

MIDWAY 4/78 Pages 3-25

MIDWAY 1/2/79
pages 93-106

SQUARE
DEAL

LIBRARY OF
GEORGE H. BALAZS

BALAZS

MIDWAY COMPOSITION

G. H. BALAZS ~~WATTOOLUWE P. 41~~
HAWAII INSTITUTE ~~KAUAI P. 83~~

OF MARINE BIOLOGY
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Hulman Building, Dayton, Ohio 45402

1978 MIDWAY 1979

CLASS PROGRAM

NAME GEORGE H. BALAZS ADDRESS P.O. Box 1346 KANEHOHE, HAWAII 96744
 SCHOOL HAWAII Institute of Marine Biology CLASS UNIVERSITY OF HAWAII GREEN TURTLES

REWARD IF RECOVERED - TEL 247-6631

		PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7	PERIOD 8
TIME	FROM TO...								
MONDAY	SUBJECT	APRIL 5-7, 1978 KURE - MIDWAY				p3-25			
	ROOM								
	INSTRUCTOR	MAY 7, 1978 LISIANSKI TAGGINGS-NAFTEL				p29-31			
TUESDAY	SUBJECT								
	ROOM	AUG 23-25 1978 KAHOO LAWE				p39-68			
	INSTRUCTOR	OCT 13-14, 1978 KAUIAI-MARINE LECTURE				p83-92			
WEDNESDAY	SUBJECT								
	ROOM	CHELONIA MODEL - LIFE ACTIVITIES							
	INSTRUCTOR								
THURSDAY	SUBJECT	30 JAN - 1 FEB 1979 KURE-MIDWAY				p93-106			
	ROOM	(1 New tagging; 1 Recovery #2089 from JAN 77)							
	INSTRUCTOR								
FRIDAY	SUBJECT								
	ROOM								
	INSTRUCTOR								
SATURDAY	SUBJECT								
	ROOM								
	INSTRUCTOR								

mead

No. 09-4160

60 SHEETS

10 IN. x 7 1/2 IN.

WIDE RULED WITH MARGIN

MEAD PRODUCTS, HULMAN BLDG, DAYTON, OHIO 45402, U.S.A.

UNIVERSITY OF HAWAII
 Hawaii Institute of Marine Biology
 Coconut Island • P. O. Box 1346 • Kaneohe, Hawaii 96741

1342-1347
1

APRIL 1978
WEDNESDAY
DITY

1342
 Depart Barber's Point USCGC E-130 - 0830
 Rich Mattingly - Pilot; Brian Clark - Capt
 Passengers: Bill Gooding, NMFS (and Associate)
 for aerial photography on Friday return.
 Brent Giannantonio for visit with Pagan
 at Kure; and return to Midway for meeting
 with Navy about seabird disease.
 Intend to parachute drop new eight
 side-band radio to Johnsons at Laysan.
 Hazards in this operation are: low
 altitude for accurate drop will mean
 higher probability of aircraft/bird contact.
 High altitude will present problem of excessive
 parachute drift - particularly if winds are
 strong.

Retained for landing after ~30 minutes because
 rear ramp door did not close properly.
 compartment was losing pressure.
 Take off again after about 20 minutes of
 ground time.

High level (20-25000') to PFS - two
 parachute drops at Tern Island from
 200-250'

Proceeded to () making at 2000-2500'
 with () set up front

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KURE-MIDWAY 3.

5 APRIL 1978

WEDNES -
DAY

Depart Barbers Point USCG ¹³⁴² E-130 - 0830
Rich Mattingly - pilot; ^{NAVIGATOR} Brian Clark; ^{JIM MONTGOMERY} copilot,
passengers Reg Gooding, NMFS (and Associate)
for aerial photography on Friday return;
Brent Gierentanner, for visit with Rouzon
at Kure, and return to Midway for meeting
with Navy about seabird disease.

Intend to parachute drop new single
side-band radio to Johnsons at Laysan.
Hazards in this operation are: low
altitude for accurate drop will mean
higher probability of aircraft/bird contact;
High altitude will present problem of excessive
parachute drift - particularly if winds are
strong.

Returned for landing after ~ 30 minutes because
rear ramp door did not close properly -
compartment was losing pressure.

Takeoff again after about 20 minutes of
ground time.

High level (20-25,000') to FFS - Two
parachute drops at Tern Island from
~200-250'.

Proceeded to Gardner Pinnacles at 2000-2500' -
with me in observer's seat up front.

5 April 78 Two photos of pinnacles with EL^w-ASA 64. Distance
Wednesday from GP to Maro Reef is ~143 miles according
to navigator.

From 2000' altitude a large turtle would seem
to be visible on the surface - Certainly a school
of turtles would be visible. Evidence for
schooling exists from 1) leatherbacks (off
Texas Coast (Copeia) 2) Pacific Ridley - report
of ship Captain along Pacific Coast (Copeia?) 3) Britcher's
tag returns article. Also, it can be noted that
sea turtles frequently feed together,
nest together, bask together, so why not
migrate together - indications that they
are very social animals - gregarious.

- Arrived at Maro Reef about 1:40 PM -
clear and sunny - surveyed area for
dry land - noted calm seas inside -

at ~ NW end waves break in and
there is coral structure which may be
above water. No sign of tanker wreck.

Note that I should bring nautical
chart of area on a flight.
Photos taken on EL ~ 12-18

YES!
seen on
sept-oct 1978
ER
RT Expedition

WIDE
ANGEL

5 April
1978
sent
4/14/78

Booklet, etc. - to Jim STARK

SNSS DAVID DOCKERY - silver suit - send photo
SSI SAQUIPED -

"Dirty Quentin" - forwarding address
(MR. BAILEY) 121 Sixth Street
McDonald, PA 15057

Arrived at Loysan - one pass - then made
air drop of radio - passed in from West -
many birds apparent - parachutes hit right
by tents -

Contact (VHF) with Patricia resulted in
the following information -

1. Seven dead seals from this far
ISA w/ parasites - remainder no
apparent signs - two adults from
last year's study.
2. Eleven turtles basking at one time
maximum. one hauled out three days in
row by dead carcass
3. Giergentanner reported that indications
of 70 seals less count than last year.

5 minutes out of Loysan we observed a
frigatebird at approximately 2300'

5 April 1978 Proceeded to Lisianski - Neva Shoals - photos from South on EL and ELW. (~1500-2000' Altitude)

WEDNESDAY

Proceeded by P.H. and landed at Midway. Talked briefly to Gary and to Bob Iversen in Honolulu. Discuss aerial camera set-up with Reginald Gooding - 1.) Should visit with him concerning turtles 2.) He mentioned knowledge of turtles in water at Naaulo, Kawai (60 at one time)

Backnotes - Regional Director Martinisen may go to FFS - send him Biblio and "Terrestrial" paper note to comment Kridler (?)

Depart Midway about 4PM Honolulu time - Disembark Kure about 330 PM Midway - Kure time, overcast, but not real cold.

Met new C.O. - Jim STARK - scuba diver. Departing personnel are - T. Michaels; Woody (has photo of basking male on taken Sand Island); and Sweet.

Need to contact Doc for forwarding addresses.

Chief Tom Atwood will depart 19 April - next flight.

5 April 78 Wednesday
Griegentanner went looking for Rauzon -
I got gear assembled for skin Dive.

Started at Windsock (noted crosswind blowing from West) and walk to first point - from here I swam out slightly to the left to examine "deep hole" previous site of turtle sightings and capture. Notes were reef fish than during last visit - also possibly more coral growth / algal growth. Water is perhaps 1-2° centigrade warmer. No turtles in deep hole, however many fish (ohole hole?) and and closest to outer reef / waves. Tide is very low at this time. Proceeded along to the South - check previous spots, including "famous hole" located almost to South Point. No turtles seen, however a large seal swam by me several times. Near "famous" hole I noted a small patch of codium growth - prostrate.

From South Point I walked along West shore of island back to quarters.

5 April 78
WEDNESDAY
1978
Thursday

Noted a recently born seal ^{with mother} near Black footed albatross ground not too far past dump. Just before radar reflector, noted ^{mother and young} of March 2nd birth. CG report that ^{mother} pup is on north end.

Notes → send disease item to WALKER also - when C-130 took off I watched adult seal on beach - did not see it respond - loud noise occurred. Note - pregnancy and noise Shears article. jets over Pearl and Hermes - Sonic Booms?

During evening hours I ate dinner (overate) and watched two movies. CG report that one Boston Whaler is not working, therefore they are only using the Hobie catamaran. Took Rayson to Kure's ^{Sand Island} once. Noted 3(?) pups. Also between 1-5 PM they have seen 7-8' shark "patrolling" waters by Sand Island. May make efforts to catch it. Species uncertain.

→ Note book in library on ocean life that has section on sea turtles - photo

6 April of Carrs. Title?

1978 Up ~ 6:45 AM. Had breakfast and
Thursday packed gear. Chief Larson mentioned
that on night dive in ^{first} sand area north
of South Point he saw a large
male turtle sleeping under a long side
ledge. Grabbed on to shell - it swam
slowly. "Report form" on this case
is in my files.

C-130 landed about 8:30 AM - Rayson
returned from short visit at Midway
with Gary and Giezentanner.

While plane unloaded gasoline, I
walked to South Point - noted ~ 4
chopped-up Laysan albatrosses on
runway. Photos taken EL55 and one ELW^{WA}.
Cold - light rain/overcast. At South Point I
noted that sand has been pulled out over
coral-rock patch that is close to shore. Also
that there are old dried up clusters of Man-o-
War very high on beach. No new ones at
South Point. Noted blue crate strapping,
partially decomposed, washed up on beach.
Sample retained.

6 April
1978

Rauzon noted that he thinks there are too many males at Kure and that could be the problem.

Wednesday

C-130 departed Kure ~ 10:15 AM, I was the only passenger - to Hancock Sea Mount for patrol. Big swell out of NW apparent - also strong wind - weather front in area.

Thursday

No ships noted - flew at ~2500' - due to return to Midway at 4:40 PM.

"DOD Flight Information Publication" noted in CG
C-130 - MAP format

USCG-333 A/C 1340 AIR OPERATIONS MANUAL

What do FWS Biologists - Managers do?

Considers great increase in number of personnel over the years. Relate this to absence of independent actions by FWS to pursue KAWLA and other cases.

~2 PM raining at Midway - trip to BOQ - called Gary and Linda at school. ~3 PM went with Gaby and Brent to view sick albatrosses. Gary mentioned having already sprayed Malathion -

6 April 1978 Brent previously mentioned Malathion as a "colinase" inhibitor - damages functions of salt excreting gland.
Thursday

I took photo of albatrosses with lesions. subsequently published in Star-Bulletin - Altona Questions for Dr. Friend (obtain address from Coleman) - 1.) Confirmed virus? 2.) Likelihood of spreading to other islands; 3.) Fly on C-130;

4.) Returned to Means house - went shopping with Linda - later went out with 105mm lens and took test shots.

Had make-your-own Pizza at Club -

Returned to Meas's house for drink - Brent came by. mentions how noisy rearies it must now get a permit for abatement For Gary and Linda I should:

- 1.) Call Francis camera about her repair;
- 2.) Call Coleman about Brent's request to return ^{Bird} to submit forms;
- 3.) Check with WW about amount now needed to send up booklets.

7 APRIL 78 - UP about 6 AM - read section in "edible sea".

FRIDAY Breakfast at EM Mess. TO C130 about 6:45 AM. (CONTINUED Page 23)

PHOTO LOG

ROLL NOS. DATES etc

SUBJECTS

1 ASA 64 FEB/MARCH KURE/MIDWAY TRIP
ELW ON FIRST OF ROLL - SHOULD BE ENTRIES IN OTHER DATA BOOK - AERIALS from CHOPPER(?)

(LAST part of roll 2/5 - LISIANSKI WA;
4/6 - C-130 killed KURE gooney carcass;
4/7/78 - FRONT of C130 - CG Emblem on C130. (PAU)

2 ASA 64 FIRST PART OF ROLL HAS 100
EL Herman releases from EASY RIDER;

4/5/78 - #12-17 MARO REEF WA;
#18 - 25 LISIANSKI 55. 4/6-30
C-130 killed Gooneys; Diseased gooneys (PAU)

3 ASA 64 4/6/78 - diseased Gooneys - #18 - ~12 on was
EL includes dancing gooneys. 4/7/78 - 12 bto of PH w/55mm to end of roll - (PAU)

4 ASA 64 4/7/78 - a few of Leewards;
ELW

5 ASA 25 4/7/78 - a few of Leewards;
EL

1 ASA 64 1/30/79 (C-130 Midway - Kure) #1-3 Trigat FFS; Shark bite seal
EL on Green Is., KURE; Recovery Toy 2089; 1/31 Dead unidentified seabird with calipers; Aerial Kure;

2 ASA 64 1/30/79 #0012 (C-130) WA body approach at tern; 2/1/79 Aerials of Green Is.,
ELW Kure Atoll;

7 APRIL Depart Midway for NMFS photographic survey of
78 Leeward Islands - 7:50 AM MIDWAY TIME.

FRIDAY NOTE: Send aerial photos to ^{Midway} Chief Blum's workers.
~ 8:25 AM overflight of PH reef at 1000' altitude -

From SW around to NE - SEAL-KITTERY,
GREEN, SAND, PLANETREE - Bird (a series of
sand bars), Little North (wave), North.

Photos were taken on roll 3 - EL 15A 64 -
run completed at 9:25 AM →

on to Lisianski ^{A few photos} which approx 150 miles.

at PH, noted "black bars" apparent along
internal light shallow sand areas that drop
off to deeper water. → on to Laysan -

went to 300' to drop 6 pair of rubber gloves -
many birds - made two passes at island for

photos ^{Few photos} - talked to Brian - he
mentioned a total of 9 seals dead - they found two
already there upon arrival. one that was ID
as last year's seal pup was found dead -

(bleach mark still apparent). He mentioned that
second molt apparently doesn't take place until
second year. New radio is apparently still
not sending very well. → on to

Mario Reef - no photos taken → on to
Gardner Pinnacles (a few photos taken
from N-NE) → on to

7 April French Frigate Shoals - saw tern - shark, - up
 78 W-S; calm seas and sunny at this
 FRIDAY location. → on to Wecker for a
 photo run - big waves crashing in,
 but calm seas on bank.
 Headed toward Nihoa, but did not
 see it. Turned for Barber's Point about
 25 miles short due to low clouds,
 poor visibility.

NOTE: Mentioned to Richard Mattingly about
fly in plane - opening door over islands
 for photo runs. Brent never warned
 him about fly, after my notification.

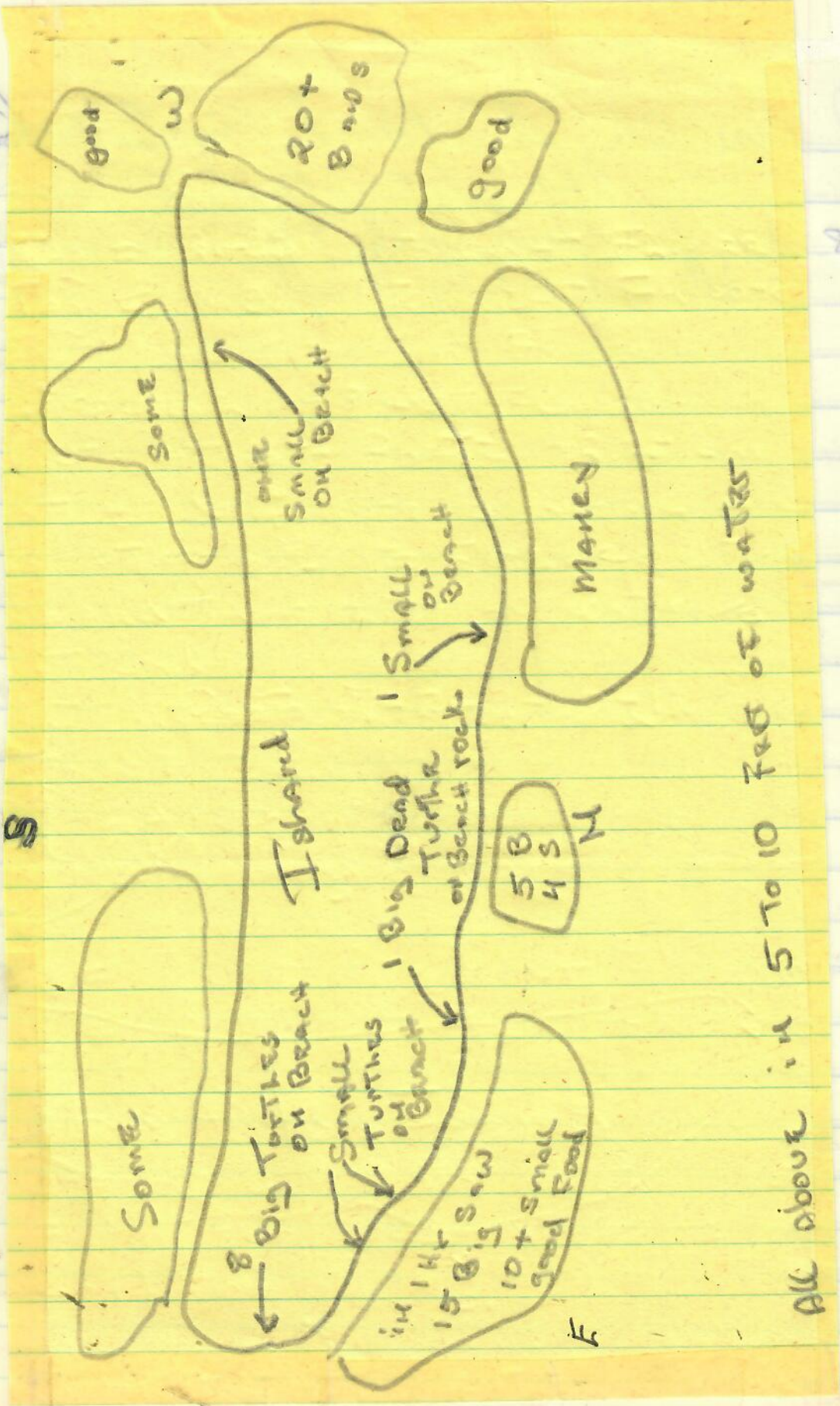
LAND at Barber's Point, 1:20 PM Midway Time; 2:20 Home
 Total flight time: 5 hours; 30 minutes.

New C.O. at French Frigate Shoals -
— ARN HEGGERS —

4/18/78 As per Cheryl Gable 546-7130
- letter sent shortly thereafter -

MAY 7,
1400-1500
①
2686R
2627R

②
2628R
2629R



18/58

LISIANSKI TAGGINGS - GARY "SKIP" L. NAFTEL

MAY 7,
1978IN CONJUNCTION WITH SPECIAL MONK SEAL TRIP -
LAYSAN, FFS, NECKER (GEAR RETURNED)

1400-1500 hours

①

NO. 1.

2626 RFL

C 47cm x 42cm

26301

18 1/2" x 16 1/2"

2627 LFL

"EXcellent Condition"

26314

"Taken in 5 feet of water by hand -
on the west tip of Island"
photos 1-2-3-4

NO. 2.

②

2628 RFL

C 46cm x 40.5cm

2629 LFL

18 1/8" x 15 7/8"

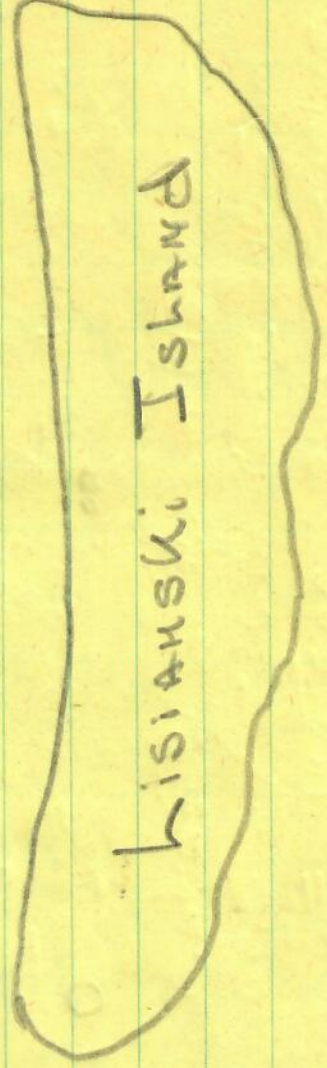
"L.H.F. 1" tear "old", otherwise in
excellent condition""also taken in 5 feet of water by
hand, west tip of Island."
photo 5-6

LISIAWSKI TAGGING - Gary Skop "L. WATTEL" in connection with special MONT SEAL TRIP - (RETURNED)

PHOTO 7-8-9-10-11



SEE PHOTO S



x 3.

N

3-2
xx

17
8
1-20
①
888
178

Lisianski (continued) - Naftel

NO. 3

May 7, 78

③

C. 48cm x 42.75

2630 RFL

2631 LFL

"above right hind flippers in shell
a cut V, see photo, otherwise
in fine condition. Taken by hand
in one foot of water 1/2 mile N.E.
of west end"

photos 7-8-9-10-11

Tag 2632 used as a test -
returned cinched.

Note "dead turtle had line around it. DeLong
got photos - did not have tags, been dead
maybe one month. Large turtle. All turtles
on beach were checked for tags without then
knowing it. No tags! Saw (purs) 100+ in one
day. Hard to catch with your hands. Most in
water were feeding on grass on bottom."



Tag 2630 - recaptured in July and again in
October

FRIDAY
6/23/78

Kathoolawe - departure from KMCAS at ~ 0700h
aboard helicopter #02 H(53) with John
Naughton, Jerry Swelberg and 8 parame-
Good chick supplied by Swelberg.
Comment that Ohara listed sea turtles
(possibly ^{hawksbill}) in list of species -
including dark-rumped petrel and newells
shearwater. - Swelberg mentioned there
are only two sand beaches - he has seen
them many times.

EIS preparation will be given to
private firm. Archaeologists are still
on the island - some may be brought back.
Approach ~ 7:50 - circled island counter
clockwise - complete ~ 8:20 - many gulches
with sand/silt mud beach - ^{certainly sand white sand on top} probably covered a lot
by high tide, areas along cliffs drop
off to deep water rapidly.

(Noted) lots of silt - turbid water -
clean water on Smuggler's cove side -
White sand only at Smuggler's cove side.
Erosion. Arrive home for fuel
at 0840h.

subsequently
achieved

problems - 1) didn't go into two calm
coves w/ high cliffs.

2) didn't circle over sand beaches
extensively.

- 13 mud beaches according to Swelberg

30 minutes
coastline
observations

BASILINE OBJECTIVES OF KAHOLAWE EXPEDITIONS

1. Occurrence of nesting (level, species, locations)
Suitability of beaches
2. Presence of algae used by green turtles
Resting Habitat
3. Incidence of feeding individuals/aggregations
- 4.

Kahoolawe - 45 square miles

29 miles of coastline - 46 km (~4%)

750 miles coast in the state - 1200 km

25 miles coast - Leeward IS.

Kahoolawe (continued)

6/23/78 Depart from Maui at ~9 AM - shutdown Friday again because fuel truck arrived -

15 minutes ^{white sand beach area} observations ^{plant on iron mats} Depart 9:15 AM ^{at 9:30 hours} Circling Sand beaches oil bomb target is in N. Mairaro

Objective: get a preliminary look at beaches from the air -
? Weather conditions - strong trades - partly overcast
? Stage of Tide - clear water by cliffs; at one time bombed everywhere 1941; now just outer 1/3 of island

9:25 AM NW Coast - photos - Beginning of new ASR 64
? Beaches seasonal - pinnacles offshore - large rock

Wipson has done drawing fish/recreation beach
Chief Whirohiohio

~3 hours 10 AM - 2 PM walked beaches Formerly Marine Geologist
lunch 12:30 - 1:15 Margarese nodules

Archaeological Team - Morgenstern and four ~~three~~ others (one Farley, Utauribe) (Private consultant company)

Report of humpback whales in deep coves along cliffs.

Federal JUDGE has ordered EIS.

20 minutes observations Depart Kahoolawe 2:35 PM - observed coastline until 2:55 PM - mostly

1/23/78
FRIDAY

KATHOOLAWA

57⁴³

Smuggler Cove to Lighthouse, adjacent cliffs,
and white sand beach around Kaneohe like Pt.

Picked up truck on sling ~ 3:05 and departed
for Oahu. 3:55 PM load truck and
gear at Barber's Pt. 4:15 PM depart
Barber's Pt. Arrive Kaneohe MCAS 4:30 PM

SUMMARY OF ACTIVITIES:

- 1) Complete circle of island counter-clockwise
upon arrival; circled white sand
beach areas after return from Maui
- 2) Hiked along coastline from facility
almost to Kaalikaihiki Pt. - inspected
beaches and observed nearshore calm
waters; Return hike inland. Lunch at facility.
- 3) Hiked to Sailors Hot crater; observed
nearshore waters and board exposure
beach/south where road construction vehicles
are located
- 4) Used up 1000 lbs fuel in helicopter
by circling white sand beach north
of Kaalikaihiki Pt and area to the
East of Waikakohulu Bay (cliff areas
along South coast.

NO TUBES SEEN ALL DAY -
NO EVIDENCE OF NESTING DETECTED

(See notes on chart)

Interviews with - Swedberg; Morgenstern;
L.P. Wilson and W.F. Wycoff (navy EOD)

1 1/2 YRS

2 1/2 YRS

13/78

77

Notes written on pad during trip -

- Sailor's Hat - large TNT blast simulated NUC
- Morgenstern suggested North shores as best chances for feeding turtles; has never seen nbc than 3 together at a time. Suggested that good sand beaches exist in gulches between cliffs of South shore.
- Mamevero sometimes "assault" beaches, use LUC's; but report no intention bombardment of beaches (ships or planes)
- > Noted Codium, Turbinaria, Lawrencina ord. soft coral in tide pool in SW shore (near white sand beaches) (near Blowhole)
- Small amounts of freshwater may percolate underground into ocean at certain areas.
- Approach for turtle nesting on beaches appears O.K. - no obstructions. White sand in many areas, extends right up to rocks - very little beach vegetation, wave wash extends up high.
- Sand from beaches is being used for road repair
- Shore targets no longer used (ships) - but could resume
- Army uses land artillery
- Swedberg reports sand beaches come and go seasonally - other (Wilson) report no.

KAHOOLAWE

6/23/78
FRIDAY

- Skiff diving, rubber rafts, nets suitable for SW shore
- ^{got} Fish study conducted by Division of Fish and Game - report published
- Sivelberg reports 13 silt bags at base of gulches - could these be used for nesting?
- EOD guide (NAVY) knows Ralph Dark TM' (SS/DV) L.P. Wilson (1/2 off and on partner) HMC (DV) W.F. Wycoff - (2/2 both "EODMUNE").

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U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE (142)
P. O. BOX 3830
HONOLULU, HAWAII 96812

July 20, 1978

FSWL/JJN

TO: ~~Walter Doyle~~ E. J. Gates, Administrator, WPPD
George Balazs, FWS
FROM: John J. Naughton, Fishery Biologist
SUBJECT: Kahoolawe site inspection

On June 23, 1978 I participated in a site inspection of Kahoolawe target island with Mr. Jerry Swedberg, Environmental Specialist for the U.S. Navy, and Mr. George Balazs, marine biologist with Hawaii Institute of Marine Biology. The main purpose for the site inspection was to survey the beaches and nearshore waters of Kahoolawe for marine turtles. In addition, information was obtained from Navy, Marine and civilian personnel on humpback whale sightings around Kahoolawe during the past several whale seasons.

We were transported via Marine Corps helicopter from Kaneohe Marine Corps Air Station to Kahoolawe. Before landing we circled the coastline of the island at approximately 250 feet altitude to look at the few sand beaches for signs of and/or potential for turtle nesting. We also scanned the nearshore waters for turtles resting at the surface. No turtles or signs of turtles were seen on this cursory survey. The only significant marine life seen was a large manta ray at the surface several miles west of Kealaikahiki Point.

From the air it appeared that the only beaches suitable for turtle nesting were those in the Smuggler Cove - Kealaikahiki Point area. The beaches at Kanapou Bay and in the bays and gulches of the north coast appeared to be mainly comprised of terrigenous material washed down from the slopes above. The turbidity of the nearshore waters along the north coast, particularly from Kuikui Point to Kuheia Bay, was dramatic and appeared to come from the badly eroded gulches in this area.

After landing at Smuggler Cove we looked at the beaches nearby and hiked to a number of beaches located northwest of the camp. These beaches were comprised of a clean calcareous sand, however, a recent large south swell had overtopped most of them and it was felt that the chance of a population of turtles nesting here on a sustained basis would be remote.

Before departing Kahoolawe we overflew several stretches of coastline and again no turtles were seen in the nearshore waters.

711

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE (NMFS)
P. O. BOX 3026
HONOLULU, HAWAII 96812

It should be noted that this survey was quite brief and that no positive conclusions can be drawn from it as to turtle utilization of the beaches and nearshore waters of Kahoolawe. Further site investigations, including underwater surveys, should be conducted during various times of the year in order to determine the importance of the area to marine turtles.

cc: Gary Smith, FSW3, Administrator, NMFS
Naval Facilities Engineering Command
Atten: Code 11440
George Balazs, HMB, Senior Biologist

SUBJECT: Kahoolawe site investigation

STAVE JONES HI-1
EOD MOBILE UNIT ONE
EWA BEACH, HI 96706

41
Lt. James Davidson - 472-8768

Scott Hamilton - 471-3942

" from Motteles, Ashdown?

Smuggler's Cove - ^{Honukanae} ^(?) -

also the name ^{Navy chart shows} for point and VW

cave (burial sacred) -

means area protected sanctuary
for sea turtles

23 Aug 78
WFD

TO Barber's Point NAS at 7:30 AM -

Depart for Kahoolawe in VC-1 helicopter Navy
EOD company - Steve Jones. ^{Squadron} SH-3G

one of pilots - Bill Farwell -

Mohokai

Flew to Kaula - noted "pit" filled with
some water close to the white cross on hill.
Flew low from this point to Halawa valley,
Noted a number of rocky islets, lots of
silty water.

5-6 blue tents were present in large valley -
a black sand beach of sorts is here
noted two dogs on beach - semi-permanent shack
in vegetation. This black sand beach
appears to be the only suitable one along

IN writing - paper's evolve - evolution occurs

from Mottler, Ashland
Zumwalt's Cove - Hawaiian Islands
It is noted that this survey was quite brief and that no positive conclusions can be drawn from it as to actual utilization of the beaches and near-shore waters of Fanning Island. Further site investigations, including underwater surveys, should be conducted during various times of the year in order to determine the importance of the area to marine turtles.

for use
George Balazs, HSP

Apr 28 TO Burger Point MS at 7:30 AM
Depart for Kaula in VC-1 helicopter
EOP program - Steve Jones, SH-32
Bill Formanell
Flew low from this point to Kaula island, noted a number of rocky islets, later with
silty water.
A blue tent was present on the island.
A black tent was also present on the island.
in vegetation. This black tent was only
offered to be the only tent on the island.

23 Aug 78
WEDNESDAY

this coastline from Kaunapali -
West valley to the post has a tall
waterfall producing a lot of water, - however
no water running down referred into ocean -
must be filtering through substrate.

Low level Molokai took place 8:40 - 9:10 AM. 30 mins

Circled over sand beaches (2) NE of
Kaunapali - a few ^{aerial} photos with ASA 64

- Landed at 9:40 AM and unload all gear
a Marine Corps H-46 on the ground. ^{Removal of Marine are}

Transferred gear to "hogan" and at ^{here few artillery}

10:30 AM departed for coastal survey - noted that:

Blow sand covers up footprints quite fast ::
could do the same to turtle tracks (fits?).

SMUGGLER =

#1

After immediate confines of Smuggler's ^(a sand)
Cove there is ^{beaches} 2. - Rocks as backdrop - close to high tide of SAND
→ Road to dump very close by?

3. Small sand pocket beach with small strip
of grass (vegetation); following this

4. Small beach with rocks at beach top
(this area has very large log - photo taken
during last trip) - following this (close by)

#14

6/23/78

rocky point juts out producing a small
bay (satad observed at this location
previously with Naughton and BOD man.)

following this -
5. Sand beach with heavy vegetation,

Rock ledge (beachrock?)
 approach to sand - round
 rocks on each side of ledge

23 Aug 78
 WEDNESDAY
 Sand extends into and around Keawe - noted dred,
cracked clay/silt at surface at South end
 of beach (a gulch runs down at this site); a
 sandy point exists offshore. Following this,
 looking slightly from the South directly at
 offshore rock (at Kaalikaihiki, there is
 a rocky cove - rocks intertidal, but higher up
 there are smooth coral chunks and a sand area
 ~ 50 yards wide - offshore of this site exists
 a horseshoe-like reef - (subsequently dive
 site 3).

Proceeded around SW (Kaalikaihiki) point - this
 offshore is in the lee - also now you can
 see Lanai - following this

⑥ Small sand beach - observed small turtle
 at NE end of this beach - off rock point -
 surfaced several times in same area - seen on
 top of rock reef -

~ 1 PM
 Skin Dive ① at this site - turtle swam
 off slowly when it saw Alan and me -
 estimate ~ 16" long - no toys or
 injuries - but appeared to be lots of
 algae on carapace. Collected algae on
 rock reef where turtle appeared to have
 been feeding - red filament and others - also

Dictyopteris
plagiogramma

23 AUG 78 noted ~~Dictyo~~ sp. (?) abundant on sand bottom;
WEDNESDAY sample collected.

Noted many reef fish - some poicillaria coral,
following this,

(7) long sand beach with blue sign "NO ENTRY"
at NE end. Photos taken #36-37 ^{looking TO/NE}

sand
sample
from
grass-
vegetation
area

end of roll ASA 64. - Sand goes back
under keawe trees - dug test hole in
sand with hands and bayonette - some
red dirt layer, but good sand underneath.

1:35 PM

some large - too large for turtles hind
flippers to break. ~~rel?~~ Photos #1-2
ASA 25 looking at this beach to the
SW (taken from "NO ENTRY" sign)

following this

(8) long sand beach - some grass/vegetation
at beach top extending into keawe
Photos #3 & 4 ASA 25 looking to the NE -

sand sample

approach to beach has piles of
red rock in center - however, sand
access at each side. Bright red
dirt borders behind white sand of
this beach - vehicle tracks in
white sand. ^{photo} #5 rocky shoreline from last beach
looking to the NE

Diary of Terry
1960

Report from Steve that in September
FOG will survey near shore area of
island for ordnance using 40' mike boat
and 21' Tritull.

SW (taken from "no entry sign")
at beach top - some grass vegetation
offered to look for signs of
red rock marker - however, had
access to each side. Bright red
but markers behind in the sand of
this beach - behind trucks in
white sand #5 with shadows from boat
behind to the NE

23 Aug 73 DIVE ② started at NE end of beach no. 8 -
 WEDNESDAY Steve and me - from this point, to the NE
 the shoreline gets rocky - some deep areas,
 lots of fish - coral. Swam back to SW along
 full length of beach no. 8 - little or no algae
 notes. Saw eagle ^{rook}.
 Saw eagle rook.

Steve mentioned "fish bombs" - old bombs
 from which the HE is extracted, cut up
 and used for fishing with explosives.

photos # 7-8 by sign NO ENTRY

Proceeded back along coastline to "horseshoe-like"
 site - Dive ③ at 4:00 PM - no algae noted,
 but lots of coral and fish.

Following coastline back to Smuggler's Cove -
 arrive about 5:45 PM -

During entire survey, the 3 of us maintained
 a (seaward watch) as much as possible.

➤ Good observation conditions existed in much of
 nearshore waters due to calm from lees.
 Also, kept a watch out for turtle feces.

Noted on all beaches - 1) recent human
 footprints 2) C-ration cans 3) Artillery explosions

➤ Helicopter activity is noisy in Smuggler's
 Cove area - men use beaches for
 recreational swimming.

note - Chart from Navy shows "HANAKAWA" "

23 AUGUST 78 Photos # 5-7 ASA 64 - kam by NO ENTRY sign,
WEDNESDAY we and Steve by sign.

At ~ 8:30 PM Steve and Marine Helicopter pilot
went diving in Smuggler's Cove - South rock side.
Speared a parrot fish - saw no
lobster.

During the night - report came of artillery
shell falling short - after conflicting reports,
no one hurt. Marine helicopter pilots
stayed in bed.

24 AUG 78 [Report from Marine that three days
Thursday ago he grabbed a hold of a ~24" turtle
while recreational swimming in Smuggler's Cove

24 Aug 78

Thursday

Depart at ~ 7:15 AM in direction of SW point.

Between beaches (1) and (2) there is a sand patch stream with rocks -

Noted many Grogus and one ghost crab.

At 7:55 AM, noted turtle at the surface approx 100 m off rocky point just before Beach #3 - estimate size at ~ 24" - vented numerous times, then submerged - not seen again - sleeping(?)

At 8:15 AM, noted turtle at surface off rocky point just past Beach #3 - same behavior as above. Photos #8-9 of Steve with SMALL GOAT.

Dive (4) at ~ 9:15 AM off red rocky point (observation pt.) past beach #4, - Dictyota Dictyoptera abundant - large rocks with coral - fish.

Proceeded along shoreline doing seaward watches - arrived at site at NE end of beach #6 where turtle was observed feeding yesterday. Dive (5) ^{12-1245 PM} in this area - extending both sides. - collected Chondrocybus and mat algae on rocks close to sand beach.

Started back at this point - just after (SW) beach #6 and before coral rock beach, c

PA "Tripoli" vessel USMC (i) Navy Farrallon de Medillon - N. Marianas
Boobys in tree - setting targets

LHJG Damon Coffman -
EOD Barber's Point

long thin island - 1/4 long - cliffs all the way around - but small white sand beach
70 miles North of Tinian and Saipan.

"target for some time, but recent upgraded for increased activity"

Chopper fibt ^{one named MITCHELL} just returned from ^{cruise} (one year since at kahoolawe)

Commonly called "FDM"

24 AUG 78

Thursday

1:40 PM

Noted small green ventilating close to shore. Continued to observed - at 1:48 Cit surfaced again - waited for third surfacing - ~ 5 min later - swam out and observed it grazing on rock - swam off quickly when it saw me. "Bite" marks noted in thin algal mat covering rock - sample scraped off and retained. Surveyed area with Steve and Alan - later saw ~ 4' shark.

This turtle looked same as one observed yesterday - very likely the same animal. Followed coastline back to Smuggler's Cove arriving at ~ 4:30 PM

Notes - Saw large (~ 50) porpoise school in cove - informed by helicopter personnel that one year ago he had seen porpoise spinner ~ 50 meters from shore. This is hazard for setting turtle nets in area - also, ray jumping offshore that was noted.

note - area I am surveying (SW end of island) is within "Roop Storey Zone" - no intentional bombing in recent years - no targets

Note - (Cats on island) - observed one on beach

25 AUG ~ 6:10 AM

25 AUG 78 observed waters of Smugglers Cove (calm) from
 FRIDAY ~ 5:55-000 AM - Swell rolls in and breaks
 loud right on beach. Beach #0 (Smuggler's
 Cove) sand extends ^(is continuous) from in front of Hook to
 final point (large gulch) toward SE.

Depart ~ 0800 to survey coastline to the
 SE of Smuggler's Cove - noted sand (habitat)
 removal in middle of gulch of Smuggler's Cove.
 Lots of human activity - tracks, people at types
 in Smuggler's Cove. Walked along coastline
 to past sailor's hat - at 9 AM collected gold
 (*Sargassum*) and green algae in splash zone on
 rocks - just past sailor's hat. Further up
 coast there is a large "blow hole" from
 water going under arch. - further along, a calm
 inlet bay with a "sea cave" - depth unknown.
 Took photos #10-11 of cliffs coast to the
 SW - photo #12 goat bones - Proceeded
 to cliff outlook just after lighthouse
 turned around at this point and returned
 to camp - noted rusted artillery shells along
 the way - Marines are firing projectiles
 up the hill. Arrived back at camp ~ 12 noon
 at ~ 1:30 PM - Snorkled in Smuggler's Cove
 SE rocky point - lots of *Porolithothamnion* corals & others -

Not much
 algae seen
 DIVER

25 AUG 78

FRIDAY

lots of shelter habitat. Cloud cover and ^{light} rain showers every so often.

VC-1 ^{squadron} H-3 Helicopter arrived at ~3:20 PM - unloaded concrete markers for archaeological sites - Depart 3:40 PM
Arrived back at Barber's Point ~4:40 PM

Post notes - check ① McAlister -
② Newspaper clipping

E.O.D. head man - Lt. Comm. C.C. Gage
684-~~111111~~

called

684-6123

→ Command Office
E

Fecal pellets on beach?

Mobil Unit 1

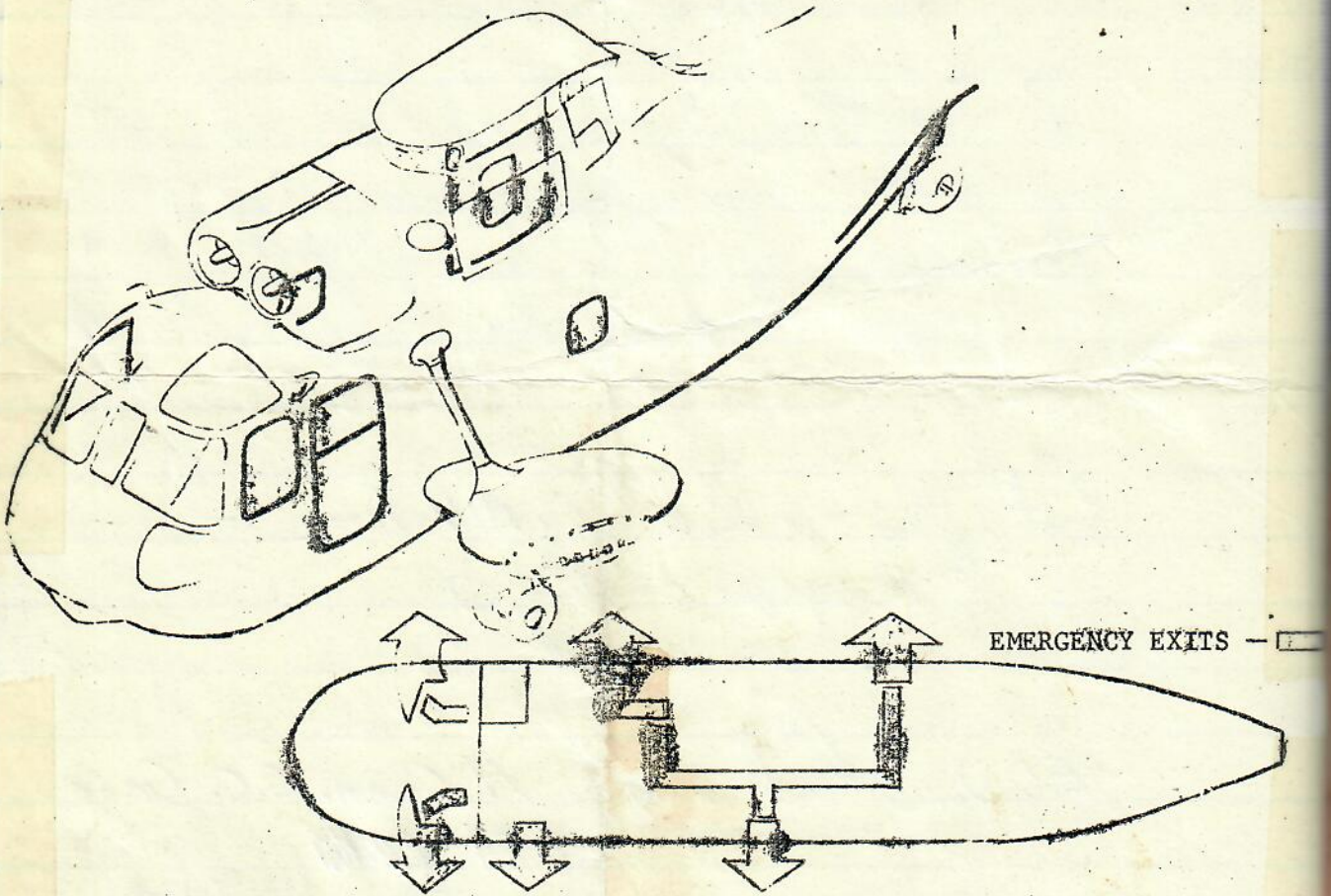
Barbers Hwy 96862

- 21st - 30 North- 6th - 16 Oct (west)
(south)

Letter for Steve sent 9/18/78

Report written "SEATURTLES OF KAHOOLOAWE: A PRELIMINARY SURVEY" SUBMITTED TO KELLY.

HELICOPTER SAFETY BASES



SH3's "THE BACKBONE OF VC-1"

Handwritten notes in blue ink, including:

- 1 - 1/2 in. diam
- Border line 0.25 in
- 1/2 - 3/4 in
- 1/4 - 1/2 in (west)
- 1/2 in (south)
- Letter for Steve...
- Report written...
- 2/20/61 - SUBMITTED TO KERRY

67
A. SH3G Passenger Brief

1. Remain strapped in and seated during flight
2. Do not exit helo until cleared by Crew Chief
3. No smoking unless cleared by Crew Chief
4. Head Protectors will be worn at all times
5. Life vests will be worn on all over water flights

B. Controlled Ditching Procedures

1. Stay securely strapped in unless otherwise instructed
2. Water takeoff is possible in this aircraft so do not exit unless directed to do so by Crew Chief
3. Uncontrolled, remain securely strapped in until all motion including rotor blades have stopped. Aircraft will float for a short time
4. Calmly exit the aircraft through the nearest exit
5. Emergency Exits: TWO forward; pilots and copilots window
THREE aft; Port and Starboard passenger compartment windows
The Personnel door may also be used for emergency exit from the helo

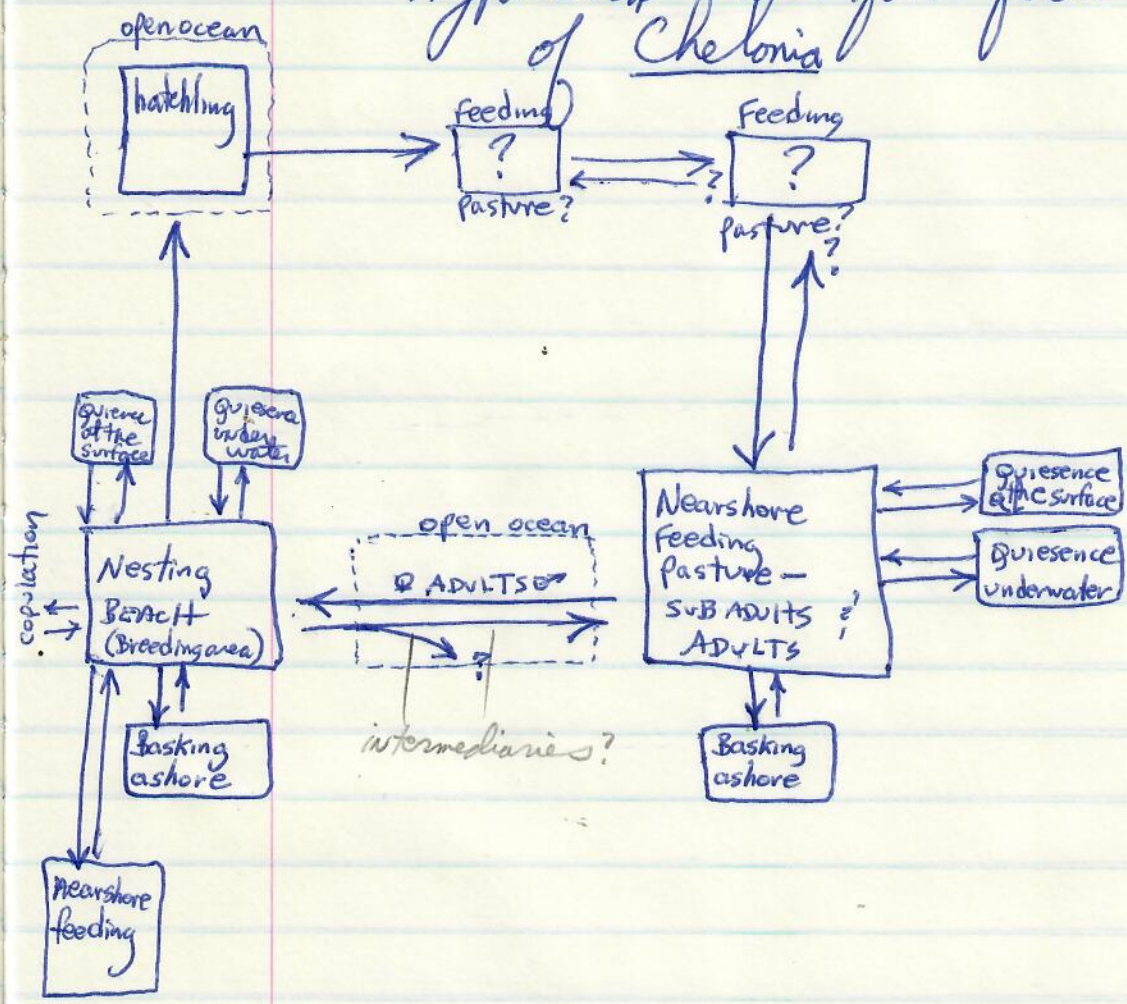
C. "MAE WEST"

1. Will inflate by pulling toggle strings
2. Or orally by rubber tube
3. Contains day/night flares, a light, whistle, shark repellent and dye marker

D. General Hints

1. Pick two emergency exits upon entry to aircraft
2. Do not inflate Mae West until clear of aircraft.
3. Do not go after anyone in sinking aircraft with Mae West on
4. "Remember, always follow Crew Chief's instructions explicitly"

Hypothetical Model for life activities of Chelonia



13 Oct 78
FRIDAY

Depart Hawaiian Air at 2:35 PM for Lihue. Marine Lecture Series at Lihue library 7 PM - Jeremy Harris contact. Budget rental car #12.95 + gas, to Tip-Top Motel #22.00 night. Traffic jam in Lihue. Dinner at Motel - Read Garden IS. newspaper and tourist literature.

TO Library at ~ 6:30 PM - Jeremy just returned from 6 months leave of absence for Con-Con and running for House. Notice of talk appeared in a recent paper. A clerk has been handling the Marine Advisory job during his absence.

14 Oct 78
SATURDAY
~ 12-15 people total attended talk. Included Mr. & Mrs. Dalton; David Boynton Box 651, Waiwae 96796 (School teacher); Dallas Grady and son Alike (Box 384, Kilauea 96754). Talked lasted ~ 1 1/2 hours. Boynton has 10-15 Niuhau kids in his class. (Many drop out - return to Niuhau as years progress). He will seek info for me on turtles at Niuhau. Also, Grady will ask his friends from Niuhau (part relatives?). Grady reports that he saw dogs at Tern Island chase a young seal way up into the bushes - wrote a letter of complaint to (?). After talk, I

13 Oct 78

FRIDAY

telephoned Vernon Byrd - USFW at
 Kilauea lighthouse 828-1380.

Been on Kawai
 ~ 1 year
 Fred gone 3 months
 before they came -
 worked in YCC

Dallas listed AHIHI Point (East Kawai
 between Kealia and Anahola Bay) having lots
 of turtles and stingrays feeding together.

Boynton mentioned taking a group hiking
 into Milolii (Helicopter dropped them off) -
 reported fishermen in there stocking up on
 turtles. He saw turtles close to shore.
 Reports lots of reef area.

14 Oct 78

SATURDAY

UP ~ 7:30 AM, checked out of motel and
 went to McDonalds for breakfast.
 At 8:45 AM proceeded out the road to Hanalei -
 Very glassy seas - no wind. Drove into Princeville -
 all the way to dirt road where steps with
 handrail descended. Some swells rolling in -
 two surfers offshore. Noted salt spray in the air;
 turbid water from swell; apparently extensive
 coral reef. Proceeded back to road to
 Kilauea - noted three helicopters painted
 alike at airport - Papillon Company. Met
 Val and Vernon - son born three months ago.
 He was working on Wedgetailed Shearwater
 project in which Newell's eggs were put
 under them - 9 total - appears to be

14 OCT 78

SATURDAY

fledging success in 8. This is John
 Sirecock's project and considered a last
 ditch effort to establish colony on offshore
 islets. Vernon has regularly seen turtles
 during his year - frequently by foamy drift
 material that is often present. I noted
 both white and dirty brown foam drifts
 (turtle food associated with this?). Did
 not observe algae abundant on rocky
 shoreline, except for brownish material
 on offshore islet. There is a steep trail
 descending into rocky bay to the East.
 Only other way to get down is through
 sandy beach to the left - or boat ramp
 reported at Kahiliwai. Vernon has an
 aluminum boat - first went to offshore islet
 only recently. He worked with Palmer in the
 Aleutians - also knows Kenyon - named a
 rock for him in a paper. We saw a podgy -
 first he has ever seen here - although
 common on North and West (?) shores.
 YCC people have generally not been good -
 many right from parole offices - knifing
 and fights. Machkoh stills lives in
 house on point - but is now on 3 weeks
 home leave - looking for another job.

14 Oct 78 I sighted a ~ 8" turtle over shallow reef area
 SATURDAY outside of rocky bay - brownish surface. Rocky
 bay is where monk seal was seen this
 summer. Adult present each day for - days,
 the gone a few weeks and back again for four
 days - not seen since. I encouraged him to
 write up all observations on this case for a short
 publication. Other notes on seabirds include
 many RF boobies in bushes on slopes
 along rocky bay - report that lighthouse
 flashes across them at night. Also
 that light has been there since 1918(?)
 and previous birds were on the point -
 apparently relocated with installation of light.
 Approximately 13,000 visitors a year go out to
 light (Monday - Friday 12 - 4 PM). Brent has
 only been there three times in a year. Apparently
 never seen Kridler there. Works closely with
 Tom Tefer. Would like to initiate a project
 using a bright fellow recently out of the
 Air Force. May work for him for one year.
 He would like to have regular observations
 of seabirds made from point - suggested
 that observations of turtles might
 easily be incorporated.

14 OCT 78 OUTLINE AND VARIABLES for such a project
SATURDAY could consist of the following:

Chart of point with some details on coastline -
offshore reef areas (xerox)
List of details to be entered at each
sensors.

Questions that might be answered:

Time of feeding/presence at surface as a
function of time of day / tide / sea surface
conditions.

Location of feeding/surface - fomy drift
or rocky shoreline.

Seasonality -

Size composition -

length of time at the surface -

Arrive Kure at 3:40 PM. Setup first in
radiomans hut for landing. ...
Depart Kure at 4:35 PM. While they
detailed the boat show and tide by
had said that KK club was only has enough
tips for 2 turtles - An actual member has
left BERQUEST to PO. SCOTHEEN
Left Kure - 4:55 PM - Disembark -
Saw Old Jim STICK - offshore -

30 JAN 1979 6 AM depart from home with Alan for Barber's Point. Arrive ~ 7 AM.

TUESDAY "14,000 feet to point 200 miles west, then low level"
 "Hancock seapoint tomorrow - ~ 5 hours of patrol"
 Kyle E. Jones ^{seal booklet 2-3-79} Helicopter Commander; Copilot - G. W. Westrup ^{seal booklet 2-3-79}
 Scott Anderson, NMFS observer.

USCG
 Barber's Point
 PPO San Francisco
 96611

Kure time now same as Midway -
 one hour earlier than Honolulu -
 Reg Gooding and assistant for 35mm trial
 photographic census of seal. Depart 9:45 AM

EXPEDITION OBJECTIVES:

1. Census and recapture juvenile turtles along east shore of Green Island;
2. Confer with CG personnel

CDR Graham - calendar for ward room

Arrive Midway at 3:40 PM - Setup front in radioman's seat for landing.
 Depart Midway ~ 4:35 - While there I talked w/ Pat Shaw and Airdale.
 Pat said that KK club now only has enough tags for 5 turtles - An active member is Jeff BERQUEST also PO2 SOUTHERN
 Land Kure - 4:55 PM - Disembark -
 Saw C.O. Jim STARK - offloaded gear

I AM about from here with Alan for
 Barber's Point, Hawaii - FAM
 "1400 feet to point 200m West, then low reef"
 HANCOCK STATION at 1000m
 Captain - G.W. ...
 ...
 (Kure time very similar to Midway -
 you can see that the ...
 for ...
 ...
 ...

COASTLINE AT KURE :
 OTHER Leeward Islands :

CRAIG McDONALD Reports - 21°C seawater

MacDonald's assistant :
 Jim Prescott 955-6719

...
 ...
 ...
 ...

30 JAN

TUESDAY 79

to Mess Deck - changed clothes and proceeded
to Wind Sock on East side for survey. 4:30 PM
(KURE TIME) noted subadult close to shore - moving
slowly. Took off all clothes and captured turtle
by hand - only in ~ 3 feet deep of water -

2988

LFL

73 lbs

(± 2 lbs) = 75 lbs

2989 FL

SL - $24\frac{1}{4} \times 18\frac{3}{4}$

2990 FL

(22)

CL - $26\frac{1}{8} \times 23\frac{5}{8}$

8-6-85

Recovery at Kure

Michelle

Reddy

NO FLIPPER OR OTHER NECROSIS

PL - $19\frac{1}{4}$ (with measuring tape - $19\frac{3}{4}$ ")HEAD - $3\frac{3}{4}$ "TAIL - $5\frac{1}{4}$ "

Dark shell; pink coralline on posterior plates;
lots of Polysiphonia on skin.

Very docile - slow moving.

Used stomach tube (black - larger diameter);
Introduced some seawater - spines, and
red filaments collected. GB-403

30 JAN 79
TUESDAY

Proceeded along East shore - noted a few Janthina shells - also tar globules; Laurencia washed up; Near (just past) beach shack noted 2 turtles offshore - silt white on carapace; noted blue "strapping" washed up - rotten - tears easy. Continued around island to pier - along West side noted some Physalia. Proceeded back to windsock to process data on turtle.

Noted the following seals along southeast shore: 6 adults (1 preg. female; 1 male) also of these, one with wound possibly from shark - photos Roll 1, EL. Talked to John Stinson, Craig and other lobster researchers; they indicate seeing ~ one turtle per day - can't touch as they come out of resting holes. They have seen ~ 400 lobsters, tagged 85; seen a few sharks - but none came around when they speared a lot of fish in deep holes for about one hour.

Reg Gooding indicated that State is trying to disprove that there is emergent land at Maro Reef.

31 JAN 79
WEDNESDAY

UP ~ 7:30 AM - Cereal and coffee for breakfast; 9 AM to Windsock walking first to North Point, then back down to South Point - 3 Adult Seals along NE shore.

$$\frac{3}{8}'' = 0.9525 \div 24 = 0.0396$$

Cm
per
month

$$2.54 \text{ cm} = 1 \text{ inch}$$

$$2.54 \frac{1}{\text{cm}} \cdot 8 = 0.3175 \text{ cm} = \frac{1}{8}''$$

$$0.6350 = \frac{1}{4}''$$

$$1.270 = \frac{1}{2}''$$

31 JAN 79 At beach shack trench (south of shack) and
 WEDNESDAY donned mask and fins for in-water
 survey. Saw one turtle swimming. Came out
 of water walked to the south of 1st
 sand area - came up on hole - made
 a capture at ~ 1030 AM - Walked
 along South Point Beach - Saw Reg - walked
 along West shore back to quarters - got
 measuring gear and proceeded back to turtle
 that had been left on the beach.

(23)

2089 LFL old tag recovery (lots of calcareous algae - 2 types) -
 Wound healed - no corrosion noted. "Expanded"
 with handle of pliers.

2991 RFL new

27.5 lbs

+ 2 lbs = 29.5 lbs

S - $18\frac{1}{2}$ x $14\frac{1}{4}$ $\frac{1}{23/77}$ ∴ 2 yrs - 1 wk =
24 monthsC - $19\frac{3}{4}$ x 17 $18\frac{1}{8}$ $14\frac{1}{8}$
 $19\frac{1}{4}$ $16\frac{3}{4}$

HEAD - 3"

TAIL - 4"

PL - $14\frac{3}{4}$ " ($15\frac{1}{8}$ " with tape)

Stomach sampled - Amphipod from by cloacal
 papillae - retained. Clean mouth. Photos.
 Healed slit in LH limb; NO SIGN OF HOLE FROM TISSUE
 PUNCH SAMPLING.

No flipper or other NERBIS

TAR IN
MOUTH

Mr. Patrick - Chief

"Willie" - Engineer

Reg Gooding notes that during summer the sea water temperature is 21°C just 100-150 miles from here.

SPC-Solomon's Prescott

Assistant of Craig MacDonalds reports seeing a Hawfsbill in Lagoon while Scuba diving.

31 JAN 79
WEDNESDAY

Proceeded to South Point where slack tide seemed apparent - very little current. Swam out all the way along reef edge - no turtles noted, but saw several big clumps of Codium. Proceeded back to 1st sand area - swam to hole again - nothing - swam all over area. Collected portion of anemone. Dried off in front of Beach Shack - Walked back to quarters. - Had coffee and cake and talked to Chief Patrick and Cookie. at ~ 4:15 PM went in the water at wind sock with all wet suit gear on. Proceeded to hole out by fringing reef - still seem low water; Swam all over area while returning to shore ~ 5:30 PM noted one juvenile swimming - also saw small shark - tide gradually coming up.

Prescott and CG swam snorkled over reef this afternoon - near Beach Shack. Saw turtle sleeping in hole at ~ 15' deep.

Ate lobster and steak at ~ 6:30 PM -

Watched movies. TO Bed ~ 00:15

(Earlier after dinner I drove down to South Point to get calipers; some trash was smoldering at dump; noted large concentration of rats feeding on lobster waste - all rats

1 FEBRUARY
1979
THURSDAY

appeared to be the same as the one I photographed.) Tide still low - strange tide conditions - ^{showed} check chart for specifics.

Backnote - Borrowed negatives of May 78 Tigers from Jim Stark - to print for Foggerhead article. Stark's new station in April will be 11th CG District - Long Beach.

Up ~ 7:30, had quick breakfast and got ride to South Point (~ 8:15 AM). Surveyed first land area - nothing in favorite hole - Reg Gooding noted going around island marking sites with ^{MONK} seals using red crepe paper. Plane landed ~~at~~ ~ 8:45 - Departed about 10 AM - Made photo passes of Kure with Bernie - Reg ^{Gooding} using 35mm ASA400 out side door; I took many photos from cockpit. Land at Midway to pick up 5 Navy personnel and 600 funches - depart at 12 noon. "While making ^{180 knots} passes at Kure, ^{1000 feet} I noted "holes" deeper protected areas inside fringing reef on West side of main channel/pass. If turtles are using this area, they must first find it by being explorative or learn from others who were.

When turtles first arrive at a pasture/residence like Kure (presumably as "yearlings") they must

photos of
UNKNOWN bird -
Retained head
for ID

We will

Pat Shows Address: P.O. Box 4
96614

Kure now has there own post office - Post
mark Zip Code - Stamp collectors send out
letters to be embossed and canceled.

Does French Frigate Shoals ?

1 FEB 79
 Thursday
 be obliged (forced) to eat whatever is available, even if such food sources are less than desirable. What factor prevents them from feeding on all types of algae? My earlier theory stated that scarcity of correct food and/or habitat might force them to undertake lengthy migrations to major islands where conditions (are) may be better.

After departing from Midway, we flew just South of Pearl and Hermes Reef. Gray skies - dreary weather - some black rain clouds most of the way. No other islands sighted. At $24^{\circ}46'N$, $166^{\circ}11'W$ we flew low over an orange ^{Colt - 3 PM colored} Japanese fishing boat.

Noted in C-130 manual - "Midway NS (Hendersonfield).

At 3:45 PM - 285 miles from Barber's Point - $23^{\circ}08'N$, $162^{\circ}46'W$

Land Barber's Point at 5 PM (6 PM Honolulu Time). Returned with 3 Green Island Nāupaka. Reg Gooding gave me a ride - arrived ~ 8 PM Honolulu time.

1. 1-2 foot turtle off south pt. 6/3/82
2. 1 foot turtle off pier 6/5
3. 1 1/2 foot turtle off stark area 6/6
4. 1 1/2 ft. turtle off volley ball area 6/19
5. 4 turtle 1-2 ft. size in the area of Hens + Chick 7/4
6. 1 ft. turtle off south pt. 7/26
7. 2 ft. turtle off pier 7/27
8. 2 ft. turtle off pen 7/29
9. 2 ft. turtle off pier 7/31
10. 2 ft. turtle off pier 8/1

1982

OBSERVATIONS MADE
By ROY WATSON while
at kure for captive
maintenance program
of wean monk seal
pups.

6794

8/82 Bill Gilmartin reports that while he was at Kure in November 1980 (his first trip there?) he saw a likely turtle nesting site on Green Island "not too far from the rubbish dump."

8/23/82

Penny reports by radio call that tracks and turtle nesting have been found on Green Island, lagoon side near "Doc's shack". Several digs. Turtle crawled up "trail" leading to shack.

6795

Tag No.	Age	Sex	Location
M. (Nanogram 112)	Juv?	?	North Point Shallow
42	40		
Cur. Length	cur. shell width	Weight	

Comments:

8-7-84
 0082 - SPFD
 0083 - SPFD
 0084 - SPFD
 0085 - SPFD
 0086 - SPFD
 0087 - SPFD
 0088 - SPFD
 0089 - SPFD
 0090 - SPFD
 0091 - SPFD
 0092 - SPFD
 0093 - SPFD
 0094 - SPFD
 0095 - SPFD
 0096 - SPFD
 0097 - SPFD
 0098 - SPFD
 0099 - SPFD
 0100 - SPFD

Kure - 1984

Letter from Gail Peterson listing
taggings made by her and Rod Watson
during June 1984 - See letter in kure file

6794 R measurements -

6795 R C-42 x 40 (5th marginal?)

6796 R C-59 x 56 (5th marginal)

(Tags 6792-6800 (970702))
Sent to kure with Gail & Rob Morrow
5-7-84.

Report that 2 tags were put on a
pup found in seal pen shortly
after their arrival -

6792 & 6793 - probably

Kure 109
sec. 02

R: 6794
L: _____
Tag Nos. Juv. ? Shallows of North Point
Age Sex Location

Metal Monel? Peiterson / Watson 6-23-84
Tag Color Tag Type Tagger Date

42.5 35.5 10-12#
Dorsal Length - straight est. Girth-Ventral length Weight (est.)

Comments: Inscription "HIMB"
Caught from 13' Whaler - after seen feeding on coral heads -
* ^{Gail} Forget to take width

Turtle
~~MONK SEAL TAGGING CARD~~

Kure
sec. 02

R: 6795
L: _____
Tag Nos. Juv. ? North Point Shallow
Age Sex Location

Metal Monel? Peiterson 6-25-84
Tag Color Tag Type Tagger Date

42 cm 40 _____
cur. Length cur. Girth width Weight

Comments: "HIMB" tag - caught at bow of whaler

Metal Monel? Watson 7-13-84
Tag Color Tag Type Tagger Date

51 cm 46 cm _____
cur. Length cur. Girth Weight

Comments: _____

Turtle
MONK SEAL TAGGING CARD

Kure
sec. 08

R: 6796
L:
Tag Nos.

Juv. Sex Location Between Pier + Pen
Age

Metal Monel? Watson 6-26-84
Tag Color Tag Type Tagger Date

59cm 56cm
C Length C Girth W Weight

Comments: Caught from bow of boat -

TURTLE
MONK SEAL TAGGING CARD

R: 6797
L:
Tag Nos.

Juv. ? Sex Location North Pt. - Wind Socks
Age

Metal Monel Watson/Peterson 6/27/84
Tag Color Tag Type Tagger Date

48cm 44.5cm
C Length C Girth W Weight

Comments: animal hid under coral head - GAP
got out of coral head w/ snorkel gear +
net - Tagged in ~~the~~ boat + photos -

*5-7-84
Report that 2 tags were put on a
juvenile found in seal pen shortly
before other animal -*

6792 & 6793 - probably

~~Wattle~~
~~MONK SEAL TAGGING CARD~~

R: 6798
L:
Tag Nos. J ? Kure - sec. 8 ^{off pen}
Age Sex Location

Metal Monel Peiterson/Watson 7-3-84
Tag Color Tag Type Tagger Date

64 cm 58
Length Girth Weight

Comments: hoop from boat w/het - tagged - photo + released -

~~MONK SEAL TAGGING CARD~~

R: 6853
L: 6852
Tag Nos. Juv. ? Sec. 2
Age Sex Location

Metal Watson 7-13-84
Tag Color Tag Type Tagger Date

66.5 cm 64.0 cm
Length Girth Weight

~~Temple~~
~~MONK SEAL TAGGING CARD~~

R: 6851
L: 6799
Tag Nos. Juv. Sec 8.
Age Sex Location

Metal Watson 7-13-84
Tag Color Tag Type Tagger Date

51 cm 46 cm
Length Girth Weight

Comments: Damaged tag no. 6800

1-17-85 ~~NURF MORTALITY~~ Dissection at
THURS. NMFS "A-2" with Robert Forsythe

S - 39.9 cm X 33.7 cm
Notch 39.6 cm

C - 42.0 cm X 38.4 cm

PL - 31.5 cm

HEAD - 6.5 cm

TAIL - 7 cm

3-4 photos w/flash.

found late
~~11/1/84~~
11/1/84

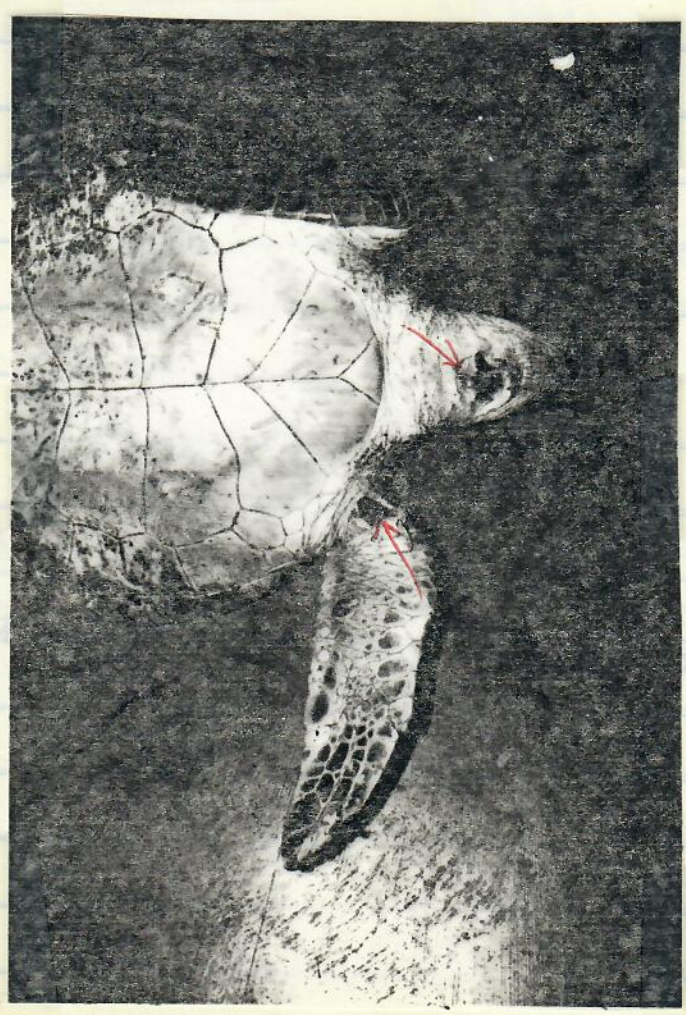
PHOTOS

Reasonably fresh, but large hole in ventral throat with tissue damaged skin surrounding it. Hole revealed severed esophagus and trachea (right at Glottis). Hole also in ventral shoulder area of left front flipper. Section of skin seems to have a clean slit. Spear wound? or some unknown predator? or Freak accident.

All seemed normal internally. Right lobe of liver sampled to use for plasticizer analysis (Bayan). Stomach

1-17-85

Thurs. and intestines have moderate fill of food - Stomach had *Codium* and *Laurencia*(??) small pieces. *Codium* throughout intestines, but 2 pieces of *Turbinaria*(?) found. Sample retained. Oviducts located running to cloaca to anterior lungs. 2 humeri saved.



4170-K

6cm

114

(CONT. from p. 111)

Turtle
~~MONK SEAL~~ TAGGING CARD

R: 6855
L: 6854
Tag Nos.

Juv.
Age

Sec. 8
Location

Metal
Tag Color

Watson
Tagger

7/17/84
Date

58 cm
C Length

54 cm
C Girth

Weight

Turtle
~~MONK SEAL~~ TAGGING CARD

R: 6856
L: 6857
Tag Nos.

Juv.
Age

?
Sex

Sec. 02
Shallows off N. Point
Location

metal
Tag Color

monel
Tag Type

P. lbs / Watson
Tagger

8-22-84
Date

60
Dor. Length - curved

56
Dor. Girth width curved

20-25 lbs
Weight

Comments: Caught w/ hoop net fr. boat - tagged and released

*Seems
Spears
predator
All see
lobe of
pharynx*

*slit,
unknown
it.
Right*

young stomach

Turtle
MONK SEAL TAGGING CARD

R:	<u>6858</u>			
L:	<u>6859</u>	<u>T2</u>	<u>?</u>	<u>Sec. 2 North point</u>
	Tag Nos.	Age	Sex	Location
	<u> </u>	<u>Metal</u>	<u>Morrow/Watson</u>	<u>9-8-84</u>
	Tag Color	Tag Type	Tagger	Date
	<u>68.8</u>	<u>68.1</u>	<u> </u>	
	C Length	C Girth	Weight	

6792-6800

ALL JUNE 1984

6794 - Rt - I took measurements wrong for
 CW - took St. L vents & dorsal
 (Info in tent.) add later

6795 - Rt - CL 42cm x CW 40cm

6796 - Rt - CL 59cm CW 56cm

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