 | UNL UNL UNL UNL UNL UNL | 35 35 35 35 35 35 35 | • | | | 33 34 37 46 42 43 41 | 31 34 41 39 39 37 | 27 30 34 33 34 34 34 | 79 76 76 71 71 75 | 24 00 21 26 21 26 21 | 30476944 | 1001985 | 65 80 130 130 45 45 | 35 35 35 35 35 35 35 35 | | | 1004 | 16 12 17 10 16 | 36 34 39 38 35 37 37 | 33 34 33 31 32 33 33 30 | 821 85 73 73 79 73 76 76 | 24 20 10 13 1 29 26 27 | 45758444 |
| | | | | | MAY | 22nd | | | | | | | l | | | 1 | HAY : | 23rd | | | | | | | | | | - 1 | BAY 24 | th | | | | | | 7 |
| 03 06 09 12 18 18 12 12 | 10 10 10 8 1 2 2 | 55 35 21 UNL UNL UNL UNL UNL | 777777777777777777777777777777777777777 | 555555555555555555555555555555555555555 | | | 37 35 37 37 43 45 44 38 | 35 35 35 40 39 38 33 | 31 30 31 31 37 31 29 23 | 79 82 79 79 80 56 55 | 28 18 24 24 26 26 04 35 | 4 4 8 7 13 10 13 7 | 00000000 | CMT CMT CMT CMT CMT CMT | 35 35 35 35 35 35 35 | ~ | - | | 35 36 41 44 46 46 36 | 30 33 35 35 37 38 31 | 20 18 18 24 21 21 25 23 | 54 40 51 40 37 44 59 | 01 36 36 25 25 25 25 25 25 | 7 10 10 11 12 11 10 8 | 000000000000000000000000000000000000000 | CHT CHT CHT CHT CHT CHT | 30 35 35 35 35 35 35 | | | | 10 30 37 19 10 10 10 | 27 27 32 34 35 35 32 28 | 20 22 24 26 25 27 26 23 | 59 59 60 67 75 | 01 35 24 23 24 1 26 1 26 1 | *********** |
| | 1 | | | | MAY | 25th | | | | | | | | | | | MAY 2 | 26th | | | | 7 | | - | Π | | | 1 | HAY 27 | th | - | | | | | ٦ |
| 03692515024 | 10 10 10 10 10 10 | UNL 13 11 10 7 5 6 | 2 | 0 7 8 4 1 1 | SH SF SF SF SF SF | F . | 27 30 30 32 33 33 32 31 | 25 28 28 31 32 32 30 30 | 22 24 25 28 29 29 26 29 | 81 78 82 85 85 85 79 | 27 29 21 20 20 21 23 | 15 7 8 11 10 12 9 | 10 10 10 10 10 10 8 8 | 15 7 15 4 200 UNL | 2 2 1 15 35 30 | 8884 | SF SF SF SF SF SF SF | , | 30 30 31 33 34 35 | 29 29 28 30 32 33 32 28 | 26 27 25 27 30 31 27 23 | 92 82 83 83 73 | 26 27 17 08 20 22 29 | 54 8 12 10 13 6 | 10 9 7 6 10 10 | UNL 35 38 23 26 5 5 | 30 35 35 35 7 7 | • | S | | 25 30 33 35 37 32 33 | 23 28 30 31 34 31 32 | 19 25 23 24 29 29 29 28 | 89 | 16 1 | 4 0 8 7 1 9 7 5 |
| ١. | ١., | | | | MAY | | | • | | | | | | | | - 1 | HAY 2 | 29th | | | | | | | | | | | MAY 30 | th | | | | | |] |
| 03 06 09 12 18 24 | 10 10 10 10 17 | 29 20 26 200 UNL 160 | 2333333333 | 000000000000000000000000000000000000000 | | - | 31 33 35 37 37 36 33 | 30 32 33 34 33 32 30 | 27 27 29 30 27 24 25 26 | 85 85 85 82 55 64 70 | 29 03 25 26 27 27 27 | 4 7 10 17 17 15 | 100100100 | 33 80 19 21 33 UNL | 35 25 25 25 25 35 35 | | - | | 32 36 38 37 37 37 | 30 33 35 34 35 34 35 | 25 25 27 30 30 31 30 25 | 75 75 70 73 76 76 76 | 27 28 04 05 15 26 26 | 10 11 10 10 10 8 | 000000 | UNL UNL UNL UNL UNL UNL UNL | 355555555555555555555555555555555555555 | | , - | | 15 | 25 27 32 33 34 35 30 | 20 28 25 25 25 25 25 25 | 72 76 64 55 57 | 00 16 23 25 1 26 1 25 1 | 3350 |
| | | | ٠, | | MAY | 31st | | | | | | | Γ | | | | | | | <u>. YY</u> | - | . 96 | VV | <u></u> Y | | VAL. | _32 | | | نىل | 3_1 | 30 | 41. | 271 | 311 | 4 |
| 03 04 07 12 15 18 124 | 00000000 | UNL UNL UNL UNL UNL UNL UNL | *************************************** | 555555555555555555555555555555555555555 | | | 30 39 42 42 43 43 | 27 27 33 36 36 36 35 35 | 21 21 24 25 27 24 22 25 | 944-55-94 | 00 36 21 19 20 22 27 34 | 04687764 | | • | | • | | | | | | | | | ٧ | • | - | | | | | | | | | |

SUMMARY BY HOURS

| | | | AY | ERAS | ES | | | RES | LTANT |
|--|--------------------|--|----------------------|--|--|--|--|--|---|
| | 5 | | TEM | PERA | TURE | Γ | | | IND |
| HOUR 1.5.1 | SKY COVER (TENTHS) | STATION PRESSURE LINCHESI | AIR TEMP OF | HET BULB OF | DEN POINT OF | REL MURIDITY E | NING SPEED LAPHI | DIRECTION | SPEED CAPA |
| 03 05 09 12 15 18 21 | - | 29.920 29.920 29.930 29.940 29.935 29.920 29.920 | 33 35 36 34 | 24 24 28 30 31 31 30 27 | 19 19 21 24 24 25 21 | 73 73 69 69 67 66 69 71 | 6.4 6.1 8.3 9.9 11.7 10.8 9.7 7.8 | 31 32 01 19 21 24 27 31 | 2.8 2.0 1.3 1.2 4.0 4.2 2.7 |

| | | | | | ΥP | _ | | _ | | CWA | TER | EQU | IVA | ENT | IN | IN | CHES | 3) | HAY | 1984 . ALA | SKA | | 26617 | , | |
|--|------|------|------------|-------|-------|------|-------|------|--------------|-----|-----|-----|-----|-----|------|----|------|----------|----------|---------------|------|----|-------|----|----------------------------|
| DATE | | | _ | _ | HOI | JR E | NDI | | _ | • | | | | | F | M. | НО | UR | ENDI | | AT | | | | |
| - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | DAIE |
| 01 02 03 04 05 06 07 | | | 0.08 | | | | - | | 0.01 0.03 | | | · | | | Ţ | | | | | | 0,06 | | | | 01 02 03 04 05 |
| 06 07 08 09 10 | | | T | | | | | | | | | | | | Ť | · | | | | | Ť | | | | 06 07 08 09 10 |
| 11 12 13 14 15 | | | 0 †01 T | | , | | | | Ť | | | | | | Ť | | | | | | T | | | | 11 12 13 14 15 |
| 17 18 19 20 | | | | | | | | | T | | | | | | , | | | | | | | | | | 16 17 18 19 20 |
| 21 22 23 24 25 | | | | | | | | | T | | | | | | T | | | | | | 0.06 | - | | | 21 22 23 24 25 |
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 | | , | 0.11 T | | | | | | 0.02 | | | | | | 0.06 | | , | , | | | 0.01 | | | | 26 27 28 29 30 |
| ᅫ | URLY | PCPN | AHOU | NTS A | RE 6- | HOUR | ACCUM | LATI | ONS. | | | | ·L | | | | | <u> </u> | <u> </u> | <u> L.</u> | | | | | 31 |

HAXIHUM PCPN DATA NOT RECORDED.

MAXIMUM SHORT DURATION PRECIPITATION

| TIME PERIOD (MINUTES) | 5 | 10 | 15 | 20 | 30 | 45 | 60 | . 80 | 100 | 120 | 150 | 180 |
|------------------------|---|----|----|----|----|----|----|------|-----|-----|-----|-----|
| PRECIPITATION (INCHES) | | | | | | | | | | | | |
| ENDED: DATE | | • | | | | | | | | | | |
| ENDED: TIME | | | | | | | | | | * | | |

THE PRECIPITATION ANGUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME OURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE ANOUNTS.

SUBSCRIPTION PRICE AND ORDERING INFORMATION AVAILABLE FROM: THE MATIONAL CLIMATIC DATA CENTER, FEDERAL BUILDING ASHEVILLE, MORTH CAROLINA 28801 ATTN: PUBLICATIONS

MONE, ALASKA USCOMM - NOAA - ASHEYILLE, MC

105

U.S. DEPARTMENT OF COMMERCE MATIONAL CLINATIC DATA CENTER FEDERAL BUILDING ASHEVILLE, M.C. 28801

AM EQUAL OPPOSTUMITY EMPINYES

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM 210



FIRST CLASS

LCD-50-26617-WS

NATIONAL WEATHER SERVICE FORECAST OFFICE US FEDERAL BLDG. & COURT HOUSE 701 C ST, 30X 23 ANCHORAGE AK

99513

Dear Scott,

I will mail my ll J,ly notes if I am still in Nome. Sylvester Ayek and Francis Alvanna's boats are on the Island.

Paul Tiulanna is in Washington D.C., I don't know thy, maybe to fool the people about our way of life on the Island again. He will be back by 6July to go to King Island. Al Pikonganna will also go to the Island.

So, we will be ready for the game from Bristol Bay. They have no right to stav on the rocks on our Island, it was our home at one time. They can go to Chukotsk Perinsula or St. Matthew Island.

I will be glad to see you again.

Sincerely, Idward S. Multoyak

Edward S. Muktoyuk

P.S. mike put skins on his boat

he will go to King Island

- June 1- Hunt with Mike in his boat about 10 miles east of King Island. There was 19 walrus, about 5 of them were females and 14 males. We lost 4 females. We went back to Woolley, arrived at 8:00 p.m.
- June 2- Went hunting with Mike about 9:00 a.m. Varible winds at 5, check the ice 5 miles east of King Island, then go back to the Island to look out to see no walrus on the ice. Two boats from Brevig Mission were hunting south of King Island then went back to Brevig. Wilfred Anowlic went to the Island and hunt south of the Island, there was only one dead male walrus, one young oogruk, and one ringed seal. Justin Tuilanna and John Pullock went hunting east and south of the Island then came to King Island with no walrus. Al Pikonganna's boat also came to the Island. Five King Islander's boats came to the Island then went back to Woolley. Arrived at 7:10 p.m., then went to Nome and arrived at 11:50 p.m.
- June 3- In Nome and went back to Woolley. Sylvester Ayek arrived at Woolley about midnight then went back to Nome. John and Justin went hunting west of King Island. They got when 9 walrus, sex unknown.
 - June 4- Went hunting with Mike and Al Pikonganna, we saw 2 female walrus with a calf in the water east of the Island. Went to the Island to look out for walrus but did not see any so we went back to "colley. Northeast winds increasing, arrive at Woolley about 11:00 p.m. Al Pikonganna's boat remain at King Island, we all got wet.
- June 5- At Woolley, partly cloudy, North wind at 25.
- <u>June 6- Clear, N.W. winds at 20, temp. 320F. at 5:00 a.m.</u>
- June 7- Clear, N.W. winds at 15. Vincent Pikonganna been call on the C.B. from King Island that they ran out of food.
- June 8- Partly cloudy, west winds at 8 and decreasing, becoming SE at 30 and decreasing and funny weather. Al Pikonganna's boat came back to Woolley by the afternoon. There was no walrus. Justin and John's boat hunt near Sledge Is., they got 2 male walrus but lost one and went back to Woolley Wilfred Anowlic came by during the evening then went to King Island. We saw 3 whales heading north 5 miles west of our camp.
- June 9- Clear, varible wind at 5. John and Justin went out about 10:00 a.m., they were hunting north of Wales. They got 3 walrus, one was a calf, sex unknown.

- June 10- Cloudy, varible winds at 5. Went out with Mike at 12:15 p.m. Hunt east and south of King Island. See about 50 Lemales with calves in the water east of the Island. No walrus on the ice. A plane flew toward King Island then went west of the Island, it looks like a white and brown C 185 with floats, we saw it about 3:00 p.m. We went to the Island to glass out (look through binoculars). Wilfred got ready to go back to Woolley. John and Justin were the ones who went out ahead of us an hour earlier to go back to Woolley. Mike and I climbed to the top of the Island. Wilfred reported that a Teller boat was going out to the Island. We went back to Woolley and saw 15 walrus in the water east of the Island. The walrus did not stay on the ice, something was wrong. We arrived at Woolley about midnight. At Woolley the wind was becoming SE at 15. All the hunters did not like the planes flying in our waters.
- June 11- Cloudy, winds SE at 35. Go to Nome arrive at 6:20 p.m.
- June 12- In Nome winds S at 20, fog, drizzle and some rain. Back to "oolley, arrived at 4:45 p.m.
- June 13- Winds S. at 30, fog, drizzle and rain.
- June 14- Winds SV at 15, fog and drizzle.
- June 15- The weather is the same as yesterday. Went to Nome and back to Woolley. Winds bacoming NW and decreasing. John care with two boat loads. Wilfred also came, there is lots of people at our camp.
- June 16- Cloudy, No winds at 15 and decreasing by the evening.
- June 17- Clear, winds N. at 10. Went to the Island with Mike We saw only one walrus on the water going north about half way to the Island, we stayed at the Island all day. We saw lots of whalers SW to NW of King Island. About 15-20 miles Justin, John's two boats, Al Pikonganna and Sylvester Ayek boats also go to King Island. We went back to oolley, the other boats stayed at the Island.
- June 18- Clear, varible winds at 10. Sylvester Ayek came back to Woolley.
- June 19- Clear, varible winds at 5 becoming SE at 25 with fog. Went to "ome.
- June 20- In Nove, partly cloudy. Go to Woolley, arrived at 5 p.m. Wilfred a nd Tiulanna arrived & pomiking Island. John and Al Pikarganna were on the way they arrived about 8:00 p.m. Two boats remain at King Island.
- June 21- Clear in the morning but becoming cloudy and rainy, SE winds at 10. King Island call on the C.B. that a rock rolled down and hit my Aunt Patunac house and rolled all the way down. Luckily Wilfred and his crew, who was staying in the couse were at Woolley at the time. All their belonging

- June 21 cont .- were scattered all over.
- June 22- Cloudy and fog, winds SE at 10. Sylvester Ayek came from Nome and was heading towards Cape Douglas to wait for the weather. He was overloaded.
- June 23- Cloudy, some rain, variable winds at 5. Went to King Island with my prother Gabe's boat. We saw one dead walrus in the water with a tusk, we just pass by it. Mike, John, and Wilfred went to King Island. We heard on the radio that the ice is 10 miles SE of the Island. When we arrived the ice was 15 miles out. Mike and I went back to Woolley, we see only two seals on the way to Cape Douglas. Sylvester Ayek's tent is set up by Cape Douglas.
- June 24- Cloudy, NW winds at 10. S. Ayek came to Woolley from C. Douglas.
- June 25- Partly cloudy, NW winds at 10, go to Nome.
- June 26- In Nome. Put new shock on my truck. Pick up Bellarmine Seeganna who help me with welding and cutting tools. S. Ayek came to Nome with his boat. Simon Angusuc told me that he was at Golovin yesterday. Hunters been bunt walrus on the ice out of Golovin.
- June 27- In Nome. Clear, N. wind at 15. Waiting for pay cleck from Exxon, I guess they don't have any money. Cur food run fast at the camp. They start to see moose, they fool around at our camp each summer, we may have to eat them because we have no meat. Go to Woolley and arrived at 5:30.
- June 28- Clear, NW winds at 25. Go to Nome to get a drum of gas.

 On the way back I got a flat tire, I was alone, 2.3 mosquitoes helping me in 70° weather. The jack slip off after I took the wheel off, it was not fun. Jerry Koezune and Ray Peneatac brought Francis Alvanna's boat and S. Ayek brought his boat in trailers.
- June 29- Clear, variable winds at 5. Four boats came from hing Island then went to Nome.
- June 30- Jerry Koezuna and Ray Peneatac went to King Islam. with Francis' boat, they left about 10:15 a .m. John Fullock went to Shishmaref with two boats, they will hum: on the way.

July 1984

- July 1- Clear, winds N. at 8 and increasing. Went to Nome by evening.
- July 2- In Nome, clear, NW winds at 15. Went to Woolfry arrived at 8:40 p.m. Brother Gabe came about 10:55 p.m. We were getting ready to go to King Island but we didn't like the weather.
- July 3- Partly cloudy, SE winds at 15 and increasing, then rain. We went to Nome.
- July 4- Forth of July weather is cloudy and rain, winds S. at 15. Today is the Independence day which is like any other day. When I was a boy they played eskimo games, danced, did high kics, and had kayak and oomiak races. Il we are trying to do today is to speak English.
- July 5- Cloudy, rain, rinds S at 20.
- July 6- Cloudy, main. SW winds at 35. Went to Woolley.
- July 7- Cloudy, rain, SE winds at 25. Went back to Nome.
- July 8- Cloudy, S winds at 10. Went to Woolley, the weather there is winds NW at 35.
- July 9- Cloudy. NW winds at 40.
- July 10- Partly cloudy, N wind at 40. Temp. 40 this morning.
 There is new snow on top of Singatook the big mountain in front of Woolley. Go to Nome.

Pullocks 2 boats and Justin Tiulana boats are weathered in Shismaref. We haven't heard from S. Ayek and F. Alvanna at King Island. S. Ayek made it to King Island okay. We haven't heard from F. Alvanna's boat. We tried calling on the C.B., but no answer. It was a very short hunting season, the boat captain only speed. Our way of hunting is over.

Library & Wildlife Service
U.S. Fish & Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska