

411104

BEST COPY AVAILABLE

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

EMBL-

Locality AGS 50 - Pongy Date 6 May 1958
Personnel Welanders, Inok K^{*} Weather Fair
Palumbo⁺ Lonhak Water conditions NORMAL!
Duckworth - Severance

Radiation level(s) Cactus (0615-8)

Operations:

* Transferred from Rehoboth to YTB at 1230 in fairly rough water. Remained aboard the tug until 1400 hrs. Then transferred to ARS. Remained on ARS and taken to lagoon for transfer to beach. Pongy island. Just made breakfast in the kitchen. Then transferred to a sizeable dish of vegetables. Then transferred to a sizeable dish of vegetables. Then transferred to a sizeable dish of vegetables.

Welanders arrived Monday, May 5th at 1000 hrs. Then security, walking, etc., etc. Finally landed in barracks #60, room 5 - reserved for U of W workers in 1957. Fish - Emeralds report in afternoon at the lab.

RG UNIVERSITY ARCHIVES
UNIV OF WASH LIBRARIES

Location

APFL

Box

Access No. 1

BEST COPY AVAILABLE

Folder DAILY LOG SHEETS

MAY 6, 1958 - AUGUST 18, 1958

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Parry Date 7 May 1958
Personnel Nelander, Weeks, Weather Warm
Palumbo Water conditions Smooth
Duckworth, Severance

Radiation level(s) None taken in Lab. Enclosed sheet
Operations: for levels around this atoll.

Laid on Trip to Henry for 8 May 1230 PM.
Visited Rad safe to obtain readings around
the atoll. Sheet is enclosed. Started working
up water samples from the Reho both survey.
Having trouble w/ MF because of quantity of
particulate matter in the original sample.
Completed drying and weighing plankton samples.
Mr. Peper got same obtained Reho both.
Obtained photos of complete atoll islands Rongelap
and Rongerik to Dick & Held. Made arrangements
for shipping water samples to NYU. As usual
the question of who is to be charged for the
shipping was a problem. Made it emphatic that
Prog 40 does not get charged. Also made arrange-
ments for plywood to replace that used aboard
the Reho both for Lab benches, etc. worked on
1957 Eniwetok fish report. Went diving at 1730
in south channel - 50-60 ft - RP, DW, NW. Don has
got the bug now. collected finger shells, fungus and
coral. Used air force rubber boat loaned by Capt.
Cooper who has gone out with us before. Received
correction sheets for WLF-56 w/ thanks to all.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Parry - Henry Date 8 May 1958
Personnel Wolander, West, Columbus Weather Warm + Clear
Duckworth, Severance Water conditions Smooth

Radiation level(s)

Operations:

Continued water treatment - Ralph Severance is pitching in on the project to help us. Lt Duckworth is writing reports. Worked on fish paper. Obtained plywood from J-4 and took (6) 5 gal jugs of seawater to J-4. Capt Thomas for air shipment to Dr. Harley NVOG. Charge is still questionable but it will not be Prog 40 - esp since we have no funds any way! Prepared for trip to Henry + squared up the junk around the lab. This place can get awful messy in a few hours.

Left 1230 for Henry by H 21 (Pisachi?) Helicopter. Collected some fish, invertebrate plants, soil, algae to get an idea of radioactivity - pre-hot - in this area. We spent possible contamination from 2 under water shots.

We would like word from Held and Benham concerning tissues to be sampled or dissected + the animals prepared. Both from Henry as well as from Bell. We were able to get a Coconut crabs *Conopsea* + Ice cucumbers on this trip. We will also 3 clams from outer reef. Arr

1730.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 9 May 1958
Personnel Wladimir Weeks Palumbo Weather Windy & Fair
4 NMRL personnel Water conditions Rough
See below for two new animals.

Radiation level(s)

Operations:

Day spent processing samples from Henry and packaging
them. called for Janet. We do not have instructions
into treatment of invertebrate samples and so are
taking small samples wet weights of the Turner or
Wright collection in other series. Samples will be dried
and shipped to R. B. Seattle for dry weights & plating.
We still have no idea of a storage number for plates,
and will assign some. This holds for all samples
and will hold for the Bell collection laid in for tomorrow.
I will hear from you soon, we will
look to compare in the manner and you will
have to assign numbers to these samples.
The water treatment of the Rehoboth samples is still under
way. We probably will begin to finish these samples to be
we are due to return to the rolling house boat. Visits today
included Henry Schick and Lt. Cmdr. W. Clayton and
Cmdr. W. Chambers from NMRL. They will also board
the Rehoboth. I tried anchoring today, but the
boat was left in the beach unattended and got
away. Had to recover by swimming, but short legs did
not allow me to catch it. Boat was
recovered by a boat upon request at 6:30 pm. no
more.

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality Elmer. Belle Date 10 MAY 1958
 Personnel Welander, Weeks. Weather overcast 87.5°
Palumbo + 4NMRL Water conditions Rough

Radiation level(s) at Belle w/ CO-V-700 f at 3ft: 0.3-0.7 mR/hr

Operations:

Morning chores included weighing, packaging, water treatment and preparation for Belle collection. The 5000 heavy samples are now packaged & will be sent off Monday if possible for Seattle direction for processing, will be included or sent separately.
 Took off at 12:35 in H-21 w/ Weeks, Welander, Palumbo and 2 water aboard. Arrived Belle 12:55. The major change in the contour of the ~~at~~ island 15.5 follows



Partly ^{island} washed out near area D

The agave plant in 1954 is doing very well. It is 36" tall with several branches w/ green healthy leaves and contains a hard 5' prop roots. The other plant is dead. Collected Scaevola, Mess and Portulaca; Plants #1208 and 1210 have disappeared completely. Stakes found lying on ground rotted at base. Covered two clumps of Scaevola w/ PE in area C on beach fringe. Collected 4 Centaurea in old shell hole. It was loaded w/ them. Took random soil sample in Area C. D and for Area D. Plants in Area D are 65" (collected) and #1319 is healthy + 36" tall.

6

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality..... Date 10 / May Continued
Personnel..... Weather.....
..... Water conditions.....

Radiation level(s).....

Operations:

Collected fish in area F to F1, the poison drifting into the pool. Took many goatfish. Collected Surgeon along with other varieties. Saw many sharks around Belle, one about 6' long in pool with us may have been Caralshark menisorrh. Needless to say none of us ventured far out from shore.

Invertebrates were ~~to~~ not in great abundance. Collected 2 small clams, spider snail, and ~~other~~ few small Conus. Area as far as coral is concerned does not seem much improved over last year.

Algae collected in poison area and in area to the east between Clara and Belle. Saw lots of Codium, Spyridia, Turbinaria, but little Halimeda, Camborpa, or Lingbya.

All planes were cancelled because of an impending storm, so a DUK-W was sent from Alice to pick us up. It got hung up on beach sand - area G-1 and it took us all over an hour to get it off. Boarded it and picked up by LCU. DUKW and all. Left Belle at 1730. aboard LCU at 1745 and in to Elmer at 2120. Stowed away all samples before returning to the barracks.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 11 May 1958
Personnel Welanders, Weeks, Palumbo Weather Rain - Sun
Lowman Water conditions Rough

Radiation level(s)

Operations:

Processed samples from Bella and completed packaging Henry samples. Frank Lowman arrived from the Rehoboth about 12:30, pale and tired. Reported picking up fallout in plankton and water samples. Continued processing samples after bull-session and lunch. Dan is becoming familiar with our methods and is really helping out in the dissections and processing and is also doing Yeoman work on the collecting trips. After dinner down to the lab to pick up chemicals etc for shipboard work. A really long day, it will be nice to get back to the easy going shipboard duty - This is Palumbo's opinion #5. L. AMEN ²⁰⁰. These boys apparently get tired from sea sickness, not -

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer - Rehoboth Date 12 May 1958
Personnel Welander - Weeks Weather Fair
Lowman - Palumbo Water conditions Normal

Radiation level(s) Fir - B 0550 (Bekin)
Butter - nut (0615) F

Operations:

Packaged part of Belle collection.
Lowman - Palumbo later to Rehoboth
to prepare solutions for chemistry.
Returned at 1230 to Parry Island.
Had meeting w/ Hydra + Capt Hackett
see Rehoboth Log for details -
obtained pump for shipboard duty
Assembled all samples in box for
shipment (counts omitted - will send
later).
Bought 9 lures for \$4.83.
Welander - for Rehoboth fishing.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date May 13, 1958
Personnel Palumbo, Welles, Lowman Weather Stormy in morning fair afternoon
Welande Water conditions Rough Temp. 86°

Radiation level(s) ? Koa - (0630) E

Operations:

Koa today at 06:30. Frank + Ralph went on board Rehabeth to run Rein columns of Carter Plankton. Welles + Welande cleaned up lab sent off Packages of samples to Seattle and package of Rongelap photos for Held.

Samples as follows:

From Henry Island. Collected May 8th 1958

Fish: Specimen numbers 1 to 15.

Invertebrates: # 1-6 (Canobita) Specimen # 7-11 (Tridacna Coosa)

Spec. # 12-14 (Holothura atra)

Land Plants - 3 coconuts (huakid), Pandanus + Scaevola

Algae: Lagoon algae - 6 packages

Collection believed important as area will be contaminated by 2 underwater bursts.

Belle Collection May 10, 1958

Fish: Specimen numbers 16 to 133.

Invertebrates: Canobita # 15 to 18, Tridacna very small # 19

Land plants - Scaevola, Messerschmidia, Portulaca from Area D-H

Algae - 4 packages

In the case of the fish these can stored as is for the present or if help is available routine ashing & (if possible after measuring ash) will be a great help.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality

Date

May 13, Continued

Personnel

Weather

Water conditions

Radiation level(s)

Operations:

Worked on patching the several rubber boats at the lab. found it to be a difficult, complicated process & still not sure of success. The patching material as well as the boats are rather old. If patches of any kind (Pressure or clamp patches) are available in Seattle we could use same.

Directions for plant-algae samples.

- 1) Dry ash one half of sample - save remainder for wet ash
- 2) Place portion of ash on plate numbered according to series following Rongelap numbers.
3. Weigh ashed plate etc
4. Calculate back to wet weight (RP will do later)

Notes: For small samples dry ash entire sample - for Henry samples Cd may want wet ashed portion.

Directions for Soils

1. Mix sample + place 100mg dry soil on plate.
2. Dry ash plates + 5 hrs etc
3. Count
4. Take ash weights (?)

RP
dw

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date May 27, 1958
Personnel Loman, Palumbo Weather Normal 94° F
Weeks & Wshuder Water conditions Normal

Radiation level(s) Maynila (0600) E

Operations:

Counting samples, prepared resin columns,
sorted equipment - placed chemical equipment
on shelves for convenience of chemists.

Prepare fish samples as follows:

1. Dry ash all of sample

2. Repack sample, with label, in plastic
bags and store for future work.

(If time does not permit dry ashing, the samples
could be stored as received in leather.

3. Plate or card numbers can be given to these
samples when they are ashed and counted.

RB

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

ELMER

Locality Lawnan, Palumbo Date May 28, 1958
Personnel Wechs & Melander Weather Normal Temp 85° at 0930
Water conditions Normal

Radiation level(s)

Operations:

Continued counting samples and processing resin fractions. Spent some time obtaining HNO_3 - apparently not in great supply here. We were finally able to get 6 lbs. with the help of several of our friends and got it from Walt Gibbins.

RIES

RP 13

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date May 29, 1958
Personnel Laurman, Palumbo Weather Normal 95°
Weeks, Welanders Water conditions normal.

Radiation level(s)

Operations:

Continued β - γ counting and γ spectrometry.
Also resin columns. Lab. work all
day.

Got word of a victim of a stone fish
at Fred about ~~the~~ 1900. Found out later
what was to be moved to Elmer so we are
waiting news. H + N sent a photo graph
for color and black & white pictures.
The same event at Bikini is still a threat
which makes counts well into the night

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date May 30, 1958
Personnel Louman, Palumbo Weather Normal 87°
Wohl & Wolander Water conditions Normal

Radiation level(s) Tobacco puffed off to the north - Janet? 1465.

Operations:

Continued counting β , γ , γ -spectrometry, alpha columns, as fast as they will go.

Had many visitors curious about Stone fish who had heard about the accident at Ford. Apparently the patient was in swimming & had a sting on his foot. 2 or 3 swimmers diverged on the scene & saw the stone fish which they caught while the victim was high-tailing it to the hospital. Fortunately, only one of the 13 spines entered the foot & so far the patient suffered edema of the ankle and knee, fever of a mild nature and a headache.

We have the stonefish in our freezer and you has the task of showing it to the visitors with the appropriate lecture.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality: Elmer Date: May 31, 1958
Personnel: Palumbo, Torman Weather: Normal to stormy, rain
Wecker & Helander Water conditions: Rough

Radiation level(s): Specimen? event at Bikini ~ 1515

Operations:
Continued counting β , γ , γ spectrometry,
HFHCl separation of aerosols found in previous
samples, etc.
Obtained badges for CMR area & may
move counting equipment to bunker if fallout
appears.
Tape shop fixed up 2 of the rubber boats
so hope the patches hold.
Prepared w-1 to 3 NaCO₃ samples for total
counts.
Three samples counted Total γ , β and
dry weight taken.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 1, 1958 Sunday
Personnel Lawman, Palumbo Weather Normal 86.5°F
Weeks, Welander Water conditions Normal

Radiation level(s) Just about doubled at 0030 ^(31,000 c/m r) but went down to 19,000 r
at 0900.

Operations: Continued counting, β , γ , β spectrometry, continued
HF-HCl amino separation.

An airborne β ray source up by 0030 June 1
at Elmer Bay but killed. A source made at
7:00.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality: Elmer Date: June 2, 1958
Personnel: Lawner, Palumbo, Weather: Normal 88° F
Walker & Weisler Water conditions:

Radiation level(s):

Operations: Continued counting of α , γ , β spectrometry, also
liquid scintillation, etc. Copying labels of samples, localities,
etc.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 3, 1958
Personnel Louren, Palumbo, Weather Normal 89°F
Woolac & Welsander Water conditions Normal

Radiation level(s) Rose & rose at 0630

Activities: Continual counting γ & ~~beta~~ γ spectra. Making
checking tables.

Writing on Materials & Methods for Water

sent TWX to Louren regarding future
date.

We have 3 jacks, 3 sharks, 4 lionfish, 1 puffer,
1 squid, 1 stonefish, 3 butterflyfish,
3 blennies, 10-15 surgeonfish, 5 gobies,
1 damselfish in our aquaria besides miscellaneous
water hardly worth mentioning?

Constructed lead shield for gamma
consisting of 80 bricks, each 25th
1 ton. Background on 2 Mev dropped
from 15,000 c/m to 2,000 c/m.

Started outline and writing on Materials
and methods. This is slow work since we
have so much to describe.

APR 1958

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality EMER Date June 4, 1958
Personnel Kleets, Klelander Weather Rain and Sun
Lowman, Palumbo Water conditions Rough to normal

Altitude level(s)

Observations

Morning spent making beta and gamma counts, repairing or replacing tubes and resistors in spectrometer and weighing plankton samples to calculate density of micro and macroplankton. Also repaired all pre-warhoop pre-Cactus fallout net and plankton sampler since we can no longer do anything with them.

At 1730 went to "Ham" shack & called in on "Ham" to Seattle. All aboard personnel had trouble with the waves which helped morale. Every day at 1730 connection is made with a "Ham" and usually reception is loud & clear. I would like Lauren's phone (Home phone) numbers in case, as soon as possible. We can not name classified material, but there may be other material which could be of interest.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 5, 1958
Personnel Louman, Palumbo Weather Normal 38°F
Weber & Welandet Water conditions Normal

Radioactive level(s) Beta bkgd 165 + 127 c/m for #1 + #2 counters
γ - " 1050 c/m

Obtained γ spectra, some resin calcium separation, and report (materials & methods) and making correcting tables.

We suggest that a copy of each report pertaining to work here be sent for reference purposes. It can be stored in our practically empty file. We have had requests for our reports from several people lately and at the time we ask them to write to the Lab. We took out only those we thought must, but our list was not long enough. We need especially the Troll and the Walter reports for reference to materials and methods, even though we won't get them in time, but they and the others should be stored.

Made reservations for Frank and Ralph to June 16th and Art July 1st. Don's fate still unknown.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality: EIMER Date: 6/6/58
Sample: Lowman, Welander, Weather: Fair
Weeks, Palumbo Water conditions: NORMAL

Level(s)

Continued with gamma counting, B. decay's
and tabulation of data. Visited by Dr. WWT,
Cane and Dr. H. Hicks, UCRL chemists and
later Jere Knight of LASL, one time
radiochemist and now interested in nuclear
structure. We discussed radiochemical
techniques, relative yields of various nucleides
and the possibility of obtaining this later
information to better evaluate our data.
UCRL chemists use ion exchange methods almost
exclusively along with standard methods as a
primary step. They obtain all their Dowex Resins
from Bio-Rad, University Ave. Berkeley, California.
Organic impurities are removed before shipping.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 7, 1958
Personnel Lawson, Palumbo Weather Normal 87°
Welch & Welande Water conditions Normal

Altitude level(s)

stand γ counting, β decays and tabulation
data. We are copying original data and
keeping this material so that a copy
is left here until the logs & originals
are ready in Seattle.
I had called from JTF 7 that Lawson would be
here in a few days.
I am working on an ion-exchange column
for the earths.

COPIES
SERIALS

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Edmer Date June 8, 1958
Principal Lawman, Palumbo Weather Normal 86°
Wells & Welandor Water conditions Normal

Sample level(s)

continued γ spectra, β decays, tabulating and
data.

George Anton asked us to meet with him in
saying he had news or rumors of
program that may concern us. p.5.
related that in talking with a Col. Jeffrey
concerned about the disestablishment
limited area. This topic has been talked
by George Anton quite frequently of late and
the Col. grabbed the ball & has
Lt. Col. Gibson on the subject. ~~Anton~~
apparently, will now be investigated by

Anton suggested we write up some plans for
program to sample the radioactive area
outside the atoll as a preliminary
investigation. He indicated that the Silverstein
may be too late for political reasons and that
answers may be needed in a hurry.
pointed out to Anton that Lauren
would soon be on Edmer & that we
not presume to set up a program
his help as well as the O.K. from
and D.B.M.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Elmer

Date June 9, 1958

Wlelander - Wecker

Weather. Humid Temp 89°

LOWMAN - PALUMBO

Water conditions. NORMAL

Level(s) Umbrella at 1115

Replaced 2" well-type crystal with 2" flat
crystal in spectrometer. Much of the background
has been eliminated. Ran samples collected
Billschell of fallout on funnels and cloud
water and 2 Mex. as well as water from
area collected by Rad Safe (Bill Tamman)
by Col Giblin, Col Lechasse, and George Anton
fast shot survey. J-3, TIF is interested with
to opening the restricted area. Lechasse was
in the fish contamination concerning the
of.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Faculty Elmer
Lowman, Palumbo
Wicks & Welanders

Date June 10, 1958
Weather Normal - 88°
Water conditions "

Altitude level(s)

Obtained γ spectrum, β decays, tabulation of
and checking. Resin columns on the
eluate material and on the solution from
water sample from Umbrella Target area.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Elmer
Lawson, Rubenbo
Wicks & Welander

Date June 11, 1958
Weather Normal 89°
Water conditions "

Maide at Bikini: ⁽⁰⁵³⁰⁾ Shook Barracks at 0548
of spectra, B decays, tabulation of
checking.

Deployment to Elmer this evening to
catch an early island for
They will try to obtain as many samples
in the short time they have there.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Party E. Lauer Date June 12, 1958
Lansman, Wilander Weather 5 stormy - Rain 79°
Walker + Palumbo Water conditions normal to rough

Package cancelled - Would be travellers returned
at 10:00 AM. Plane trouble caused return after 0700

- Package for mailing - Following included in one large
- 2 pkgs of flags from drague
 - 2 pkgs of chill shock salt from Rhobothic evaporators
 - 1 Pkg Rhobothic Plankton sampler
 - 1 H₂O
 - 1 Trawl samples
 - 1 Algae samples
 - 1 Extra plankton and MFP papers
 - 1 Pre Wahoo samples
 - 1 Co₂ W-1 to W-3 lumped
 - 1 Dolphin Tissues
 - 1 Squid
 - 1 Microplankton P.6 to P.21
 - 2 coconuts from Henry (#6, #7) - same as previous shipment
 - 2 pkgs. Mickee cards
 - 1 Pkg miscellaneous samples.
 - 3 boxes for Silver stain survey + cleared
at Lab in preparation for Doc's visit on
Tomorrow morning.
 - 1 pkg fish specimens 135 - Jack from Party

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 13, 1958
Personnel Laurman, Palmbe Weather Normal
Weeks & Wilander Water conditions _____

Radiation level(s) _____

Operations:
Continued T-spectra, completed Tables.
~~Begin~~ Continued packing for Silverstein's trip.
Worked on Umbrella water samples.
Found out from 7.1 that Laurman would be
accompanied by Dean Budd, Sir Control, Bill Chang,
Tim Joyner, & Ron Eisler.
Laid on a trip by M-Bost to Vera. with
Henry Schlacks

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality

E Lmer

Date

June 14, 1958

Personnel

Louman, Palumbo
Welks & Welander

Weather

Normal

Water conditions

Normal

Radiation level(s)

Operations:

Left for Vera 0800 by M-boat with Duke
collected some samples at Vera.

Reared a coral head off southern end of
Point in about 25' of water. Collected fish with
some success. Collected helmet shells off Point
returned about 1300

Worked on Umbrella bottom sample.

LIBRARIES

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 15, 1958 (Sunday)
Personnel Lawman, Palumbo Weather Normal
Weeks, Welandor Water conditions Normal
Radiation level(s) Aspen (0530) B Walnut (0630) E

Operations:

Sorted, labeled and folded Wahoo charts of which we have 33 ~~charts~~ originals - about 2 copies each plus the transparencies for duplication.

Frank & Ralph will carry one full set to Seattle & we will send the other copies by air mail please.

Finished packing all samples for air shipment or mail to Seattle. Shipping 1 box of water samples, extra plankton & fish via J-4. Mailing samples of Wahoo series of plankton, water fractions, fish plates etc via T-1 mail office - 1 box only.

Added to box for air mailing the following (see list for June 12th):

Pkgd for mailing {
1 PKG - cigar box vials w/ fractions of resins
1 PKG - Listeroid tubes w/ fractions
1 PKG R - fractions
1 PKG R - fractions & others
1 PKG miscellaneous (vials whole plankton)

2 Rats dissected - Janet April 1958. Tissues lumped and weighed and put in oven to dry.

wet weights of samples:

Bone	- 3.695 gms
Muscle	- 44.327
Liver	- 12.872
ovary	- 3.699

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 16, 1958
Personnel Louman, Palumbo Weather Normal - 91°F
Weeks & Welsch Water conditions Normal to stormy
Rain.

Station level(s) Aspen at Bikini & Walnut at Eniwetok Yesterday

Operations: Louman & Palumbo left for Statewide
0930

Shipped off water samples & preserved specimens
Wahoo event, by air ^{flight} to Seattle.
Shipped off dried specimens from Wahoo event
Parcel post - air to Seattle.
Painted rest of the shipping boxes.

Water has been shut off most of the day -
interfering with lab. work.
Continued to count T spectra of
Wahoo & Umbrella specimens.

Don also worked on timer & printer.
Painted and repaired more shipping
containers for the Silverstream trap.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Facility Elmer Date June 17, 1958
Personnel Weeber & Wilander Weather Normal - 87.5°F
Water conditions Normal

Location level(s)

Conditions:

Had repairs made on windows on westward side lab. Also doors changed so as to form a wind screen. Makes it tougher for the flies and we enjoy the weather in the lab.

The large drying oven was moved from the counting room into the lab room.

Worked on spect. It is working now. The trouble was found in the micro switch within the timer. Replaced the micro switch within the scaler. Also repaired timing register in the scaler. We are now making arrangements for a tube checker which we will use to check all tubes in & spect. Tomorrow we will have a spect. that is a new one.

The show hall is really in a bad way. It seems they have a tremendous number of flies now - that Palumbo has departed. We will do our best to remedy this situation.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 18, 1958
Personnel Weeks + Welander Weather Hot - no clouds
Water conditions Normal

Radiation level(s) Under at 1500. off Runit

Operations:

Laid on trip for plankton + fish tomorrow.
Called J-3 phone 6-2225 + set up the M-Bot.
Also called Mess Hall 6-2736 for lunches.

Don has spectrometer running again smoothly.
Painted more boxes. Worked fish from Runit.
Set up gear for the trip tomorrow.

Frank and/or Ralph - you may need more screen
1/2 inch, for the Silverstein trip if you use
different screen for each station or haul.

Samples take all day to count so
we work slowly until tomorrow's plankton
comes in.

No word on the incoming personnel!

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 19, 1958
Personnel Weeks & Welanders Weather Normal
Water conditions Normal

Radiation level(s)

Operations:

Plankton - Fishing trip around lagoons. Because of yesterday's shot at Yvonne we obtained a variety of blanks & filled same at Red-Sale with the help of Henry Schlack's. Left by M-boat at 0800 with Red Carol, Fred DePluma as assistant. P-37 (Plankton haul 37) off Glenn near Wide range at 0925 to 0945 with $\frac{1}{2}$ meter net & 100 yd line with M-boat drifting. Placed in graduate cylinder with some alcohol and the plankton all rose & compacted at top of cylinder, so measured volume of 20 ml ~~the~~ at the surface. Placed all plankton & liquid from graduate in 150 ml P.E. Bottle.

P-38 off LeRoy about 1 mile 1048-1105 would follow pattern from 2 inches immediately north of LeRoy, the surface water ran to 14 mph. The pattern appeared to be about 100 yards across from 2 mph to 14 mph to 2 mph.

~~P-39~~ off Belle 1230 to 1300 - lost graduate cylinder & plankton overboard.

P-39 - 2nd try - 1305 - 1320 off Belle

P-40 - off Yvonne (Ran into 1 inched Fallant zone - surface water up to 34 mph) 1445-1805 Fallant pattern here roughly a quarter of a mile across.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 19, 1958 Continued
Personnel Wicks & Welanders Weather Normal
Water conditions Normal

Radiation level(s)

Operations:

Arrived Elmer about 1630. Found most of us ~~the~~ contaminated with salt spray to about 40 mcp/hr on hands & feet. Plankton net ran 5000 m³/hr at cod end.

Took showers at decontamination station. Washed clothes there also. Placed plankton net in large concrete aquaria.

Due to a revised start ~~date~~ date ^{SMT} ~~of~~ ~~the~~ ~~trip~~ ~~will~~ ~~now~~ ~~go~~ ~~on~~ ~~the~~ ~~15~~ ~~August~~. This start will delay the Silverstein trip until about 1 Sept.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 20 June 1958

Personnel WELANDER & WEEKS Weather NORMAL

Water conditions NORMAL

Radiation level(s)

Operations:

FILTERED & DRIED PLANKTON SAMPLES FROM
19 June TRIP. (WEIGHTS ALSO) CONTINUED COUNTING
OF U-1 & U-2 SAMPLES LEFT BY LOWMAN.
VERY LOW ACTIVITY IN THESE SAMPLES. PERIODIC
CHECK WITH STANDARDS SHOW THAT
SPECT. IS FUNCTIONING PERFECT. NO DRIFTING
AND EVERYTHING ELSE WORKING A-1.
AT 1500 HOURS WELANDER, SHELLENK, (CAGL?)
& WEEKS TOOK OFF IN H-19 FOR BELLE.
SHELLENK TOOK M/Y READINGS - WEEKS & WELANDER
HUNTED FOR PALUMBO'S SCAEVOLA THAT
WAS PROTECTED WITH POLY-BAGS. BOTH BAGS
WERE OPEN AT END SEAM FROM OVER PRESSURE.
ONE BAG BADLY MELTED, THE OTHER IN FAIR
CONDITION. M/Y READING AT BUSH WAS 450 M/Y.
WE ALSO OBTAINED TWO EXPOSED SCAEVOLA
BRANCHES FROM NEARBY BUSH. THE EXPOSED
BRANCHES ARE BEING DRIED TOGETHER. THE
TWO PROTECTED BRANCHES ARE BEING PREPARED
SEPARATELY. BELLE WAS BURNED QUITE BADLY
BUT VEGETATION WILL PROBABLY RETURN. JANET
IN REAL SAD SHAPE - no vegetation

aw

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 21 JUNE 1958
Personnel WE LAUNDER, CENTRAL, Weather NORMAL
CHAMPION & WEEKS Water conditions NORMAL

Radiation level(s)

Operations:

Bell and Jim arrived this morning at 1000 hours. They are working with Art and I in the 460. She got them squared away at the pass office and all are set for lots of work.

Cal Gibson (7.3) called this morning concerning a problem at Johnston Is. and Is. located just to the NE of Johnston Is. is a bird sanctuary with a population of about 10,000 birds. The two states speculated that area will definitely have harmful effects. Cal Gibson wanted to know if we had any idea as to how to protect them. They cannot use smoke because of optical equipment at Johnston Is. Off hand we could not think of any solution.

She are continue to & cant make process samples from previous field traps.

She reserved a room for Nean Bond at Don Donaldson at Bldg 128. She anticipate annual visit Thursday, 26 June.

aw

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date 22 June 58
Personnel Anttil, Champion Weather Cloudy
Weeks, Welander Water conditions normal

Radiation level(s) _____

Operations:
Finished up processing fish from coral head south of ~~point~~ ^{point} of Elmer. Also counted plankton from some local $5/10$ million and $2/10$ million samples of this plankton were the largest amounts which we could count. Any more would be too much. This stuff is pretty "hot". Presently missing spectrum on this same plankton as well as on some NRDL stuff.

Bill, Don and Art did some speulung this afternoon. Being Sunday, we didn't do too much.
S.C.

MET AL KLEMENT, who is ^{working} George Anton's
21516 HERE.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date 23 June 58
Personnel Waklander, Champion Weather normal
Weeks, Cantrell Water conditions normal

Radiation level(s)

Observations:

This morning, all four went to Henry by
Luper leaving Elmer 0800 and returning 1130.
We poached on the outer reef and collected
the fuel reefers cans full of various fish.
We also collected 3 coconut crabs - 2 large
and one small, along with several hermit
crabs, 1 ghost crab, and 1 crab we couldn't
identify. The ghost crab and the unidentified
one were dried whole so that Ed could
identify it. It is a common species, I think,
but we are not familiar with crabs.
Some coconuts, sand and soil, and various
other land plants were collected (pandanus,
Messerschmidia, scaevola). Five sea
anemones were also collected and subsequently
dissected and dried.

Packaged the rat tissues from Janet, the fish
tissues from Yvonne (#136 thru 186).

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 24 June 58

Personnel WELANDER - CANTOR - Weather STORMY

CHAMPION - WEEKS Water conditions ROUGH

Radiation level(s) _____

Operations: _____

Continued counting of PLRT samples.

PLRT still running vertically - MAX.

PLRT is about 1/4 of channel.

At 0830 hours WELANDER, CANTOR - CHAMPION

left by motor for deep channel. They

retrieved 30 ml of PLRT (30 min haul).

Also continued to process samples

collected at heavy.

Col Gibson called again about the

bird situation at Johnston. They are going

to try a heavy water spray method over

is. This ^{will be} set up sometime between

now and shot date. They requested ^{one of} two

of our people to observe the test at that

time.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 25, 1958
Personnel Weelas, Control, Weather Normal 87°
Champion & Weclander Water conditions Normal

Radiation level(s)

Operations:

Painted 6 more boxes for shipping; ran X-spectra
P-41 material (Plaster haul from Deep Entrance);
packaged plant material from Henry; cleaned up
the aquarium area.

Left at 1300 for Vera by ~~the~~^{H19}. Pisoned in
lagoon on reef about 4' deep. Collected clams,
slugs, sea cucumbers, sea urchins, etc. Altho
crown-of-thorns are present, only a few coconuts were
present - too high for us to venture. No anemones
were seen in a wide search over most of the island.
Returned at 1630

ED HELD

THE AERIAL MAPPING GROUP IS NO LONGER IN
THE AREA. MAJ. MONACO HAS RETURNED TO THE STATES
AND HIS REPLACEMENT KNOWS OF NO WAY TO
GET THE PHOTOS YOU WANT. COME

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date June 26, 1958
Personnel Wicks, Cantrell, Burod, Weather Normal but with high cirrus
Donaldson, Champion, Weland Water conditions clouds setting scheduled
trucks
Normal water.

Radiation level(s) —

Operations:

Dean Henry Burod & L. R. Donaldson arrived at 10:00 and after the usual red tape were settled in barracks #460, room 6.

The register located in the super-cabinet finally broke down completely. It had been running very smoothly after I fixed it. If a new register unit could be ordered I believe we could install it here. At the present time the ~~remains~~ remainder of the unit is working fine. We are experiencing very little drift.

Worked on material from Vera & packaged material from the Henry collection.

JPh: J-4 has beakers, graduates, clamps, tubing and other equipment for chemistry. They also have heat lamps, ^{by stands} fine wire screen. Battle lanterns or something similar, cable clamps, nipples, etc for heat work. If you needs these items let us know before end of operation so they may be ordered by Williams pres here.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Clones Date June 27, 1958
Personnel Bruce Cantel, Champion Weather _____
Donelson, Muhn, & Milander Water conditions _____

Radiation level(s) _____

Operations:

Plankton and fishing trip underway at 9:30 am for Duke
passing and points north.

Laid on off atoll trips ^{for future dates} and trip to Leroy
for tomorrow.

Packaged more samples

Bird & Co. brought in two Jades & 2
guppies caught near Crescent Barge.

Plankton haul made west of Jupiter.
& processed to drying.

George Dennis

Office of Information

Albuquerque Operations U.S. AEC

P.O. Box 5400

Albuquerque, N.M.

(Write to Dennis for information on weapons, etc.)

A number of films on nuclear effects are available at Albuquerque

Office

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elder Date June 28, 1958
Personnel Donaldson, Burt, Weeks Weather Normal - Peoria winds
Control, Champion + Water conditions
Welder

Radiation level(s) Elder (0630) F and Redwood (0530) B

Operations:

Up early.

Packaged following for mailing:

Soils - Henry I. June 23, 1958; Umbrella Target Sludge June 27, 1958

Plankton - P-37, P-38, P-39, P-40

Invertebrates #21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 38, 39, 40, 41.

Plants #25, 26 & 27, as well as exp. with phloem bag plants from Belle (no spec. numbers); 5 coconuts from Henry.

Fish #136 thru 186; 187-212 (muscle & liver);

213-223, 224, 225 (liver & muscle); 268-274;

275-289, 290-297, 298-314, 315-324, 325-327, 350-371

372-390, 391-400, 401-411, 412-447.

Rat tissues from Janet April 28, 1958

Birds from Henry #4.

Numbers missing include tissues not sufficiently dry for shipment

Discovered program "P" with Bill Simmons, Ben Burt

took part in the operations discussion and for staff

function developed and a sound program with the recording.

Trip to Henry at 1:45 P.M. for collection. Hundreds of dead birds on the island. Many empty and rusty tins are scattered and feeding in the area. Collecting party consisted of Burt, Ben Burt, and picking with A.F.C. group.

NIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Comer Date June 27, 1958 (Sunday)
Personnel Beard, Central, Chapman Weather Fair
Wicks, W. Lander - Donelson Water conditions

Radiation level(s) Oak (0730) F
Hickory (1200) B

Operations:

Went only to open up the lake and get in my bucket. No change except some wet feet and a few brown snakes. Fish (*Trachurus trachurus*) were picked up in a pool at the south end of Parry many fish were stranded and some had been returned to the lake to be used as samples other captures alive were added to the live tank.

Dr. Mel Merritt, Sandra Cook came to the lake and in the morning in conference on P with Dean Beard and L.P.D.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 30 JUNE 1958
Personnel BURD, DONALDSON, WELANDER Weather GOOD
WEEKS, CHAMPION, CANTRELL Water conditions HI SURF ON REEF

Radiation level(s)

Operations:

BURD AND DONALDSON DEPARTED FOR WOTHO AT 8:00. REST WORKED IN LAB. WELANDER MAKING PREPARATIONS TO LEAVE PACKAGED SOME SAMPLES TO SHIP WITH BARRACUDA HEAD. INCLUDES PLANTS: Nos 33, 34, 35, 36, 37, 38, 39, 40

Burd & Donaldson left Ford at 0900 in Air Force A5-16, first by way of Bikini from the air the atoll looks like a sand spit with interrupted sections, no green, no coral. From Bikini on west to Rongelap to air drop & sack of mail. Turned south from Rongelap atoll to Wotho arriving at 12:15. After lunch at the weather station Lt Ellis introduced us to the "chief" L' Enajwa, the interpreter L' Steven and the native pastor Joseph. Hon resident engineer.

Richard Evansiger was very helpful. Fish were collected from coral head just west of the camp. The three natives helped collect fish, we were joined by a dozen small loop 5-7 years of age they swam like eels and looked like seals as they popped up out of the water with a great fish in their mouths. At the surface they flip the fish about, started with the tail and got it, skin, gut, but the natives collected most of the sample except we could not find them. Departed Wotho at 3:15 arrived at Ford 5:05 P.M. and Elmer at 5:45.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Filmer Date July 1, 1958
Personnel Melander - Beard, Chappin Weather Thurs
Conrad, Donaldson Water conditions Average

Radiation level(s) 1 mR

Operations:

Melander departed for Perry at 0930 on his way to Honolulu - and after a week of playing tourist - on to Seattle. Dean Beard made the rounds of the check out places and purchase places in preparation for his expected departure tomorrow.

Beard & Donaldson visited the Alote and talked to the mate, a Mrs Johnson. The Alote needs a good deal of cleaning to get it ready for a laboratory ship. There are plenty ofunks, with a space for 24 crew near the mid ship section that could be used. This section may be air conditioned as are the crew quarters, wardroom, and officers quarters.

The well-deck of the Alote would serve well as a working area. A tarp could be fastened over the well deck to provide shade and protection from the rain.

Dean Beard and Donaldson also had a conference with Eric Nyquist and Joe Sanders on the surplus property that is available here. A list of the equipment was given to Dean Beard for evaluation by those at the University competent to determine the University's interest.

Beard & Donaldson were invited to a dinner party at 114 with A.F.C. and H. & N. "whale"

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Perry Island Date July 2, 1958
Personnel Bend - Champion Weather _____
Conrad, Weeks & Donaldson Water conditions _____

Radiation level(s) Siquia - F (0.630)

Operations:

Dean Henry a Bend departed from home at 0930 for Fred and his trip home. DR DONALDSON MADE FLIGHT WITH TU-6 PEOPLE AROUND THE ATOLL. CONTINUED TO PROCESS & COUNT SAMPLES PREVIOUSLY COLLECTED.

Rad. Safety survey trip around the atoll was organized by my Gordon Jacks. F.P.D. was asked to go along to observe the color in the water. After passing the "Oak" crater near Alice the island cloud of fine material was observed in the water. From the crater to about one mile south of Leway a band of brilliant green color could be seen in the shallow water on the lagoon side of the reef.

This green color was assumed to be due to a gigantic bloom of algae produced by the release of minerals for plant metabolism by the Oak device. Radiometer readings at 100' in the "chopper" were 30-60 mc over the reef and 500 to 600 mc over the "green streak" on the lagoon side of the reef.

A stop was made at Leway to observe the damage to the bird colony by the Oak shot. Several hundred birds were seen along both shores of the island, unable to fly and down at the water's edge trying to feed. The attack on the island which we would not see on June 28 was them apart. The poisonous trees near the center of the island in the bird nesting area are broken or uprooted. The trees on the short side are felled on the trees remaining.

U. VERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 3 July 1958
Personnel DONALDSON, WEEKS, Weather GOOD
CHAMPION, CAINTAL Water conditions "Normal"

Radiation level(s) Bkg. up slightly from BIKINI - 1.5 mc. (Calc. B)
cell (0530) B

Operations:
DR. DONALDSON & WEEKS DEPARTED FLEET FOR
A COLLECTION TRIP TO KUSAIE I. CAINTAL & CHAMPION
CONTINUED PROCESSING COLLECTIONS. RECEIVED REPORT FROM
FALL-OUT PREDICTION GROUP THAT FALL-OUT MIGHT INCREASE.
OPENED INSTRUMENTS & SHUT DOWN AIR CONDITIONING UNIT.
THE UNIT WILL NOT START AGAIN (SWITCH SEEMS TO BE
BROKEN).

Trip to KUSAIE in the Air Force SA-16 was
a wonderful experience. We departed from Ford at 0900
and arrived at KUSAIE at 0945. Traveled with Capt.
John Kitting and Chuck George. Mr. Hedges of Pacific
was also a passenger. Had lunch at the airport bar
and collected a vast amount of food material.
With the aid of two fishermen we collected fish
on a reef in the harbor. The fishermen used
their own diver roost a few roosts pounded
on a rock and worked in the water worked
wonders. The fish bill was almost instantaneous
much better than we get with any roost.
A beautiful red and green colored surgeon fish
swims up the fish of the sample. We should
save these fish for the collection as I don't
think we have them - at least not many.
Spent about 30⁰⁰ on samples and "lost"
with it can be considered as expenses.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 4, 1958 (Friday)
Personnel Carlton, Champion, Weather Rain
Watts, & Donalton Water conditions _____

Radiation level(s) _____

Operations:

Processing of the samples collected at K series proceeded, oven was cleaned out and samples prepared for shipment.

Visited the deep water pump to look at the catch, a large number of fish were captured. A number of the forms seemed to be new as we will fix up a container and put the line over in the outdoor tank and forward any unusual specimens for the collection.

for

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Talawa - Leroy Date July 5, 1958
Personnel Control, Champion Weather showers
Donaldson & Waks Water conditions

Radiation level(s) 1.0 m.r/hr

Operations:

Don Waks checking out in preparation for going home
Donaldson in conference with Wyncoop, Lander and
others on the Rangely survey and the use of the
alots. Mr Wyncoop will press for the use of the
alots with out charge to our program for the
August trip. The best date for the Rangely
Biology Program will be \pm Aug 18 to Aug 30.

Word was received from Al on the Selawatin trip
the ship is due at Eniwetok Sept. 1 and can
commence on the survey as soon as equipment
is ready.

Commissioner Graham and Mr Nelson A.F.C. visited
the laboratory during the morning. The Japanese situation
formed much of the conversation I suggested that better
relations would result if the useful aspects of
the testing program to applied fishery were stressed.
The Commissioner was very much interested in the proposed

At 1:30 Geo Byerman, Control, Champion and Donaldson
went to the Oak crater to photograph the "green
streak". The color was not as intense to day as on
July 2. Photos were taken of the reef the plant
had been damaged on Leroy. The great number of
sick fish observed on July 2 have since recovered
died. A count of 247 dead fish was observed
one sand spit. Penetration and a clam shell were
observed.

UNIVERSITY OF WASHINGTON

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Clawson Date July 1, 1957 (Sunday)
Personnel Carlton Champion Weather Shower
M. A. & D. M. M. Water conditions _____

Radiation level(s) Bozwood (0.633) E 12.0 - 25 mcp

Operations:
Processed a clam collected at Ferry and second
up the water column. Included a previous type
in the general species of the region (Caulerpa)
collected at Ferry.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Facility CB-10 Date July 9, 1958
Personnel Carlton, Champion Weather Rain
Donaldson Water conditions _____

Radiation level(s) Background

Operations:
Processing plankton for counting and isotopic separation.
Packaged the starfish that arrived in July 6. Sawamura
was here. The fish was thawed and injected with formalin
and then with a small amount of formalin, put into a ziplock bag
and then into a larger bag. Paul Simons apparently requested
the fish be shipped to him.
At 11:00 AM, I took Carl Donaldson to F-7.3 and
discussed the work and the status of the paper and read for
support.
I took a 12-foot part of the
main supply of Tyler Rope. This should be
enough for the repair of our most net. Forward
please order another spool of twine like the enclosed sample
from Pacific West Rope Co.

2/5

yu

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Clouse Date July 9, 1958
Personnel Conrad, Champion - Weather Showers
Donaldson Water conditions _____

Radiation level(s) _____

Operations:

Package material for shipment to R. B. Perkins
up end of the fish log of materials included:
Plants: 33-80 inclusive
Sail: sample from Vess
Birds: 5-6
Invertebrates: 34, 37, 42-47
Fish: 448-452, 453, 454, 455, 456-466, 467-
491, 492-517, 518-521, 522-533, 534-557
552, 553, one unknown sample (looks in old
log book).

note: Parts of samples 28, 37 and 47 are not dry
yet and will be sent with the next shipment.

Conference with Joe Sanders on the Pongulap trip
set the dates at Aug 12 to 24 inclusive. Sanders
and Cal Luchs agree that this operation can be a task
group function. Sanders suggests that subsequent
Pongulap trips be worked out as a D.B.M. request
for support to 7.5 (Alb. Oper Office) and that it
be handled as a line item.

Write to Ed giving dates of Aug 12-24 and
requesting the order to be cut for Aug 10-8
departure from Seattle. The request for the
Aloto is for 12 men. Include Ron and Tom
in the party for they will be back in time to
go to the Silverstein. Last one now scheduled for Aug 25-28

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality _____ Date July 10, 1958
Personnel Curtal, Champion and Weather Shower
Romaldson Water conditions _____

Radiation level(s) _____

Operations:

Counting salmon samples collected on several trips July 8th.
Washed a number of dirty beakers from the last collection
series. The drying of masses of plants, fruits, etc. in
glass dishes in a poor procedure we have to make
with constant stirring to the dish. Better to lower the
temp. and take more time so that
plants dry out.
Preparation of tissue traps. Went on to
to get the traps for a few days. Departure which
means a long waiting time.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 11, 1958
Personnel Cantril, Donaldson Weather Stormy, rain
Champion Water conditions choppy

Radiation level(s) Background

Operations:

Donaldson & Champion on their way to Tarawa. At the lab, counting was continued, completing Total γ counts on plankton collected on July 8 and starting γ spectrum on the same. Also finished counting (γ spectrum) of water collected off heroy on July 5. A few hours ~~was~~ spent in clean dishes and trapping rats. Two more down but we ran out of bananas. G. Bernier also gave us the pictures taken of LRB personnel (when Dr. Burd was here)

Left Fnd for Tarawa at 5:50 am. Lt. Ches. George accompanied the flight as "extra" navigator. Plane stopped at Majuro for 1 hour as L.P.D. wind ahead and arranged a conference with Mr. Maynard Nease, Dist Administrator, Marshall Islands, Majors, M. I. (Trust Territory of the Pacific Islands) (Nease, please send them copies of our reports) Mr. J. B. Mackenzie, & Mr. C. Morris also attended. Nease requested that Mr. Mackenzie and a new man yet to be secured go to Rongerik with the Coming Day survey. I replied - if they are at Rongerik for the departure of the ship prior to Aug 12. we will take them along.

Arrived at Tarawa at 1:30 P.M. and loaded into a "Dukier" for the trip to the weather station. Capt. Bill [unclear] is in charge of the station [unclear].

(M. L. Bernatchez)

Resident-Commissioner

Tanamo,

French Frigate Shoals.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Oliver & Tanager Date July 12, 1958
Personnel Cortel - Oliver Weather Rain at Percy - beautiful at Tanager
Champion & Smellon Water conditions Rain

Radiation level(s)

Operations:

Cortel's sample collection P45-L.P. was completed and P45
filtering started.
July 12^{am} Smellon conferred with M. L. Bonacchi, Resident Commissioner
Tanager, Elliot, and Ellis Salada. Mrs & Mrs Bonacchi were
most helpful and offered to help in any way possible.
Plans immediately were stuffed up for a 9^{am} departure for
so a well arranged to get the collections in the time remaining.
Great many collections of specimens around a section. M. H. H.
left from 1944 many fish species black spotted group
were caught in addition to a number of smaller
fish. Crabs, algae, coconuts, seaweed, papaya, bread
fruit etc were obtained. Stuffed by darkness.
July 13 Up at 5³⁰ am a bit to late and the start looks
down the atoll to the air strip. Capt Bond, Champion
and Smellon departed ahead of the main party in
a Boeing to go to Burke from B. itia Island. Mrs
Bonacchi had fruit, aloha, bread fruit coconuts etc
ready for us, with a cup of Coffee the wild
ride down the small islands, over islands, to the
air strip. Departed at 9.15 am and arrived fast
at Fred at 2.30 pm.

Started at once in processing material collected
upon arrival at Fred. Part of the fish collected
at Tanager was preserved for ship transport
to the College of F. Science for art's class use.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Clou Date July 13, 1958 (Sunday)
Personnel Central Champion Weather Rain
Tomasko Water conditions _____

Radiation level(s) Geiger (1500 B) yesterday

Operations:
Two Geiger counters and 15 to go. Very strong reports yesterday
of radiation. Found high background level of rain fall
2-3 inches collected during rain water samples.
Central Champion and Tomasko of collection samples
collected yesterday.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY

U. NIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality Close Date July 14, 1958
 Personnel Contoil, Champion ✓ Weather Rain
Donnellson Water conditions _____

Radiation level(s) 2.8 m.r. outside 2.4 m.r. inside
(Scavenger 0.1 m.r. at 1600)

Operations:

Processed the fish collected at Tawawa and continued to run spectrum on plankton samples
 Cleaned up laboratory and wiped bench tops, polished desks in an effort to seal the working surfaces to reduce chances of contamination.

Received word from Sergeant Wolf that we had been bumped from tomorrow's scheduled flight to Kapingamarangi and Papeete. Rotation of aircraft after 180 days.

T.D. stations in this area
 Requested flights to
 Utirik - Wed. July 16 for Donnellson & Contoil
 Ujelang. Sat. " 19 " " " Champion

Kapingamarangi - Papeete Tues. Wed. July 22, 23 - Donnellson - Contoil

Don - Jim says that the "ink tape" for the timer of the gamma spectrometer is worn out & we have checked here and can't find a replacement. Better order a new one and send it out at once.

Packaged plankton and other material as listed

- | | | |
|--|-------------------|------------------------|
| W-1 MFP | P-37 preservative | P-39 preservative S.S. |
| W-1 Untreated | P-37 PLK | P-39 PLK |
| W-1 CO ₂ "2 | P-38 PLK | P-40 PLK Subsample |
| 2.5 A Q (broken - no activity) | P-38 preservative | P-40 Preservative S.S. |
| Algae *80 | P-38 MFP | P-40 MFP |
| Umbrella Target sludge | P-39-2 MFP | P-41 LP |
| P-37 MFP | P-39 MFP S.S. | P-42 - Preservative |
| P-45 LP; P-45 filtrate, P-45 M.F.P., P-46 LP; P-46 MFP | | |

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 15, 1958
Personnel Carl Champion Weather Showers
- Smallwood Water conditions _____

Radiation level(s) 2.8 Mr at 0845

Operations:

Continued gamma spectrum analysis.
Champion & Carl working on bacterial culture collection
for Dr. John Tatum. The cultures inoculated will be
forwarded to Dr. Tatum in today's mail. A total of 29
strains were inoculated. The list of organisms used
is enclosed with the cultures.

Conference held with Major Hiatt, Capt. Cornum and
L.P.D. on the atoll schedule and equipment needs.
In addition to the work order signed by Cdr. Marshall
N-3 for the Base support program, I requested the
following items:

- 1 - small boat (14' - 16') with outboard motor.
 - 15 - folding cots for sleeping on deck if it is to
be in the quarters.
 - Covered space above the well deck for laboratory
space and a sleeping area.
 - Extra food and water for 14 ± men.
 - 1 - temporary work bench on the well deck about
12' x 3' to serve as a laboratory bench.
 - 1 - 4 x 4 four wheel drive for use on
Rongelap Island by the scientific party.
- note - A duster was not requested for it was
felt to be unnecessary since the ship will
be beached a brush would be more useful.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 15, 1958
Personnel Control, Champion Weather Showers
- Smallwood Water conditions _____

Radiation level(s) 2.8 Mr at 0845

Operations:

Continued gamma spectrum analyses
Champion - Control working on bacterial culture collection
for Dr. John Linton. The cultures inoculated will be
forwarded to Dr. Linton in today's mail. A total of 29
cultures were inoculated. The list of organisms and
mediums is enclosed with the cultures.

Conference held with Wayne Heath, Capt. Cooney and
R.D. on the details scheduled and equipment needs
in addition to the work order signed by Dr. Heath
7-3 for the basic support program. I requested the
following items:

- 1 - small boat (14' x 16') with outboard motor.
 - 1 - folding cot for sleeping on deck if it is to
be used in the quarters.
 - Covered space above the well deck for laboratory
space and a sleeping area.
 - Extra food and water for 14 ± men.
 - 1 - temporary work bench in the well deck about
12' x 3' to serve as a laboratory bench.
 - 1 - 4 x 4 four wheel drive for use on
Rongelap Island by the scientific party.
- note - A truck was not requested for it was
felt to be unnecessary since the ship will
be beached a truck would be more useful.

UNIV. CITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Clare Date July 16, 1958
Personnel Champion, Central Weather Rain
Donaldson Water conditions _____

Radiation level(s) 1.0 mR

Operations:
Champion collected general samples of plankton samples, cloud
samples, and water samples. Had the job while Donaldson and
Central went to check to collect.
Donaldson and Central left Clare at 05:40 by water taxi
for Fred in the Wharf / since left Fred at 06:30 by
SA-16 with Donaldson as pilot that it was a good
thing to have an experienced pilot. After leaving Eniwetok
and plus about clear about passing south of Bikini,
over the middle of the lagoon was the Southern portion of
the lagoon and the Wharf at 10:00. After the
usual plans with the Magistrate we started
to collect. Sam collected fish, clams, & algae, Donaldson
land plants, crabs, snails etc. (I have to stay out of the
water for a few days because of a burned thumb)

All our film has been used, as near as I can
tell so I processed a roll from Geo Banner and shot
exposures 1-7 at Utterby, 7-8 over Pongik and 8-16
entire over Pongik. My first experience with Verchrome
& hope they turn out usable.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY

Ed, your work came. I see no problem with John
Kinnard, if we have budget funds to pay him and
you can get him in the 12 man limit.
Kidd, the mail you sent to Ed is so good
better than that I send last winter, if he
wants more have Tom mail up another batch or
two a batch of 100 lbs.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 17, 1958
Personnel Conrad, Champion Weather _____
+ Donaldson Water conditions _____

Radiation level(s) 0.8 mR

Operations:

Ch - Mapped the Bradley, TSCA Operation called to tell
me that they were going to support for the Project Aug 12-24
truly had a good idea section T.6 T.7 and that they
were prepared to receive the request for accommodations
and support.

The general operation got tired and quit. When we
found the distribution in the water, the time
started to report, but it continues to decrease
they do not get at 0.2. And as a result does
not start the second phase of the operation.

Packed samples that were dry in the area
from the Utah collection.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 18, 1958
Personnel Champion, Central and Weather Rain
Donelson Water conditions Crystalline

Radiation level(s) 0800-1200 (Pascoia-E-0100) 1500-3700 w/ survey
Operations: meter and 1400 pps counts per minute on the # scales

Spent morning packing samples trying to get
the ^{things} ~~things~~ for the gamma ~~recording~~ ^{fixed} - without
luck.

Helped Ch. Heath with water sample for radiation
assay.

Received word from Al Seymour on status of
Pongulap trap. Heard Al that the trip is a 71
duration and is scheduled for Aug 12-24 inclusive.
Also sent word to Ed Heath with instructions
to pass on by phone all the planning notes
that have been included with the logs.

Spent afternoon in Conference with:

- Dr. Webb - 7.1
- .. KE Byrnes - 7.3

Al Clement and A.R.D. on progress
for the Silverstein. For planning the ship
can cruise at about 4 to 5 miles a day. The trip
to Kusan from Eniwetok will take about 12 days.
The survey of the restricted area then will
take 5-9 days with the delays for fueling
etc. I am sure that many changes
will be included before Sept 1. Do not
lose the fuel out date - now does anyone
know what date it is? It is

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Ona + Ujeling Date July 19, 1958
Personnel Central, Champion, Weather Fair
Donaldson. Water conditions

Radiation level(s) 0.6 mR 0930 0.8 1530

Operations:

Central worked at the laboratory and really started
up the field every thing in spec and spec
Champion + Donaldson left by SA-16 for Ujeling at 0915
Arrived at the native village at 1100 and after the
usual pleases with the native chief Joang who
speaks some English. Bill collected fish, lams,
snails, etc and Donaldson in company with the
native subs collected (L. Omeve) plants and other
Two small coconut crabs were found in a pit
trough dug by the Japanese L. Omeve said that
most small crabs - coconut - are found in
moist places among large rocks. He said make the
large ones and under the bark of the coconut trees

The native people on Ujeling are busy building boats
they had a number under construction. The making of
coconut fiber rope was also observed a piece of rope
about 1/2 in thick in diameter was so strong that
I could not break it.

Left Ujeling at 1730 for return and arrived at
1530 on 1-26 brought us back in time for
processing the plants and putting away the equipment.

Wayne Hiatt still trying to find some
to cover the spectrometer.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 20, 1958 (Sunday)
Personnel Cantal, Champion Weather Fair
Donelson Water conditions _____

Radiation level(s) _____

Operations:

Cantal and Champion are on F-2, Champion played
handball. Donelson spent morning organizing a talk for
the local medical unit of the Task Force, H. & M. etc.

The local medical unit under the general leadership
of Dr. Michael has weekly seminars. I talked about
our program and interest in developing more of the
positive side of radiation biology rather than a monitoring
function. After the seminar a couple of hours were spent
in informal discussion of the role of radiation
biology in the A.E.C. and world affairs with
Col R.M. LeChasseur, USAF and Staff Surgeon J.T.F.
Dr. LeChasseur represents General A.P. Luedtke, USAF
Commander JTF-7. In biology and health matters, he
made a strong pitch for a direct line position for our
organization in the test program. Since General Luedtke
is to be the next general manager for A.E.C. the
Col's recommendations may get us up a step or
two on the ladder.

A visit to the Ateto and talks with Capt
Fosse, 1st Mate Johnson and Chief Engineer Wilkie
covered most of the areas of interest. Ed - please
and put the rubber raft, paddles on board. They
plan to put an extra rubber - walk in size for
freezing samples etc. I think this is going to
work out in a fine fashion if we can just get DBM
action the ball and work out the financing for rubber

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Cloner Date July 21, 1958 Monday
Personnel Champion, Central Weather Showers
Drummond Water conditions _____

Radiation level(s) _____

Operations:

Eds letter around today was good to get info on caponee, budget - activation.

Checked around the island today and obtained all the items on Ralphs list of requested things as of July 9. except

2 fuel lamp stands

7 lbs. Conc. H₂O₂

7 lbs. Conc. HCl

1 lb. H₂O₂ (Superoxide)

After sleeping, sleeping, almost studying the items I returned to F.M.B. and found that the entire list was already here - you sent it out with Jim and Bill. Items above should be purchased and shipped at once as they are not available on the island.

Shipped package of Tarawa samples to L.P.B. today

Plants 81-87, 88-90

Insect boxes 72-81

Fish 554-558, 559-563, 564-566, 569

Soil: Tarawa Corresponding logs are enclosed with samples.

R.D. talked to Jim Lyden about Gators request for staff. we radio responded yes - Jim said it is a H₂O₂ function and they have denied the request as an extra privilege.

Talked to Al Klement on fall out patterns for planning substation paths.

Talked to Ralphs Pruitt about plots financing as explained in Eds note.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer - Pape Date July 22, 1958
Personnel Champion - Central Weather The worst possible - rain
Donaldson Water conditions Rough

Radiation level(s) Juniper 1625 B

Operations:

Donaldson & Central went to Fulk at 2:00 on July 21 to stay overnight for the second scheduled trip to Pape & Kapege. It rained and the wind howled all night - we were up at 03:00 had breakfast waited till 04:00 - rain clearing 05:00 flight postponed till daylight, 06:00 flight cancelled. Arrived back in class at 10:30

With the aid of Ed & Chas. George worked on possible tanks for the silviculture & the fall out data - foot- to the point of actual man activities was furnished by Ad. P. Bennett, P.B.M. representative. Copies of the proposed tanks are enclosed. These are for planning only and should not be considered as final.

Some cleaned the tanks on the porch and the splashing of the storm had so pooled the water about many pounds of sand - mud had played their part and filled the tanks with much

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Olney Date July 29, 1958 Wed
Personnel Warping, Central, Guellem Weather Fair
Water conditions _____

Radiation level(s) Olney 0930

Operations:

Dr. S. Tuttle, Harold Hansen and visiting researcher R.B. and assistant went to E.M.C. taking inventory and working on the needs of the laboratory. I suggested:

1. Don't allow fuel for a part of the building to collect in the roof tank in
2. Replace roof clamps torn loose by the sheets of the spring device
3. Repair the door to the roof a separator to reduce rusting
4. Clean out the drain line from the outside tank
5. Get Tuttle records here 1 or 2 per, 1 reading sent as per for a center page etc that could not be accounted for. Can any of you help?

Mr. Kirk of Tech-Tec continued to work on the gamma spectrometer unit. He brought a new switch on the scale that had been replaced with a foreign replacement was sticking and should be replaced. The switch was removed and will be hand carried back to the R.B. for ordering a replacement. He also replaced 1 meter set of weak tubes.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Pang Island & Kapinganagi Date July 24 1956
Personnel Phillips Weather _____
Central & Paulson to Kapinganagi Water conditions _____

Radiation level(s) 1, 2 mR

Operations:
Central and Paulson went over to Fred last evening and stayed for our early take-off. Had breakfast at 0330, about 0415, departure at 0450 in Sea-16. South flight to Kapinganagi and we arrived about 1000. Kapinganagi is an atoll that resembles one of the southern atolls like Tarawa, Majuro, etc. Very isolated island and island is covered with coconut palms for the production of food and copra. The King son, Wilson who also is the trained medic visit the palms and went with us to the major village on another island about 5 miles distant from the weather station. The trip over in an open boat was interrupted by an accident when the airman man manning the boat put it down a coral bed and took a pin.

The chief lieutenant, in a very polite manner and with a good plan we had permission to photo graph some of the village ruins. The 2000 people on the atoll seem to be very happy but and much more energetic than the northern Marshallians.

We collected coconuts, fish, snails, etc., and remember, the fun of returning to the plane and the end of the return trip to Papeete. Arrived at Papeete about 1900 our time - less 1 hour for local time.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer & Panope Date July 25, 1958
Personnel Champion Weather Fair
Cantel & Donaldson Water conditions _____

Radiation level(s) _____

Operations:

Champion at Elmer & Panope, east, finishing up
morning and ready to depart. no plants. Spring
panels with doors of the refrigerator and deep freeze
collecting at Panope along a road just before
the so many other interests, was organized by
Mrs. Hedges. The notes were instructed
a very fine fish and one perch, a yellowfin and
a striped bass and a number of other fishes from
the Washington. They had a wide variety of
fish for the day. According to Hedges the fish were
all taken and considered up to the fish. The
fish were taken from a small at times so considered
samples to eat.

Mrs. & Mrs. Ed Swanson helped us collect the
rest of the water forms and the Agri. Station
again provided the plant samples needed. A very
destructive hurricane passed over Panope but had
the evidence of the destructive force of the wind
was in evidence.

Mrs. & Mrs. Hedges are leaving Panope this week to
travel some before collecting in Florida. This
next assignment Ed Swanson is now in charge
of Coas farming in the Trust Territory and
will maintain a propagation plot at the Agri
Station but will also spend much time on promoting
the work in the Territory.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 26, 1958 (Sat)
Personnel Donaldson Cartil Weather no wind
Champion Water conditions calm

Radiation level(s)

Operations:

Donaldson scheduled to depart Elmer to
Frad on way home at 0930, but MATS
had no planes to take personnel out.
Doc is re-scheduled for tomorrow morning.
A great portion of the day was spent
cleaning up the lab. Some painters sprayed
the floor and fixtures and consequently
covered the lab with a fine coat of white
paint which required a great deal of
scrubbing to get off.
The ^{later part of the} afternoon was spent recting some
Pompey Grip. Both Donaldson and Cartil
were exhausted. And the heat here
made it almost unbearable.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date July 27, 1958 (Sun.)
Personnel Donaldson, Cantril, Champion Weather hot, mild wind from use.
Water conditions Calm

Radiation level(s) normal - Pine 0830 E

Operations:

Dr. Donaldson departed Elmer for Fred at 0930 on way home.

The lab was dirty again by 0900 with dust and sand but no effort was made to clean it as contamination may follow in next 24 hours and then the whole lab will get a scrub down again.

It was learned that the U.N. test was officially canceled (Pinon) and Wayne Hiatt said Donaldson had been informed before he took off. Hiatt also said there maybe a chance both Silverstein and Alota trips could be or would be moved ~~up~~ up. Al Klement said he would inquire for us in the morning.

Don: The spectrometer "ink top" is OK but the machine as a whole is on the blink.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Ehose Date July 28, 1958 (Mon)
Personnel Contr. 1, Champion Weather hot - no wind at all
Water conditions calm - glassy

Radiation level(s) normal

Operations:

The whole morning was spent scrubbing down the laboratory in preparation to starting ^{the} processing of Ponape and Kapingamanga samples.

William in T-4 supply requested we soon round up all checked out items we would need in next month or so and turn them in as he is leaving in two weeks or so.

Al Klement called to say that there seems to be considerable pressure from military brass to move Silverbird up as far as Aug 1. We told him we could make no decision but that Aug 1 was probably too early for us to get ready. He said he would try to reach Donaldson before he left Hawaii and would inform us the what was going on. THIS PLACE HAS DEVELOPED A GOOD CASE OF MASS HYSTERIA. THE GENERAL HAS SNAPPED HIS FINGERS AND ALL THE DOGS ARE JUMPING. THOUGHT FOR A MINUTE TODAY THEY WERE GOING TO SHIP US OUT TO SEA ON THEIR OWN. THEY ARE FIXIALLY CONVINCED THAT THEY SHOULD WAIT UNTIL DC ANSWER KLEMENT'S WIRE

1958

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality _____ Date 28 July (CONT.)
Personnel _____ Weather _____
_____ Water conditions _____

Radiation level(s) _____

Operations:

7.1, 7.3, 7.5 ALL SEEM TO BE WORKING INDEPENDENTLY ON THE PROBLEM SO WE GET CALLS IN BATTERIES. AS WE SEE IT, THE GENERAL WANTS TO DIS ESTABLISH THE DANGER AREA. THIS REQUIRES OK FROM DBM SO THEY WANT 1ST LOT OF SURVEY RUN "RIGHT NOW". 7.3 HAS PLACED A DD ON STANDBY FOR THIS TRIP WHICH THEY EXPECT TO HAVE DONE IN A WEEK OR 10 DAYS AND THEN EVERYTHING IS TO BE REMOVED FROM THE DD AND THE SILVER STERN WILL THEN BE USED ON SCHEDULE TO COMPLETE THE SURVEY. SOUNDS VERY NAVY TO ME BUT LIKE I SAID THE GENERAL HAS SPOKEN SO EVERYONE SNAPS TO.

Help !!

Wme

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 29 July 1958
Personnel CANTREL & CHAMPION Weather FAIR
7.1, 7.3 & 7.5 Water conditions CALM

Radiation level(s)

Operations:

The morning and part of the afternoon was spent processing Kapingamaringi and Ponop samples. There were an ~~awful~~ awful lot of them. This morning some confused military man called asking where Kelly and Ed were. The last time he heard they were in Kwaj and that was February. He was getting worried as to where they were. He was afraid they were lost. I assured him that both Kelly and Ed were in Seattle, safe.

Al Klobert called and asked what Doc's home address and phone number. He is going to try to call Doc tonight or tomorrow through the ham station.

2

J.C.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date 30 July 58
Personnel Conrad & Champion Weather fair, normal
Water conditions normal

Radiation level(s) normal - Bkgd

Operations:

We finished up the mouse samples and cleaned up the laboratory again. Al Klement called to say he had called Doc and was awaiting an answer to the problem he had. We have a new addition to Lab of Radiation Biology. A cat - named "CAT" Black picked him up in the compound and the animal seems to like it here very much. It sleeps all the time - at least during the day. We hope he will make himself useful in combating the mouse problem. MORE MICE SCURRYING AROUND THE COMPOUND THAN WE EVER HAD HERE. EVERYONE WANTS SOMETHING DONE RIGHT NOW. WE ARE BEING AS HELPFUL AS POSSIBLE UNDER THE CIRCUMSTANCES.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 31 July 1958
Personnel CANTRAL & CHAMPION Weather 1st w/oc SHOWERS
Water conditions CALM

Radiation level(s) NORMAL

Operations:

WORKING IN LABS IN THE MORNING WENT DOWN TO THE ROCKPILE TO TRY AND RESTOCK FISH POPULATION IN TANKS (CAUGHT A FEW SMALL SANDPEGS. RECEIVED A CALL FROM CMDR WENDALL THAT COLETTE DD 730 WILL BE AT THE DEEP WATER PIER AT 1300. ALSO RECEIVED INSTRUCTIONS FROM FRANK RE INSTALLATIONS ABOARD SHIP. WORK IS PROGRESSING WITH THE AIDE ASSISTANCE OF HEN WHO HAVE BEEN GIVEN A PUSH TYPE WORK ORDER ON THIS JOB. BOTH PLATFORMS WILL BE MOUNTED PORT SIDE AFT BUT DUE TO WEIGHT DISTRIBUTION PROBLEM SKIPPER WANTED THE TANK ON THE STARBOARD SIDE.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 1 AUG 1958
Personnel CANTRAL & CHAMPION Weather HOT
Water conditions CALM

Radiation level(s) NORMAL

Operations:

Work still progressing on the COLETTA at a good rate we are getting a great deal of cooperation from H&N and harassment from the Navy. They want to know why it isn't done right now (and why our people aren't here ready to go). I am ignoring them thank you. Sam and I went thru back storeroom looking for items that will go aboard ship (cleaned it up too). Can't find ship pump we are supposed to provide meter blocks and other small items. We have set ^{ASIDE} those boxes that were marked for the SILVERSTEIN. I am having one problem. That is, deciding where to put lab & counting room. Since I don't exactly know the requirements Frank might have. The decision may have to be made soon if Frank et al. arrive on 7 Aug. Time will tell!!! We have decided to cancel the plankton trip for a few days until the "CO FEVER" dies down here. It seems like everytime we leave the lab someone is looking for us.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE WASHINGTON

Locality ELMER Date 2 AUG
Personnel CANTAL & CHAMPION Weather HOT
Water conditions CALM

Radiation level(s) NORMAL

Operations:
Work still progressing on COLETTE SHOULD
BE DONE MONDAY. AFTER THE WINKLES WERE
PLACED ETC. LOOKED LIKE THE ALLOWING COULD
HAVE BEEN A LITTLE LARGER THAN THE 20'
CALLED FOR. WE HOPE EVERYTHING IS SATISFACTORY.
THE LAB IS STILL HERE BUT HAVE BEEN AT
THE SHIP MOST OF THE TIME.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality ELMER Date 3 Aug 1959
Personnel CANTRELL & CHAMPION Weather Hot
Water conditions CALM

Radiation level(s) NORMAL

Operations: H & N NOT WORKING TODAY SINCE THEY NOW
HAVE plenty of time. STARTED PROCESSING
SAMPLES FROM PONAPE etc — —

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date 12 AUG 58
Personnel Arthur & Citangpud Weather HOT
Water conditions CALM

Radiation level(s)

Operations:

Spent most of the morning Airborne ship.
DECK WORK FINISHED EXCEPT FOR MINOR DETAILS.
COULD SEE SOME CHANGES THAT MIGHT HAVE MADE
THE SET-UP A LITTLE BETTER BUT WILL LET FRANK
DECIDE IF THEY ARE OK. HEN DID A FINE JOB
AND THEY WERE VERY COOPERATIVE. ALSO WORKED
ON SAMPLES THIS MORNING.

MAILED SAMPLES

Plants - 91-106 Fish - 510-574 575-588, 589-602, 603-615,
616-620

INVERT - 83-104

SOIL - UZELANG

ALSO LOGS

86

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Elmer

Locality Cantrel & Champion Date Aug 5, 1958

Personnel _____ Weather Hot, little w.

Water conditions calm

Radiation level(s) Normal

Operations:

Finished packaging Tomops & Kapingamaringsu
samples, all but a few livers which
should be dry tomorrow or the next
day. U.S.S. Collett is out at anchor so
we couldn't do anything aboard ship.
Actually, H & N has done a beautiful job
and all that we can do is done

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date Aug 6, 1958
Personnel Conrad & Chapman Weather not - mild
Water conditions calm

Radiation level(s) Normal

Operations:

Again a greater portion of the day was spent cleaning up the lab after completion of Rongelap & Rongerik samples. Elmer's shipment for Rongelap is here except for 10 carboys. All the others arrived OK!

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date Aug 3, 1958 (cont'd)
Personnel Centril & Champion Weather Dist - fairly calm
Welanders & Weeks Water conditions calm to choppy
Palumbo & Lowman
Radiation level(s) Normal

Operations:

Welanders, Weeks, Palumbo & Lowman arrived
EPO at 0900 and are housed in 128 with
Centril & Champion. Part of the morning was
spent washing dishes etc.

Checked in with Ernie Wynkoop, Comdr. Wendell and Clement of
DBM. Seven prior three and one are in a big rush to get the survey
under way so that they can go home.

At 10:00 AM went to large pier to meet ship. Checked
in with Captain ^{J.D.} Patterson as to operation of ship during cruise.

Dan had the spectrometer repaired and in working condition before
noon.

The probe had gone to Honolulu prior to our flight and
was locked up in the Airborne Freight warehouse. Sgt Pelot of
71st at Hickam is going to ship it to us on the next flight.

In afternoon collected necessary equipment and supplies for
the lab for transport to the ship. Inspected ship and made
arrangements for labs to be installed. The shipfitters shop
below the main deck will be used for chemistry and the
1st class lounge for counting room.

Champion & Centril have done a good job getting
the ship outfitted for the cruise. The winches are installed
and a canvas awning on the fantail. All of the boxed gear
is aboard.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date August 7 1958
Personnel Conrad, Champion Weeks, Wendle, Weather fair
Palumbo, Lawman Water conditions Smooth

Radiation level(s)

Operations:

In morning went to lab to pack for the Collett trip. Took the β counters and the spectrometer apart for shipboard use. Boxed and stored (also inventoried) the extra gear in the laboratory.

H+N is building the new addition on the building so the noise level is fairly high.

Made arrangements w/ H+N to build tables in the shipboard labs and to construct 4 blocks to use on the second winch and the probe unit. Put cable on the two winches after removing the old cable which was very rusty.

Checked with Frank Beebe about getting SAR plugs, ears, and red devil fans.

Talked to Cmdr Wendell about sealing date. Is dependent upon arrival of the probe.

Took the β counters and the spectrometer to the ship in late afternoon and installed in the labs. Made up SAR adapters for use w/ the equipment.

After evening chow went to ship and checked out the gear. Trouble in the analyzer which Don quickly remedied with a new tube.

Set up the chem lab for operation.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer + aboard the Collett Date Aug 8 1958
Personnel Palumbo, Welander, Weeks, Chempin, Weather Rain!
Cronill + Luman Water conditions medium rough

Radiation level(s) _____

Operations:

Finished loading the gear from the lab aboard ship.

The probe arrived at 0900 and was installed by our group and HAM went to J-4 + got batteries for probe. Probe didn't work so Weeks started trouble shooting.

Installed blocks on probe boom + forward winch frame. Got 6 coils, 2nd devils + snakes from Burke.

Rain was coming down in sheets during the entire operation.

Checked out the counters by running pleistones and calibrating w/ ^{60}Co standards. Calibrated the spectrometer.

Ralphie Art finished cleaning up the lab.

At 2:00 PM boarded ship and headed for sea. A few miles out ran 700' of wire out of aft winch through the metering block and painted the wire at 100' intervals. Then placed the metering block on the forward winch for use with the Neomera bottles.

Revised trip route and put off 300 miles and added 2 more stations. Sea is fairly smooth so we are using less diagonal runs and more N+S and E+W.

First station #34 at 1752 to 1812 took 8 ml plankton at 70 M and water samples at 0, 25, 50, + 200 M. Plan to take water samples at 0, 25, 50, 100, + 300 M but had a foul up on the 1st station.

2nd station #33 at 2145 to 2220. 16 ml plankton from 35 M took planned water samples.

Spectrometer + counters working fine - probe snafu. Still working on it but are also taking surface readings with a survey.

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality USS Collett Date Aug 9 58
 Personnel Weeks, Walunder, Central, Weather fair (rain at night)
Champion Palumbo + Lowman Water conditions smooth (nobody sea sick so far.)

Radiation level(s)

Operations:

Stations	Time	total ml. plankton	plankton depth	Water samples
35	0135-0200	30	35M	2 planned
36	0507-0527	12	35	lost 100 M
3	0902-0930	35	40	2 planned
38	1252-1312	20	35	" "

At station 36 the hinge that connects the bottle to the cable clamp came loose and the bottle was lost. Now have 5 bottles. We should get two more bottles before the Silverstein trip.

The shifts we are using are as follows:
 Team A Lowman Champion Palumbo 1200-1800
 Team B Walunder Weeks Central 0600-1200
 1800-2400

There 12 men from the ship were helping us on 4 hours on and 8 hours off schedule. Payne, Hays, N. Holt, Cresellon, Clamer, Porter, Beck, Coluhorn, Eiswirth, Kunkler, Justice and Chesley are the assigned men.

At 2:00 PM sent message on station through #38 to Klement.

In early afternoon one of the crew became very ill and had spasms so at 1600 we headed for Eniwetok. Arrived at Eniwetok at 2310. Had sent message requesting Klement to meet us.

Ed called by radio when we arrive in Port and requested information about some of their supplies. Klement was also at the phone so we talked to him and informed him. For Aug will discuss K1

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Utility USS Collett Date Aug 10
 Personnel same as Aug 9 Weather fair (rain before dawn)
 Water conditions smooth

Station level(s) _____

Observations:

Station	Time	total ml. plankton	depth of plankton	water samples
39	0635-0653	22	35 M	as planned
32	0952-1022	8	"	"
31	1330-1406	14	"	"
29	1830-1851	10	"	"
28	2152-2212	12	"	"

On stations 32 & 31 collected samples (1 liter) at all depths ^{to depths} ~~at~~ hilly and some size for us. On 32 collected 5 gal surface ~~Q~~ for Harley.

On station 31 the ship stopped for the sampling and for some time then started up again. The probe was broken off when huzzie screw - we also lost 10 150' of probe cable. We almost lost the plankton net too. The screw put a mighty dent in ~~the~~ ^{the} cable ~~and~~ weight. We are still taking the surface readings at the turning point.

Ralph put on a safety line and went down to look the probe. Nothing on the screws.

Sent second message to Klement on stations 39, 32, & 31.

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality USS Collett Date Aug 11
 Personnel Sarna et al Weather fine
 Water conditions smooth

Radiation level(s) _____

Operations:

Results to date

Station #	Plankton d/imp/l	Surface d/imp/l	25M d/imp/l	50M d/imp/l	100M d/imp/l	300M d/imp/l	(5' above H ₂ O) Surface R in mr/hr
34	43,000	255	801	96	---	331	0.14
33	2,600	1,250	234	931	4560	0	0.11
35	15,700	9,220	1,620	11,400	2,470	365	0.06
36	125,000	44,400	46,500	157,000	---	9,180	0.15
3	851,000	33,100	53,100	20,700	15,400	3,190	0.22
38	213,000	75,500	101,000	47,400	1,690	7,110	0.25
39	310,000	59,800	69,800	23,000	6,260	22,000	0.21
32	18,700	5,500	4,970	22,300	13,700	2,300	0.21
31	35,500	2,490	9,040	11,300	2,190	3,760	0.30
29	5,650	130	0	0	0	0	0.175
28	5,110	160	65	0	0	0	0.08
27	410	130	0	0	0	---	0.14

UNIV. CITY OF WASHINGTON
 LABORATORY OF MARINE BIOLOGY
 SEATTLE, WASHINGTON

(2)

Locality: VSS Collett Date: Aug 11 1958
 Personnel: Weeks, Wolander, Palumbo Weather: fair
Champion, Connel & Lawson Water conditions: smooth

Radiation level(s): _____

Operations:

Station	Time	Total ml Plankton	Depth of Plankton	Water samples explained
27	0120-0140	14 ml	35 M	9, 25, 50, 100, 200 M
13	0503-0523	12 "	"	10, 25, 50, 100, 200 M
1	1252-1312	15 "	"	"
37	1612-1632	10 "	"	200 M
2	1937-1957	14 "	36 M	" " " " 300 M
4	2245-2310	20 "	36 M	"

One net torn beyond repair. ^{became fouled in water bottle.} Processed 2 unsorted samples. Samples being taken with greater efficiency. ~~_____~~ The credo, back, hang and out seen after by experience. Travelling was rapidly between stations - 19 boats.

The water bottles have given us occasional trouble & need some work after every station.

New net lost when snap became unhooked while waiting out net. Using device from now on to attach net.

Results to Date

Sta #	Plankton D/m ³ /cc	Surface 1120 D/m ³ /l	25 M d/m ³ /l	50 M d/m ³ /l	100 M d/m ³ /l	300 M	above surface rat 5' m/hr
13	2560	72	0	0	0	180	0.12
1	3320	1300	1100	52300	0	370	0.30
37	27,100	37,000	35,000	42,400	3900	3900	0.34
2	34900	53,400	50,500	157,300	5,400	6000	0.27
4	190,000	218,000	202,000	85,000	1740	4300	0.20

9!

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality U. S. S. Collett Date Aug. 12, 1958 (Tuesday)
 Personnel Lowman, Wells, Palumbo Weather Fair
Castroil, Champion, Welander Water conditions 5 m. oth.

Radiation level(s)

Operations:

Station	Time	Total ml Plankton	Depth of Plankton	Water Samples
5	0210-0230	14	35	0, 25, 50, 100, 300 14
7	0520-0540	24	"	" " " " "
8	0834-0854	6	"	" " " " "
6	1141-1201	6	"	" " " " "
9	1447-1507	12	"	" " " " "
11	1755-1815	10	"	" " " " "
16	2100-2115	15	"	" " " " "

Travelling 19 knots between stations. Taking fathometer readings at each station. Bombus consumption reduced.

Flying fish found on board between stations 7 & 8. Processed liver, muscle, viscera, & Bone.

Results to date.

Sto #	Plankton d/ml/cc	Synaptid d/ml/l	SM 116 d/ml/l	50MH ₂ O d/ml/l	400MH ₂ O	300MH ₂ O	Abn. Surf. Y ₂ ant
5	21,900	18,300	16,300	710	97	5700	0.1
7	17,600	13,200	12,900	1460	1040	3330	-
8	9110	3830	3510	851	1610	2050	0.22
6	7110 7110	72	460	466	1610	1870	
9	1070	1700	640	1160	130	460	0.4
11	1060 1060	237	0	0	0	772	0.16
16	4670	4950	1800	1360	805	2830	0.22

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality U.S.S. Collett Date Aug. 13, 1958 (Wed)
 Personnel Lowman, Cantor, Palmbe Weather ~~Sun~~ Fair
Weber, Champion, Welander Water conditions Smooth

Radiation level(s) _____

Operations:

Station	Time	Total ml Plankton	Depth Plankton	Water samples
10	0014-0034	10	35 M	0, 25, 50, 100, 300
17	0314-0334	8	"	" " " " "
18	0633-0656	10	"	" " " " "
22	0930-0950	8	"	" " " " "
19	1250-1315	10	70	" " " " "
15	1651-1716	10	35	" " " " "
20	2045-2100	8	"	" " " " "

Injured & sooty tern landed on deck.

Results to date

Sta. #	Plankton d/m/cc	5m- H_2O d/ml	25M- H_2O d/ml	50M- H_2O d/ml	100M- H_2O d/ml	300M- H_2O d/ml	51abc Surfa 7 m/ft
10	1580	65	0	0	0	0	0.20
17	1270	770	620	0	97	0	0.13
18	1740	194	0	0	0	0	0.15
22	1608	497	0	90	0	720	0.24
19	8320	6710	6840	9440	9010	2460	0.70
15	4060	1210	4290	695	920	2720	—
20	1510	0	0	0	0	0	0.14

UNIVERSITY OF WASHINGTON
 LABORATORY OF RADIATION BIOLOGY
 SEATTLE, WASHINGTON

Locality USS Collett Date Aug. 14, 1958 (Thurs)
 Personnel Lowman, Palumbo, Cantrol Weather Fair to stormy
Champion, Weeks, Welander Water conditions Smooth to rough
gusted to 39 knots

Radiation level(s)

Operations:

Station	Time	M.L. Plankton	Depth Plankton	Water samples
21	0034-0054	8	35 M	0, 25, 50, 100, 300 M
23	0434-0459	16	"	" " " " "
24	0905-0930	10	"	" " " " "
25	1244-1259	15	"	0 25
26	1544-1604	8	"	0, 25, 50, 100, 300
14	1920-1945	12	"	" " " " "
12	2230-2255	12	"	" " " " "

Station 25 water sampling incomplete because of squall - winds up to 39 knots. Water bottle cable angle to surface of water was about 30° or less - could not get the bottle down to any depth.

Processed & counted samples, sent in the usual message. Received no message.

Results to date:

Sta. #	Plankton d/m/cc	Surf. H ₂ O d/m/l	25 M-H ₂ O d/m/l	50 M-H ₂ O d/m/l	100 M-H ₂ O d/m/l	300 M-H ₂ O d/m/l	5' above surf. Y m/hr
1	1770	319	0	60	0	0	0.18
23	293	0	0	0	0	0	0.16
24	3410	252	97	130	0	0	0.20
25	6780	178	0	0	0	0	0.17
26	5060	0	463	0	0	0	0.22
14	1940	0	0	0	0	198	0.10
12	410	640	1030	1930	0	360	0.175

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality U.S.S. Collett & Elmer Date Aug 15, 1958 (Fri.)
Personnel Lawman, Palumbo, Weeks Weather Fair
Cantail, Champion, Welander Water conditions Smooth

Radiation level(s)

Operations:

~~Repacked~~ Collett into lagoon & locked 1st at oil barge about 0700. Went in on Captain's gift & met with Ennie Wyucrop, later, Cmdr. Welander & Al. Clement. We were concerned about the use of the Collett for the next phase of the track but met with no encouraging response. We feel that the data should be tied together as well as possible & the chances of this fade as the dates between the 2 trips become separated.

Started to unload ship & completed same in less than 8 hours.

γ Spectrometer had not been working properly the last 24 hours of the trip. Repairs are under way.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality U.S.S. Collett & Elmer Date Aug 15, 1958 (Fri)
Personnel Lawman, Palumbo, Weeks Weather Fair
Cantail, Champion, Welander Water conditions Smooth

Radiation level(s)

Operations:

~~Collett~~ Collett into lagoon & docked 1st at oil barge about 0700. Went in on Captains gig & met with Ernie Wycoop, later, Cmdr W. W. W. & Al Clement. We were concerned about the use of the Collett for the next phase of the track, but met with no encouraging response. We feel that the data should be tied together as well as possible & the chances of this fall as the dates between the 2 trips become separated.

Started to unload ship & completed same in less than 8 hours.

V-Spectrometer had not been working properly the last 24 hours of the trip. Repairs are under way.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Elmer Date Aug. 16, 1958

Personnel Lowman, Palumbo, Cantrell Weather Rain, etc.

Weeks, Champion, Welander Water conditions Fair

Radiation level(s)

Operations:

Cleaned up storeroom area & Porch - the latter left in a mess by the Rongelapese.

Continued efforts to get Country equipment in shape at the lab.

Set up Resin columns in cold room (6 in all)

Collett left at 12:00 noon today.

The addition to EMBL is almost ready & will give much needed bench space and storage facilities.

Cleaned and rearranged the storage room. Fine job by Welander and Champion. The entire Lab now is in spic and span shape.

Lowman called out of movie by Admiral Tyree to discuss the Collett Survey. We all dropped into 119 to check with Al Klement who had been asked about lack of fish data. We all emphasized the difficulty of catching fish at the speed travelled between stations and the poor luck of the fishermen aboard. Al understood completely and sent a Tux explaining the situation. This Tux is being copied for our files. Will send a copy to you today.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Perry Is. Date August 17
Personnel Conrad Chapman, Palumbo Weather fair
Wesley Welander, Lowman Water conditions Smooth

Radiation level(s) _____

Operations:

Set up resin columns for 7 samples. 4 Macroplankton, 1 microplankton, and two fish. Wet ashed the samples.

Started drying plankton plates to get dry wt. and for second counting of plates.

Oiled extra cable for winch. Made plastic covers for winches. Worked on a sick gamma spectrometer.

Set up the β counters after cleaning the pigs, slides, and counter tubes.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

Locality Perry Is. Date Aug 18
Personnel Same as Aug 17 Weather Fair - showers
Water conditions smooth

Radiation level(s)

Operations:

Sorted resin column experiments. Weighed dried plates.
Calibrated the β counters with standards and worked on
the γ specimens which is really kept after the three
power failures aboard ship.
Started recounting the plates. Worked over waste bottles
for next trip.