

## GENERAL NOTES

GUADALUPE ISLAND TRIP, II: 8-15: 1957  
on "Paulina T"

PARTY - From SIO: Carl H. Hubbs, leader; Arthur O. Flechaig, Allen J. Storer, Robert L. Wisner.

From Tuna Comm. (and representing Dirección General de Pesca e Industrias Conexas): Julio Berdeagué.

From San Diego Museum of Natural History: Reid Moran (botanist).

From UCLA: Frederick W. Ming.

OBJECTIVES - Natural history collections and observations, by groups and problems as follows (time and weather permitting):

Mammals - Censuses and observations on Arctophoca, Miourounga, and Zalophus. Observations on porpoises and whales en route. Two elephant seals to be obtained for San Diego Zoo. Check on report of whales at Weather Station.

Birds - Determination of status of winter-breeding petrels (Oceanodroma leucorhoa) - are they white-rumped as indicated by Feb. 1956 collection?; collections of water birds about island including Cassin's tubenose to determine subspecies; the birds to be frozen; brains of petrels and shearwaters to be preserved, and perhaps other spp.; miscellaneous observations en route.

(over)

Fishes. - Collecting about island, with midwater  
trawl (principally), traps, dredges, etc.  
also other methods of fishing, etc.;  
Money to fix retinas for pigment study;  
"junk" from trawl to be frozen for archiving  
miscellaneous observations.

Invertebrates. - Midwater trawl and dredge  
samples to be saved; some shall  
collecting.

Plants. - Collections from island and  
islets (Moran, assisted by Berdeguil;  
and Dudley)  
Talinum, plants for garden planting.

Physical oceanography. - Surface tempera-  
tures on route and about island  
(Ship's thermograph). Check tempera-  
ture station, pick up records, and  
deliver new sheets; check and  
photograph tide gauge installation;  
deliver material to station.

Miscellaneous. - Photography to be  
continued - including inscription on  
sailing house after chalking.

See Preliminary Cruise Report filed  
under W.C.: 92nd Street Id.

LOG OF TRIP TO GUADALUPE ISLAND

II: 8-15: 1957

II: 8: 1957

0830 Departure from DSL dock, San Diego. Birds in harbor entrance: many Brandt and very few Double-crested Cormorants; Brown Pelicans (several flying, many on jetty); Common Loon (2, separate); mod. nos. of W., Calif., and Ring-billed Gulls; Surf Scoter (2, separate). Zalophus: 3 on Buoy 8, 2 on #7.

0847 Bell Buoy. Very calm; no whitecaps; NW breeze; course 179° mag.

0905 Eschrichtius: 1 surface near Buoy 1.

0915 Brandt Cormorant (1); W. & Calif. Gulls.

0943 Trash onboard: many W. Gulls - Brown

0950 & 0943 on Br. Cormorant and Gulls (all W., mostly adults; all, or few on seen, definitely pink footed).

1015 Many W. Gulls.

1018 Abandon Nend of N. Coronado Id., about 1/2 mi. to starboard: many W. Gull, nearly all adults; few Br. Cormorants.

1021 3 dark Fulmars flying away from island.

- W. Gulls continue for miles.

1105-20 W. Gull, mostly ad., and mostly → N.

1137 Helephorus (3) at bow, then dropped behind after a minute or so, followed ship momentarily (Wifner, et al.).

1140 Some whitecaps, now Porpoise (or similar-looking large fish) leaps out about 10 ft.; not seen again. over

run  
II: 8 (cont)

- 1142: on shark, presumably Prinace at bow  
(Fleching).
- 1148: one shark, presumably Prinace (seen &  
identified by Stoen).
- 1200: W. Gulls have continued; now 3 Calif.  
Gulls or more.
- 1216: Pink-footed Shearwater (1); scattering of  
W. and Calif. Gulls.
- 1300: Callochinus (1) - head up high; head  
heavy & blunt.
- 1311: W. Gull (1) - a few follow.
- 1346: Rhinoceros Auklet: 1, flying S, near  
water, with rapid wing beat.
- 1400: W. Gull (1)
- 1429: " " " - pink-footed.
- 1433: Black-billed Shearwater, very close;  
seemed unusually changeably bicolored  
as it flew away from us; ~~at~~ clean white  
below [but birds taken later look like this].
- 1443: Rhinoceros Auklet (1) flying S.
- 1506: Ad. Sabine Gull.
- 1511: A few W. Gull still following.
- 1516: 1 subad. Calif. Gull, very close.
- 1518: 3 Brown Pelicans in file, → N.
- 1525: Flock of 4 Calif. Gulls adults - followed  
ship for some time; others seen  
for some time.
- 1617: 1 Black-footed Albatross.
- 1635: 1 humming bird passes over bow of ship &  
continues → W.; rather bulky, probably Sunna.

(cont.)

II: 8:1957 (cont.)

See conspicuously, bidless later in afternoon;  
off watch at 1800.

2045-2100 Passing through immense school of  
Cololabis saira, reaching dense concentrations,  
with hundreds jumping simultaneously in  
glow of light from side of ship. Crewman  
said he had been watching the fish  
for a full hour previously to calling  
my attention to them. Many just broke  
surface or leaped weakly or for short  
distances, but some leaped out in  
clean arcs for as far as 15 feet,  
reaching 4 ft. above surface (water  
was calm and smooth). At times  
density varied and toward 2100 the  
fish became scarce, and only an  
occasional one was seen during the  
following half hour. Occasionally the  
large head of one big fish or porpoise  
was seen in the mass of sauries. The  
phosphorescence was limited. Occasional  
pyrosomes glowed bright blue.

2100-2115 Rather large group of porpoise  
(Delphinus) played the bow in typical  
daylight fashion, though moon was at  
least quarter and largely concealed by  
high overcast. The color pattern and size  
(yfg. to ad.) seemed typical, but the beach  
seemed shorter than usual (though definitely <sup>over</sup>).

Possibly this was a school of R. capensis.  
Flashlight was played on the porpoise, and  
seemed at times to disturb them.  
Fleckerig took a number of flash  
photos that should help in interpreting  
beak, etc. None leaped clear, though  
many broke surface.

II: 9:1957 - Out at 0610, with Guadalupe  
scarcely visible. Sun <sup>(0618)</sup> c/c to 190° mag. to  
strike for Pilot Rock. Swell and chop  
moderately increased, but whitecaps  
still small and few. Wind from N.

- 0715 First birds: 3 subad. ad. W. Gulls,  
pink-footed.
- 0718 1 ad. Calif. Gull joins ship.
- 0733 About 6 W. Gulls feeding off ship (to R).
- 0817 after cursory observations on scattered  
gulls, a pink-footed imm. W. Gull comes down.
- 0840-45 Large bull Zalophus basking, with 1  
flipped out. Blunt head, large nose, and  
smooth fur showed, on close, slow approach  
that this was not a fur seal. Circled  
at slow speed for further view, but animal  
did not show again.
- 0856 1 ad. Cormorant → sea.
- 0903 I go to crow's-nest. Imm. W. Gull.
- 0911 Pyrosoma numerous in very clear blue water.
- 0915 Sev. W. Gulls now with ship.
- 0928 Bull elephant seal ahead, head up  
high + vertical. Dors on close approach and

II: 9: 1957 (cont.)

swan S just below surface. Like whales and seals <sup>was above</sup> appeared very light (white) cream on submergence. When we were quite close I could see rear flippers held outstretched and feet sweeping sinus rhythmically to L and R.

0920 Ship with 2 men and outboard seen tending lobster traps off N. Cape. Large nos of traps for about 1/2 mile N of point (the 4-fathom depth we were crossed over was perhaps a ridge running N.).

0935 At least 2 sealions (identified later) basking just off rocks of N. Cape. Traps also just N. and just S. of Pilot Rock. Julius Bergey's later found that fishermen from Enderby were working island for lobsters.

0940 Hawk showed down and air very close to Pilot Rock, so I could check guano patches for possible nest sites, but no trace of nests was seen. From crow's nest I could clearly see the several <sup>W.</sup> gulls on the roosts. They were pink-footed.

0945 off elephant seal beach just S of Pilot Rock. Enormous concentration.

I left with Stover handling "Wizard" and with Moran to check W. shore, leaving Wither to check elephants and Fleck to photograph them by panoramic views from car's nest just off shore. Wither roughly estimated 3,500 on beach, plus another 500 or so in roost

IX: 22: 1957  
Count from  
photo  
1,856

the Baracks beaches.

1005 Off for W. show. At least 6 elephant seals close to rocks between large boulder slide and Pilot Rock. (Late Flecker's said he thought there were 50 or 60 on show N of when he started to take pictures and presumably S of the rock slide; two patches were seen by me from airwaves, chiefly on small pockets of sand, and I would guess that the 50 estimate was low; Flecker's also stated that there was a group of about 15 S of his last picture, at extreme S. end of beach, somewhat isolated.) Among the 6 I saw was one very large badly scarred bull.

1014 5 more elephant seals on rocks and in water (1/2-gt. + bulls).

1016-17 At least 3 sealions heard + seen close to rocks along E side of tip of N. Cays (they were presumably ones seen from ship).

1018 Rounding N. Cays. 3 light-footed Gulls on rocks.

1022-23 Group of 12 imm. + ad. Glaucous-winged Gulls on one small rock.

1025 At least 8 medium-sized sealions (Zalophus) in water, some close to ship.

1026-27 At least 25 elephant seals, low to high on pocket beach; 2 sealions basking about 100 yds. offshore. A few W. Gulls on rocks.

1034-35 18 medium elephant seals sleeping on boulder and cobble beach below timber refuse.  
(Cats)



II: 9: 1957 (cont.)

- 1036 Seal close to rocks just beyond elephant seals.
- 1040-42 Round a rock tied to shore (rock with window); 3 elephant seals on pocket beach on NE side of rock, medium-sized, 1 deep, 1 low, 2 high.
- 1044 At least 4 sealions basking over wide waddy shore 100 yds + offshore.
- 1046-48 Boulder beach with timber refuge; looks good for elephant seals, but only 1 seen.
- 1100 Small rock with considerable guano; cornucopia flies off.
- 1103-5 Point with stack at end, and a pinnacle rock well offshore; covelets with some reef development on either side.
- 1114 point with rock tied to shore. Some local W. Gulls.
- 1116 Small guano rock; 3 <sup>W.</sup> Gulls with very light pink feet. ^
- 1117 3 elephant seals on boulders.
- 1119 A definitely pink footed W. Gull inspects skiff.
- 1120 The great dyke.
- 1124-27 Beach - sandy below, bouldery above; 1 flock of about 20 Glaucous-winged Gulls in one close group on beach; 18 elephant seals of various sizes
- 1130-36 Collecting on Rhinoceros Islet about 100 yds. offshore. (over)

- 11φ42 1 elephant seal on boulder beach.
- 11φ47 1 Branet Cormorant on Elephant Rock;  
it seemed curious on very close approach.
- 11φ48 Sealion near point; lobster traps  
here, in lee; 2 cormorants fly from  
shore, 1 definitely double-crested.
- 11φ50 + Held up a few minutes in good lee;  
1 elephant seal on boulders; 1 Wandering  
Tattler on algae-covered rock, 2  
elephant seals on rock.
- 1158 Underway; 1 big bull elephant  
seal in water; good weedy submerged  
reef.
- 1202 Continuing very slowly. More lobster  
traps.
- 1205-13 Collected 1 fully adult W. Gull,  
tame on rock. Feet definitely yellow,  
with bare trace of pink in webs.
- 1217 Large elephant seal bull in water.
- 1218-25 Randonvous with <sup>Palina T</sup> ~~area~~, then back  
to shore to continue.
- 1227 1 light-footed W. Gull on rock;  
1 elephant seal (half-grown) on  
boulder beach.
- 1230 1 Nereocystis floating.
- 1232-39 Working into large cove;  
9 elephant seals (♂♂ + ♀♀) on cobble  
beach + 2 half-grown on ledge  
above; + at least 5 bulls, including 1  
in water, in side cave. When the 2 on  
the ledge start down toward the water  
(last)

the master bull below heads them off, then promptly tries to mate with the ♀ nearest the ledge. Here or soon after saw another Wandering Tattler.

- 1242-43 On boulders in next cove 6 ♂ + ♀ elephant seals + 1 big bull in water.
- 1244 - Out to round broad shoal.
- 1245-48 Collecting 1 Cassin's Auklet about 1/4 mile offshore; 1 foot lost and <sup>wound</sup> healed.
- 1255-131<sup>3</sup>/<sub>6</sub> 2 runs to count elephant seals on Elephant Seal Beach; counted only 76 but many must have been hidden; surely at least 1,000. Some copulation attempts seen. Many very fat pups. Mostly on black sand.
- 1316 Big bull <sup>elephant seal</sup> near rocks.
- 1317 5 elephant seals on boulder beach.
- 1318 36 " " on sand pocket.
- 1319 Big bull " seal off rocks.
- 1321 W. Skull with pale pink feet.
- 1321 1/2 1 elephant seal on boulder.
- 1322 1/2 1 bull " " in water.
- 1323 2 yg. bull " seals in sand pocket. More lobster traps continuing (there were many traps N of and on large shoal noted at 1244).
- 1327 3 W. Skulls, 2 with yellow feet, 1 with pink feet, on rocks.
- 1328 4 elephant seals on bouldery pocket beach; rock tied to shore
- (over)

- 1332 - flat rock about 100 ft. offshore.
- 1339 - heading out to Paulina T for  
toys. 0.1 mile N of Steamer Pt.
- 1353 Back on course, with Julio  
Berdigué and Friedrich Mung, and  
Flechaig at motor.
- 1355 Rounding Steamer Pt. More  
lobster traps.
- 1400 2 ad. W. Gulls on small  
rock, one with pale pinkish feet.
- 1401 In low-arched cave: 1 large  
trumpeting bull elephant seal;  
1 Wandering Tattler.
- 1402-5 Cicking elevated reef where  
we once saw several elephant  
seal on solid rock; this time  
we saw only 1, a young bull,  
rather high.
- 1409-12 Ad. W. Gull with pale  
yellowish feet shot but not killed.
- 1415 Thomomys (many).
- 1417 2 W. Gulls, pale-footed; one shot but  
not killed.
- 1419 3 elephant seals (yg. bulls?),  
on cobbles; + 1 big bull in water.  
Many lobster traps in this general area
- 1422-24 Ad. W. Gull killed; 2 others that  
were with it flew by several times  
looking at the dead one. The one killed  
had pale yellowish feet with greenish  
tinge on shank and trace of pink on webs

- 1428 Now 2 Wandering Tattlers (1 had accompanied ship from first observation).
- 1432 Prominent point.
- 1436 2 yg. elephant seal bulls in small rubble beach.
- 1438 Do.; also pale-footed subad. W. Gull and 1 Wandering Tattler.
- 1458 2 bl. gr. elephant seals on long bouldery beach.
- 1501 1 Wandering Tattler.
- 1510± Several bouldery caves; offshore a small rock; more lobster traps.
- 1515 1 elephant seal on bouldery pocket.
- 1519 Close to deep cave.
- 1520 First main point N of West Anchorage Pt. Sped up for investigations with Pauline T at West Anchorage.
- 1535± rounding West Anchorage Point.  
1535④ At Pauline T.

There is a rather large lobster camp here when in Feb. 1956 the elephant seals were thick about. Now the larvae are more scattered. There are 4 stacks in the camp. The men say (to Berdegué) that they have been here since Sept. The elephants have been here all the time, but have been migrating since January and February. Two weeks ago beach was more crowded. The lobster fishermen are working out

out of Ensenada, for one of the cooperatives.  
They doubt they will return. Legal  
lobsters are ~~packed~~<sup>held</sup> for shipment to  
Ensenada, small ones are dried  
(tails). On beach saw carcasses of  
Gymnethorax mordax (many) and  
Cephaloscyllium sp. (1♂+1♀). One  
promise to bring in and hold for us  
a series of Cephaloscyllium and  
Heterodontus, which the hincas get and  
sell. <sup>later failed to get the sharks</sup>  
Muraena angustirostris: 9 carcasses on  
beach by camp; 41 of all ages and sizes  
on beach; several pups. In one barren  
18 cows + several pups with master bull  
and 4 old bulls outside. Later 1  
of the bull in water attempts copulation  
with unresponsive ♀, without being  
challenged by master bull, who also  
attempts copulations unsuccessfully.  
About 50 ft NW, in shallow water, is a  
immense old bull, with torn and  
healed proboscis and raw neck. Later  
one of marginal bulls gets chosen. They  
bluff and trumpet, drop heads in  
water then rise up and open mouths.  
Finally the smaller bull slashes  
side of neck of the old fellow bringing  
blood and a terrific return lunge,  
which sent the challenger to sea. Both  
lay ♂ in water near end of beach. In  
channels and shore pockets on E part of the

II: 9: 1957 (cont.)

extensive, flat, dissected reef 23  
jugs to old ♂s are scattered. Then 3  
starred ♂s. On boulder and cobble  
area beyond and in adjacent channel  
at 42 more, mostly in 1 harem. Then  
beyond a low ridge, on sand and  
boulders, a harem of 29. Then a  
somewhat isolated harem of 10, with  
a small bull. Then a bull or ♂ with  
4 fat jugs on far side of definite ridge.  
Then harem of 30 among cobbles & boulders,  
and in channel at far end of reef, with  
big bull in water. - Much nursing seen.  
Most yg. very fat. No intermediates  
between smaller ♀s with jugs and the  
jugs. At least 1 big bull beyond reef.  
Some apparently newly born. In places  
jugs greatly outnumber cows, which are  
not fishing?

II: 10: 1957

0615 Underway from Melgomen Cove for Islets

Negro. A few W. Gulls in cove.

0625 1 cormorant between islets.

0635 and 0638 2 pro of Cassin's Auklet

(possibly murrelets) at sea.

On way up wind was registering 45-50 mi/hr  
Parline T pulled in just S of islets in  
moderate lee and anchored securely in  
14 fathoms. Landed in slight cove on S side  
of islets, with stairlike access to ~~top~~ up cliff.  
Birds ~~mostly~~ littered by nests, in sequence. / ~~seen~~

Green  
#10

Birds secured by overturning boulders (petrels)  
or following burrows (shearwaters and auklets).

- (A) Petrel recently dead, much down left.  
White rump index 4.
- (B) Single downy yg. petrel.
- (C) Petrel yg.; flight feathers forming,  
rump largely white.
- (D) Another, flight feathers forming; rump 5.
- (E) 1 Black-vented Shearwater adult deep  
in recess burrow under boulder.
- (F)<sub>1-2</sub> Pair of the shearwater in similar burrow.
- (G) Adult petrel (white 3) with 1 small  
downy yg.
- (H) One downy petrel with flight feathers  
forming and rump apparently 3.
- (I) One adult petrel under flat boulder; 4.
- (J) Downy yg. petrel, flight feathers just  
starting, under rock on top of island  
(A-1 and L on steep slope between cliff  
and top; all others on top).
- (K) Downy young petrel, flight feathers starting
- (L) Pair of shearwaters in deep recess dug  
under a flat boulder. These released.
- (M) Petrel (rump 4) with 1 small downy yg.,  
under flat boulder with a little  
dry vegetation on soil.
- (N) Cassin's Auklet eggs (old), not taken;  
found at end of burrow under large  
flat boulder.
- (O) Downy yg. petrel left on nest; flight feathers  
not started.
- (P) W. Gull (feet pale) carcass apparently eaten  
by cat. Photographed. On open surface.



II:19:1957

(cont.)

- ② 1 downy petrel under boulder; too young to show white ring; not saved.
- ③ Pair Black-vented Shearwaters in burrow area, in very large nest chamber about 3 feet back and 1 foot below surface; 1 discarded; 1 saved for brain study (skinned head + plucked eyes), in 10% formalin.
- ⑤ 1 old Xantus Murrelet egg in burrow in open dirt area (considerable no. of Murrelet eggs in recesses - none taken).
- ⑦ Pair of Black-vented Shearwaters in flat burrow under flat boulder.
- ⑧ Downy young petrel under stone.
- ⑨ Do.
- ⑩ Cassin Auklet (note line) + 1 egg in moderate burrow under boulder, on crest of islet.
- ⑪ Adult petrel (#3 ring) with 1 egg containing embryos about ready to hatch.
- 4-X in morning. After lunch on ship:
- ⑫ 1 downy egg petrel with enough feathers to show predominantly white ring; under large boulder.
- ⑬ 1 Black-vented Shearwater in long narrow dig under ledge.
- ⑭ Do.
- ⑮ 1 Cassin Auklet, alone in burrow on ridge. Cavity 6' down and 2 feet back.
- ⑯ Downy young petrel alone under flat boulder. Not saved.

(over)

- (DD) Single small downy petrel, not saved; in side pocket of a burrow.
- (EE) Another in another pocket of the burrow. Not saved.
- (FF) Another largely downy yg. petrel under flat boulder; not saved.
- (GG) Adult petrel alone in flat lava debris; #2 or 3 rings.
- (HH) Another ad. petrel, #2 rings, within 3 ft of GG under flat lava rubble; alone; took off, but caught on wing.
- (II) Single ad. petrel (#5) on soil under pile of lava rocks (apparently soil bottom is preferred to solid rock for nest cavity).
- (JJ) Adult petrel (#4), soil + lava debris; with 1 egg containing a small embryo.
- (KK<sub>1-2</sub>) Pair of petrels together under lava rubble.
- (LL) 1 downy yg. petrel alone under rubble. Some feathers, showing white rings.
- (MM) 1 downy yg. petrel alone on nest; feathers barely started.
- (NN) Adult petrel under large flat boulder (#4).
- (OO) Cassin's tubenose in burrow under boulder; not fully grown; dead; presumably from last season.
- (PP) Small downy petrel alone under rubble; not saved.

(cont.)

II: 10:1957  
(cont.)

(QQ) Single downy petrel, under boulder;  
not saved.

(RR) Do.

(SS) Do.

(TT) Very small egg like a petrel's under large  
flat boulder, on dirt; old, but saved  
(possibly a Rock Wren's?).

(UU) Adult petrel under rubble; # 4  
rings, caught escaping; nearby a  
newly hatched chick.

(WW) [Vv apparently missed] - 1 downy yg.  
petrel with white showing on rings;  
saved; in slight burrow in dirt.

From "Isola Negro" we saw 1 seal in channel and  
3 in swimming hole just S. of islet.  
Ca. 1500 Collected a few mollusks in upper  
intertidal mud above, on S side of  
"Isola Negro".

With Flechas and Steve left island in  
"Wizard" to explore coastline about islets  
and S.

1534 Leave island.

1535 Leave ship, rounding islet to N.

1540± Around N end of rock just tied to main  
island just N of islet. Fair tidegauge,  
good cave.

1547 Big cave.

1548 Tidegauge on channel side of islet doesn't  
look so good.

1549 Large bull elephant seal by shore just  
S of islet (also seen from islet).

(over)

1553 + deep rock-walled cave; followed by  
elevated platform; then 2 bouldery  
caves

1556-59 more caves, some elevated; sun  
shining in no. obs. observation good.

3 Wandering Tattlers.

1620 Landed on Sargoyk Rock - worked birds  
with Flechaig and Bergeaud. Wandering  
Tattler heard; W. Gull overhead.

Bird-nest contents numbered. Nest  
in crevice in lava rock.

- ① Lone yg downy petrel; not saved.
- ② Adult petrel (no 2!), but with some  
white below outer rectrices; possibly #3.
- ③ Adult petrel taken near ②; index 3,  
with some white below.
- ④ Lone downy petrel; too yg. to show  
ring color; not saved.
- ⑤ Lone downy petrel, showing that a  
developing eye tail coverts; index  
#4 index; saved.
- ⑥ Lone downy petrel too yg.
- ⑦ Adult petrel; index 3; with 1 egg contains  
early embryo.
- ⑧ Downy yg petrel; index 3?; saved
- ⑨ " " " - too yg. to see color; <sup>not</sup> saved.
- ⑩ Do.
- ⑪ Do.
- ⑫ Young petrel with developing feathers;  
index 3? saved.
- ⑬ Downy petrel; too young.

(cont.)

- ⑭ 2 ad. petrel seen side by side in  
 big recess; too deep to reach; 2 downy  
 yg. seen 1 1/2 feet away [possibly clutch  
 of 2 - or 2 clutches].
- ⑮ Advanced downy <sup>petrel</sup> yg.; saved; index 3 or 4.
- ⑯ Downy petrel; too yg.
- ⑰ " " } could not reach.
- ⑱ " " }

WEATHER STATION - Temperature Records.  
 After dinner visited Weather Station with  
 Julio Berdagué and 1 crewman. After  
 landing we were challenged by a  
 lieutenant, who called for papers.  
 After long discussion with Julio as  
 intermediary we learned that no  
 temperatures have been taken since  
 end of October, and also that  
 has been delayed. Claim was that  
 temperatures were taken on a special  
 favor basis through Oct.; when no  
 official instructions arrived, they  
 ceased. Would continue if so ordered  
 from Mexico. Engineer from Ensenada,  
 Ingeniero Enrique Cardenas Trigo,  
 Residencia Obras del Puerto, Ensenada,  
 B. Cfa. came in November (?), photographed  
 place for tide gauge, and said he would  
 install it when equipment came; nothing  
 more heard of project. Whole attitude  
 essentially unfriendly. I showed the  
 officious officer the SIO permit. Obviously  
 (ours)

over  
II:10

immediate contact with Mexico is needed.  
Local arrangements are obviously out.  
Queries should also be made as to  
tide-gauge. Radio instructions could  
be sent. We left a large boxed  
sawed box (over) which was told  
was to go to Station; but later learned  
this was for the PT! But it didn't  
fit, so crew was glad of riddance!

II: 11: 1957

WORK ON AND ABOUT ISLOTE TORO =

ISLOTE DE APUERA = OUTER ISLET

Hulbs, Moran, Berdeque'

0752 Left by "Wizard", run by Storm.

0800-07. From ship counted 308 seals  
in landing cove at low NW part of  
crater rim (not previously seen  
here by us; see more complete  
count at end of bird notes); certainly  
missed some seals in counting for sea.

0807 + Ran about NW of islot trying to locate  
fresh swimming groups of Earl Seals  
(more definitely checked & sampled  
II:12), but were unsuccessful. Numerous  
Cassin's Petrels seen NW of islot,  
mostly in pairs. An approach would  
dive almost immediately on surfacing.  
One shot 3 times but not collected.  
Some W. Gulls and Comorants seen.

(cont.)

On climbing cliff saw sealions in 3 groups, with largest no. and thickest concentration (almost solid) on E side of ledge, the about 15-20 feet wide. Many bulls and cows; no pups. Considerable variation in color, a few <sup>(2-3)</sup> very white. [See later notes.] I worked most of day overturning tons of loose lava boulders on W side of crater, beginning at rim of landing cave; helped part of time by Bordegué. Later we worked one steep recess near crater bottom on E. wall. Nest contents designated T [for Tons] - 1, 2, etc.

- T-1 Adult petrel, index 3, alone on soil under boulder.
- T-2 1 downy petrel; two young.
- T-3 Pair of presumably fresh (i.e. this season's) Xantus murrelet eggs (not saved). Many old murrelet eggs, many imbedded in hardened soil on old nests; also many old petrel eggs.
- T-4 Downy petrel in recess under boulder. Enough feather development to show extensively white rump. Very close to recently crushed #4 petrel adult, likely parent of chick.
- T-5 Downy petrel, alone in deep vertical fissure; could not reach it. (~~one~~)

T6 1 adult petrel in definite soil burrow about 15 inches long. In collecting ad. I crushed the legs (with medium-developed embryos). Index y ad, 3.

T7 Petrel - two young; alone on nest

T8 " " " " " "

T9 " " " " " "

T10 " - white tail patch developing; alone on nest under boulder.

Nos. 7-10 close together (within an area not over 2x2 feet, in small, separate pockets in soil under the boulders of the crater rim (of poorly cemented ash and lapillae).

T11 Similar to T10, but somewhat removed. Petrel

T12 Adult petrel; index 4; in channel under large boulder; escaped entrance, but patch clearly seen.

T13 Downy petrel, developing white rump; alone on nest under boulder; kept.

T14 Downy petrel showing trace of white patch; alone on nest under boulder; kept.

T15, 2 Adult (index 4) and small downy off. petrel; both saved; from deep recess on very dirty nest, obviously used before.

T16 Downy petrel showing bare beginning of white rump; not kept; at end of what appears to be an outlet or shower-burrow (but no eggs or nesting birds or other seen or signs). (cont.)



II:11:1957 (cont.)

T17 Downy petrel showing large white  
rump patch; alone, deep in recess; kept.

T18 Low downy petrel; too young.

T19 Adult petrel; index 4+; under boulder  
with yg. too young to save.

T20,2 Adult petrel, index 3, with 1 downy  
chick showing beginning of predominantly  
white rump.

[Nos. 19 and 20 within 1 foot, but in different  
burrows; several times nests have been  
seen closely clustered, usually  
in holes in dirt under boulders.]

T21 Low downy petrel, under a ledge,  
beginning to show white rump; saved.

T22 Downy petrel beginning to show  
largely white rump; not saved.

T23 Large downy petrel <sup>petrel</sup> with (light feathers  
far along; index 3 or 4; saved.

T24 Downy young petrel just beginning to  
show white rump (4?); not kept.

T25 Do.; index 3?; not kept.

T26 Do.; " " " "

T27 Downy petrel; too yg. to show white; not  
saved.

Stopped birding after working over best  
areas on W side of crater.

1 Hummingbird, apparently an Anna

Hummingbird, seen near rim of crater.

House Finches common, mixing freely as at

"D. slate Negro."

(over)

At 1430 resumed bird collecting, within  
a steep recess with many loose boulders.

Area about 20 ft. in diameter. All  
from recesses under boulders, except T37.

T28 Adult petrel; index 4+; with 1  
egg, which was broken in handling.

T29 Downy petrel; index 4?; kept.

~~T30~~

[T30+31 reported by Julio Berdegué for  
Wicks, to W of rim of crater; young  
thought by him to be of index 3 - not  
kept; data not to be used.]

T32 Downy petrel two young, to show  
white; in separate Y or recess,  
about 15" from T29; not kept.

T33,-2 Adult petrel; index 3, with 1  
downy chick with about same  
amount of white. Both saved.

Both about 3 feet in long recess  
(apparently not dug).

T34,-2 Adult petrel; index 2 or 3, in recess  
with yg. almost ready to fly. Both saved.

T35 Downy young petrel; not saved.

T36 " " " - two young.

T37 " " " " " ; in

uncovered nest in slight recess.

T38 Downy petrel - ~~index 4~~ <sup>index 4</sup>; not saved

Section census - see next page

Small series of the land snail collected in  
dust & debris

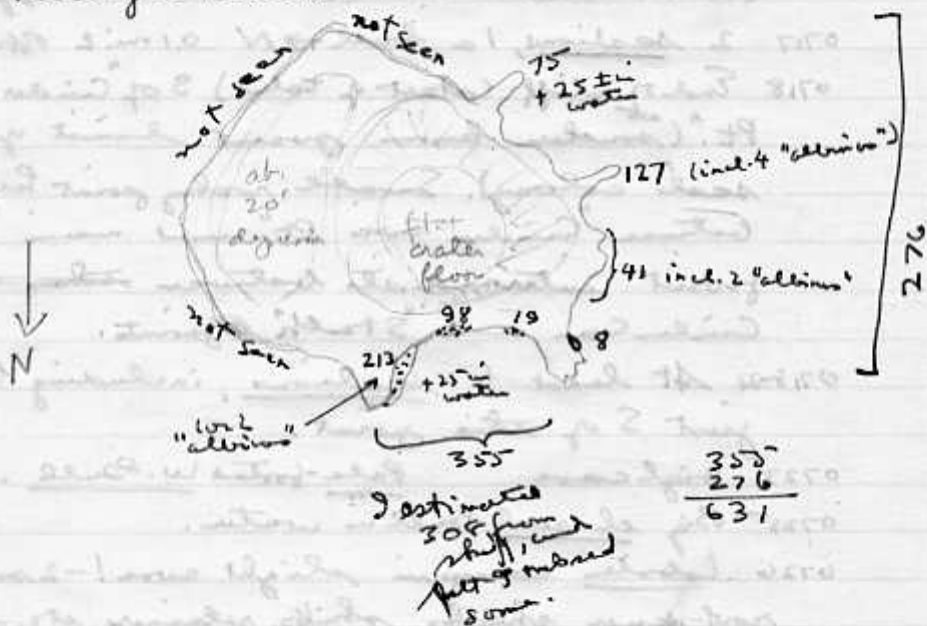
1600 Back on Parline T.

After 1600 - when garbage was thrown over, S. W. Dull  
gathered near ship - all with definitely pink feet.

II:11:1957  
(cont.)

While on Islotos Toros = Aguen, Jules Berdegué made count and observations on the sections, while I was working birds and Moran was collecting plants. Jules gave me his counts, etc. See also notes for II:12 (from ship). There is core counted for site slope, sites for high rim.

Berdegué's counts:



Jules also noticed many bulls. This recalls almost exactly each of bulls on San Benito in Feb., 1950.

Very noisy in core area, much quarreling but no definite heron behavior noted.

over II:12

(over)

II: 12: 1957      MAMMALS & BIRDS

After successful midwater trawling, Parliat  
anchored securely in 10 fathoms in ~~area~~<sup>lee</sup> of  
"Cinder Cone" Pt.

0715 Took off in "Wizard" with Julio Burdague as  
photographer and co-observer and Aileen J.  
Stover at motor. A few W. Gulls nearby.

A sealion has been barking against  
shore. In mouth of "Big Cave" 1 fur seal at  
mouth, on rock, and 3 on rock 50'± N.  
(to be counted later).      Start count, going S.

0717 2 sealions, 1 a bull → N 0.1 mi. ± offshore.

0718 End of cliff (start of talus) S of "Cinder Cone  
Pt." (<sup>at</sup> southern known present limit of fur  
seal colony). Small rocky point <sup>here</sup>  
between "Cinder Cone Pt" and main  
point intermediate between ~~them~~  
Cinder Cone and "Stalk" points.

0718-21 At least 6 sealions, including bulls,  
just S of this point.

0723 High cave.      Pale-footed W. Gull.

0725 Big el. seal bull in water.

0726 Lobster camp in slight cove! - 2 small  
roof-paper shacks, shifts, retainers, etc. - at  
S end of fur-seal colony! Protest planned.  
1 small sealion on a rock point.

0728 Wandering Tattler.

0731 Bull el. seal in water in mouth of cave.

0732-35 Small double cove. On one side 1 bull el. seal  
and 1 fat juv. On other side 2 cows and 3 juvs.

Probably one harem [on return trip 1 big bull on  
cove with harem.

Total

(cont)

II:12:1957 (cont.)

- 0736 The sealion follows closely after diving in.
- 0737 $\frac{1}{2}$ -39 2 fur seals on rock just S of a cave.  
Photo by J.B. 2 pale-footed W. Gulls with  
pale yellowish feet. Another fur seal (3 =  
cumulative no.) on boulder in cave.  
— Cave largely filled with boulders.
- 0739 Wandering Tattler.
- 0740 1 yg. bull and 1 ♀ fur seal (5, cumulative) on  
sloping rock
- 0741-51 Working about "Big Cave" [special notes  
on previous trips]. 5 fur seals (10) on  
rock about 4' up at R of entrance.  
Another (1) on rock in entrance. Several  
bull barking loudly in water, and 1  
advanced juv in water (13). Another two  
(5) on rock 100' ± N., apparently ♂ + ♀. Then  
10 fur seals were very tame and lazily.  
Photos by J.B. I did not land this time.
- 0751 $\frac{1}{2}$  Groups of 4 and 1 fur seals on rocks on S side of joint  
in minor cave + 1 in water, with tail flippers  
waving out of water (20).
- 0752 1 bull el. seal just S of tip of joint.
- 0753 + 0754 Big cove on joint.
- 0757-58 $\frac{1}{2}$  Cirked, probably false alarm.
- 0800 Minor joint.
- 0802 1 fur seal in water (22).
- 0803-04 Fur seal ♀ on rock, remarkably concealed (23)
- 0805-06 2 more on rock + 2 in water (27).
- 0809-10 7 fur seals on rock 4-8' up, in mouth  
of broken-in cave (34). Coughlike notes. (over)

- 0811-12 2 fur seals in low arched cave (36).
- 0812+ 1 fur seal pup 2' up (37).
- 0813-14 1/2 (in most of seal traps Julio took colored pictures) - 2 pups on rock (39).
- 0816 4 fur seals, each on a separate small rock about 3' up (43).
- 0817-24 2 fur seals on rock; photos (45).
- 0825-26 At least 15 fur seals in one group in area about 20 x 30 feet, on rocks 2-12 ft. up and in water channels; Near mouth of slight cave (60). Rock When near water. - photos
- 0825 1/2-29 1/2 Another fur seal about 4' up, by small deep cave (photo) - (61).
- 0834-34 1/2 Fur seal cow on rock 3' up; 3 pups idly flapping at surface (1 very small) - (65).
- 0835- Yg. fur seal on rock 3' up (66).
- 0835 2 Hg. fur seals on rock 3' up (68).
- Wandering Tattler.
- 0836 1 yg. fur seal 3' up (69).
- 0836 1/2 1 Hg. " 5' up (70).
- 0837-39 2 cow fur seals each with a pup, 8' apart and 3' up; 50' ± N. 1 Hg. "; 15' ± farther cow and pup; another 10' farther, 2 yg.; 25' farther 2 more ygs.; 1 in water. Total 11 (81). Photos.
- 0840-41 1/2 4 yg. fur seals: 1 in water, 2 together 5' up, and 1 about 15' up, on dry rock on soil slide - all near mouth of a cave (85).
- 0842-43 Cow and pup, fur seal; pup apparently trying to neezing 6' up (87).

(cont.)

II:12:1957 (cont.)

- 0843 $\frac{1}{2}$  100'± N. another cow + pup fur seal (likely from same hauler?); photo (89).
- 0845-46 1 yg. bull fur seal 5' up, black against gray lava; photo (90).
- 0848 low creviced caves with boulders.
- 0849-50 $\frac{1}{2}$  4 fur seals 3-6' up, very tame, bl. gr., + 1 in water; photos (95).
- 0851-57 $\frac{1}{2}$  Changing film from color to black-and-white.
- 0859 $\frac{1}{2}$  Back to place where we stopped.
- 0902-03 Cow + pup fur seal, cow 2' up, pup 5' up (97).
- 0905 Cow and advanced pup fur seal near minute cave (99).
- 0908 Cow and nursing pup fur seal about 4' up; photo (101).
- 0908 $\frac{1}{2}$ -09 1 ♂ fur seal on wet boulder in cave (102).
- 0910-11 Recaying el. seal pup floating.
- 0915 Point. 2 W Gulls on rocks; pale green fish feet. 1 Brandt Cormorant.  
From this point N end of island is visible.
- 0918 Recaying cow or yg. bull el. seal on surface.
- 0920 1 ad. W. Gull - feet almost white except on webs.
- 0922 $\frac{1}{2}$  Boulder pocket beach; 1 bull el. seal in water and cow on boulders.
- 0925 El. seal on boulders, by crevices + blowholes.
- 0925 $\frac{1}{2}$  2 el. seals on small boulder pocket.
- 0927 1 el. seal in water of small cove.  
(over)

- 0928 1 yg. bull fur seal about 6' up (103).
- 0929-32 3 yg. fur seals 5-8' up; photo (106).
- { The ~~103~~ fur seals were identified with certainty, with no chance of duplication
- 0934 1/2 1 old bull el. seal on slight cobbles terrace.
- 0937 Very low-arched cave.
- 0938 2 sealions in water.
- 0940 1 el. seal in boulder-cobble pocket.
- 0942 1/2 6 el. seals on cobbles pocket and in water. 1 pale-footed W. Gull.
- 0943-45 1 fur seal in water (107). 2 ad. Herring Gulls with 1 pale-footed W. Gull on rocks (approached very close).
- 0947 5 yg. bull el. seals on + off cobbles pocket.
- 0948 Another yg. bull el. seal
- 0948 1/2 " " " "
- 0949-52 "Discovery Cave".
- 0953 1 pale-footed W. Gull.
- 0953 1/2 ♂ el. seal on cobbles pocket.
- 0954 1 imm. Blauvros-winged Gull on rock (close).
- 0955 Point where Pilot Rock just clears. Turned to "PT" at NE Anchorage.
- 1005 At least 3 bull el. seals in open water of bay, heads high up.
- 1009 On S. beach by Barracks, Elephant Seals; Pugs largely concentrated in dry pool at head of this beach, against large lava dyke. Flecksig counted 549 on S. Beach. (cont.)



II:12:1956

SOUTHWARD TRIP FROM NE ANCHORAGE

1035 left Paulina T on "Wizard" with Arthur O.

Flechaig as co-observer + recorder and

Gellan J. Stopped at the motor.

1035 1/2-37 28 el. seals among rocks S of S.

Barracks Beach. 3 light-footed W. Gulls.

1038 3 el. seals on boulder beach; 1 pale-footed

W. Gull; 3 more el. seals.

1039 9 el. seals; then a harem of 11, with

bull in water; then 2 bulls; then 3

more on boulders; 2 more. 1 Wandering

Tattler.

1040 3 bull el. seals in water.

1041 18 el. seals on boulder-and-cobble beach.

1042 8 " " " " " " ;

then 2 bulls in water in next cleft + 7 on beach.

1043 3 el. seals on boulder beach +

1 bull in water.

1044 1 pale-footed W. Gull on rock.

1045 2 bull el. seals in water.

1046 1 pale-footed W. Gull; 1 bull el. seal

— in water, another offshore.

— Very deep canyon.

1047 16 el. seals on beach, including pups

1 Wandering Tattler; then 17 el. seals

on boulder-and-cobble area - further

canyon.

1048 1 bull el. seal in water; then another.

1049 40 el. seals on cobble-and-sand beach,

on N side of boulder talus at canyon mouth

On S side, on rubble, only 1 el. seal.

www

area  
II:2

The 2 more el. seals on cobble pocket; the  
4 on next cobble pocket.

1050-58 On N beach, largely sandy, at  
mouth of main canyon (usual  
rocky), counted 538 el. seals, with  
many pups, some nursing; some  
copulation; 4 more bulls, offshore.  
On beach to S of boulder delta there  
~~was~~ considerable sand this time  
in the cobble, and 197 el. seals  
counted - of all ages, some copulation  
& some nursing. 9 imm. + ad. Herring Gulls  
with 1 juv. + ad. W. Gull on beach.

1059+ 1 bull el. seal in water. At  
next large canyon a high beach,  
mostly cobbles, a little gravel at one  
end; 68 el. seals.

1100 1 bull el. seal in cave, 2 on cobble  
pocket under cliff.

1101 5 el. seals on sand ~~and~~ shelf above  
boulders.

1102 1 el. seal, same situation; another  
on boulder.

1103 3 el. seals <sup>(1 bull)</sup> on sand-and-cobble  
pocket + 1 bull in water.

1104 (bull el. seal) in water.

1105 1 Blandt Cormorant on rock; 1  
juv. + ad. W. Gull.

1107-12 "His way Cam." 9 landed and looked  
into cave. No seals. 3 imm. + ad. juv. + ad.  
W. Gulls.

- 1112+ 1 bull el. seal in cave just S of "Discovery Cave."
- 1113 1 yg. bull el. seal in water; 4 el. seals on boulder beach. 1 ad. Herring Gull.
- 1115 1 ad. pale-footed W. Gull.
- 1116 7 el. seals on cobbles.
- 1117 1 cormorant in water; 1 el. seal on boulders.
- 1120 low arched cave. 2 fur seals about 6 ft up (2, cumulation).
- 1122 1 yg. bull el. seal between boulders.
- 1123 small deep cave. 1 pale-ft. W. Gull.
- 1124 1 Wandering Tattler; " " " " ;  
1 el. seal high up in cave.
- 1125 Wreck. 1 el. seal; the small deep cave; 1 pale-ft. W. Gull; 2 el. seal <sup>seal</sup> <sup>bird</sup> on boulders another el. seal.  
1130 ± Print 5, which <sup>is not visible.</sup>
- 1133 1 Wandering Tattler; 1 el. seal in water.
- 1134 Cow jump fur seal on rock 3 ft. up (4)
- 1137 to 1 fur seal ab 5' up, prob. yg. ♂, partly shaded (day is hot + sunny; we suspect fur seal have left washing just for open water or caves); <sup>then</sup> 2 fur seals, with cyanide ♀, in shade (?)
- 1140+ 1 bull el. seal, then another.
- 1142 1 fur seal yg. ♂ about 7 feet up, partly shaded<sup>(8)</sup>
- 1144 1 bull el. seal; 6 fur seals, cows with separate pups (14)
- 1148-88 stopped.
- 1188 + 3 Wandering Tattlers. (over)

- 1149 1 fur seal, then 2 more, yg., 100' S. (17)
- 1150 Encountered lobster traps; 22 counted  
from 1150 to 1200; then 48 after "Big Cave",  
mostly in fur seal area.
- 1152 2 Brandt Cormorants on point.
- 1153 2 fur seals (possibly calina) in water (19).
- 1157 The seal follows ahead.
- 1200 2 fur seals in shade before front of  
cave (21); awake on rock ab. 4 ft up;  
1 in water, possibly one that pursued  
us, but may be counted. (23).
- 1203 1 glaucous-winged ad. W. Gull on rock.
- 1206 1 Brandt Cormorant.
- 1207 Brandt can
- 1208 Two large caves on point.
- 1209 Tip of Cinder Cone Pt.
- 1210-1226 At "Big Cave" S of Cinder Cone Pt.  
1 fur seal swam into cave, then out.  
On landing, on rock in entrance  
I could see interior clearly. There  
was 1 lone bleating pup, and one  
cow tending its pup. Total only 4 (27).  
Side pocket of cave was largely filled  
with boulders. [27 us 107 on Northwest side!]
- 1226+ 1 Wandering Tattler.
- 1230 1 taken of 5 ad. seals (1 bull, cows and  
nursing pup).
- 1233 lobster camp.
- 1234 2 ad. glaucous-winged W. Gulls.
- 1235 1 ad. W. Gull; glaucous feet  
(cont.)

II: 12: 1957

(cont.)

1236 Point where northward run started.

1242-44 Stop.

1250 Broad, boundary cave.

1256 "Stack Pt."

1268-1310 Lunch

1313 1 ad. pale-footed W. Gull.

1314 3 el. seals in boulder pocket.

1316 point intermediate between "Stack Pt." & "Double Pt."

1319 1 el. seal on boulder.

1319-22 Stop. 1 ad. pale-footed W. Gull.

# Opposite Hanging canyon containing several drying juniper. Two seal have a bare trace of green foliage.

1324 2 ad. W. Gull, with very pale, almost white feet.

1325 Hanging canyon with juniper about 1/4 alive. Sparrowshawk near flying.

1328 "Double Pt."; 1 imm. pale-footed W. Gull.

1330 1 ad. + 1 second-year pale-footed W. Gull.

1331 1 ad. do.

1332 "Yellow Pt."

1334 1 second-yr. pale-footed W. Gull.

1335 1/2-36 stop.

1336 1 Brandt Cormorant.

1337 1 pale-footed W. Gull on rock pt.

1340-1431 Stop at old sealing camp; unprepared for photography; decided to try again tomorrow [9.4].

1445 Leaving South Bluff for Islets

Toro = Islets de Afuera = Outer Islet  
(cont.)

Over II:12

TOP II (20)

1452 1 Brandt Cormorant → W.

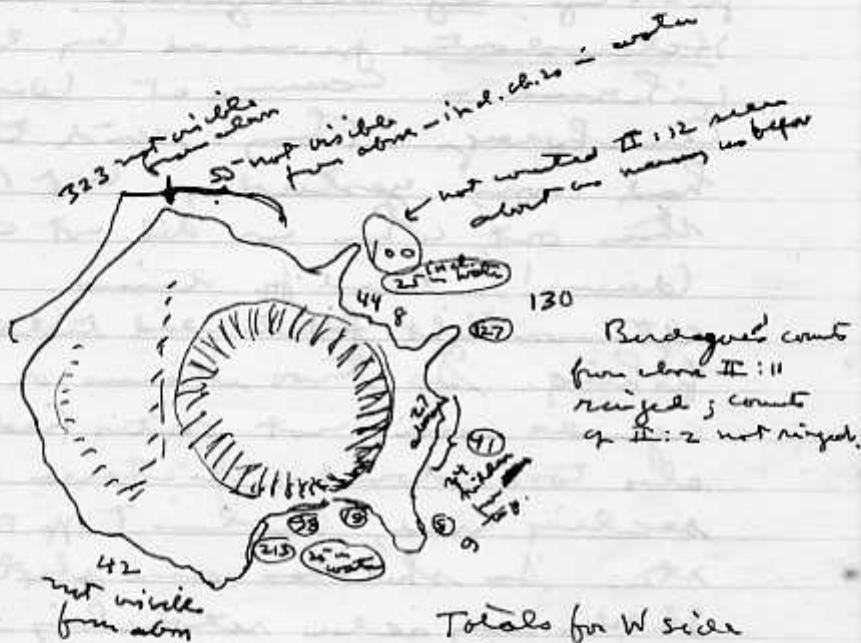
1453 On N. side of islets. On ~~the~~ very narrow ledge on N. side counted 42 sealions. Several singles and pairs of Cassin's Auklets. Flock of at least 12 Eared Grebes in one unit. About 25 Herring Gulls on islets N. shore. During remainder of afternoon checked sealions and shot birds, taking 2 Eared Grebes, 5 Cassin's Auklets, and 1 second year pale-footed W. Gull (feet almost white, with slight tinge of yellow and of pink. Gull was roosting on ledge of islets; others were swimming in sea water just N of islets. [All

labelled and frozen] other light-footed W. Gulls seen around. SEALIONS Large nos. on ledge - E. side, when not visible from above; counted here and in adjacent water 323. Many are cream, tan, chocolate, or varicolored, just as at San Benito, for which this mull-tide new on Islets. True probably common; high incidence of ad. ♂s, and most of them had cream or tan toy knots.

About 25 Herring Gull on S. side. 55 sealions, including 20 in water, just E of S point. No count of large nos. on more easterly of 2 projecting pts. (see Berdegué's figures). Then 2 groups of 4 + 5. (cont)

II:12:1957  
(cont.)

130 on SW pt. Then ~~count~~ below SW and NW pts (short distance), 27 high + 24 low (latter hidden from view from above). The 9 near NW tip. Then in landing, were look about a dozen as they did yesterday.



Totals for W side

	Add	Berkeley	Hubbs
327	42	II:11	II:12
276	323	276	125 (for S pts)
add 101	55		44
	101		8
	521		130
			27
			24
			9
			377

Total for islets  $\frac{631}{521}$   
1152 (!)

Never more than 200 counted before!

Anchored, awaiting Paulina, 15:48 hr.

(over)

over  
~~Handwritten~~  
II:13:1956

Worked all day at old funeral station on deciphering, sketching and photographing inscriptions on rocks of foundation of large house, with surprising results - Sent Paulina T to pick up Cephaloscyllium and Heterodontus promised by Robert Fishman in Camp at West Anchorage. They said they had some yesterday but threw them out when we did not arrive (damn!). Need for time and afternoon light precluded tidepool fishing. So two items on agenda were not satisfied. We also took colored pictures of sealing area, Paulina T off the show, etc. In sketches and photographs. Sketches may allow retouching of photographs and photos will make final sketches more accurate. We took one stone, from top of wall at middle of W side, outside. This is one saying

Ezekiel NETTLETON  
John de Paul (1881) New York

The photographs (by Flechaig) were as follows:

- 1 of color [also other black-and-white]  
2 of black-and-white.  
[1+2 Had tried powdering, but powder brush off - very little left in depression] (cont.)

W<sup>m</sup> CHANDLER  
1824



II: 13: 1957  
(cont.)

Photos

- 3 Large area "Rotten 1955" though "Summer Cloud"  
(<sup>no corner</sup> "Summer Cloud" inscription slightly retouched  
with point of stick.)
- 34 BONEY + WOODWARD. (slightly powdered;  
then touched with abalone)
- 5-12 Touched up with fine point of bleach  
(except 6, 7 and 13)  
abalone shell - found by Fleck; to  
be much better than corn starch;
- 13 marked by pencil as the rock  
was light colored; 14 and 10 retouched.
- 5 Hobbs, Porter, Kelly, et. al.
- 6 January 1836 (before retouching)
- 7 Ship Essen - before retouching.
- 8 " " after marking.
- 9 January 1813 after marking with abalone.
- 10 Anderson and Summer Cloud after  
marking with abalone - G.L.H. shows  
finishing marking.
- 11 Fur Ship next marked with abalone;  
note length and sketch at side.
- 12 Wm Sumner and By Juigo, marked  
with abalone.
- 13 1857 and W Porter 1881 [note also 1846] -  
marked with pencil.
- 14 Wm Allen 1854 - unmarked.
- 15 Prichard, et al. "

Contrary to earlier belief we found  
dates of 1892 and 1939. Inscriptions dated  
1955 and 1957 and some others ~~are~~ new since  
June 1955 trip - and in part over historic  
carving (clams). The "1834" date turns  
(copy  
cont.)

Use  
#12

out to be 1824 and we find a new record,  
January 1813. Revised list of dates:  
[check 1870-79 date]

Jan, 1813	1880
1824	1881
Oct, 1835	1892
1837	1939
1846	1955
1854	1955
1855	1955
1857	1957
1857	
1861	

Lima (Cuzco)

Lopez Carrillo (1955)

May, 1869  
Following names found:

—, Noah, 1861

Allen, Wm., 1854

Boney, W.

Chandler, Wm., 1824  
(+ 3 variants)

David

De Paul, John, 1807

Hemott, E.

E., G.

Hannon (?)

[Hart (?), William] <sup>Paper</sup> <sub>Worked</sub>

Hobbs, N.

John (?)

Johnson, 1892

Kelley, 1955 } <sup>See?</sup>

Kely

sum { Mata 1957  
? { Mata Talamante,  
Nethaton, Ezekiel

Phil., Richard

James, 1880  
Porter, Wm. (1846, 1881)

Richard, R.

R, J. 1939  
(+ 3 variants)

Ringsdate(?) 1837

Ritter, 1955

Salk

Sumner, Wm.

W, H; 1855

Waldron, Henry (1830)

Woodward, Wm.  
(3 times).

II : 13 : 1957 (cont.)

INSCRIPTIONS COPIED FROM LAUB STONES OF  
OLD HOUSE WALLS ON E.E. SEALING GROUND

By about 2 ft. column, top to bottom, continuing  
first inside, clockwise; then outside, counterclockwise.

(1) - (OVER) -

(2)

Melkof. [??] Seems old

(3)

A I Kingsdate 1837

↑ ?? something older  
beneath

(4)

RITTER  
1955 [vandal!]

(5) (over)

(6)

R ANDERSON

Clearly old.

(cont.)

OVER

OVER

something illegible just above

W<sup>m</sup>

Summer

Brig Square

Possibly Yoohee?  
Style like that of  
Wm Summer's  
Brig Square

By Singas in you know  
All obviously new rid

(old)

(new)

(5)

THE

PEPPER (RRRIILD)

(old)

RRRIILD

#13: 1957 (cont.)

Sketches of Descriptions (cont.)

(7)

↓ SCOOVER  
 ↓  
 SUMER CLOUD  
 MAY 1869  
 recent → A. |

(8)

since <sup>last</sup> ~~1857~~ 1857  
 Mel. SHIP (1857) ??  
 W. Porter 1857  
 1857

See also W. Porter 1846 on (22) - almost surely by same person!

↑ Seems to go with "Ship", not with Porter

(9)

Probably old

(over)

#1 (2nd)

(6) (2nd) 1931

old  
(10) DOK

(11) RA 1939

old old  
(12) WT BS Harmon  
(13) 2, 6/21/1939  
19  
JE SPA

Apparently the same person (likely Mexican) who carried (11)

(14) KEV

New  
Likely same defecor as played ball with (26)

II: 13: 1957 (cont.)  
Inscriptions (cont.)

(15) Parent? ~~H~~ ~~S~~  
H

??

(16) old? ~~A~~ ~~1954~~  
A

??

(17) ~~William~~ ~~1954~~  
William LE IV  
1954  
Very old? → ~~William~~ ~~1954~~  
Seems strong, possibly 1954

(18) [ William of Boston ]  
William of Boston  
(See also 23, 27, 35)  
must first (smaller) than 17  
move out

(19) H/x W/ 1855 old  
[on IV: 1857 at night + in 1855]  
(over)





II:13:1957 (cont.)  
Inscriptions (cont.)

South Side, to E. of Door:

(23) M. MANUEL ← old (wooden)  
Woodw. MATA → see also 18,  
27, 35  
MATA MONTES  
Rx P. Orchard  
↑ old?  
still older

Mata seen  
last 1955  
see photo

(24) MATA  
old  
Agua Mata seems to  
have displaced two  
old inscriptions

(25) (new) CHUXLMA  
(likely same Mexican) → new

(26) J+L A. MATA  
old

(27) W BONEY  
W WOODWARD  
SKIP ME  
Note M... on 35 (over)

#113

(cont.) (2P) II: II  
(cont.) - white paper

On East side of 2nd St

Old Register signed, as  
found by a farmer:

(28) Richard James Philo<sup>ca</sup> [Philo a delphi<sup>ca</sup>?]  
1880 E Side

[1839 - across N. 1/4  
and on - Philo<sup>ca</sup>]

(cont.)

II:13:1937  
(cont.),  
Disruption  
(cont.)

Big arch beam on E side

MENT  
FOR  
S-I-I-P  
CLIA  
LET  
OF B  
ST  
IN

Note No. 34, giving date of  
1824 for "W<sup>th</sup> CHANGLED"  
(also 33)

New York - (cont.)

[Nothing on north wall]  
West Wall, top:

Nothing  
left of  
archway  
around 1871

Ezekiel NETTLETON

(30)  
Considered  
in 1851  
file

John De Paul (1851)

This stone taken for photograph and possible  
exhibit.

(over)

On South west Corner:

(31)

E. DUNOTT

on top face, engraved,  
of same  
rock

(32) SHIPESSEX 783502  
FLEBY WALDBON  
BRIS & OLRI

II: B:1957 (cont.)

Inscriptions (cont.)

West Half of South Well, outside

Just above (33), on same rock were a lot of scratches, finally worked out as the start of the signature of William Chandler. Apparently most of the first name had been inscribed with the initial W written Was in (33). The lettering was larger, coarser, less deeply incised, as though by a blunter instrument. I take it Mr.

Chandler was not satisfied, and struck out this first trial by numerous strong lines, thus ~~W~~; then did the pretty job of (33). Probably he was a somewhat vain fellow. - See also (29).

The whole signature of (33) is only about 3" long overall. The "Chandler" was clearly visible in early morning light, before we tried to bring it out with corn starch. Later it could not be read, but presumably the effect of the starch will be temporary.

(33) William Chandler [Original script of Chandler could not be reproduced over]

92  
12-13

W<sup>m</sup> CHANDLER

(34) T 1824

See also 37 and 29.

↑ newer scratches

See 19, 23, 27.

Probably another  
or possibly signature of  
William Woodward?

on East side of door, in  
2-ft.-wide wall (nothing  
found on West side of  
door):

(36)

H

Possible "corner stone":

1 J // January  
// 1813

Next to door (just below)

Hart

(35) William

Ship M (near Boston)

Note ME... 6-27

1630 Back on ship, underway to anchor at Melpomena Cove.

1647 2 el. seals on cobbles pushed on South Bluff.

1750-Koo - When track was then overboard about 40 W. Gulls imm. & ad., all pink-footed or far as seen, gather, along with about 10 ad. Herring Gulls.

FUR SEAL HOUSE (further notes)

The inscriptions show up much more sharply than ~~inscriptions~~ on last trip, but visibility varies greatly with light direction & intensity. Working about nearly all day we finally deciphered some rough ones.

Inscriptions were recorded by about 2-foot columns top to bottom, continuing first inside, clockwise, then outside, counterclockwise. Some stones seem to have been removed for logs, but we checked some stone and found only one (a large one) with inscriptions.

It was inside and its inscriptions could not be made out. Occasionally, <sup>here</sup> traces of old inscriptions not noted <sup>down</sup>. Several boulders in the wall were polished, and must have been carried up from the extensive <sup>area</sup>.

570  
II:13

working area below yesterday's one  
photos attempted of polished  
rock (old working). - See also next page.

II:14:1957

At NE Anchorage - Too rough  
last night for midwater trawl.

Willivough with fuco eye to 50 mi/hr.

0650 Gray whale surfaces 3 times close  
to ship, which is anchored about 0.1 mi  
offshore; first time nearer ship than  
shore, the nearer shore. Then  
completely disappeared. No calf  
seen with it. Observed by Fackler,  
Stover and others, who have some  
of identification. On the last surfacing  
it apparently ~~was~~ arched well out  
but didn't quite fluke. Many  
barnacles; no dorsal fin.

Capt. Larry Lewis says one was seen  
right in one of the small coves just  
N of South Bluff on cruise of 1958  
in 1951 on Parlene T. Officials at  
Weather Station each (who seen on  
this trip) that whales are never  
seen in Melnikov Cove; one was  
seen a short time previous to South  
of the islets.



ELEPHANT SEAL CAPTURES

The scientific party with some crew members, helped by several Mexican lobster fishermen, obtained the desired elephant seals on the north beach by the Barracks at Northeast Cencho-age, Guadalupe Is. First I selected an ideal bachelor bull about 12 ft. long overall (and of hind flippers), not badly scarred, and with an unusually rich brown coat. We brought up the 60-foot cage and first tried leading it in by flinging up & down a heavy rope extended on a wire from each side of the opening, with crate between the elephant, on its upper back, and the water. He broke loose. After considerable maneuvering of the crate and leading of the bait, we put a heavy rope round his neck, and after much effort of all hands got his head into the opening. The rope had been carried through the crate. Both front flippers had to be forced inward to allow his

own

55  
11:14  
(320) 52P1 11:11  
passage. He finally went in and  
was secured. The light went  
had to be strengthened by ropes.  
Planks and rollers were needed  
to move the crate with the seal  
to its water. The crate was  
pulled by light cable from  
the ship, near shore, and  
hoisted aboard. He was dressed  
with water on shore and  
of one on a shipboard, though  
the day was cool and almost  
misty, and the weather  
remained so on the return  
trip. The adult female,  
like the male, was about  
as small as any of its sex  
on the beach. It was lassoed,  
and its head covered by  
netting, and I rode it as it  
was pulled to its crate. This  
operation was simple. But  
it was obvious that the most  
effective crate would be one  
built on a heavy stone boat  
base, with runners upturned  
in front. A cable around the  
base leading to a ring in front  
would be desirable. The use of  
drums around breathing gear.  
The shore operation requires about 2 hours.

The Moran-Berdegui party had returned from the summit the previous evening and Berdegui had counted the elephant seals on the north beach, as 271. Harem were still in active operation. Some bloody fight between harem vets and challengers were seen, as well as the usual bluffing. Considerable numbers of copulations were observed, especially around territory defense. Most of the pups were fat, a few newly born; some had grown considerable, to approach the smallest cows in size.

When approached the north beach early in the morning we observed nearly all the pups in a thick congregation at the north end, even more striking than before.

There seemed to be no seals intermediate between the larger pups and the smallest breeding females. What are the yearlings? — or do  
 own

finally water at on year. If  
or, when are they irrigated?

ISLAND HISTORY

From inscription on rocks at summit of  
Guadalupe Island

Julio Berdegué, with some word  
for Reid Moran, reports an inscription  
found on rock faces of a large  
pile of rocks at the very highest  
point of the island. The illustration  
J. B. sketches thus



The main rock face was about 4 feet  
wide and 2 feet high, slightly sloping.  
The rock face is light-colored and  
fairly scratched, but many of the  
inscriptions remain clear. On  
another, more westerly face of the  
bordering tip is another, blackish  
rock, with less clear inscriptions.  
Only the 2 rocks seemed to carry  
inscriptions. Some inscriptions  
could not be read or copied.

(cont.)

II: 14: 1957

(cont.)

The light was not good for photographing and in effort was made to sketch the inscriptions. One inscription carried a name with a date, remembered as 1919, with 3 or 4 subsequent dates in the early 20's and a name Berdegué a photo recalled the name. The observation was made during the operation of Feb. 12-13. The inscription is copied down by Berdegué as:

O. HALL 1879 in large letters in middle of rock. [on II: 17] called Capt Oakley J. Hall, who said he never went ashore on the island. He knew of a "juicate" and "muyya" named Hall who was an old man whom Oakley Hall was young, and he thinks that might have been the "O. Hall."]

N. J. WEAVER 1904

T. HARDEE JAN. 20, 1915

M. E. B. 1917

H. M. SHANKLIN 1914

CAPT. M. ESPARZA I-13-1910

(on east rock)

T H 1884

H L July 1905

(over)

II:14

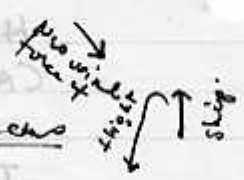
II:14

Ad. Jones's of great significance  
HMS 1815

Julio sketched the bold date figures from memory. He can not recall whether there was a trace of carving between HMS and 1815, or what room intervened. Curious HMS to His Majesty's Ship? — These inscriptions should be reexamined, sketched and photographed.

II:14 log, continued.

Noon - Steam north end of Sanadalupe Id. on return trip. Near here Wisner saw ship almost run down a large and a medium-sized elephant seal (together).

- 1312 Nearly ad. Calif. Gull comes to ship.
- 1320 found by ad. "H".
- 1331 a juv. - footed (dark pink) imm. W. Gull joins.
- 1350 Cypselurus californicus 

[Only flying fish seen on trip] (cont.)

II: 14: 1957 (cont.)

1435 Off watch.  
1720 1 ad. Herring Gull circles ship  
(Wiker).

II: 15: 1957

- 0615 1 imm. W. Gull with ship.  
0625 1 shearwater, appears in  
dull light to be Sooty Shearwater.  
0630 2 imm. gulls, apparently  
Calif. and Western.  
0640 Now 5 gulls.  
0650 1 Pink-footed Shearwater.  
0725 1 petrel, likely Black  
Petrel (but light still dull)  
0746 1 seal, almost surely a  
Northern Fur Seal near  
rather high and straight  
about 110 mi. off ship.  
0755 ~~Two~~ birds, almost surely a  
Rhinoceros Auklet.  
0930 Fin seen - possibly Blue Shark  
1015 ~~Herring~~ Gull on plank.  
1037 1 shearwater.  
1042 1 Rhinoceros Auklet.  
1100 1 Audubon Warbler comes to ship,  
circles warily. - few times,  
then passes just beside  
bridge in a clear view. at  
1103 it takes off to W.

(over)

1207 2 Loons, or possibly ducks, → NW,  
too far off to identify, maybe; 2  
Pink-footed Shearwaters (separate);  
several gulls

1218 1 Pink-footed Shearwater and  
1 Sooty Shearwater flying together,  
but occasionally separating.

1220 another Shearwater.

1235-38 2 Pink-footed Shearwaters,  
5 Brown Pelicans, several W. and  
Calif. gulls.

1243 On heli raft several W. and  
Herring or Calif. gulls.

1302 1 Brown Pelican and several  
gulls.

1303 1 ♂ White-winged Scoter flew  
close to ship.

1348 4 Black-vented Shearwaters → W.,  
W. of Los Coronados.

1353- Shark fin, apparently of Blue Shark.

1413- 1 Heermann + 1 W. Gull → N.  
Coronado Id. — Other gulls have  
been with us virtually all day.  
2 or 3 whales spouting N. or N.  
Coronado Id. Watched for  
several series of blows. 2 spout  
near simultaneously; 1 small  
spout suggests also a calf.  
Seen one rather close, one with  
flukes clearly waving. Definitely a  
(cont.) ~~over~~



Gray Whale. Probably going N.

- 1429 1 bull sealion → Commodore.  
 1435± 1 Sooty Shearwater  
 1439 Whale now about 1/4 mi. to port.  
 1442 1 ad. pink-footed W. Gull; the  
 1448 a sealion rear high, but oblique.  
 1453 1 Mola mola, about 3' long, by bow.  
 1454 2 petrels, prob. Black Petrel.  
 1455 Calit + W. Gulls.  
 1501 Killer whale & close to ship,  
 moving fast at surface toward  
 SE, then disappearing. About  
 immediately a sealion, appar-  
 ently a adult ♀ to the 7 ft  
 from SW at great yards,  
 regularly and frequently  
 leaping out in clear arcs.

1538 Whiter Buoy.

- 1538+ In San Diego Harbor offing: Braunt  
Commodore feeding in short fics  
 → Pt. Loma, W + Calit. gulls, Brown  
Pelican.

## 1505+ In Harbor entrance:

BIRDS: Braunt Commodore flying singly and  
 in small groups out to sea (undoubtedly to  
 Pt. Loma roost); Double-crested  
Commodore feeding; several of each  
 species sitting on a large buoy;  
Western, Herring, California, Bird,  
Heermann and Bonaparte gulls, (Puffin)  
 (over)

large on or along shore of North Island; Bonaparte's increasing in large nos. inland, some diving like terns; a very low tern in harbor (one identified as Foster Tern). Additional birds on shore of North Island: a few Hudsonian Curlews and Willetts, 1 Sanderling. Off subarctic, a flock of Scarp Grebes. At subarctic beach, 1 Belted Kingfisher.  
1 Sealion in entrance.

TURSIOPS: several small groups encountered in entrance. 1620± 2 adults (Tursiops) were towed ship obliquely, \*turn to run bow for about 1 second. I couldn't be sure whether they were just attacking ship, but very soon 2 large adults came in and definitely run the bow in typical porpoise fashion for approximately 20 seconds, after just breaking water and weaving backward forth, occasionally turning in side. The short back and the characteristic head and body color pattern was clearly seen. We cleared customs just before 1700 with the subarctic ship at NEI dock. The elephant seal was televised on unloading, and the ♂ named "Johnny." (cont.)

late in the morning of II:16 the elephant rears were put into ponds at the Zoo. Named "Johnny" and "Marscha." By manipulation of truck, crate & animal weights were ascertained to be 1920 and 660 lbs, resp. The ♀ had shown swollen nipples, at times laid on side in nursing posture, and extruded some milk while on board. When it was put in its enclosure, the Zoo staff held it while Dr. Henschel took about 5cc of milk for analysis (a II:17 ask Dr. Henschel to set up how the analysis).

When we arrived with truck & hoist to drop the ♀ into the special enclosure, a keeper we followed about on the concrete by the half-grown ♂, "Elmo", now quite tame. It followed like a dog, though the keeper then had no feed. As the crate with the ♀ was being lowered, the ♂ sensed the newcomer and approached closely, alert. As the ♀ approach his level he let out a wide-mouthed wail. They moved ~~some~~ another through the screen. (over.)

Over  
II:16:1917

PLATE II

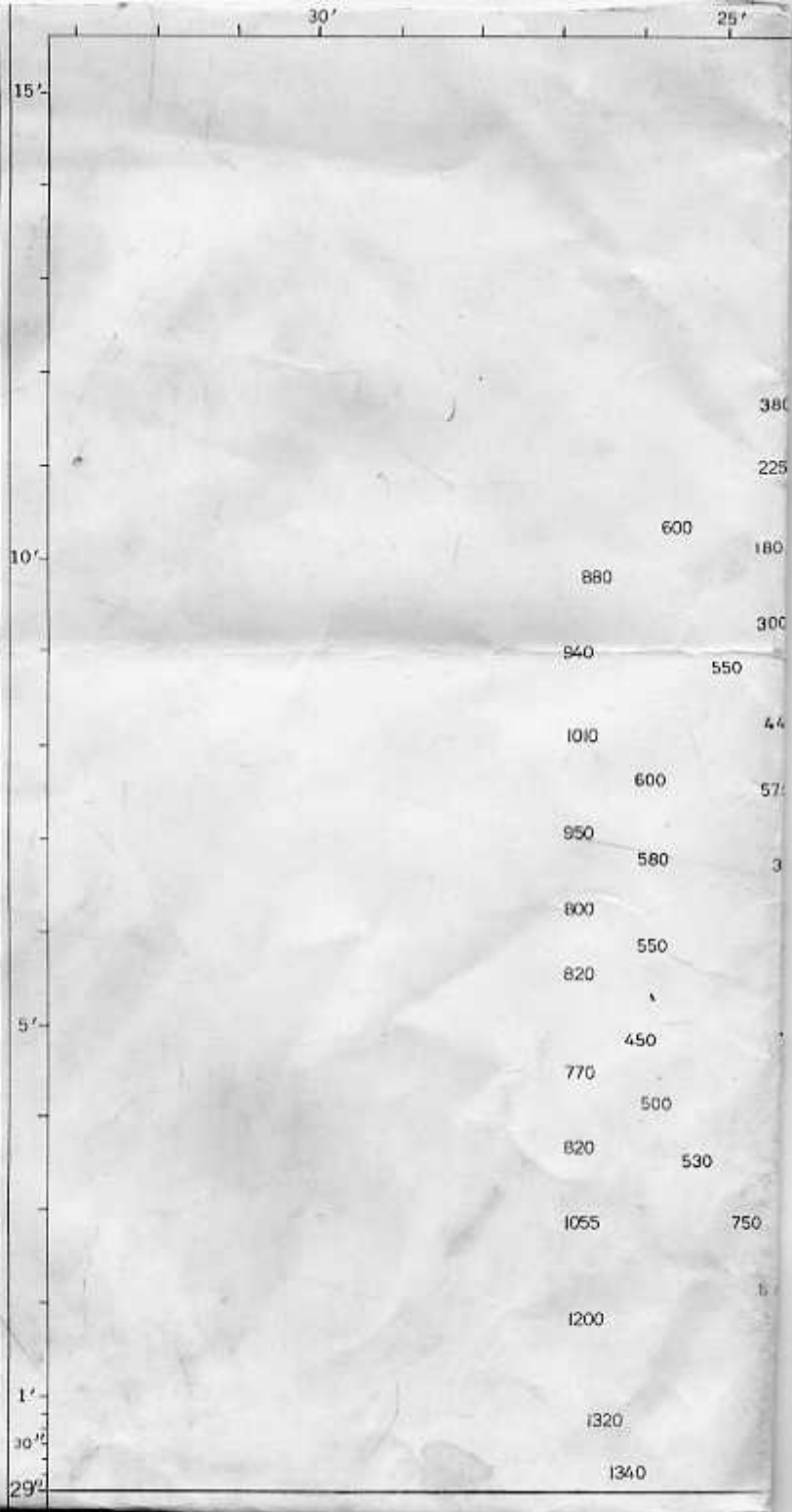
As soon as the ♀ was free (after milking) the ♂ - which had to be drawn away repeatedly - approached the ♀ and walked again, she also emitted a call. Almost at once he began to rear and strike the ♀ on her midback or fore-back, usually striking, sometimes resoundingly with his chin, or occasionally gently biting. He attempted to get in clasping position, but she avoided him and entered the pool. He kept right with her, ~~and~~ riding on top, and soon got in clasping position. Before long they were in contact. The ♂ has only a trace of a trunk and probably weighs ~~not~~ about 1,000 lbs.

The sealions in due time were released from their confinement and moved toward the water. At once they saw the 2 big pinniped and showed obvious concern, with barks. Soon one dove in and then all went in. They kept swimming near but did not touch the mating elephant seals.

II: 17:1957

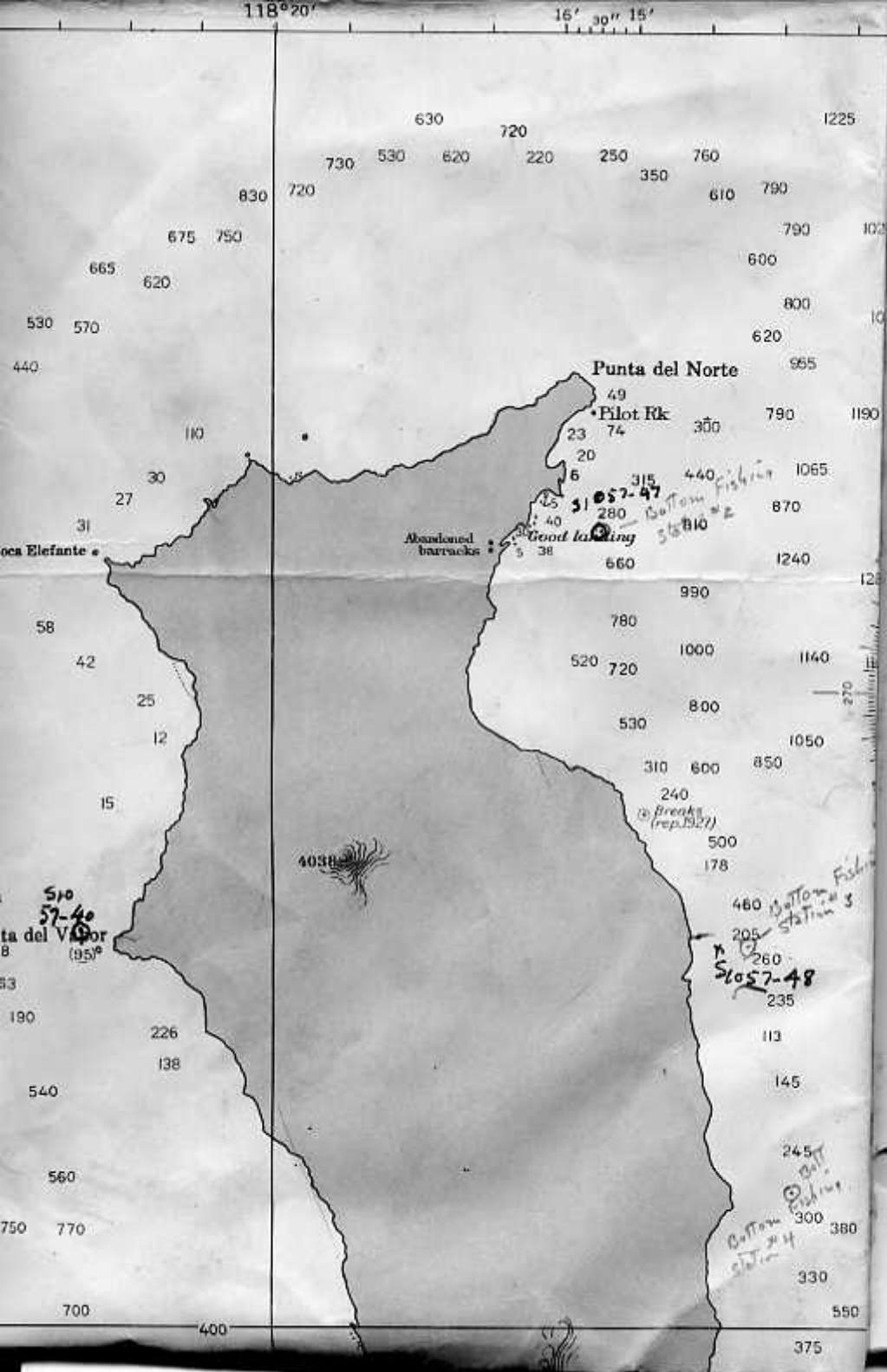
According to George H. Pournelle,  
the ♂ elephant seal mated today  
with the large female with  
which it was placed in a small  
seal-pool enclosure. They  
mated when there was only a  
few inches of water in the  
pool. One apparently definite  
hooking was <sup>noticed by Pournelle at</sup>  
15 minutes. <sup>on the same day, although to a couple of minutes' question</sup> The male has been  
measured rather closely at 12'8"  
overall, to end of hind flippers.



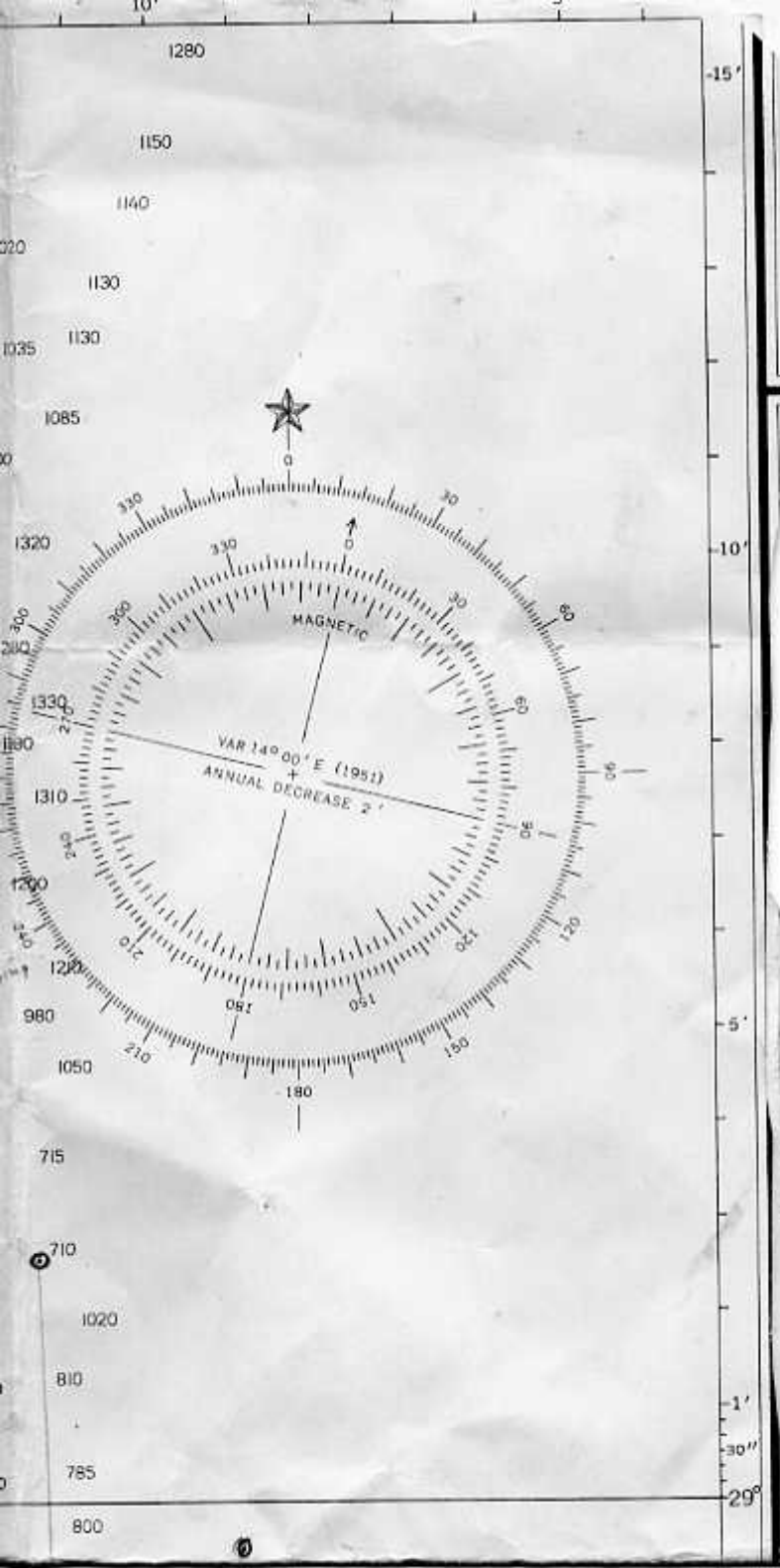


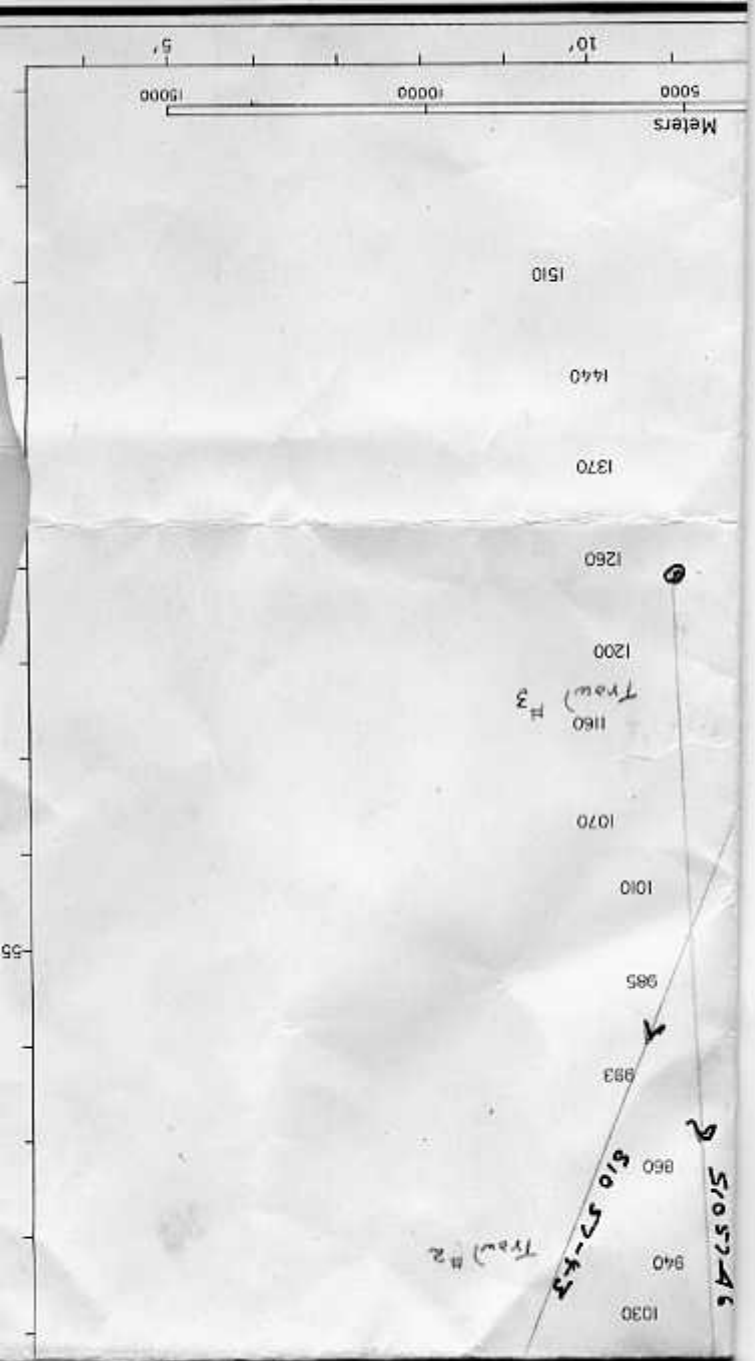
118°20'

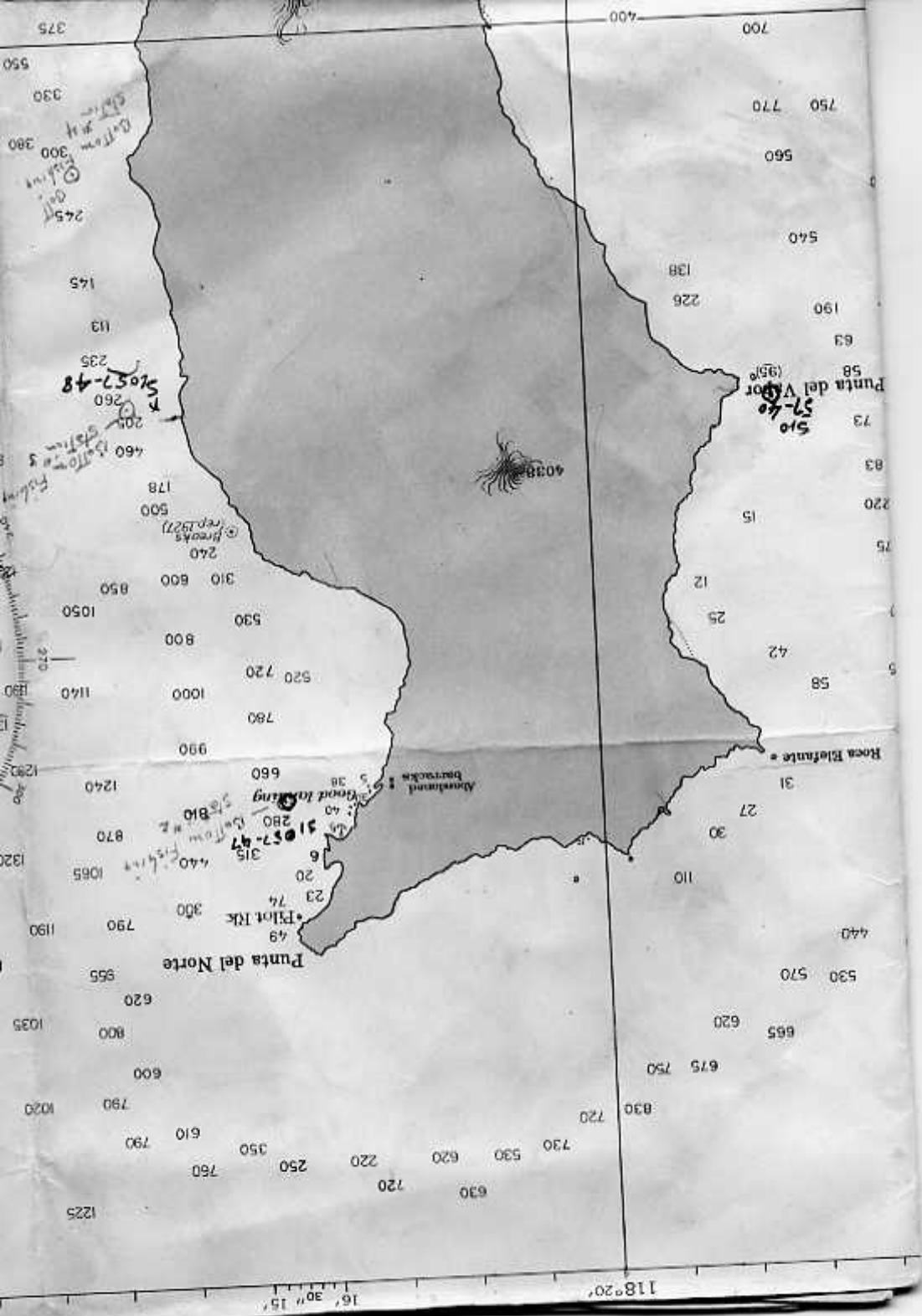
16' 30" 15'

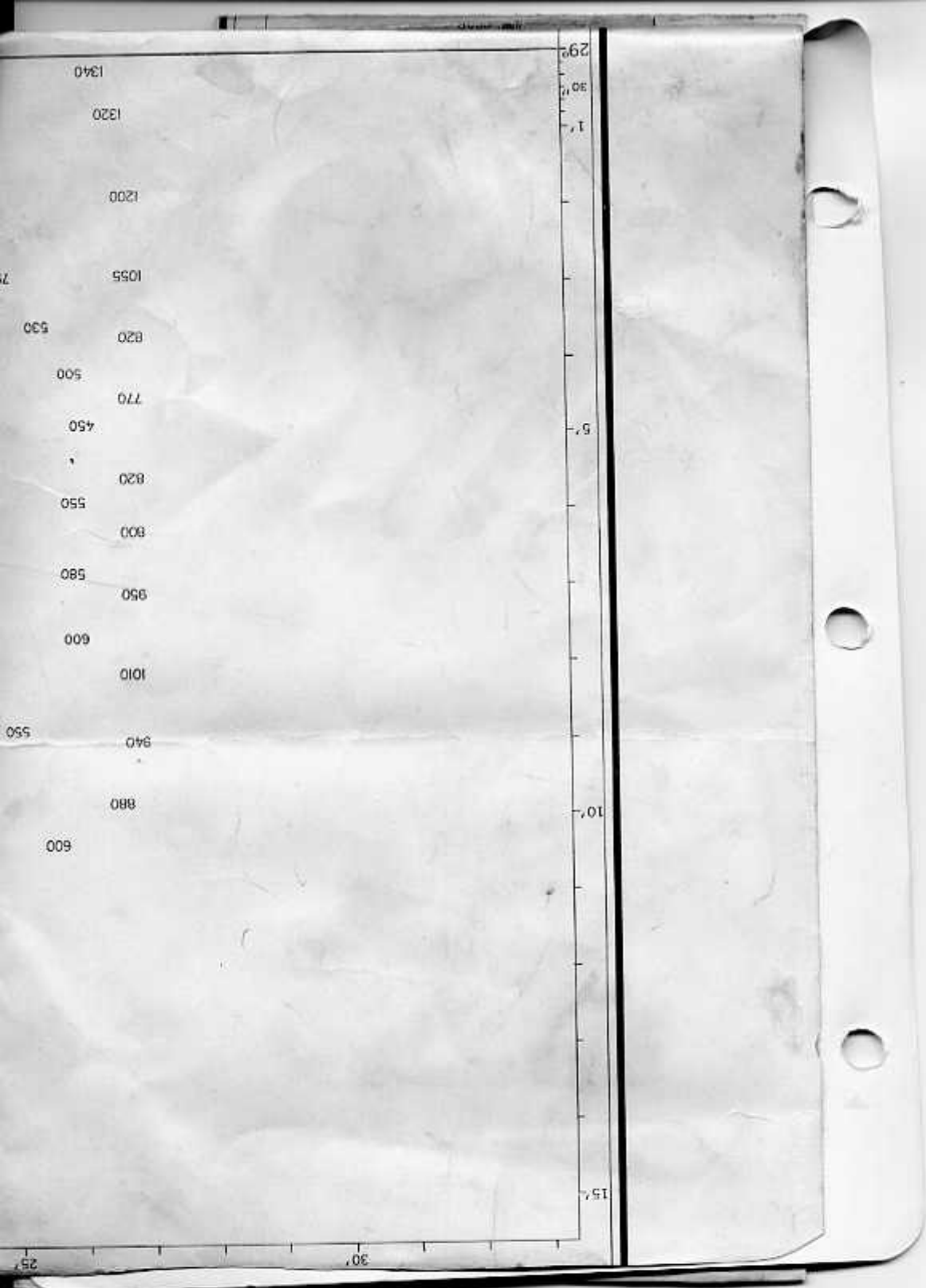












San Diego to Guadalupe Island

8 February

0906 Whistler Buooy abeam  $195^{\circ}$  True  
1023 North Coronados Island abeam

9 February

0618 Position  $29^{\circ}37'$  North  
 $118^{\circ}06'$  West

Course made good  $194^{\circ}$  True

0618 Change course to  $205^{\circ}$  True  
1000 Pilot Rock abeam  
Average Speed 8.7 Knots

Guadalupe Island to San Diego

14 February

1200 - North end Guadalupe Island abeam  
Set/course  $015^{\circ}$  True

15 February

1336 Position by  $\phi$   $32^{\circ}22'$  North  
 $117^{\circ}25'$  West  
Course made good  $013.5^{\circ}$  True

1336 Change course to  $030^{\circ}$  True  
North Coronados Island abeam  
Average Speed 7.7 Knots

Temperature records (sketchy)  
see figs 1) filed under ~~San Diego~~ ~~Guadalupe~~ ~~1957~~  
WCTAMP Feb. 1957

State & Country: California and Mexico. Field No. S10.57-40-57

County: Map: USHC 876 168F (2d. Ed. Jan. 1957)

Locality: San Diego to Anacapa Island and return  
chiefly about Anacapa Id.

Lat. 32° 57' - 38° 50.0' N., Long. 117° 10.0' - 118° 20.5' W.

Water: salt

Vegetation:

Bottom:

Cover: Temp:

Shore: Current:

Dist. offshore: Stream width:

Depth of capture: Depth of water:

Collected by Carl H. Hulse and party on S.O. RV "Parline T"

Tide: Date: II: 8-15-1957

Method of capture: various

Orig. preserv.: various Time:

Field notes and sheets follow.  
Carl H. Hulse

S1057  
40-51  
Quadr.  
Ridge  
Id.