

JATA PROJECT

G.H. BALAZS

JOHNSTON ATOLL

29 SEPT - 13 OCT 1983

PHASE I

JATA

BALAZS

1983

G.H. BALAZS

NATIONAL MARINE FISHERIES SERVICE

P.O. Box 3830

HONOLULU, HAWAII 96812

TEL. 808-946-2181 (943-1221)

395-6409

RL1A2300

Later - FSR 200/RL1A 235V



COMPOSITION BOOK

9¾ IN. x 7½ IN. (24.8 cm x 19 cm)

AVAILABLE AS:

- No. 09-9130 (1130) 60 SHEETS COLLEGE RULED & MARGIN
- No. 09-9132 (1130-P) 60 SHEETS COLLEGE RULED & MARGIN
- No. 09-9134 (1143-X) 100 SHEETS COLLEGE RULED & MARGIN
- No. 09-9132 (1130-P) NUMBERED PAGES

Made in U.S.A.

VERNON McMILLAN, Inc., ELIZABETH, N.J. 07208

TAGS USED -

7451-7500

7501-7527 (2528-7550
BIG IS.)

7551-7569 (7570-
BIG IS.)

BILL - 3967
GAIL - 2723

OURS - 2124

Phil Roseberry - 2962 (Honolulu 944-1143) Recording

MAC FLIGHT INFO - 449-2807 or 6875

AIR MIC 800-421-5390

CENNAN (ACE) Marg Elliot (wetlands) marggie Swaford 438-2264

JA - 422-0531

John Henderson home 377-5351

- PHOTO LOG - p. 118

- TAGGING SUMMARY - p. 112

H&N security 2358 "ALAMO"

Redhat Guard shack -

695D - 3022 TEL.

471 7411 - military info

JA - APO San Francisco - 96305

Dudley - home 935-6987

Headock - 822-3834

JOHNSTON TIDE COLLECTION (p. 328a)

(16°45' 169°31')

ON HONOLULU (SEE NAVY CHART p. 98)

HIGH WATER

LOW WATER

hours minutes

hours minutes

+1 30

+1 26

feet

feet

+0.5

-0.1

NETTING TIMES & LOCATION . . . p108

By-CATCH SUMMARY - p. 110

SCUBA DIVE SUMMARY - p. 104

"QUESTIONS/NEEDS" - p 7; p 25; p 26

TELEPHONE

Lt. Col. Moore 3005/2359

" " Jolley 3035

Major Mitchell 2359

Major Jim Aikem - 2112

CWO G.G. Stillman 2305/3366

ARO SF96305 - P. Respicio 2081

C. Balubar Traffic/Warehousing 2266/2266
Maui Horke - 879-3848

Security - Captain, G.H. Brown 3020

Kitty Ajean 948-7777

Ms. Schleich - ^{CRISTINE} (BOTANY) B.P. Museum 847-3511

Virginia Thomas - HIG - (Ni, Cu) Randi

JON STAIGER - (305) 887-7761
(WATER QUALITY)Dennis J. Russell
School of Natural & Mathematical Sciences
Seattle Pacific University
Seattle, WA 98119

R.G. Ackman (902) 429-8300

P.O. Box 1000

HALIFAX NS B3J 2X4

- MAP OF NETTING SITES p. 41
- MAP OF ALL JA ISLANDS p. 43
- MAP OF DIVE SITES p. 63
- MAP/XEROX PHOTO OF JOHNSTON IS. p. 96-97
- SEPT. - DEC. 1983 CALENDAR p. 101
- NARRATIVE, Phase II, 3-17 Nov 83 START p. 68
- NEEDS - PHASE II p. 26

29 September 83

Thursday Depart MAC flight from HAFB
at 8:40 am with A. Kam.
C-141 with camflage paint.

Phil Roseberry^{erry} - info on JA diving
(SAFETY OFFICER)

Cris Balubar - turtle expert

X X BEEN AT JA "22 years" SINCE
1961-62. GOT OF TURTLES WHEN
HE FIRST CAME; ONLY 60-70 MEN
THEN. Tagged a turtle once with "home-made" tag.
HOOKING NEVER HURT TURTLES.

Jet arrived ~ 10:40 am. Met
by Phil Roseberry^{erry}, who is leaving
until 3 Nov. Met Colonel Moore;
Major Mitchell (Logistic); Had gas
mask instruction. "Red Hat" area
fenced is off limits. Other leaders
are Commander Jolly and (Army) Aiken.

Obtained pick-up truck and drove
to assigned quarters: 695D. Had
light lunch with HOLL people (Chave,
Dave ^{Robert Richardson,}). Went
to Port Harbor - talked to Herb
Ching - been here 12 years, goes
fishing with Cris. When bottom

29 SEPT.

fishing by channel, they had turtle
 switch right up to the boat.
 Never bit bait on hook though.
 Swam away when they tried to
 cast over them. Both large and
 small.

LOU, CAPT. BOAT "Bow" sub driver Bob Rich
 Saw Holokai, and Makalii diving
 submersible. They have made
 5 dives to 1200'. Saw
 gray reef sharks at 490'.

Ralston and Gooding have made 2
 scuba dives, one of these today.

Inspected boat house / scuba
 facility. Gasoline will be .25 lb.
 Radios issued.

Herb Ching saw a seal here
 ~ 6 months ago. By harbor
 hauled out, and other areas.
 Seem to show up at harbor
 first, then at East.

Drove truck all the way around
 island - Lots of concrete sea
 wall, and steel sea wall. A few
 sections of sloping coral rubble
 beach are present.

Appears to be SE wind
 today.

Saw "shark chute", where (P. 8)

Questions / NEEDS:

5-7
p15

received

* Applied
ECO-TECH
SERVICES, INC.

Returns 11/10/83

sent

10-12

1. Current light situation at night > no. at? Redhat?
2. " Warm-water discharge? DESAL. PLANT?
3. Area Photos of all sections
4. More turtles present in 1961?
5. More at certain times of the year?
6. Need Fig. 23 & 24 of water quality report
7. Map Coral heads (photo in C.O. office) CENNAN? JAKE?
8. Type of tag Cris used
9. Call ^{AUTHO} water-quality people; types of dives; Chase turtles?
10. Cris - Any other species caught? NONE
11. Photos of turtles at home?
12. Were turtles here in 1962 before major dredging? Algae too? where located?
13. John - radiation safety - now in charge of dive club?
14. Command have BW aerials I can have? see H&N
15. Send water quality algae section to J. Russell for comments
16. Anyone still taking turtles?
17. Name - "Turtle Point"?
18. Call Menzies & D. Owens about tissue analysis. Kinds include
19. Library newspaper Micro film (i.e., 1951 plane crash?)
20. Algae very seasonal?
21. Typist & Graphics

29 SEPT 83
THURSDAY

garbage is dumped. Watched school of ~20 small sharks splashing around, feeding on material just west of West Point we saw turtles by coral heads, periodically surfacing - presumably feeding. 2 looked full size or nearly so. I estimated seeing 8 turtles. Between West Point and East Point (standing on West Point) we saw ~4 turtles. Thereafter, none seen.

Met USCG personnel coming back from Sand Is. CO. used to be at FFS. He said they have only seen 2 turtles - Anating.
Dog ^{recently} bite one of the men in the nose so was destroyed.

at goes
bottom
p. 10

30 SEPT

~ 9:30 am met with Major Mitchell, ^{TEL. 2359} logistics. outlined needs, i.e. vehicle after 6:30 pm; dive all areas, overnight boat mooring, radio.

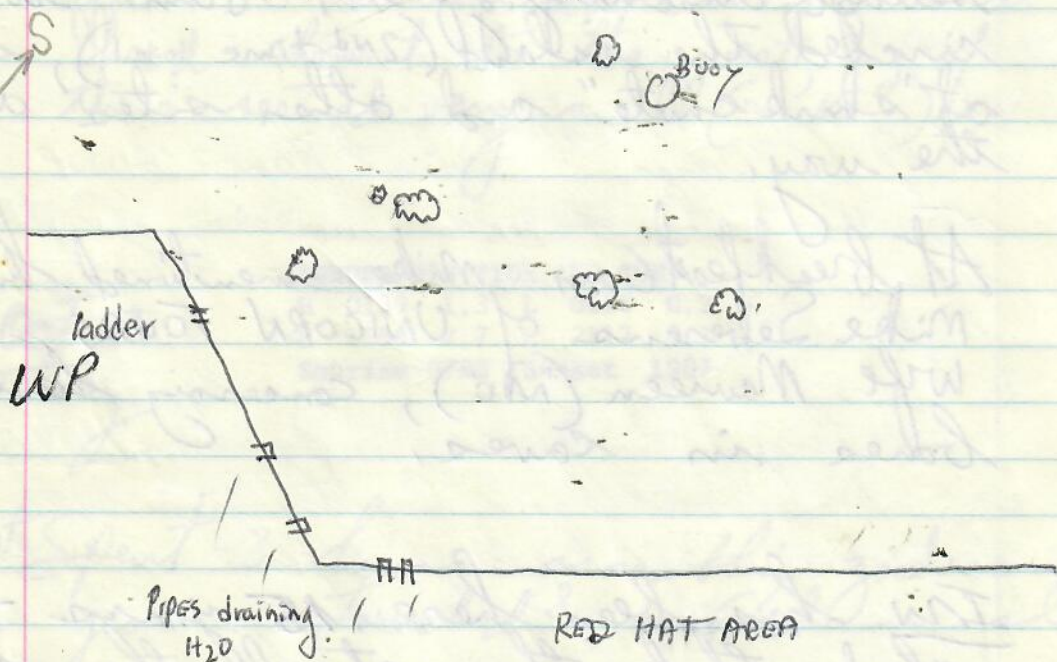
Went to ^{HJ 2000} Radio maintenance - electronics - Bldg. 190 to IRV WOLF for radio - ① ACAMO - Security ② TANGO - fire Department

30 Sept

TOMORROW'S TIDE AND SUN

H 0008	1.2	L 0452	0.3
H 1259	2.6	L 2038	0.3
Sunrise	0708	Sunset	1908

Sewage Dumping Supervisor - Jimmy Hashimoto



POSITIONS OF CORAL HEADS JUST WEST OF WEST POINT

CRIS - \$16.80 hour

GAS/OIL - 25/6

vehicle - \$30 wk

BOAT - \$8 hour

FOR DIAM \$17.75

30 SEPT 83

FRIDAY

UP - 5:30am - dark - TO DRIVE TO WEST POINT
TURTLE AREA. Observed from there betwe
6:30am 7:50am. Coral head to the
west, one small (probable) seen -
nothing else. Lower tide - tops of
head partly exposed; some swells
coming in. No clear evidence of
sewage discharging. At 8am we
circled the island (2nd time total), stopped
at "shark chute" and other sites along
the way.

At breakfast 8am - Mike mentioned knowing
Mike Seberens of UNICORN TOURS,
wife Mameen ("MO"), concerning turtle
bones in caves.

[ISW has been here 15 years -
glad that they stopped the taking
of turtles. Cris is the only
one who did it, as far as
he knows. Always by gussling
hook cast over animal. Thought
that ~ 3^{er} month taken. Feels
there were more before.
South side is where he has
seen most turtles. However,
mating ones, and occasionally others

30 SEPT

seen when they have cleaned "seawater screens" in 10' foot water - north side. DESALI PLANT?

At 11:30am we drove to west Pt. again after hauling a load of cargo from fair terminal to building behind warehouse office. 5 turtles total (seen - 2 on head closest to the west, one of these seemed very small (~15"))

1 Oct 83
SATURDAY

TOMORROW'S TIDE AND SUN

H 0139 1.3 L 0624 0.3

H 1359 2.7 L 2117 0.1

Sunrise 0708 Sunset 1907

30 SEPT Spent 3 hours assembling zodiac -
FRIDAY gear. Towed & worked in slip.

At 5pm we motored around the east end of the island, to channel marker #5, turned right, and motored to buoy off west peninsula. Motored slowly over the area. Saw *Bryopsis* covered heads of coral. Between east and west Pts. we saw two turtles surface next to head, but only briefly. Bo

30 Sept 83

FRIDAY

they sleep around these heads?
 Noted silt-covered shells.
 Returned to pier ~ 6 pm.
 He fried-fish lunch for
 dinner that I had saved in
 the refrigerator.

1 OCTOBER 83

SATURDAY

Up 6:30 am breakfast about 8 am. Drove
 to West Peninsula - no turtles
 seen; Chris came just before Continental
 flight landed. Provided the following
 info -

- Largest turtle he caught was ^(186kg) 409 lbs - a.m.
- No knowledge of Smithsonian turtle taken
- only one known on beach - small
 dead one found on North Island
- Tracks and digs only ever seen
 once " on Sand Island
- A large dead turtle was found
 washed up tangled in a
 "Japanese fish net" - on East Point
- Buoys of South shore were
 set by H&N to catch
 sharks - only got small ones.
 Big ones are in channel.
- only dove area once - rock bottom

SUNDAY 20 OCT 83 TIDES

H	0242	1.5	L 0742	0.2
H	1451	2.7	L 2148	0.1

MONDAY 30 OCT 83

H	0327	1.7		
L	0847	0.2		
H	1536	2.7		
L	2220	0.0		

- lost lobster trap

- "Corner" area to the east is a transit area for turtles

x - "Turtles ^{travel} occur all around the island, but south ^{shore} is their feeding area.

Drove all the way around island. garbage recently dumped, but no sign of it or sharks.

~ 10:15 am departed in Zodiac for scuba.

DIVE I 11 - 11:35 am at 25' - 3-4 heads visible at the surface just west of end of row of pilings. Bryopsis on top; plus drift piles of this alga at sites on the bottom. Some very thick. Fine silt on the bottom. Lots of live coral cover. Heads that

10 OCT 83

corals to surface seem dead on top except for Byopsis. From the boat bottom is not visible, thus we thought it would be all sand/silt bottom. Turned out to be live coral canyons, heads, etc. Byopsis growing down side of coral heads. No other algae seen.

DIVE 2 1205-1250 (45 min. at 18') several surface coral heads close (but not closest) to West Point. even more turbid. Here Caulerpa is dominant all over, except on subtidal head tops. Crest up on small turtle "feeding" on top of head - nearly grabbed, but quickly swam away. 3 (?) large ones on adjacent head seen from zodiac (set shells) were gone when we got there with Scuba. Sensed us coming? No turtles seen sitting on the "bottom". However, I am sure saw suspicious "cloudy" area, and I saw small tracks probably made by a turtle. Some nice Acropora, even close to West Point (WP).

10 OCT 83

SAT

Thereafter, we sat in zodiac and watched heads we dove on - turtles never came back. Motored around various heads. Saw some turtles, but all responded quickly to dive/swim away. Easily frightened. - quick reaction. Cris later said (that) boat troll through this area. They must be chased, etc.

SEAWATER 28°C

Tried to free dive on turtles seen by heads west of WP. Quick departure. Also, smell of sewage.

Bigger turtles seem to be seen here. Edge outside of 2 heads off WP?

Motored through channel of pilings. Saw Cris there. To East Point - along the way, saw 3-4 turtles over these heads. 1530 h rounded point to return home via motor by Sand Island USCG.

Cleared all gear, recharged tanks, etc. Ate dinner about 5 pm.

Between 6:30 - 7:30^{pm} (close to dark) we made observations of WP. Tides $\frac{1}{2}$ down - heads exposed. 2-3 small rays seen close to wall. only (5)

see p 23

Book II

2 OCT 83

SAT.

lights fronting ^{n. 100 yards inland} ocean along Redbat.
 5 Turtles 2 medium, 2 big & 1 small seen
 WP → east. Perhaps 2 of these
 may have been swimming seaward.

No feeding on tops of heads, because
 base ^{waves} breaking on them.

Bryopsis grazed down short for
 new growth on top of heads?

Picked up "jellyfish" when returning
 in Zodiac. Photo taken. Collected
 in south region and serve as
 turtle food?

Met LEE GOZ ^{he} briefly - been here
 15 years. Started Pacific Hall
 Divers club. No longer active.
 He caught a ^{59kg} 130 lbs turtle between
 Sand & North Islands. Stated
 there aren't many "in the lagoon".
 See Chris, knows all about turtles

2 OCTOBER 83

SUNDAY

Up ~ 5:30 am - breakfast at 6 am

6:45 loaded gear in zodiac - pumped compartments. Departed with 2 bottles

saw turtle
medium
in channel

each - arrived at coral heads of dive 2 yesterday. Entered water to approach head, but turbidity very bad - silt-laden; visibility ~ 5 feet. Note low tide is 8 am. Diving at this time to search for turtle sleeping areas. Yesterday at this site the apparent tracks of a turtle were seen in silt at the base of one of these heads.

DIVE
3A

only stayed here 10 minutes due to poor visibility. Motored back toward East Pen (EP) to almost directly off airport terminal. Perhaps even further end of points. Visibility much better. Swam parallel to shore almost to EP, then back and inshore. Became very turbid inshore; lots of "up-down" due to bottom topography. Clearing of ears a nuisance. More inshore we found patches of Caulerpa racemosa. Also, probably serrulata - have collected a specimen.

3B

racemosa growing/intertwined with live coral - very attractive. Near where the boat was anchored I saw a clear water area near

2 OCT. 83 -
 SUNDAY

base of a coral head that had
 * apparent turtle tracks in the
 sand bottom. DIVE 3B last
 ~ 60 minutes, at 18' maximum.

DIVE 4 Motored farther, off shore from
 airport terminal to do another
 dive. 70 minutes at 35'.
 Brock report #5, Habitat 5.
 Visibly quite good - perhaps 30'.
 Continues. Deep depressions - silt
 at bottoms. Fresh coral on heads.
 Saw one large school of *Marini*.
Bryopsis drifts in some depression
 most result from growth on
 adjacent head in intertidal top.
 Also saw "jellyfish" casings in
Bryopsis. During last 1/3 of dive, we
 saw a ca 18" green turtle
swimming from behind a coral head
 wary, but not frightened. Moved
 away slowly. I followed him for
 awhile. Very thick. Some algal bloom.
 No other characteristics.
 Rested in boat after dive.
 Several rain showers passed over.
 Motored over heads, trying
 with scoop net. All done quickly

2 OCTOBER 83
SUNDAY

away from the boat. Saw sewage pump out. Motored to west end lee when large shower came. Tied boat and stayed awhile with fellows at "Hashi's fishing shack" wear shark chute. Ate a cooked Manini. After rain motored back to WP. Saw 5+ turtles on heads from west end to WP. Attempted jumping from bow, but couldn't get close enough for this. Motored all the way around island returning ~ 3:30pm. Washed/stowed gear.

4 Observed from WP 6:45 - 7:20pm
2-3 turtles near "corner"; 1 further inshore.

Called ^{235/1253} Gail & Henderson at home.

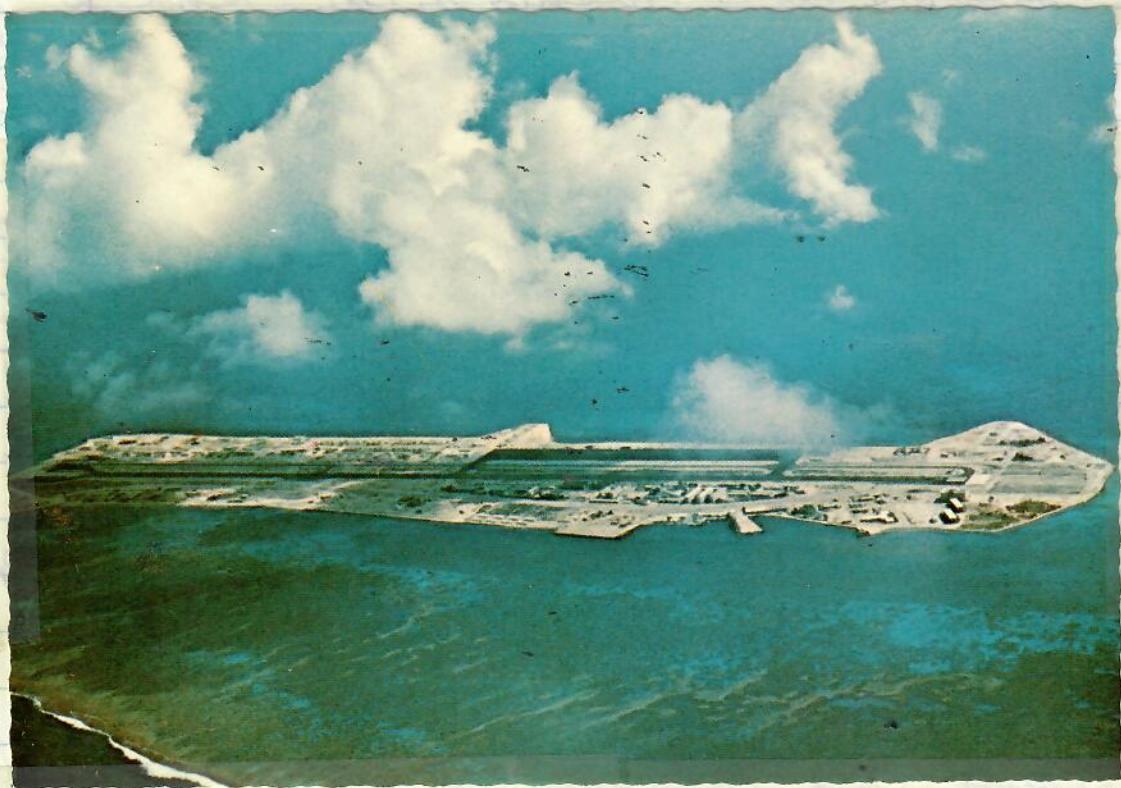
3 OCT 83 UP ~ 5:45am ate breakfast,
MONDAY reached 2 sections of net into zodiac. Departed dock ~ 9am - Set net between 2 coral heads dove on ^{dunks} DIVE 2 - 9:30am.
I got caught in net.

DIVE 5

50-100 Meters outside of 2 surface heads off WP. Lots of Byopsis particles

2007.8.1002
Sunday

October 23
Sunday



[Faint, illegible handwritten notes in blue ink, likely bleed-through from the reverse side of the page.]



Handwritten notes in purple ink on the left side of the page, including "Plant #2", "Process", "Distillation", "Reflux", "Stripper", "Stripper-35", "Stripper-36", "Stripper-37", "Stripper-38", "Stripper-39", "Stripper-40", "Stripper-41", "Stripper-42", "Stripper-43", "Stripper-44", "Stripper-45", "Stripper-46", "Stripper-47", "Stripper-48", "Stripper-49", "Stripper-50", "Stripper-51", "Stripper-52", "Stripper-53", "Stripper-54", "Stripper-55", "Stripper-56", "Stripper-57", "Stripper-58", "Stripper-59", "Stripper-60", "Stripper-61", "Stripper-62", "Stripper-63", "Stripper-64", "Stripper-65", "Stripper-66", "Stripper-67", "Stripper-68", "Stripper-69", "Stripper-70", "Stripper-71", "Stripper-72", "Stripper-73", "Stripper-74", "Stripper-75", "Stripper-76", "Stripper-77", "Stripper-78", "Stripper-79", "Stripper-80", "Stripper-81", "Stripper-82", "Stripper-83", "Stripper-84", "Stripper-85", "Stripper-86", "Stripper-87", "Stripper-88", "Stripper-89", "Stripper-90", "Stripper-91", "Stripper-92", "Stripper-93", "Stripper-94", "Stripper-95", "Stripper-96", "Stripper-97", "Stripper-98", "Stripper-99", "Stripper-100".

Handwritten notes in purple ink on the right side of the page, including "Stripper-101", "Stripper-102", "Stripper-103", "Stripper-104", "Stripper-105", "Stripper-106", "Stripper-107", "Stripper-108", "Stripper-109", "Stripper-110", "Stripper-111", "Stripper-112", "Stripper-113", "Stripper-114", "Stripper-115", "Stripper-116", "Stripper-117", "Stripper-118", "Stripper-119", "Stripper-120", "Stripper-121", "Stripper-122", "Stripper-123", "Stripper-124", "Stripper-125", "Stripper-126", "Stripper-127", "Stripper-128", "Stripper-129", "Stripper-130", "Stripper-131", "Stripper-132", "Stripper-133", "Stripper-134", "Stripper-135", "Stripper-136", "Stripper-137", "Stripper-138", "Stripper-139", "Stripper-140", "Stripper-141", "Stripper-142", "Stripper-143", "Stripper-144", "Stripper-145", "Stripper-146", "Stripper-147", "Stripper-148", "Stripper-149", "Stripper-150".

3 Oct 83

MONDAY

in the water - turbid and some surge. TIME & Depth - 22 minutes - 3 INSPECTED sand pockets, crevices, but no turtles seen. Noted *Bryopsis* growing on tops of sublittoral coral heads, and also patches on sides to at least 20' depth. lots of coral cover. NO CAULERPA SEEN.

DIVE 6 At midpoint between WP and filing - offshore. lots of coral cover; periodic "heads" without holes as were seen on DIVE 4. Turbid, but not as bad as previous dive. Light to no surge.

586 Dives Habitat - Characteristics of Brock = with small aspects of #5.

Dive 6 - 43 minutes, 35'.

3 Oct 83 ~ 3pm - Info supplied by
 MONDAY Cris at WP -

1. 3 subtidal heads straight out are favorite feeding area -
 2. slightly farther out that break heads are not favored
 A deep one also favored over to the right

2. Tag he put on was in 1971.
 75" long aluminum plate with his name and "JA" embossed. Also ^{embossed} weight of turtle - 130 lbs. ~ 1971;

A second "tag" was the painting of a large "ugly" turtle - I painted shell all black.

3. Lots of Manta rays. sometimes seen between the 2 points - (~30 ?) Some very large.

4. Once a fellow set a volleyball net near WP; used bleach bottles for floats (kam says touch a net ~ 3 1/2"). In the morning everything was gone.

5. Turtles eat both kinds of seaweed here - sea purses & fuzzy kind.

30 OCT 83 267th Chemical men told Alan the
 Monday tomorrow they will go to North
 Island for practice with
 shotguns.

Checked net from shore at 3pm
 & 5pm; nothing seen.

(5) Many turtles (75) seen feeding
 at Joice on the near head Sat
 3-3:30pm high tide.

4 Oct 83
 Tues.

TOMORROW'S TIDE AND SUN			
H	0410	1.9	L 0945 0.1
H	1618	2.6	L 2249 -0.1
Sunrise	0709	Sunset	1905

Watched net from shore again 5:45-6:
 A couple turtles seen surfacing, but
 not over heads (tide going down now), and
 not near as many animals.

Evening - Cut net in two so we
 have 2-30' segments suitable
 to put right over the favored
 feeding heads.

WORK PLAN/NEEDS FOR NOV. TRIP

1. Censuses from shore - JI
- ✓ 2. Stationing people for a day at a time on outer islands
3. Boat tender for north-area dives
- ✓ 4. Set & tend nets (?)
5. Wire enclosed - clip Bryopsis & Caulerpa back.
- ✓ 16. Leather gloves
- ✓ 17. Request truck
8. Go out as observer on M-Boat fishing - Look for turtles
- ✓ 9. Nikonos
10. 698 A has "Honolulu" phone
- Request (or go out) ✓ 11. Orange floats from Tern Is. (need request to Rob - go out)
- ✓ 12. Turtle Sighting forms/poster
- ✓ 13. 6 - 65' nets - additional
- ✓ 14. Call Major Mitchell prior to arrival.
- ✓ 15. Blood tests?
16. Tern Is. Floats
- * ✓ 17. Sample & ID. skin algae
- ✓ 18. See Betty Young's husband

Note - Project payoff extends for beyond initial results of study period - Tag recoveries at a later date -

- 1) migrations
- 2) growth
- 3) longevity
- 4) breeding area

19. Inshore dive east side of WF

-Needs- Phase II 3 - NOV 83

1. ^{zoites} Epiphytes scraped from turtles
2. Close-up photos of Caulerpa & Bryopsis
3. FAT especially for Akman
4. Blood samples for Cholinesterase
- 5.

4 OCT 83 ^{SET #1} Large female found in net
 TUESDAY at first light. Untangled and
 brought back to harbor - Released there.
 At net in zodiac 7:30 am.
 5 eagle rays also in net.
 1 or 2 just ^{recently} got tangled.

7451 RFL

7452 R3-4

7453 RHIND STRAIGHT LENGTH & WIDTH - 100.1 x 83.2

7454 LFL

notch (99.8)

7455 L3-4th

CURVED L & W 107.8 x 105.5

PLASTRON - 81.1 cm

HEAD - 13.5 TAIL - 25.6

FRONT FLIPPER WIDTH - R 14.4; L 14.1

FLIPPER SCALE COUNTS 6 R; 7 L (small between 5-6th)

POST OCCULARS - 3L - 4R

PLASTRON COLOR -

Moderate yellow, with slight
 orange areas along underlying
 center plastron bone. Some
 green algae on plastron. Red (*Polysiphonia*)
 on ventral pelvic skin.

4 OCT 83 TUES.

TUES.

Bone wedge taken from 10th
marginal R² frozen in glass.

Upper esophagus tube - particles obtained
and preserved.

Tried blood ^{drawing} - but none came out
photos taken.

left hind
between
4-5th digit

(SET
#2)

Set 30' piece of net - NOON right
along coral head closest to JWP.
Last afternoon at high tide about 5
large turtles were seen feeding here

40 OCT 83 -
TUESDAY

1:15 pm Turtle caught in same net -

SET
#1

cloudy water in area. Turtle
 seemed to be heading out -
 Some silt adhering to margins
 of carapace. Dorsal/ventral photos - Roll 2.
 worked-up in anchored zodiac. Olive & Brownish-black
 carapace.

S - 87.4 x 70.4
(86.9 notch)

C - 95.4 x 94.6

- PL - 72.8

HEAD - 11.2 ... FLAIL - 21.0

Flipper width - R 12.2 ; L 12.4

7456 LFL

5 scales on each front flipper.

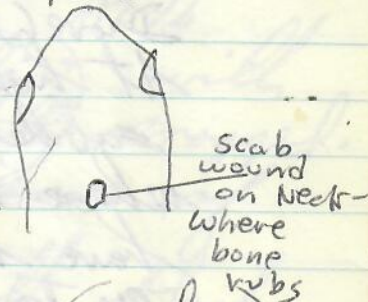
7457 L3-4th

7458 RFL

NOTE unfamiliar breath
smell - like 74577459 R3-4th

7460 R hind

Cops of red alga on skin; small amounts
 of green too. Plastron color - medium yellow
 fine scratches all over PL (from feeding?)



(Several of these seen on others)

4 OCTOBER 83
TUES.

Reg Gooding left on Continental flight this morning.

at 2:30 pm Anchored zodiac by piling; I walked to bring back truck from harbor. Drove to pier to observe nets. At high tide, ~5 turtle seen as submerged head just outside of head where net is set. Apparently turtles have been scared away by Vit. Waters seem a lot clearer today. Ate chicken dinner in truck watching nets. 6 pm - a few floats down on 2 sections of net. Took zodiac out and found eagle ray - cut it out. Man drove truck back to the harbor - I motored zodiac back.

Cris supplied the following info -

SEND HIM
A PHOTO
PAINTED #2

see
p. 79 too

His "payroll" number is 7451.
- only greens seen - never hawkbill
- He saw a leatherback 5 miles to the north; a few more have been seen by other personnel
- He started turtle fishing after segment WP was built. Before that it was all nice reef in there - turtles present; didn't

* recall exactly where sewage came out.
No turbid water back there.

- (military) person encouraged him to catch a turtle for him; let him go in restricted WP

last year he caught a 18016 abn (from WP? or whaler?) with his (turtle gear, accidentally snagged).
written in Aug or Nov issue of 1982 HFNewsC

We say
one of this
general in
color in
WP area; it
Alan thought
was a male

- Caught some turtles with black background and speckles; will bring photo album when he returns
Nov 10th from Honolulu

- dense school of "Woayo" over second submerged coral head.

- Tommy; person who works at airport, has been here 20 years. Used to enjoy eating turtles that Cris caught

5 OCT 83
WED

TOMORROW'S TIDE AND SUN

H 0452 2.1 L 1040 0.1
H 1659 2.4 L 2316 -0.1
Sunrise 0709 Sunset 1904

Up 5:30am - Motored to nets
at 6:20am - nothing found in
either net; short ^{net} ~~net~~ ^{over}
coral head, all caught on the
bottom in coral. Pulled it out
at 8am - had to dive to
unfree it. Returned to port at 8:50.
Straighten^{30'} net and assembled a
3rd one (65 + 30 = 95'), borrowed 2
anchors from boat house.

Visited Dago Sanchez briefly at power
plant. Went to plant Maintenance
office - Jimmy Hashimoto - to inquire
about sewage pump. Engineers there
said that a few months ago
recording was made for 24 hours of
the motor turning on. I visited
him at JOC office and saw tape.
Reported to pump 1500 gal ^{each time} does
it automatically when holding tank
reaches a certain level.
Low periods seem to be 8-70.
Delivered article for BLOTT to Maj. Mitch

Telephoned Gail.

5 OCT. 83 Herb Chiz says large seal
Wednesday was here between Feb &
April. Jake may have photos. Could it
have been an elephant seal?

Met Resident Manager John Merrill -
^{H&N} been here 12 years. Jake sells photos.
Cris reports that before 1964
dredging south area was
great fishing ^{squid} swimming grounds. Never
swam in sewage there.

Set 2 ^{more} nets 1315 - 1330 h.

(SET #3) 30' piece just outside second head off
WP - parallel to shore. floating.

(SET #4) 95' piece parallel to shore just west
of end of piling.

Noted apparent recent catch in
(SET #1) 130' net. Did noise of boat
passing cause it to get caught?
Sounded "bounce" off recent seawall?
Data on following page:

36 Recovered East Is. 6/21/85 "7462 L45"
TC-94 by Carl Pierson (nest) + LFL + RFL + R4-5 (4 total)
also, 6/19 BASK & 6/25, 26, 27
5 OCTOBER 83 area 2, 11 & 17
never confirmed nesting.

WEDNESDAY SET #1

7461 AFL S-90.9 x 69.8
(89.6 notch) 6th marg left deformed.

7462 R4-5th C-97.5 x 90.6

7463 Rhind PL-73.1

7464 LFL HEAD-12.1 TAIL-20.2

7465 L3-4th
Flippers = R 13.4; L 13.2

Red alga on skin - mainly pelvic.
Some green on plastron
Carapace has some silt -
Same color as 7456.

Bone-wedge sample taken from
10th marginal left.

44 post ocular count; 6 scales on
L & R front flippers.

Scrapped alga from mouth. (Impression of
coarse area
of mouth?)
Painted "4" on shell.

Photo being pulled from net to zodiac - scurled.

PHOTOS OF PC'S SHOWING NOTCH.

5 OCT 83
WEDNESDAY

37

1445- DIVE 7 38 minutes at 48'
Light winds - water much
calmer today; motored offshore
from just west of pilings.
Visibility ~ 50'. Regular beds that
only come ~ 20' of surface. Also regular
sand areas - heavy coral cover.
Saw 1 large head of millipora.
M-Boat rusted wreck with large school
of fish; also small trails;
No turtles seen, but certainly habitat
is acceptable for sleeping.

WED.

5 OCT 83

1820 h

Viewing nets from truck at WP -
 saw capture in ^{outside} net by head (#3)
 Motor around and got it out just
 before sunset. Taken to house
 to work up. Release ~ 10 pm
 at port.

- Blood sample obtained

- BONE WEDGE - 10th marg R

7466 RFL

7467 LFL

S - 57.4 x 46.3

C - 63.0 x 58.0

PL - 44.0

HEAD - 7.1

TAIL - 9.5

P.O.'s 4-4

Flippers 6-6

photos taken on kitchen floor.

Pumped stomach

6 Oct.
Thursday

TOMORROW'S TIDE AND SUN

H 0534 2.3 L 1133 -0.1
H 1735 2.2 L 2342 -0.1
Sunrise 0709 Sunset 1903

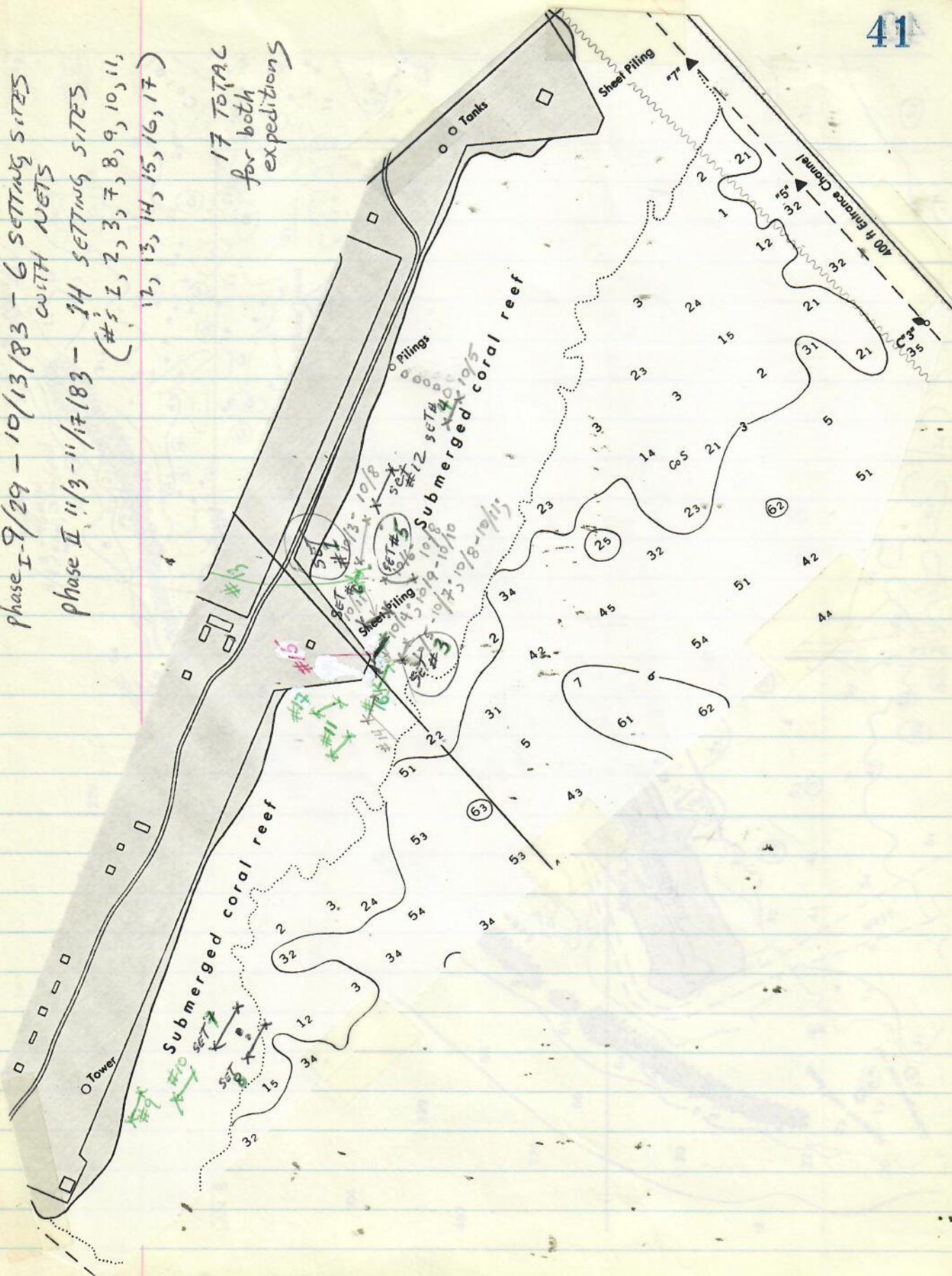
Cris - Info related at lunch -

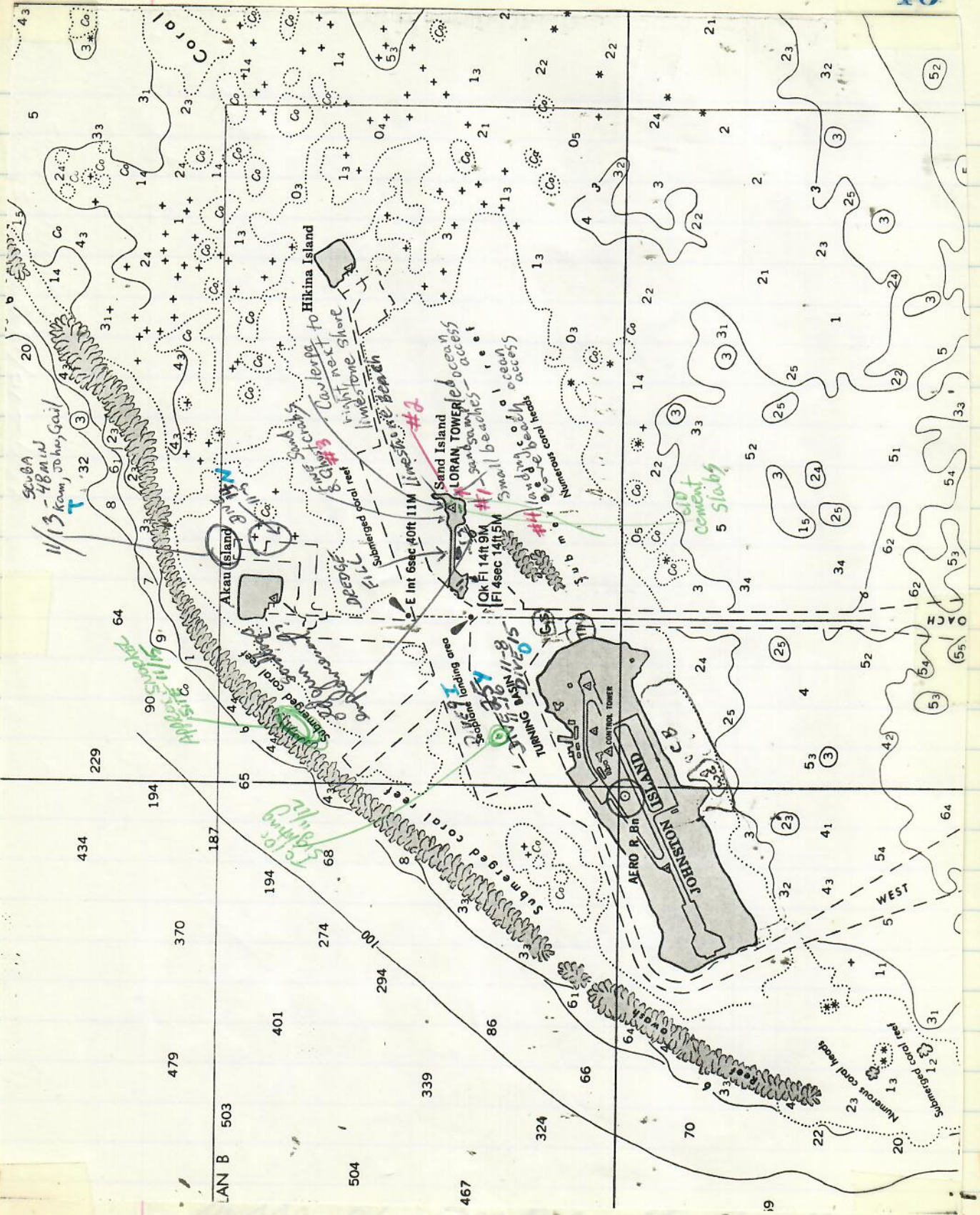
1. Started fishing for turtles ~ 1967
2. Estimates taking ~ 60 (mostly big)
3. Meat tastes sweet here, not like the ones in Hawaii.
4. Once he saved up 300-400 lbs meat - used it in a Cuan for ~ 2000 people
5. ^{He has} Never seen eggs inside
6. Have seen mating - for lengthy periods
Mate Sept - Nov
7. West pen. was initially off-limits

Phase I 9/29 - 10/13/83 - 6 SETTING SITES WITH NETS

Phase II 11/3 - 11/17/83 - 14 SETTING SITES (#s 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)

17 TOTAL for both expeditions





6 OCTOBER 83

Thursday UP 5:30am, arrived at net
at ~7:30. No turtles - small ^{SET #3}

piece of coral was caught on the
bottom. Later we moved the
anchor seaward more.

4 rays taken out of ^{SET #1} 130' net.
one had to be killed with bang stick
because all barbs were exposed.

Liver, pancreas, and wing flesh sampled
and frozen. Junctured zodiac in the
process. Returned to dock and
mended it. Returned to nets

and moved 95' ^{SET #4} one by piling to
^{SET #5} area near 130' ^{#3} one.

In the afternoon, motored to North
Island and walked around it. Man
from Molokai who works at boat house
wenzell PU says he saw turtle by "Cable"
sign. We noted ~~remnants~~ of coral
in 1964 dredged area, ^{not really}
Ate dinner, and drove to W area
at 5:30pm to check nets.

one seen. Took zodiac and
^{SET #1} retrieved male. Net badly
twisted. Small piece of coral ^{SET #3}
twisted, too, but nothing in it.
From a turtle? Worked up
turtle at dock in the dark.
Released there.

Set #1
46

6 OCT 83 1730

Thursday MALE

7468 RFL S-88.2 x 71.6

7469 R3-4th C-92.6 x 86.0

7470 LFL PL-70.9

7471 L3-4th HEAD-12.1; TAIL 44.0

7472 RHIND Flipper width- R 14.5; L 14.2

P. Oculars R-4; L-5
Flippers 6-6

X red alga; a few skin barcodes, but many off - just indentations.
Front claws short, but facing downward (all scale greens that way?)

5 Small TMS - R FL and edge of 2nd scale;
Small top of head (slightly to the right)
Corner inside of mouth (Right)
Small R anterior side of eye,

✓ Bone wedge from 10th left.
Looked in mouth, but no particles found. - NO PHOTOS TAKEN OF THIS TURTLE AT ALL -

7 Oct
FRID

Clis - Seen tumors ^{> Only once - a large turtle}
 covered with white growths -
 year - ? "long time ago" - 10 yrs "

Seabirds or eggs tested for pollutants?

7 OCT 83

FRIDAY

H 0615

2.5

L 1229 0.2

H 1811

2.0

SUNRISE 0709

SUNSET 1902

Wind up & brisk - more out of east,
 7 OCT 83 Checked nets right after
 FRIDAY sunrise - inside net had
 bad float snarl - but not sign
 of animal. Possibly done by a ray.
 Outside small piece had a snarl,
 (turtle?) but we were able to
 wedge it from the zodiac.
 Middle net had bad float snarl
 from yesterday's wale.
 Right strung out of floor boards.
 Took up 2 large nets and
 took them to ramp at boat house.
 Spent all morning untying nets
 and fixing zodiac. Left anchors
 with buoys. Drove to wh
 at 12:30pm and found turtle
 caught in remaining 30' net. Motored
 and removed it, net and all.

7 OCTOBER 83

FRIDAY

12:30 pm catch - small
 outside net (seaward of 2nd coral head)
 (SET #3)

7473 RFL

S - 84.0 x 65.4

(83.6 notch)

7474 R3-4th

C - 90.5 x 94.5

7475 Rhind

~~7526~~ LFL7527 B-4th

PL - 70.0

HEAD - 12.0

TAIL - 21.0

Flippers R 13.2 ; L 13.4 (6-6)

Red skin alga; green on PL; skin barcodes;

P.O. 4-4

Painted number "7"

Weighed on JOC scale - 212 lbs.

photos in zodiac and releasing from truck.
 (96.4 kg)

Bone Wedge

700
FRID

Problems of catching at Johnston

1. Mantas / rays
2. Large turtles, snarl nets more; more work and harder to handle.
3. Turtles too big to catch with scuba
4. Cloudy water
5. Eels
6. Sewage bacteria in water
7. Chippy water conditions when wind & or swell comes into area NOTE: This side is normally not "lee"
8. Alert, fleeing turtles

Cris noted that if turtles at Johnston were going to, or coming from, FFS, one of the ones she has captured over the years would have had tags. I agreed.

7 OCT 83 Watched 2 nets out from
 FRIDAY WP 5:30 - 6:30pm. Chippy &
 windy. Saw several turtles feeding,
 but not as many as other nights.
 Motored zodiac around to
 check nets - nothing in them,
 but at least 5 large mantas
 seen ^{swimming} ^{near} breeding area?
 along coast.

8 OCTOBER 83 wind still blowing, but some decrease
 SATURDAY ^{by pm.} Motored out to nets (2 left
 SET #1 overnight, >130' & 95'). 130' nowhere in
 sight. 95' spun-twisted bad. Pulled
 SET #5 up on it and found a ~10' wing
 span manta dead. Severely entangled.
 Cut it free and motored it to
 dump in deeper water just west of WP.
 Brought up net and returned to
 Port. Zodiacs found to have front
 board popped up. Used a hydraulic jack
 to put it back in place.
 Untangled 30' taken out with
 turtle last night. Rebet it
 SET #3 at same site just outside second
 head at ~2 pm. Found anchor
 on 130' net, followed it along
 and ended up with 3 mantas
 (1 - ~12' wing span). Net twisted
 and lead actually bent. Short
 piece of net cut off, as it was
 tangled on the bottom with one
 remaining manta.

~4 pm We drove around the island
 counter clockwise. Watched several
 turtles (2 small) feeding at various
 headoff WP. Ate dinner and
 watched at WP ~ 5:30 pm - 7 pm.
 High tide at 6:58 (2.5'). A few, but

8 Oct not many, feeding turtles seen. Saw
SAT the very small one on closest
head west off WP. Seen several
times before. Estimate size 14".

Cris told of guys harpooning
manta from DWP, and manta
dragging 55 gal barrels through
the water.

In the evening we talked to Ken
at Recreation Services he told about
gas, previous nuclear testing, and
his work experiences at Eniwetok.

10/8
SATURDAY

TOMORROW'S TIDE AND SUN

L	0009	0.0	H	0658	2.5
L	1327	0.3	H	1846	1.7
Sunrise	0709	Sunset	1902		

9 OCT 83 up 6 am - Nothing in net.
SUN (1 large seen to left) from 7-8:15 am; untangled nets;
Watched from WP again 10-10:30 am.
only 1 seen to left, 1 in front of head. Tide
high, but very little turtle activity.
Set #1 net out at ~ 12:30 pm. Approx.
Set #2 45' set between 2 heads immediately
off WP. Last night's net had webbing
up in places, but possibly due to
waves-current.

9 OCT 83
SUN.

Backnotes - person reports seeing a turtle while scuba just off boat house - in dredged edge. 12 others reported seeing a large turtle near North IIS. Also, report of seeing a large turtle on Sat. while fishing from "M" boat, out south channel need - go out as an observer.

DIVE 8 conducted a slow search in area immediately to the west and off of East Point. 1307-1410h (60 minutes), 30' - lots of sand patches deep down between live coral. No turtles seen. Turbid - 20' visibility

Retrieved 2 anchors from 1st "Manta" net, brought in yesterday. Motored all the way around west end.

DIVE 9 1603-1635h 25'
Directly across from port in non-dredged area. Lots of coral cover. Underwater cables. Sparse fish life. Collected 3 small pieces of coral. Sand patches, some large, but no

9 Oct
SUN

9 Oct 83
 SUN
 turtles seen, ^{considerable "globs" of reddish} liver-like alga. Cymbid?
 Watched 2 nets from WP 5:45 -
 6:30 pm. ~ 2 turtles seen on
 2 leads associated with nets.
 Motored out ~ 6:45 pm. Inside
 one caught slightly on coral +
 leadline tangled in itself. 'Struck
 by turtle? Almost dark when
 we returned. Hard short rain
 from dark passing squall.

10/9
 SUNDAY

TOMORROW'S TIDE AND SUN			
L	0035	0.0	H 0743 2.6
L	1431	0.4	H 1835 1.5
Sunrise		0709	Sunset 1901

10/10
 MONDAY

MONDAY'S TIDE AND SUN			
L	0104	0.1	H 0832 2.5
L	1548	0.5	H 2003 1.3
Sunrise		0710	Sunset 1900

* Kam reports from conversation with
 Wendell that locals guys sometimes
 take turtles when diving in
 north area. Within the past year,
 he has hand-captured a 100 lb+ turtle
 and butchered it on photo platform
 past East Island. Guts contained -
 "CRUSTY WHITE MATERIAL"
 Several hard rains during the night.

10 OCT 83

MONDAY

Observed from WP 0700-1000.
 1 seen to the right - in front of wall;
 also one to the left. Inside net
 waded-up - seen to be a ray. Drove
 to garbage chute at 9am. Photographed
 dumping. Drivers says that morning
 dumping is usually only Mondays, (due to
 Sunday accumulators). Sharks don't come in
 the morning, only afternoon (3:30pm) dump.
 Untangled nets until 11am. He
 and proceeded to nets with
 zodiac. Live, but abraded, mantas
 ray found in net. Cut free.
 Net hauled. Checked dead manta
 with net-scrap still attached. Pulled it
 loose and rotated it out aways.
 Later in the day we saw a
 surface slick originating from approx. site.
 Possibly this was due to
 prop hitting animal during towing.
 Anchored on head (near) WP
 and dove entire area from 1/2 inside
 WP to 2 exposed head.

DIVE 10

70 minutes at 27 feet.

Dizziness due to low visibility
 and "drifting" back and forth
 of detached masses of Caulerpa.
 Collected what appeared to be
 "crossed" Bryopsis on nearest

As opposed
 to long
 abundant
 strands

10 Oct
MONDAYSaw
and
aster

1-8-1

X
J

10 OCT 83
MONDAY

Saw
small
canister



1-8"-1

head to WP. Observed that along southern coastline, heads that sometimes become exposed, or have white water break on them, have Bryopsis while ^{always} subsurface heads have Caulerpa. Caulerpa can withstand higher energy, so Bryopsis colonizes? Many areas of each head down the slopes are vacant of Caulerpa, consequently I assume hard habitat is indeed available.

3 types ^{forms} of Caulerpa noted. ① "Sea Grapes" floats erect with large spherical bulbs coming off of stalk. ② "Cup" shaped ∇ coming from stalks; ③ Small round berries tight against substrate. Is this latter form the result of turtle cropping? Giving patches to "culture" form this (isgal) form?

Need to collect and photograph samples of all 3.

Overcast when we surfaced from the dive at ~3 pm. One sub-adult-adult turtle seen swimming by one of the exposed heads. Did not flee from us. By these heads, I saw many sandy Jemdercuts at the base that I felt offered excellent, current-protected,

10/11
Tuesday

TOMORROW'S TIDE AND SUN

L	0133	0.2	H	0928	2.5
L	1727	0.5	H	2130	1.2
Sunrise	0710	Sunset	1900		

10/10 sleeping areas. However, in all our searching thus far ~~no~~ turtle has been seen in, or swimming out of, a sleeping area. Is it possible that they just do not sleep during the day, since our nettings strongly suggest that they don't feed at night under influence of rising tide.

Motor the "long way" back to Port. Motor Crest to east end. Camera stand. Noted off limits sign. Noted small channel through barrier reef where we motored out a short distance yesterday. Ate dinner and drove to WP at 5:45 pm. 6:30 pm we drove along Redbat. Saw 3 large and one small, presumably feeding. More activity here, than at head of WP? During the past several days the sightings of turtles off WP has

10/11
Tuesday

Site #

DIVE
K

dramatically declined. Is this due to tide change? or something related to moon phase?

Note: Caulerpa seems to grow fine in turbid, low-light conditions.

10/11 TUESDAY Heavy rain early morning to ~ 9am. Checked net 7-7:30am and 8-8:15. Small one seen feeding on head to the right. Worked on tangled nets in building. Set site #6 95' (65+30) - running into swell just off left side of Wh. Saw large turtle inside, then outside, while setting. Fast finicky surface - one of turtles caught eyes?? Note log wby around. Watched Air Mic take off. Reasonably calm.

DIVE 11 Made after lunch, 1307-1412
 65 minutes 35'
 Anchored in coral head at east end, southern portion. Swam down many sand canyons that

11 OCT
TUES.

emptied into ship channel.
Extensive coral growth. Current
in channel beveling out, outgoing
tide. Lots of fish. Lots of
suitable turtle sleeping habitat, but
none seen. 2 Caulerpa varieties
"collected" - growing on "dead coral."
Caulerpa gardens

1500 Checked short, remaining net outside
SITE #2 coral head, and found a
SITE #3 turtle. Nothing in long net we
set this morning. Brought in net
and returned to port. Worked
up turtle on ramp. Several photos
taken.
Data on following page:

Took last net in at ~6:30pm;
nothing in it, but a few turtles
seen/feeding in adjacent areas.

7500h #3
 11 OCT 83 Female with somewhat serrated
 TUESDAY marginals - photos taken. PAINTED NO. 8
 PHOTO #5 ROLL 4 ?

7476 LFL S-77.2 x 59.6
 (notch-765)

7477 L3-4th C-84.5 x 82.0

7478 RFL PC-61.2

7479 R3-4th

Head-10.2 = TAIL-14.5

7480 R HIND

Eyes 4-4
 Flippers 6-6 (11.0cm-11.0cm)

Green alga on PL; red alga on skin - dense
 in places; Amphipod noted on ventral
 surface of posterior marginals.
 Sharp nails on head flippers

Spray painted number "8"

Weight 149 lbs.
 (67.7 kg)

Stomach pumped - small particles saved.
 Bone wedge taken.
 Tried taking blood sample, but couldn't get
 anything.

60

BACKNOTES ON "REFUGE"

no handouts, nothing in cafeteria; no Briefing
(not even FWS brochure!)

10/12

WED.

TOMORROW'S TIDE AND SUN

L 0210 0.3 H 1035 2.4

L 1903 0.4 H 2256 1.1

Sunrise 0710 Sunset 1859

12 Oct
Wed.

12 OCT 83

WEDNESDAY

Untangled nets in the morning;
Visited upper floors of JOC and
took photos; Motored past
Sand Island, to East Is. and to
observation stand. Climbed up on top
of it. Heads to the surface are
not common between East and ob. stand.
East Island appears to have
gravel beaches around much of it.
Noted breaking waves at Donavan's
Reef from obs. stand.

DIVE
12

35 minutes at ~32 feet. Arrived
on coral head at surface.
Lots of live coral, but very few
fish. Saw a ~5' white shark. It moved
quickly out of view. Visibility
~25' - seems cloudy.
Collected 2 kinds of Caulerpa. Saw
Microdictyon and Parolina.

After dive, we motored to WP
and pulled up remaining 4
anchors. * Collected Caulerpa.

13 OCT
Thursday

12 OCT 83

wed.

Motored to port ground, east end. Sargebage in the water - sharks feeding, but when we approached they left.

Pulled zodiacs - stored all gear in warehouse. USO show at 8pm - "Rocky Mountain Entertainers" - photos taken.

Barbara Keating - Geologist; not looking at "dump" site for JACADS. Didn't go there in sub. Brine solution discharge site.

USO show manager

Kerry Summers
39 West 355 South
Arem?, Utah 84057

13 OCT 83

Thursday

Finished packing and storing gear. Completed paper work and S&Q payment at JOC. - \$252.25 (CASH \$92.25 check). Colonel Tolley indicated we need to charge to "NIPRA."

10/13

Thurs.

TOMORROW'S TIDE AND SUN

L 0305 0.4 H 1144 2.4

L 1956 0.4

Sunrise 0710 Sunset 1858

9am - checked in 8 pieces luggage at terminal.

13 October 83

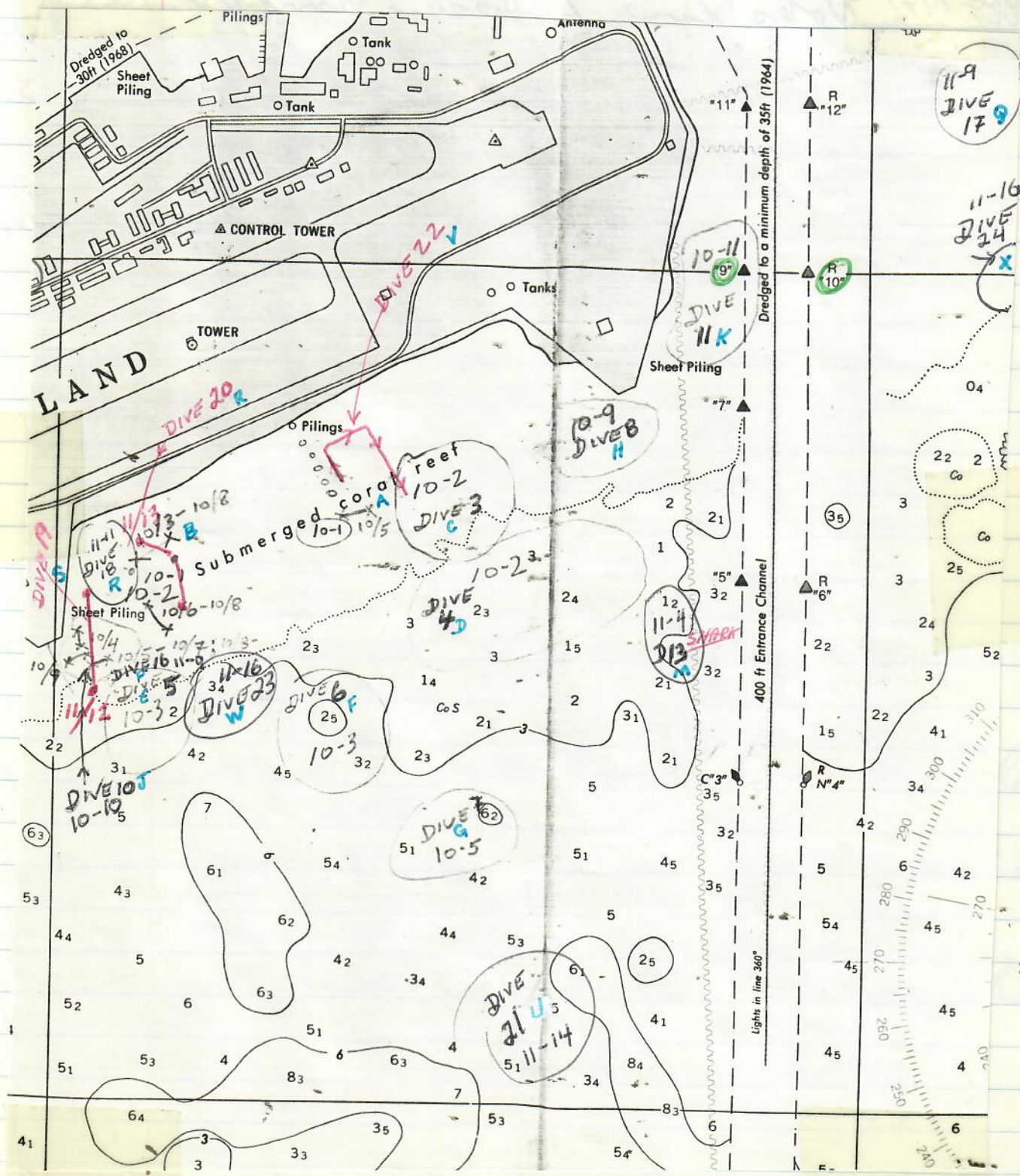
Thursday Drove to WP at ~ 12:30pm -
no turtles seen, even though it
was ~ 1 hour past high tide.

Checked post office, but no mail -
Need to telephone PostMASTER about
my package of Turtle posters.

MAC flight departure at 2:15pm.
Kitty Agear arrived - will dive
in Isib for benthic algae, +
make some collections in shallows -
"Tonda report ^{to the} only one out as algae".
I warned her about dead Manty -
we were still seeing "shick" at
noon observation.

Arrive Hickam ~ 4:15pm - Packed up
by Bill & Thea with NMFS van. Dropped
Barbara Keating off at the UH-HIG.

Home about 6pm.



SCUBA
TRANSECTS

11-9
DIVE
17

11-16
DIVE
24

22 2
Co

3
3
25
Co

24
3
52

15
22
41
310

34
300

42
290

5
6
42
270

54
45
45

45
4
250

6
240

Dredged to a minimum depth of 35ft (1964)

400 ft Entrance Channel

Lights in line 360°

LAND

CONTROL TOWER

TOWER

Antenna

Tank

Tank

Dredged to 30ft (1968)

Sheet Piling

Pilings

Pilings

Sheet Piling

reef

10-2

Submerged coral

10-1

10-5

Sheet Piling

10-10

10-15

10-3

10-2

10-1

10-2

10-3

10-4

10-5

10-6

10-7

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R N 4"

C 3"

R 6"

R 6"

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JUNE 1971 Notes from 2 Dossiers provided by
 JULY Chief, Plans & Operations Charles Young Acting Surgeon USAF HAW Rep.

- ANTICHOLINESTERASE POISONING EXPOSURES
- IRRITANT AGENT ^{MUSTARD} PULMONARY & CUTANEOUS
- Medical Plan Johnston Atoll
- JOHNSTON Atoll Hospital - Medical Disaster Plan
- Toxic chemical Induced Neuro-patho-physiology

October
 Monday

October 24, 83

Monday

Interview with Charles Young,
formerly with TAMC - 1970-71
planning for medical emergencies at
REDHAT - Johnston Hall.

- Suggest "World Almanac" to determine how many ^A blasts went off
- Contain old H & N "Defense" or "War" workers who previously worked at JA - a source of info on turtles. Place an ad in the newspaper; or call "talk radio" station 1000 Hz and ask for people to call in

He saw lots of turtles in 1970-71.
Would call them "abundant".

- Was asked if he wanted one.
- Left 2 reports with me that he had written.

From these, the following 2 questions need to be asked:

1. Does the "decon" wash water go directly into the sewage system?
2. How are contaminated rabbits disposed?

10/26 Telephoned Maj. Aikem concerning Decontamination wash water.
Material going into sewer is monitored. "Meet Surg. Gen. Standards".

10/27/83 Ted Walsch - Analytical Services
Ni & Cu ~\$60-70 each.

John Hylin - Organics (Dioxin?)
948-8352 VX? GB?
GASES

10/28 Kitty Apan INTERVIEW - Didn't dive
South shore of JI. Spent most
of the time diving in sub.
Saw lots of Caulerpa at 150'.
Not racemosa. She made a
couple of scuba dives in the
lagoon - very sparse algae. She
collected some algae. No turtles seen.

FAT SAMPLES FOR Ackman for fatty acid
composition to possibly shed light on diet of
JA turtles.

11/1/83

TUES.

Telephone discussion with John Hylin 948-8352
inquired about nature of nerve gas.
He will look for literature. He felt that
nerve gas will either kill the turtle outright
or be metabolized and therefore no
residues remaining in tissue that could be
detected. Suggested drawing blood and measuring
acidal cholinesterase baseline. Stressed
that "numbers" would be needed to

account for population variation - also one should
size, age & sex of individuals. He
noted that some animals can function fine
at 70% reduction of Cholinesterase levels.
Others, like cows, collapse after exercise
with just a 15% reduction.

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52-

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right,

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3 NOV 83 Thursday

10:15 am Departed Hickam for JA on MAC.
Left about 1 hour early due to person
on JA cutting off fingers.

Alan, Bill, Gail and John departed aboard
Cromwell - 10 am Monday 10/31.

Gail Johnston - 12:10 pm.

Reg Gooding had 3 fingers severed in
JA frame at ~ 5 am this morning.

Drove to JOC, quarters, and
port. Assembled nets (90' & 135'
into zodiac; fixed floor board with
hydraulic jack.

Drove to WP - 3 pm. Saw 6-8
turtles, some near heads. Water
very milky white - wind brisk.

Saw large Manta Ray.

Saw black discharge from
sewer outfall. Not oil - no
great slick. Color slow to
disappear in spite of wind.

Same discharge seen again about
4:25 pm.

Drove back to port where Bill,
John and Gail took Cromwell,
zodiac to WP and tried using
detachable hoop net with
turtle netting on it and 100'
of line tether. Alan & I
watched from WP after having

Cleaning
old
lines

4 No
Fe. D

c. 3 NOV 83 Drove to Shark Club and along
Redhat. Manta seen again at
Redhat WP.

Drayton's decrease in turtle sighting
with zodiac present. Drives and
keeps turtles underwater where
they can't be seen? A short distance of
submergence and they can't be seen.
They motored around for about an hour.
Didn't get close enough to attempt
a "scoop". Motored around West end
~ 5:15 pm.

Medical Supervisor - "Sevilla."

Backnote - Kona crabs introduced by
Cris in sandy dredge area of channel.

4 NOV 83 UP ~ 5:30 am - Left dock at 7:10 am

FRIDAY 135' (2 sections) set at site #3
just outside 2nd coral head off WP.
90' (60' + 30') set site #2, between
two coral heads.

Bill, Gail and John motored around
with poop net ~ 8 - 9:30 am. Nothing
caught.

~ 10 am Alan & I visited hospital
for Cholinesterase blood sample.

USCG ^{C-130} loaded last night from Kane
- Gene Wilham aboard.

4 NOV 83

FRIDAY

Met Lucile Bodnar^{Bodnar}, medical technician, who agreed to do analysis of turtle. She gave us numerous reprints on the subject.

Before hospital we went to JOC; travel orders to MAC; reported 3-prong spears missing.

DIVE
#13

After lunch we motored out channel and turned right after marker #5. Bill attended the boat while Alan & I scuba #13 starting at 12:29 pm and lasting 62' - maximum depth 30', but 20' was average.

Acropora in the beginning, but afterwards lots of smooth rubble areas - Pocillopora coralline algae (red) & (pink) growth on rubble. Several metal objects seen. Lots of fish - numbers & diversity. Probably best so far. Visibility 40'-50'. Strong current at times though.

5-6' gray reef swam up & down by us at end of dive right near Zodiac. Possibly caused by second Zodiac pulling up. Alan collected small rock with

4 NOV

5 NOV
SAT.

4 NOV 82

algae attached. Saved. "kinkie"
Caulerpa seen commonly.

Bill went off in zodiac searching for turtles with hoop^{net} - spent 1 hour 15 min.
 Came close to small turtle on coral head right of WP. Tore net when hooped a coral head mistaken for a turtle.

Watched net from 3-3:30 pm. Saw 2 turtles on head to right of outside net. Also saw 2 surface to the left, inside (comparisons site).

x Saw dark sewer discharge again 10:50 am. Maj. Mitchell was to check on this.

Alan & I took both nets in at 6:15 pm. Sunset at 6:45 pm. Downwind anchors left in. Pupils came up without diving on them. No turtles seen, but a ~ 8' Nanta seen while heading East.

Planned dive sites ① South of Sand Is. along ridges;
 ② Dredged area East of North Is.

5 NOV
SAT.

UP 5:30 am; Alan, I, & Gabh motored 2 nets already set in zodiac 7:45 am. Set 130' at site #2; Anchors left from yesterday badly

5 NOV. stuck - need scuba. Tried setting
 2nd net outside of head just to
 the right. Strong wind & choppy sea
 blew boat off course when net
 caught on buoy. Net braced up right over
 sewer. It discharged while we were there.
 Waited till it cleared, then pulled
 net in and took it to ramp. Set up
 another net (135') and returned with
 Gail and Alan. Set up in site
 #1 swam to manna between coral heads.
 Didn't use second net (90') because it
 was too choppy to tie into to buoy,
 and anchors would ^{I love on them!} come up.
 Returned to dock. Showered &
 went to hospital for 2nd blood test.
 Ate lunch and readied gear for
 a scuba dive. Bill & Alan set
 90' at site #1 ~ 12:30pm.

DIVE #14 Just east of North Is dredge, and
 along dredge face ~ 48'
 55 minutes. Clear water 50'+
 visibility, lots of coral mounds & ridges.
 Some fish, but not abundant. Several
 algae samples collected.
 Returned about 2:45pm. Watched
 from WP ~ 3:15 - 3:45. 3-4 turtles
 seen. Drove to shark chute.
 People with shark buoys

5 NOV
SAT.

6 NOV
SUNDAY

light ground
at clean 20' turtle
seen west of wp.
we motored close

5 NOV SAT. Cromwell arrived ~ 4:15 pm. Took Zodiac
Bill, John & I pulled all nets and
anchors at ~ 6:30 pm. Had to use
scuba on the deep ones. Sites #1 & 2
snagged in small places on the bottom.

6 NOV. UP 5:45 am. Started setting nets into
SUNDAY zodiac at 7:30. 9 am Alan & I set
sites #2 (90') and slightly to the
right of #3 (archive on coral head)
135'. Two more nets, set by
John & Bill at new sites, parallel
to shore, one on each side of double
coral heads. ~ 11 am. Anchors
were 2 pieces of rebar tied together
(8 total for 2 - 135' nets). Mother's truck
to WP and saw that a turtle was
caught. Drove to Port, met John & Bill
as they arrived. Alan & I and Gail took
zodiac to get 'turtle' in Set #2 -
probably caught at 11:30 am.
Transported to warehouse and
worked up in the back of pick up.
Data on following page:

Bright colored
& clean 20" turtle
seen west of W.P.
we motored close
before dive.

6 NOV 11:30am capture in Set #.2
Painted # "9" - returned to ramp - 1320h

7481 left rear S - 72.8 x 58.1
(notch 72.1)

7482 LFL C - 79.1 x 76.2

7483 RFL PC - 59.3
TAIL - 12.5

7484 R3-4th HEAD - 9.7

WIDTH
RFF 10.3
LFF 11.2

EYE SCALES - 4-4
Front Flippers - 6-6

Weight - 140 lbs (63.6 kg)

Fat biopsy by Bill cut & forecepted from
incision made in left pelvic region. Frozen

Bone notch wedge taken - 10th marg. left. Frozen

7481 Red algae sample from neck skin & green
from plastron

7481 Mouth sample algae taken - looks like Bryopsis

Blood taken from neck - Serum spun for
sex determination.

Duplicate samples for Cholesterolase
for Lucile Borden.

PHOTOS; Scum/silton shell, but cleaned for paints.

6 NOV

7485

7486

7487

7488

7489

NO EVIDENCE
SAME WIT

7485

7485

NEEDLE
RETURNED
FOR NESTING
NOV
NO 5

6 NOV ~ 2:45 pm capture of turtle SET #2.

Painted #10 Bill, John & I got it.

7485 CFL

S - 95.9 x 72.5

7486 L3-4th

(94.9 notch)

7487 RFL

C - 103.7 x 94.8

7488 R3-4th

PL - 80.2 =

HEAD - 12.8

7489 L Hind

TAIL - 26.5

FF L 14.9 6-6

FF R 15.3

eye scales 4-4

NO EVIDENCE OF OLD TAGS -
SAME WITH ALL OTHER TURTLES.

Weight - 333 lbs (151.4 kg)

Deep (bone) gash in 2nd lateral Right, other shorter
scratches, as deep but healed.

Bone wedge 10th L

Biopsy fat sample - lots seems present.

Blood for sex & Cholinesterase

PHOTOS; Scum/silt on shell, but cleared for paint.

7485 Algae from skin and carapace.

7485 Algae particle from mouth - looks like
Caulerpa grape.

3 ROEDER
RETURNED
FROM NESTING
AREA
NOV
BEST FOR TURTLES?
NO SIGNS OF COPULATION

Noted distended cloaca with turtle on its
belly. also "acid" ^{scared} area anterior of tail.

6 NOV
SUNDAY

A "Wardell" ^{"NUNES"} met at ramp mentioned he caught turtles on Kauai up to 1975 - he was a "spotter" for Alu.

I watched nets 4:10^{pm} - 5:10^{pm} at sites #7 & #8 & #2 & #3

Noted "wind-rows" of floating *Caulerpa*. Very noticeable.

Alan & Bill brought in all four nets - up by 6:30 pm.

3 turtles seen around and between #7 & #8 sets 4:10 - 5:10 pm

7 NOV 83 UP - 6:15 am; Assembled nets Monday 2 - 135' and John & Bill took them to set at East End, one near site #7, but coming off west end of head. Second set (#9) close to shore and more to the east of aluminum warehouses, - set by 8:30 am. Alan, Gail & I set

90' at site #2 (caught on stem - needed lots of untangling & straightening); 135' set at site #3 - completed at 10 am.

While motoring out, we saw a large turtle with silty shell surface just before Channel marker No. 17. Dive needed in this area.

7 NOV. 83

Question for Chris - What was his
"miss" rate - no. turtles leaving free
or with hook?

77

7 NOV. 83 "LETTER OF WELCOME"

MON,

"our mission here at Johnston is one
of nuclear test readiness.

Nets checked at noon from truck.

Napped for 1 hour 11-12; headache.

Alan fixed "rag" site on zodiac, +
new plugs in outboard.

NOTE: for report, 2 varathanel nets were
tested at Bellows prior to JA trip.

2 turtles caught - a normal catch rate.

I watched nets 1:45-2:45 pm. 2 turtles
seen site #2 area; one time surfaced
and dove right by net. Obviously they
can see it and are negotiating
around it. Two turtles seen
at double head - feeding on the
east side away from nets.

Camping trip to north is. tonight.

Turtles can see net floats ~~at night~~
during the day when they stick their
head out, but not at night.

Bill checked nets at 4 pm - reported
capture at buoy end of set #7 right by
coral head. Again jacked up in
truck in Warehouse while John & Gail
went out to pull all nets. Data follows:

4pm
7 NOV. 83 Buoy coral head end of Site #7
MONDAY Male Painted NO. 11

7 NOV
MONDAY

7490 RHIND S- 89.7 x 71.6
(Notch 89.5)

DAVE ?
FUNG

7491 LFL

C-94.5 x 88.5

Paul
or
lower
plant

7492 L3-4th

HEAD - 11.6

7493 RFL

PL - 67.5

TAIL - 41.7

7494 R3-4th

255 lbs (115.9 kg)

head scales 4-4

RFF - 13.5 6-6

LFF - 13.6

Right nail front - "worn to nub"
left " " - "worn down"
Hind nails have some wear down flat } from copulation

Bone wedge - 10th mag any left

Blood sample for sex & cholesterol

extra small scale in PL



Red skin algae

Fat sample for right pelvic incision
~ 85% black carapace photos; Very
vigorous, sometimes thrashing turtle - unlike others.

8 NOV
TUES

Holding time about 1 hour.

7 NOV
MONDAY

(COOKED FISH ON BAR-B-Q AT WAIKIKI CLUB)

Interviews with Eddy Matson - 10 years
JA, came from "merchant marine"
and Francisco Aquinaldo - in 1976
he was at Enewetak - remembers
natives getting turtle eggs, probably green,
from Glenn Asplet.

DAVE
FUNG
Jetsal
or
power
plant

Some people at JA (Filipinos) pick the large
berries of *Caulerpa* along south shore
at low tide for eating.

↙ About 1 1/2 years ago Mike Boat was
out fishing and apparently hit a
leatherback cutting its head off. Still
flippers moving when seen. Tried to
gaff it, but couldn't.

This past July they saw turtles locked
together at sandy area near piling.
Tried to grab, but they swam
off - Francisco "drank sea water".
They feel that some eggs are
laid on Sand Island. Also, some
mention of algae off this island.

8 NOV
TUES

UP 5:35am, Alan & I set sites #2 (90')
and #3 (30') at WP by 8:45am; Bill and
Gail set modified #7 (like yesterday) and
new #10 by 10am. "Special Operations"
at Redhat sign still up.

Where is Despl. outfall? Warm?
measure with thermometer - scuba

8 NOV 83

TUES. Turtle reported in net #2 at
~1230. Bill & Alan retrieved it.

DINE
#15DATA: PAINTED NO. 12

7495 LFL S - 82.9 x 65.4
(NOTCH 82.1)

7496 RFL C - 89.2 x 80.6

7497 RHIND PL - 68.3

HEAD - 11.3

7498 L3-4th TAIL - 18.2

7499 R-3-4th

RFF - 12.0

LFF - 12.0

part of
7th missing

FFlippers - 6-6

Head - 4-4

Bone wedge 10th marg. left.

5th marg R indented.

WEIGHT - 193 lbs

(87.7 kg)

Right
P.C.

7495 Fat biopsy

Red algae scraping saved.

No bands, like most others seen.

Blood - - sep Serum
+ Cholinesterase

7495 Stomach pumped

DIVE #15 ~ 1:30pm dive made near Buoy #17 off golf course. 55 minutes at 40'. Lots of debris, partly cloudy - vis ~ 30-40'. Mostly we followed the hard and coral-covered cut - Alan at 30', me at salt bottom of 40'. John Henderson snorkeled in search of turtles.

At 4pm Alan and I motored to Sand Island, - barely got ashore when Gail reported a turtle at Site #2. Large female with stuck lead-line. Motored to Site #7 and found 2 turtles near coral-head cut - one stuck under water - sawtooth - leadline caught on shallow coral where net was set. I dove to free it - deemed necessary in case turtle still alive, in spite of sewage. - Redhat.

CPR given. while returning to port - Bill & John left to get nets set 5:45pm - Gail, Alan and I took turtles in truck to JOC where we first put turtle on back

8 NOV
TUES.

and jumped on plastron. Hissing heard, likely of glottis opening. Prior to this I all attempted to ventilate were probably going into the stomach.

I forced fingers into glottis - then inserted plastic tube - sealed by closing mouth - then forced air in by mouth. expansion of plastron seen. Did this several times, then put turtle belly down with head hanging far down off end of truck. Elevated posterior ~3" with swim fin, ~ 1 1/2 hours after getting from vet, turtle raised its head and took a breath. up to that point, only the tail showed life. Constricted when pulled straight. Eyes bulged & open.

Slow recovery over the next 1 hour - with muscle movement occurring.

8 NOV 8

7500

7501

7502

7503

7504

8 NOV 83

4 pm

SITE #2
PAINTED NO. 13

7500 RFL

S - 89.5 x 68.8

7501 R HAND

(Notch 88.7)

7502 R 3-4th

C - 96.0 x 85.5

7503 LFL

RFF - 14.6

LFF - 14.7

6-6

7504 L 3-4th

EYES - 4-4

PL - 72.4

HEAD - 11.9

TAIL - 25.2



Red skin algae; green PL
orange/yellow PL

"c" cut between
4-5th digits

NO WEIGHT - not taken

Blood sampled
Fat "

Released 7:45 pm ramp.

no Bone

no photos

8 NOV 83
TUES.

found ~ 5pm SITE #7
PAINT NO. 14

7505 RFL

S - 75.2 x 57.8
(notch - 74.5)

C - 81.5 x 75.5

7506 LFL

PC - 60.4

7507 L3-4th

HEAD - 9.9

TAIL - 17.0

7508 R HAND

RFF - 11.2 6-6

LFF - 11.0

EYES - 4-4

WEIGHT - 143 lbs (65 kg)

Blood

Fat

Red algae on skin; green on PC

~~wounded~~

no photos

8 NOV

7509

7510

7511

Bone,

75

8 NOV

found 5pm - comatose SITE #7
 (Glottis tubed) Paint NO. 15
 Held in truck overnight, where
 photos next morning at sunrise.

7509 RFL S - 75.6 x 57.0

7510 LFL (notch 75.2)

7511 RHIND

C - 82.0 x 77.8

PL -

HEAD - 10.3

TAIL -

WEIGHT - 150 lbs. (68.2 kg)

RFF - 12.0

LFF - 12.4

6-6

EYES. R5 - L4

(Small between 3 & 4)

Bore, fat, Blood not taken.

Released ~ 7:30am 11/89 at boat house
 ramp. Swam slow & deep - then
 surface - big breath and dove quickly.

7509

Fecal sample rinsed numerous times,
 then larger particles put in formalin
 for I.D. Looks like Bryopsis
 particles and emptied-out "grapes" of
Caulerpa.

9 NOV 83
WED.

UP 5:45am

7:45 Bill &

John set 2 nets - drifting
and already laid-out in Zodiacs at
the time of pick-up. 1-130' net
in site #30 area, 1-130' designated
no. #11 site in area of large head to
the right of WP. By 9:30am Alan &
I set out 90' at site #2 and
130' at "Manta Ray Manor" between
2 heads (site #1). Picked up ~ 6pm by
John & Bill.

NEED TO COLLECT & FREEZE FRESH CAULOPPO
& Bygopsis

X Phil Rosebury caught a ~ 30lbs turtle
by hand close to shore of ~~WEST~~^{EAST} IS.
Head was going up & down (feeding?).
Brought it to JJA, painted and
stenciled it fluorescent reading:

X "Happy New Year JANUARY 1981"; He also
reported that a few years ago an Army guy saw large dead
turtle washed in at North Island. Gone when he went
there the next day.

SHARK / Mr. Stillman. 2-3 months ago 13 1/2'
shark caught off Sand Is. wharf
using 4' white tip shark. Stomach not
opened. John Steker caught it. Some
teeth may still be here.

9 NOV 83

FIVE
#16

FIVE
#17

NEED - Smithsonian turtle specimen data,
- Throat & anal swabs

87

Lee Core arrived in 1964 - helped lay sewer line off south shore, but doesn't remember if algae was present. Jake also in 1964 - but not a diver. Made friends with a ^{monk} seal originally tagged at Laysan. I saw several photos of the 2 together.

Wendell - 3 large turtles taken on Molokai for his wedding last June.

9 NOV 83 Alan & I ^{at 12:45 - 2 PM} made dive #16 -
68 MINUTES - at 30' - clearest yet

DIVE
#16

for this area - region just outside 2 breaking heads off WP. Covered lots of area - several submerged head not always clearly seen. Saw 1 ~ 75 cm turtle swimming near "breaking" head.

During this dive, Gail & John had been dropped off on Sand Is. to snorkel survey for turtles and algae. They found an area ~ 3' deep with Caulerpa racemosa - inside limits of antenna guidwires. Rust from cement anchors.

DIVE
17

Made at 3:10 pm to the east of channel marked #12 ~ 400' from channel. Long ridges like I described

9 NOV 83

(45 minutes at 25')

Wed

in Brock's report. Cloudy - but poorer visibility undoubtedly due to late afternoon sun. Large Manta seen, ^{Circled}
 Sparse fish. Inspected tops of coral heads that seemed comparable to those across the channel covered with algae. Only 1 small patch of Caulerpa and a few small recessed patches of Byopsis.
 SEAWATER 27.5°C

NOTE
 CORAL
 HEAD
 COMPARISON

John & Bill picked up the 4 nets
 at ~ 6 pm.

10 NOV.
Thursday

Squall rain showers during the night.
 up ~ 6:15 am.

I drove Bill to east & Bill to North at 7:15 AM in a BW.
 They were picked up at 5:15 pm -
 observed for turtles all day, but none seen. DATA OBSERVATION SHEETS & MAPS PROVIDED
 Alan and John drift set at sites #1 & #2 and #11. John and I set at #3 to the right a 60' (30x30) piece, and a 130' one at site #11.

Male found caught in #2 when we arrived -
 note - clear water.

10 NOV. 83 ADULT MALE - 0930

Thursday PAINTED NO. 16 SITE #2

Recovered 7513 W-S BASKING 6/22/85 By
Gail Pieterison.

7512 LFL S - 89.0 x 67.3
(NOTCH 88.8)

7513 L3-4th C - 95.0 x 86.5

7514 RFL PL - 70.8

HEAD - 12.3

7515 RFL TAIL - 54.6

WEIGHT - 251165

RFF 15.0

7516 RHIND

(114.1 kg)

LFF 15.4

6-6

Bore notch Right 10th marg
EYES 4-4

Fat
Blood

Claws are 1/2 off worn flat.

7512 Skin - PL algae saved (also 2 skin barns)

7512 Stomach sample pumped:

photos in back of truck. P 2

10 NOV 83

Thursday

4pm Captive SITE #2 - MALE
John & I retrieved it.

PAINT NO. 17

7517 RFL

S-83.3 x 64.6
(NO NOTCH)

C-87.2 x 82.0

7518 R3-4th

PL-68.2

7519 L3-4th

WEIGHT - 186 lbs (84.7 Kg)

TAIL 28.7 (1/2 off headed -

7520 L Hind

pseudo penis comes out)

eyes 4-4

HEAD - 11.4

RFF - 14.6

LFF - 14.7

6-6

bone wedge - L 10th

FAT

Blood

"whistles" when it breathes!

2 photos with flash at ramp.

LFL ripped but healed.

2

Thumb-size TMR L ventral groin -
pelvic area. Also small TMR RFF

ventral flap.

RIGHT

~~flap~~ bird has ^{an} old healed injury
and a new ^{one} only part healed cut.
Flapper piece hanging. Nails not worn.10 NOV
Thurs.11 NOV
FRIDAY

(1P)

Call-Dennis Russell

Telephone No. -
- Call CRIS Balibar - Tel. no.

10 NOV 83 Alan and I picked up all 5 nets
Thurs. using the BW ^{35th P} ^{JOHNSON} leave 5:15, return
6:30pm Saw the small turtle on
top of head. Got close once only;
on one approach, when it saw us, it
shot off quickly.

Chicken (Shoyu) dinner at the Waikiki
Club.

Wendell ^(Molokai) reports that in March there
are large schools of gray sharks in
the atoll for breeding.

JAKE TOO - carb?
Lee Gore & Steve West have been here since 1964.
Lee helped lay sewer line, but doesn't remember if algae
was there then.

11 NOV 83 Rain showers again last night - strong N.W. (C)
wind all day 11/11:

FRIDAY

Up 6am - 4 nets preset in BW from last
night; Site #2 90' net tangled and in need
of repair - Alan & I dropped John H.
off at Sand Islet at ~7:30am -

Bill picked him up at 5pm. NO
turtles seen all day, however, Caulerpa
growth seen in very shallow water.

130's set at Bites #7, 2 and 12 (new
just east of #1 (MEM)). 60' (30+30) set
slightly to the right of site #3.

(1pm later) we brought out the mended 90' piece
and set it at #1. ∴ 5 nets total.

Billard Gail worked on Zodiac floor boards.

70 MINUTES AT 20' MAX.

11 NOV 83
FRIDAYDIVE
#18

SITE R

Dive 18 made at 1:30 just east of WP. Photos with Nikonos of Caulerpa and Bryopsis. Surveyed inshore of WP. Caulerpa up and down all heads, and on all hard surfaces. Sand/silt areas in between. Two growth phases(?) collected - ① erect stems with berries, and ② prostrate "grapes". Bag of each frozen for analysis. Dive right in the area where turtles have been regularly seen rising and submerging. Slightly farther offshore there is almost no Caulerpa - coral growth on slopes of heads, and Bryopsis on the top. Bryopsis pockets of detached material in depressions where currents can't carry it away.

After the dive, we motored past set #7 and found 2 turtles tangled - 3 pm.

Data as follows:

NOTE - Freshwater influence of sewer - drain pipes. Salinometer readings needed.

11 NOV. 83 3pm - SET #7

PAINTED NO. 18

7521 RFL

S-83.7 x 62.2

(NOTCH 83.6)

7522 R3-4th

C-92.2[?] x 80.0[?]

photo seems to show "dome"

7523 LFL

PL-67.2

7524 L3-4th

HEAD-11.4

TAIL- Deform = present, but tucked
tightly under.

7525 RHind

RFF-12.8-6-6

LFF-12.6

EYES-4-4

WEIGHT-189 lbs

(85.9 kg)

bare wedge L 10th marginal

Very small blood sample - only for sex determination

No cholinesterase.

Fat biopsy

red skin algae

photos

11 NOV
FRIDAY

3 pm Set #7
PAINTED NO. 19

7551 RFL S-75.2 x 61.2
(notch 74.8)

7552 R3-4th C-80.0 x 77.6

7553 LFL PL-59.8

HEAD - 10.9

Confirmed with AKIKAMI's notebook
2-14

7554 RHIND

TAIL - 14.5

WEIGHT - 137 lbs. (62.3 kg)

RFF - 11.2

LFF - 12.0

6-6

EYE SCALES 4-4

Bone wedge 10th L

NO blood obtained

fat buffy

red skin algae + green

Several narrow deep scratches in scutes
of carapace - sharks?

Dark pigment in plastron and
ventral of front flippers. Several
photos taken. Also noted pearly nature
of posterior of carapace.

Bill mentioned "lots of fat - same color
as plastron"

11 NOV

7555 R

7556 R

7557 L

7558 L

7559 R

7555

11 NOV SET #1 ~ 5pm
 Retrieved by Gail & Bill along with the
 5 nets. PAINTED NO. 20

7555 RFL S-79.1 x 61.6
 (notch - 78.3)

7556 R 3-4th C-84.5 x 79.0

7557 LFL PL-64.0

7558 L 3-4th HEAD-10.7

TAIL-18.2

7559 RHIND WEIGHT-163 lbs. (74.1 kg)

RFF-13.0 6-6
 LFF-13.0

EYE L 115/R4

Bone wedge 10th L

Blood for sex & cholanesterase

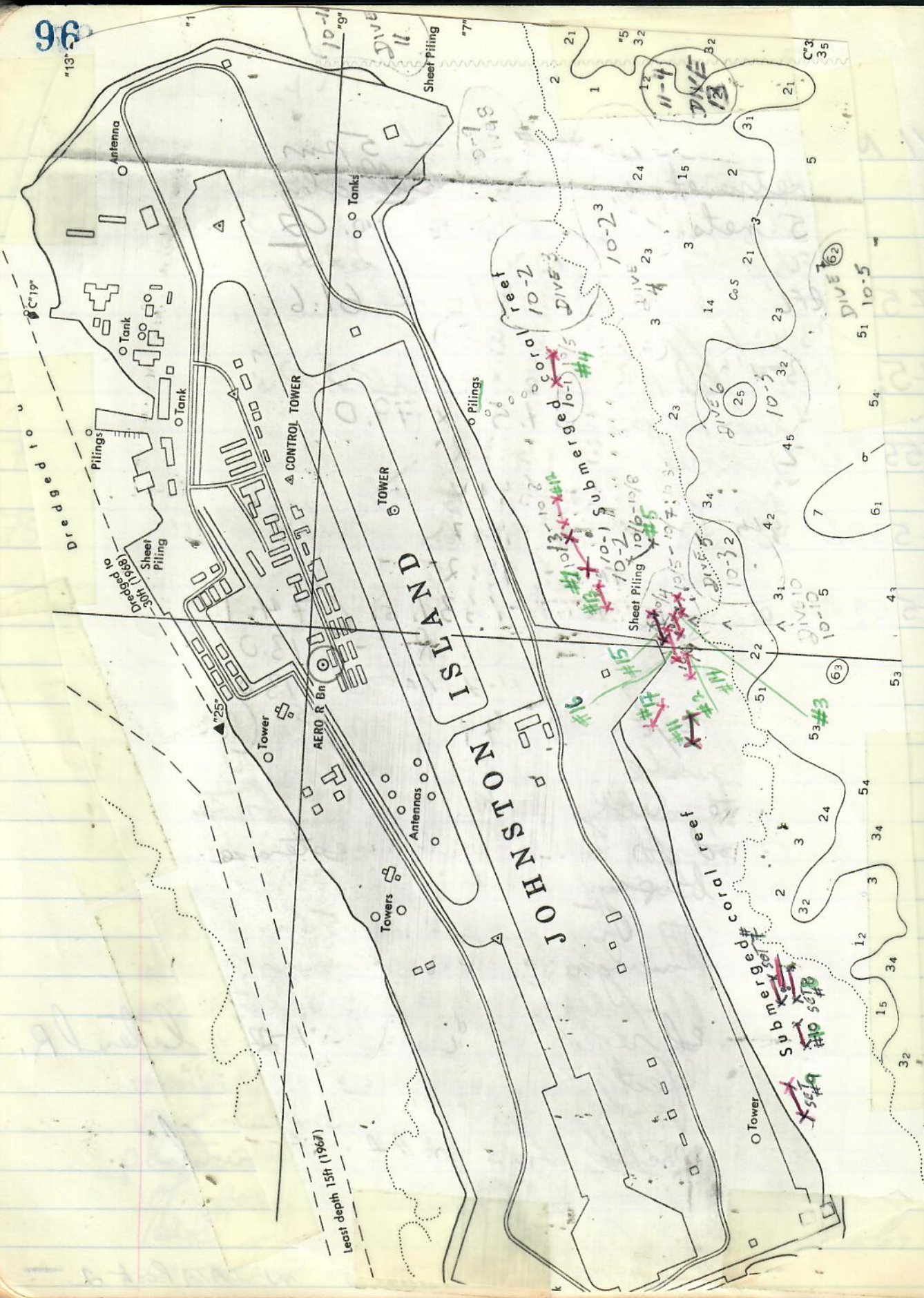
Fat biopsy

Red skin algae + green PL

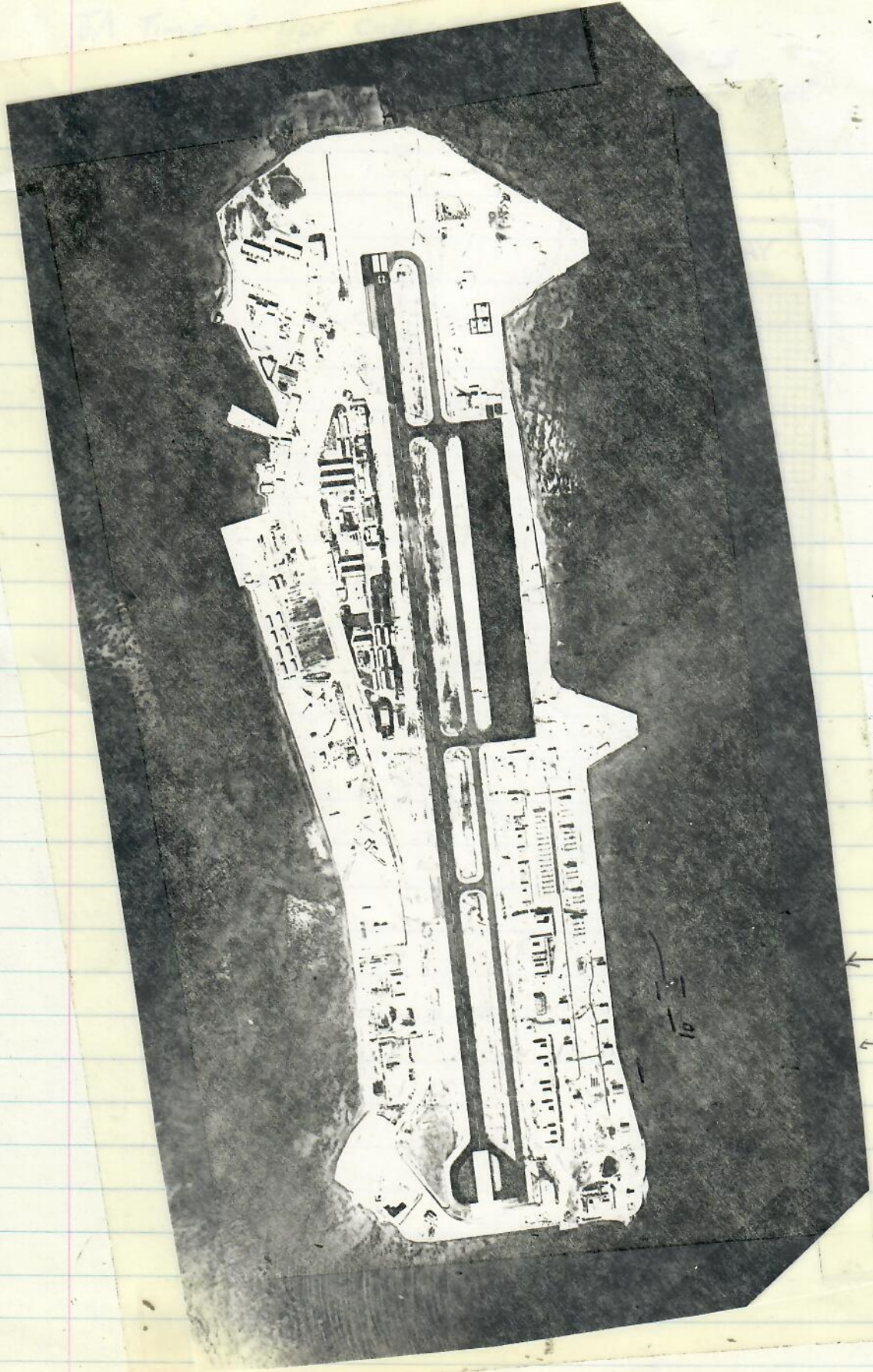
Depressed region 2nd central & 1-2nd lateral R.
 "Birth defect"?

7555 pieces picked from palate of mouth

— NARRATIVE CONTINUED IN DATA BOOK 2 —



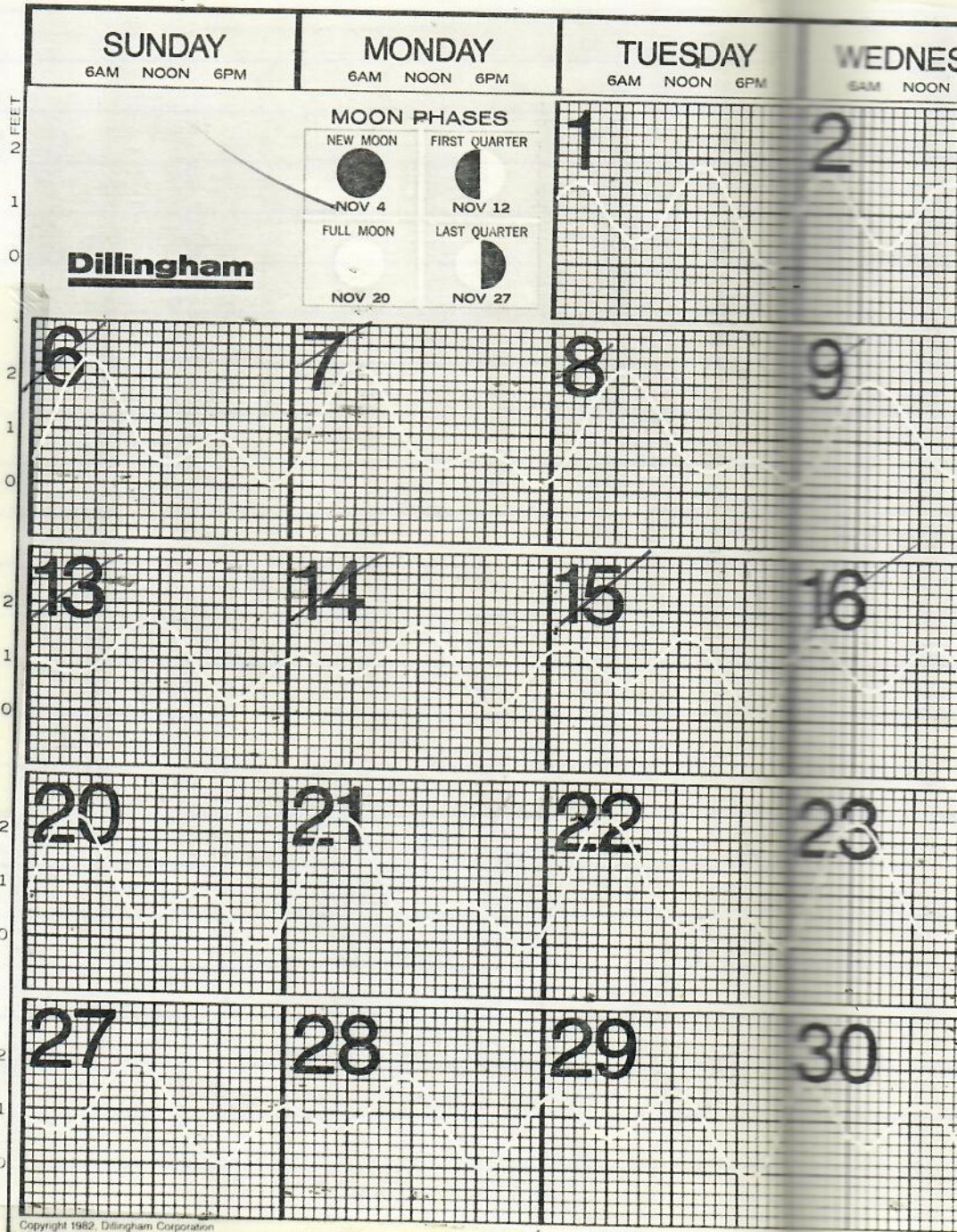
SEPT 1978 PHOTO



SETS
 ← #7 & #8
 ← #9

10

NOVEMBER 1983

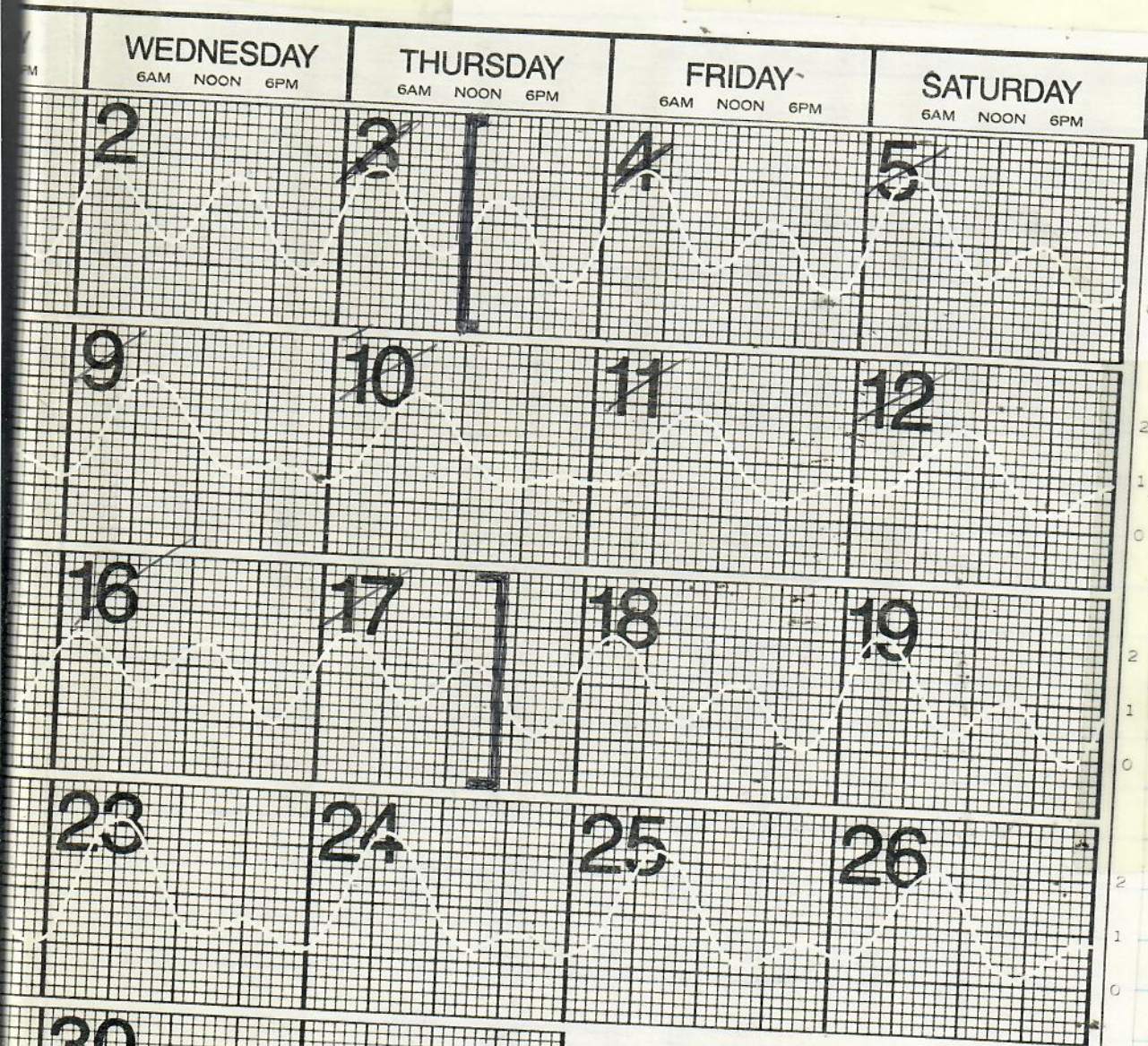


JA TIME-OF-TIDE CORRECTION:

APPROX. +1.5 HOURS

HIGH WATER = +0.5 FEET

LOW WATER = -0.1



For tide time at following places, add or subtract from Honolulu time.

PORTS	Hrs.	Mins.	PORTS	Hrs.	Mins.
HANAIEI BAY, KAUAI	-1	40	KAUNAKAKAI, MOLOKAI	-0	09
NAWILIWILI BAY, KAUAI	-0	32	KAHULUI, MAUI	-1	48
PORT ALLEN, KAUAI	-0	32	KIHEI, MAALAEA BAY, MAUI	-0	14
HALEIWA, OAHU	-1	36	HILO, HAWAII	-0	59
HANAUMA BAY, OAHU	-0	55	HONUAPO, HAWAII	-0	24
KANEOHE BAY, OAHU	-1	35	MAHUKONA, HAWAII	-0	24
LAIE, OAHU	-1	48	KEALAKEKUA BAY, HAWAII	-0	16
WAIANAIE, OAHU	+0	16			
WAIMANALO, OAHU	-1	15			

Handwritten notes at the top of the page, including "A Time-Of-The Collection" and "1.0 - 0.1".

Hono. Star-Bull.
NOV 17 83 45
Chemical Weapons

WASHINGTON (AP) — Congressional negotiators agreed today not to include money for a new generation of chemical weapons in a Pentagon spending bill, handing a victory to opponents who describe nerve gas as an unnecessary and politically damaging addition to the nation's arsenal.

The decision to delete the \$124.4 million that the Senate had earmarked for nerve gas production facilities and operations came after little discussion by the members of the conference committee meeting behind closed doors, participants said.

The chemical weapons program went "without a whimper," said one House member, who spoke on condition he not be named.

The question of embarking on a new round of nerve-gas production after a 14-year ban on the weapons had been one of a handful of controversial matters that needed to be resolved before the conferees could complete work on the roughly \$250 billion bill — a compromise of measures passed separately earlier this month by the House and Senate.

SEPTEMBER
S M T W T F S
2 3 4 5 6 7 8
9 10 11 12 13 14 15

SEPTMBER

S	1
M	2
T	3
W	4
T	5
F	6
S	7
S	8
M	9
T	10
W	11
T	12
F	13
S	14
S	15
M	16
T	17
W	18
T	19
F	20
S	21
S	22
M	23
T	24
W	25
T	26
F	27
S	28
S	29
M	30

OCTOBER (OKAKOPA)

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24/31	25	26	27	28	29

NOVEMBER (NOWEMAPA)

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

3	H 0443 2.4	L 1053 0.2
	H 1625 1.9	L 2226 -0.2
	Sunrise 0718	Sunset 1847
4	H 0521 2.6	L 1147 0.2
	H 1704 1.7	L 2253 -0.2
	Sunrise 0717	Sunset 1846
5	H 0600 2.7	L 1242 0.2
	H 1742 1.5	L 2319 -0.1
	Sunrise 0717	Sunset 1846
6	H 0636 2.8	L 1338 0.3
	H 1817 1.4	L 2344 -0.1
	Sunrise 0718	Sunset 1845
7	H 0718 2.8	L 1444 0.3
	H 1852 1.2	
	Sunrise 0718	Sunset 1845
8	L 0011 0.0	H 0800 2.7
	L 1546 0.3	H 1942 1.1
	Sunrise 0719	Sunset 1845
9	L 0038 0.1	H 0848 2.6
	L 1702 0.3	H 2049 1.1
	Sunrise 0719	Sunset 1845
10	L 0117 0.2	H 0942 2.5
	L 1808 0.3	H 2242 1.1
	Sunrise 0720	Sunset 1844
11	L 0202 0.4	H 1041 2.4
	L 1853 0.2	
12	H 0039 1.2	L 0335 0.5
	H 1141 2.3	L 1929 0.2
	Sunrise 0721	Sunset 1844
13	H 1141 1.4	L 0532 0.6
	H 1235 2.2	L 1958 0.1
	Sunrise 0721	Sunset 1844
14	H 0220 1.6	L 0701 0.6
	H 1327 2.1	L 2022 0.0
	Sunrise 0722	Sunset 1843

15	H 1255 1.8	L 0814 0.5
	H 1407 2.0	L 2047 0.0
	Sunrise 0722	Sunset 1843
16	H 0327 2.0	L 0913 0.5
	H 1449 1.9	L 2110 -0.1
	Sunrise 0723	Sunset 1843
17	H 0359 2.2	L 1001 0.4
	H 1524 1.8	L 2131 -0.1
	Sunrise 0723	Sunset 1843

SCUBA DIVE SUMMARY

TOTAL SCUBA DIVE TIME - 1332 MINUTES OR 22 h 12 min

DIVE NO.	DATE	TIME & MAX. DEPTH	LOCATION	DIVE #
#1 A	10/1/83	35 min. 25' 7.6M		#14
#2 B	10/1	45 min 18' 5.5		#15
#3A C	10/2	~ 10 min 15'		#16
#3B	10/2	60 min 18' 5.5		#17
#4 D	10/2	70 min 35' 10.7		#18
#5 E	10/3	22 min 32' 9.8		
#6 F	10/3	40 min 43 min 35' 10.7		#19
#7 G	10/5	38 min 48' 14.6		#20
#8 H	10/9	60 min 30' 9.2		#21
#9 I	10/9	32 min 25' 7.6		#22
#10 J	10/10	70 min 27' 8.2		#223
#11 K	10/11	65 min 35' 10.7		#284
#12 L	10/12	35 min 32' 9.8		#24
<hr/> PHASE II ^{585 MINUTES} (9 hours 45 minutes)				
#13 M	11/4	62 min 30' 9.2		#256

#14
 #15
 #16
 #17
 #18
 #19
 #20
 #21
 #22
 #223
 #284
 #24
 #256
 - 22
 - man-h

DIVE NO.	DATE	TIME & MAX. DEPTH	LOCATION
#14 N	11/5/83	55 min 48' 14.6	N. IS. Dredge
#15 O	"/18	55 min 40' 12.2	NEAR " " BUOY 17
#16 P	"/19	68 min 30' (very clear) 9.2	OUTSIDE OF BREAKING HEADS 2 WP
#17 G	"/9	45 min 25' 7.6	left side of channel - marker p. - South Sand Is.
#18 R	"/11 FRIDAY	70 min (BW) 20' 6.1	East side of WP - Caulerpa garden sand pockets coral on slopes Mostly algae inshore of heads offshore - Bryopsis on top
#19 S	"/12 SAT.	75 min 26' 7.9	inshore of East WP - 1 & out to nos. 2 coral head, seawater samples, MPM east head -
#20	"/13 SUN.	85 min 20' 6.1	inshore to offshore transect.
²¹ ALAN, JOHN & GAIL ONLY	"/13 afternoon	48 min 45' 13.7	East of N. IS. Alan, John & Gail
^{Me, John & Alan} #21	"/14 MONDAY	45 min 5' 15.5	1/2 way between Red spare marker & entrance buoy light.
#223	"/15 TUES.	45 min 15' 4.6	"18 pilings AREA - inshore/offshore
#234	"/16 WEDNESDAY	46 min 35' 10.2	Measured heads: with polespear outside & emergent WP HEADS.
#245	"/16 "	15 min 30' 9.2	EAST of markers 9 & 10 - Bryopsis heads
#256	"/16 "	33 min 36' 10.2	natural reef & dredged edge (followed) - state across from House Point

- 22h 12 min = total
- Man-hours TOTAL =

747 MINUTES (12h 27min)

NETTING TIMES & LOCATIONS

PHASE I

DATE	TIME	LENGTH OF TIME	SET NO.	LOCATION	LENGTH OF NET	FOOT HOW
10/3-10/7	0930-0800 ^{10/7}	94.5 hours	JOURNAL 46.5	#1 (MRM)	130 39.6 <small>ONLY SUSPECTED nighttime catch</small>	12,285
10/4-10/5	1200-0800 ^{10/5}	20.0	8	#2	30' 9.1M	600
10/5-10/7	1330-1230 ^{10/7}	47.0	23	#3	30' 9.1M	1410
10/5-10/6	1330-1030 ^{10/6}	21.0	9	#4	90' 27.4	1,890
10/6-10/7	1100-0800 ^{10/7}	21.0	9	#5	90' 27.4	1,890
10/7-10/8	~1500-0800	17.0	5	#1	130 39.6	2,210
10/7-10/8	~1500-0800	17.0	5	#5	90' 27.4	1,530
10/8-10/11	1400-1530 ^{10/11}	73.5	37.5	#3	30' 9.1M	2,205
10/9-10/10	1230-1200 ^{10/10}	23.5	11.5	#2	45 13.7	1,058
10/11-10/11	1030-1830	8.0	8	#6	90' 27.4	760

TOTAL - 25,838

Compute - hours and meters of net set total
 - hours and meters set at each location
 - and catch rate. 109

FOOT HOURS OF NET	METER HOURS OF NET	DIURNAL METER HOURS	CATCH M/H	METER HOURS	DIURNAL	NO. CAPTURED
12,285	3,742	1,841	110 ¹¹⁰ 680	4,415	2039	4(3)
600	182	73		504	231	0
1,410	428	209	366 ³⁶⁶ 1831	1,097	550	3
1,890	575	247		575	247	0
1,890	575	247		1,041	384	0
2,210	673	198		219	219	0
1,530	466	137	1122 ¹¹²² 6127	7,851	3670	
2,205	669	341				
1,058	322	158				
760	219	219				
25,838	7,851	3,670	(46.7%)			

BY-CATCH SUMMARY

DATE	SPECIES	LOCATION SET	NUMBER	REMARKS
10/4/83	EAGLE RAYS	#1	5	(all tails sniped and released)
10/6	EAGLE RAYS	#1	4	(1 killed) 3-tail sniped & released
10/8	MANTIA RAY	#5	1	DEAD - TOWED OUT
10/8	MANTIA RAYS	#1	3	2 DEAD - TOO HEAVY TO TOW OUT 1 - Freed with short piece of net. - Dead
10/10	MANTIA RAY	#2	1	ABRADED BAD, BUT RELEASED ALIVE

29 SEPT - 13 OCT 83
 9 EAGLE RAYS, 5 MANTIAS

PHASE II

NONE (except occasional pieces of Bryopsis)
 in nets

- TAGGING SUMMARY -

DATE	TAG NOS.	STRAIGHT LENGTH	TIME	NETTING SITE	DATE
① 10/4/83 TUES.	7451-55	100.1cm	0600h	#1	11/10
② 10/4	7456-60	87.4	1315	#1	11/10
③ 10/5 WED.	7461-65	90.9	1330	#1	11/11
④ 10/5	7466-67	57.4	1820	#3	11/11
⑤ 10/6 Thursday	7468-72	88.2	1730	? #1	11/11
⑥ 10/7 FRIDAY	7473-75; 7526-7	84.0	1230	#3	11/12
⑦ 10/11 TUES.	7476-7480	77.2	1500	#3	11/13
PHASE II					

⑧ 11/6/83	7481-7484	CHOL .28 .31 .40 .42 >.30	72.8	140 lbs 63.6 kg	11:30	#2
⑨ 11/6	7485-7489	CHOL .15 .16 .22 .23 >.16	95.9	333 lbs 151.4 kg	1445	#2
⑩ 11/7	7490-7494	CHOL .27 .27 .41 .40 >.14	89.7	255 lbs. 115.9 kg	1600.	#7
⑪ 11/8	7495-7499	CHOL .13 .14 .22 .23 >.14	82.9	193 lbs 87.7 kg	1230	#2
⑫ 11/8	7500-7504	CHOL .13 (2ml) .20 (4ml)	89.5	NT	1600	#2
⑬ 11/8	7505-7508	CHOL .26 (2ml) .41 (4ml)	75.2	143 lbs 65 kg	1700	#7
⑭ 11/8	7509-7511	(COMATOSE)	75.6	150 lbs 68.2 kg	1700.	#7

DATE	TC	TAG NOS.	CHOL.	STRAIGHT LENGTH	MALE	WEIGHT	TIME	NETTING SITE
15 11/10	16	7512-7516	✓ .23 ✓ .31	89.0	MALE	251 lbs 114.1 kg	0930	#2
16 11/10	17	7517-7520	✓ .30 ✓ .29 ✓ .43 ✓ .41	83.3	MALE	186 lbs 84.5 kg	1600	#2
17 11/11	18	7521-7525	✓	83.7		189 lbs 85.9 kg	1500 h	#7
18 11/11	19	7551-7554	✓	75.2		137 lbs 62.3 kg	1500 h	PIGMENT IN PEASTRON #7
19 11/11	20	7555-7559	✓ .33 ✓ .34 ✓ .32 ✓ .48 ✓ .46	79.1		163 lbs 74.1 kg	1630 h	#1
20 11/12	21	7560-7564	✓	87.0		239 lbs. 108.6 kg	1600 h	#2
21 11/13	22	7565-7569	✓	92.5		312 lbs. 141.8 kg	1800 h	#2

PHOTO LOG

Roll 1

90-1-83

start ~20 jelly fish(?) a lodging area; dining hall; 10-2. shark chute end of island;
 10/3 MONDAY - putting NET in zodiac; CRIS w/turtle ^{10/4}#;
 7451 photos to end of roll, in harbor slip.

Roll 2
ASA 64

¹⁰⁻⁴ Me in the water checking net; 7456 in zodiac, ventral & dorsal. Painted #4, 7461-65 snarled in net;
 10/5 7466 on kitchen floor, stomach sampling. 10/6 JOC, nets in study area; JI from North Island; 10/7 in w/ret snarl

Roll 3

20 EXPOSURE
ASA 64

^{10/7} 7473 snarled in zodiac; Releasing turtle from back of pick up; 10/8 area views of JI. (Red hat sign) Alan w/snarled
 MANTA: SUNSET OVER RED HAT. 10/10 Garbage being dumped
 Photos of me with gas mask in DNA Truck w/ J.

Roll 4

ASA 64

10/11 Air Mic take off. Nets all set in zodiac;
 7476 on back & belly; 10/12 ISLAND VIEWS FROM JOC;
 observation platform east of East Island; U.S.O.
 show; JA Refuge and Island signs;

Phase II

Roll 5

11/30 Photos of JA aerials prints - afternoon sunlight with tripod; 11/31 Halloween photo of Christian & mom;
 11/6 Sun South shore red hat sea wall; TAG NOS
 7481-84 TC 9; TAG NOS. 7485-89 TC 10; Sign at red hat; 11/7 "Softy" sign; 11/7 tag 7490-94 TC 11;
 11/8 JCI 2 7495-99; Views of Sand Is; ¹¹⁻⁹ 7509-7511 TC 15;

✓ 1

2

✓ 3

✓ 4

✓ 5

✓ x 6

7

Roll 6

ROLL 7

A EK

400

20-EXPOSURE

JW

B EK

400

36-EXPOSURE

- Photo needs -

- ✓ 1. Signs at Redhat
2. Various gonsmask views/w. hood
- ✓ 3. Caulerpa up close - UW
- ✓ 4. West - East points, nearshore waters (from shore?)
- ✓ 5. Sign - "Redhat Express" bus
- ✓ 6. Flash of Biopsy - blood sample.
7. Col. Moore with turtle

Roll 6 11/9 - Caulerpa / Bryopsis coral heads; Alan; me in scuba gear;
 11/10 TC 16 in truck TAGS 7512-16; TC 17 FLASH at
 Ramp TAGS-7517-20; 11/11 TC 18 ⁷⁵²¹⁻7525, TC 19 ⁷⁵⁵¹⁻7554, TC 20 ⁷⁵⁵⁵⁻7559;
 11/12 ^{SATI} ~ 5 photos set at ASA 400; Last 2 at Sand IS. O.K.

ROLL 10W 11/11 FRIDAY - ENTIRE ROLL taken on DIVE #18 - Caulerpa gardens
 A ^{EK} 400 - tops of coral head - #16 & 11 at 1/500 - and
 20 - EXPOSURE other exposure combinations. Views of Bryopsis also
 included.

JW 11/12 #1 coral head off WP - 11-16 at 1/500 on to
 B ^{EK} 400 wider openings (5.6) - ~ 15 shots of
 36 - EXPOSURE Bryopsis and Caulerpa; 11/3 Kam on
 scuba behind net; 11/15 BW picking up NETS; 11/16
 rest of roll Bryopsis growing on head top offshore
 of 2 emergent WP heads (taken during DIVE #23)

ROLL 7 "1/12 TC 21 released by pilings, "13 4 beaches on Sand IS
 ASA 64 AREA VIEWS OF Sand IS; TC 22 stomach pumping,
 electron, fat biopsy, dorsal without painted numbers; 1
 WP sealall views; "17 "18 JAKE'S MONK SEAL PHOTOS; 1
 267th Army by RH bus & truck piling beach; red hat signs;

ROLL 8 "1/17 Coal Heads off WP (one has turtle on forehead);
 ASA 64 Piling Beach and sealall looking from WP;
 Decon wash area for 267th vehicles - sewer
 drain there - drain exit on sealall;

To Award House
 Mr. Joe Balayo
 has my permission
 to photograph the
 signs on the fence
 by Bldg 706 E to West
 only

James H. Hoken
 M.T. CA
 Commanding

