ARO-ANIA / RF N14K93D_1 please review & give me your comments

1988 Coastal Raptor Survey
Aniakchak National Monument and Preserve

Frank and Penny Starr

INTRODUCTION

Except for incidental observations, no detailed information on raptor nesting activity along Aniakchak's 96 km has been collected. The rugged Pacific coast offers excellent nesting and feeding habitat for raptors. Over 10 species of raptors have been recorded on the Alaska Peninsula. Increased oil exploration, commercial fishing and other human activity makes identification of nesting sites an important resource management objective.

METHODS

A Cessna 185 on tundra tires, piloted by Gary Kiegel of Yute Air (Dillingham, Ak.) was used to survey raptors along the headlands from Cape Kunmik to Kejulik Bay. Two observers conducted the survey; both passengers sat on the right side of the plane. The individual in the back seat served primarily as navigator and nest mapper, but also assisted in spotting. The survey was flown with 20^0 flaps and at an altitude of between 100-300 feet above sea level. The survey started at the northern Preserve boundary and followed the shoreline south. The flight path was over the ocean, usually within 100 feet of land; overflights up river drainages ~~was~~ were not attempted. When necessary to confirm the presence of a bird or nest or pinpoint a specific geographic location, several circular passes were made. Observations of all nests (active or inactive) and birds were marked on 1:63,360 topographic maps. The age class (adult, immature or unknown) and activity (perching, feeding, flight, on nest) were recorded for each observed bird. Nests were considered active if young were observed, white-washing surrounded the nest or if adult birds were perching in or nearby the nest.

RESULTS

The survey was flown between 1300-1430 hours on 10 June 1988. Weather conditions during this period consisted of scattered clouds at 2,500 feet, temperature 53^0 and a north wind at 10 mph.

A total of 21 bald eagles, 20 of which were adults, were observed. Ten of these birds were considered nesting as they were observed either on or immediately adjacent to a nest. Three other birds were flying (including the immature) and 8 others were perched not in association with nests. Ten active and one

inactive nests were identified. Adult pairs were observed at three of these nests. No eggs or young were sighted. Nests and sitting birds tended to be on promontories, such as cliffs, bluffs and seastacks. (do you have any quantitative data on # of nests for each habitat type?) No

The only other raptor observed was a pair of rough-legged hawks. Other wildlife sightings included, 4 moose, 12 caribou and 10 brown bear. Four of the bears consisted of a sow and three yearlings.

DISCUSSION

Along the Aniakchak coastline, an eagle and active nest was observed an average of every 4.57 km and 9.60 km, respectively. These data are in general agreement with the distribution patterns of eagles surveyed elsewhere on the south side of the Alaska Peninsula. Payne (1987) surveyed approximately 700 km of shoreline by air from the southern Katmai boundary to Perryville and documented eagles and nests every 3.1 km and 16.58 km, respectively. During boat surveys along 500 km of the eastern half of the south side of the Alaska Peninsula, Bailey and Faust (1984) recorded eagles and nests at intervals of 3.44 km and 17.2 km respectively.

Differences in nest density found at Aniakchak may be partially explained by varied survey techniques (e.g., boat vs. plane and stratified random quadrant vs. complete census) and/or habitat characteristics of the survey areas. The eastern half of the southern Alaska Peninsula is generally rugged with abundant rocky cliffs. Contrastingly, Aniakchak contains a diversity of coastal habitat, including sandy beaches, intertidal pools, vegetated bluffs and rocky cliffs, which is considered by Hodges and King (1987) to be better eagle habitat.

Because the observers in this study were relatively inexperienced, some birds may have been overlooked. A total count of eagles, as was conducted in this survey, assumes that all birds are seen and recorded. Along shoreline habitat, this assumption is easily met for adult birds who are very conspicuous. However, immatures are more difficult to see and may be using habitats other than the immediate shoreline. The fact that only 1 of 20 eagles observed in this study was an immature, indicates that the total count may an under-estimate of the eagle population along Aniakchak's coastal zone. Boat surveys to be conducted in July 1988 along the Aniakchak coast will enable confirmation and updating of the nest locations and numbers of birds found during this aerial survey.

LITERATURE CITED

Bailey, E. P. and N. H. Faust. 1984. Distribution and abundance

of marine birds breeding between Amber and Kamishak Bays, Alaska, with notes on interactions with bears. Western Birds 15:161-174.

Payne, J. 1987.

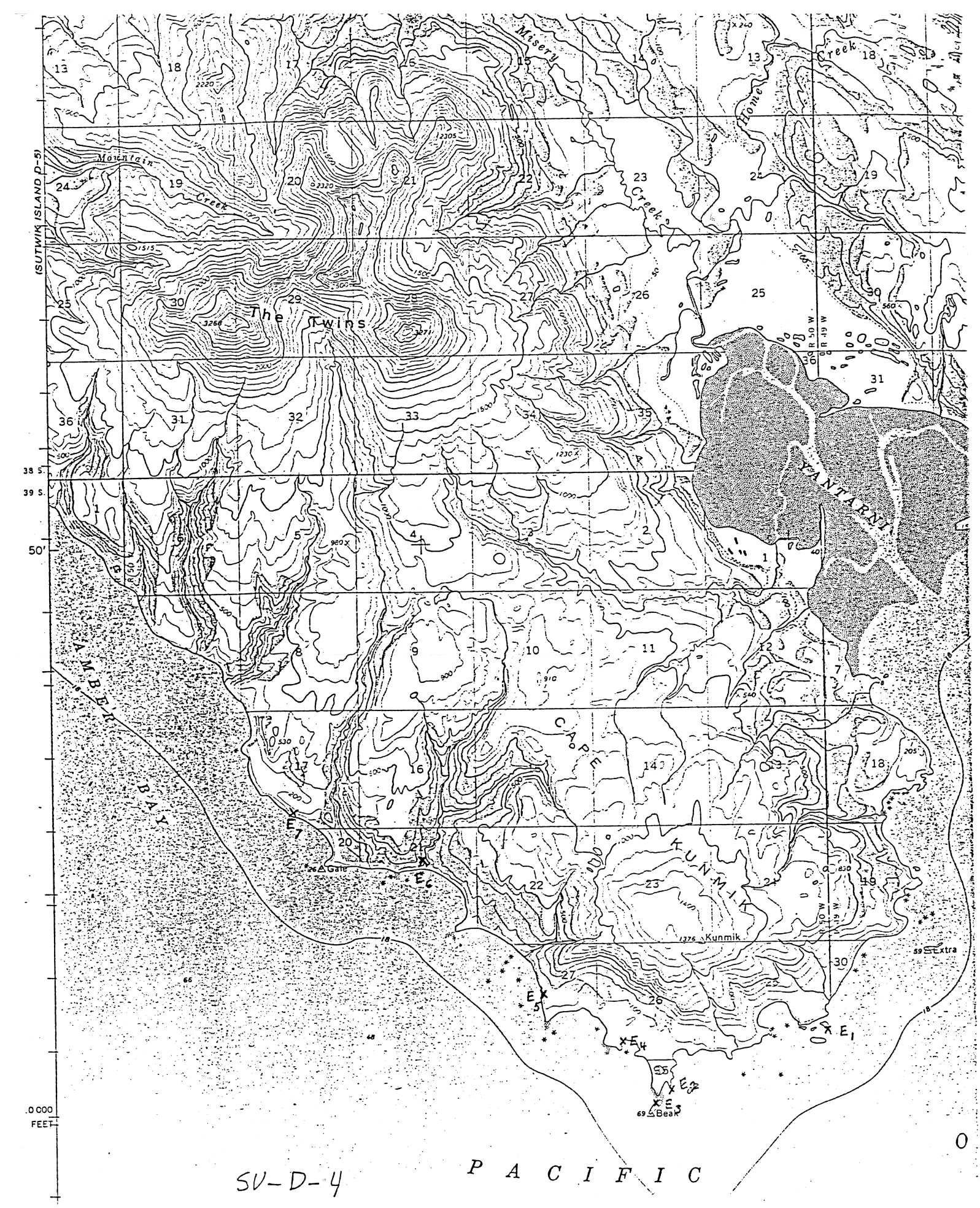
Good - numbers will indeed increase with the opportunity to observe immature birds

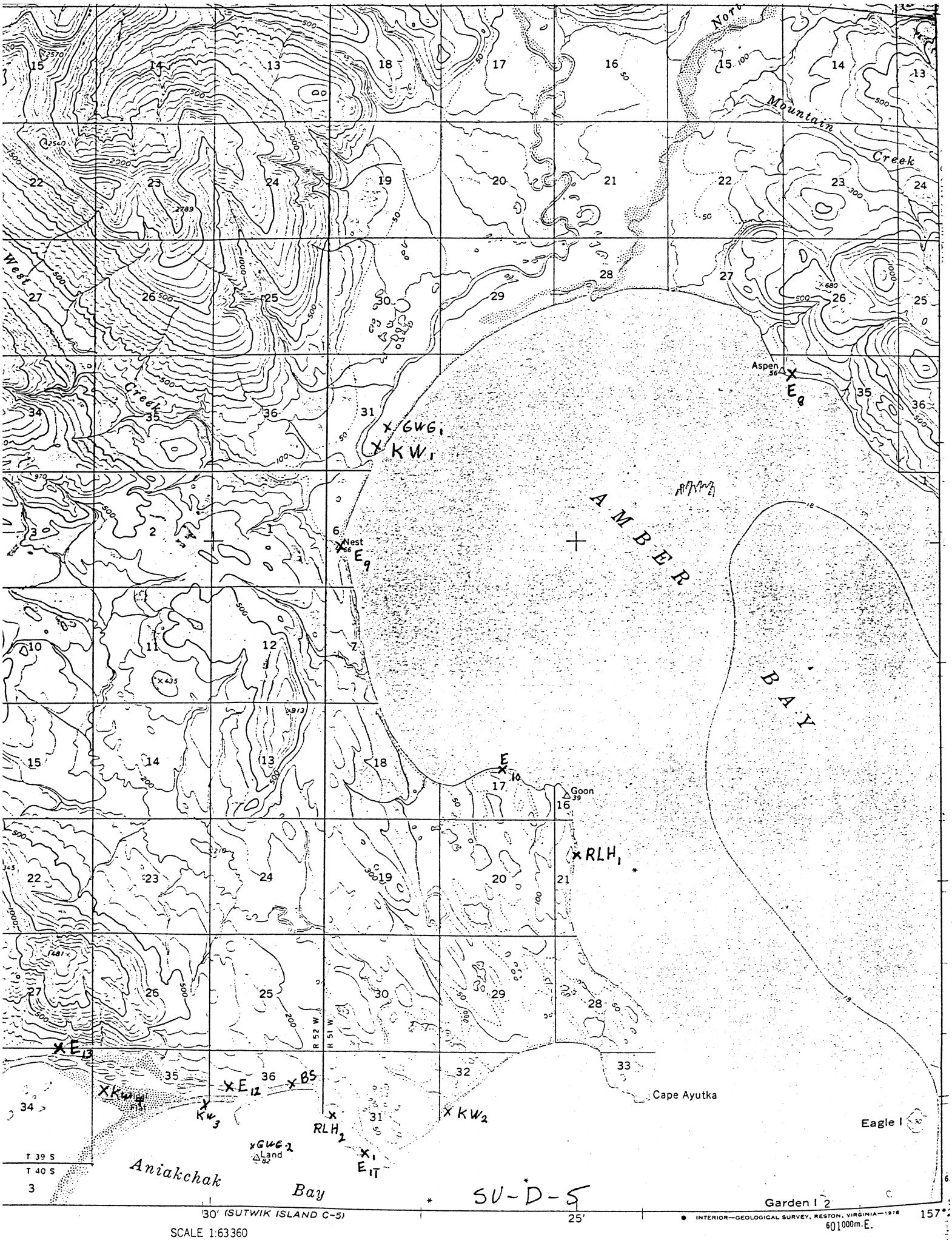
David - Please send us a copy of this ASAP. I want it to help guide future work. Thank you!

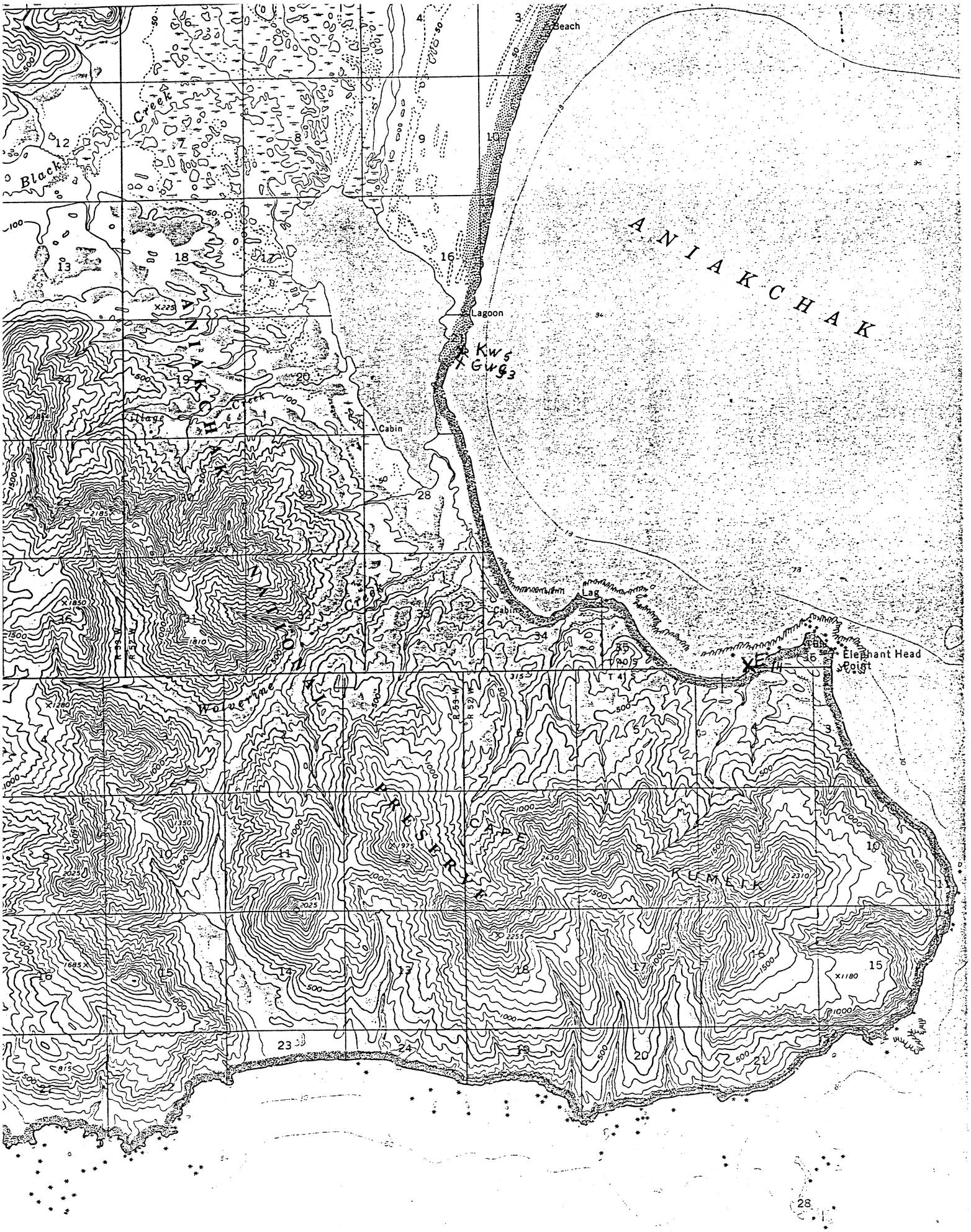
ANIA Coastal Bird Survey 1988

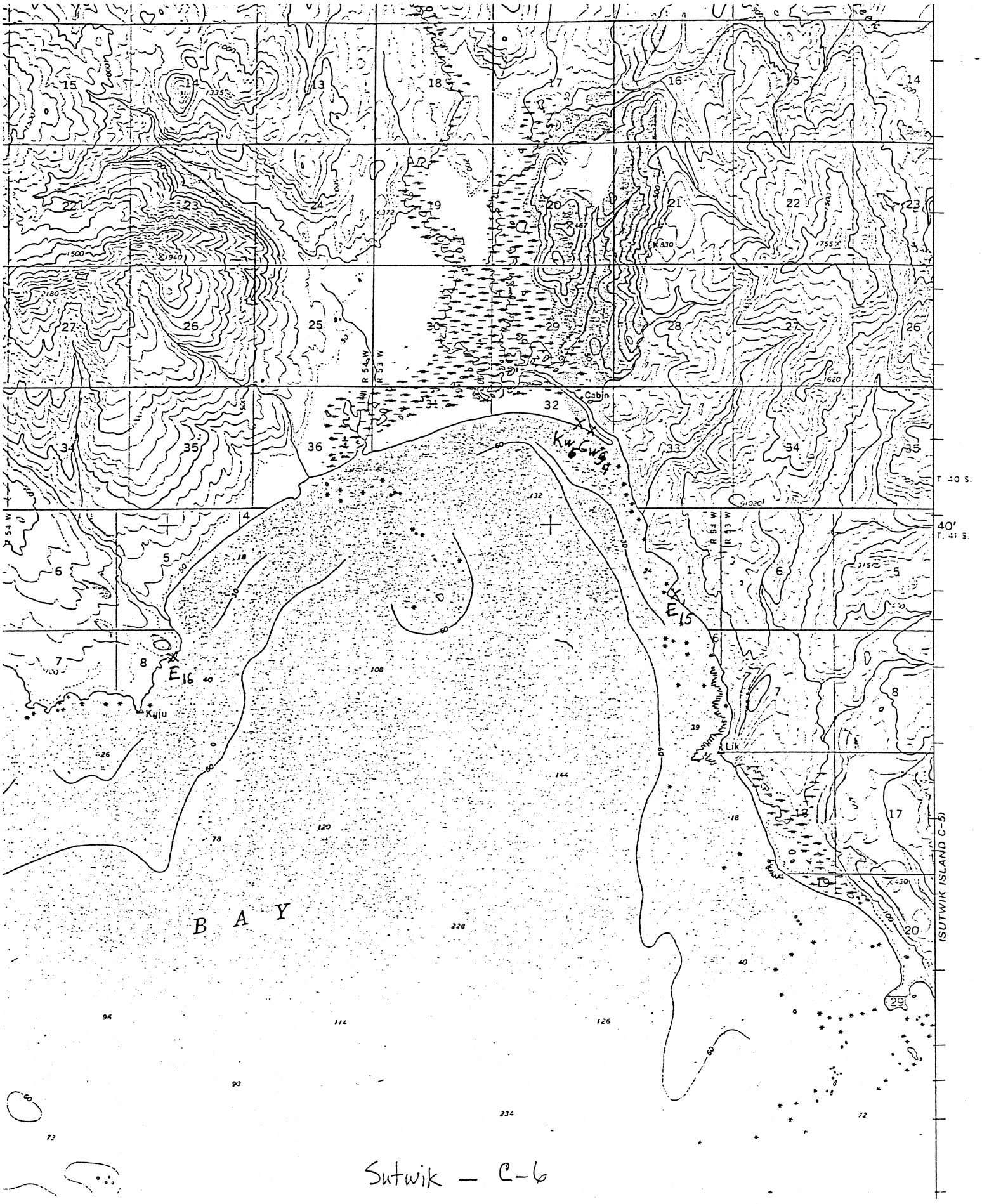
Map Index - from Sutwik Island Quadrangles D-4, D-5, C-5, C-6

E 1-16 - Bald Eagle nests
RLH 1+2 - Rough-legged Hawk nests
KW 1-6 - Black-legged Kittiwake nesting area
GWG 1-4 - Glaucous-winged Gull nesting area
BS - Bank Swallow colony


(SUTWIK ISLAND D-5)
Misery
Creek
Mountain
Creek
Creek
The Twins
KANTARNI
AMBER BAY
CAPE
KUNMIK
Kunmik
Gate
Beak
Extra
PACIFIC
SV-D-4


Mountain
Creek
West
Creek
AMBER
BAY
Aspen
Nest
Goon
Cape Ayutka
Eagle I
Aniakchak
Bay
Land
Garden I
T 39 S
T 40 S
R 52 W
R 51 W
GWG1
KW1
E9
E8
E10
RLH1
KW2
KW3
RLH2
E12
BS
E11
SV-D-5
30' (SUTWIK ISLAND C-5)
25'
SCALE 1:63360
INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1978
601000m.E.


Beach
Black Creek
ANIAKCHAK
Lagoon
Kw5
Gw3
Cabin
Village
Creek
Cabin
Lag
Elephant Head Point
Wolverine Creek
CAPE KUMLIK
28
SV-C-5


Cabin
Kw 6 Gw 9
E 15
E 16
Kyju
Lik
B A Y
T 40 S.
T. 41 S.
R 54 W
R 55 W
(SUTWIK ISLAND C-5)

Sutwik – C-6