

R

T67.1

Hardtack Phase I.

PPG. TU-6

Emmitte Atoll.

Log Book.

13 April 1958 - Aug 19, 1958

RG 326 US ATOMIC ENERGY
COMMISSION E-23

Location LANL B-195

Collection Records Center

Folder LOGBOOK HARDTACK II

BEST COPY AVAILABLE

COPIED/DOE
LANL RG

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
Y
Z

Sun 13 April

Main body of troops arrives PPG aboard the MST5 ship Ford Ainsworth. Troops depart at approx 1100 hrs and were processed through JI. The remainder of the day was spent in an orientation tour of Perry Island. The troops that have been scheduled to go to Bikini returned to the Ainsworth for travel to Bikini.

Mon 14 April

The day began with a breakdown of job assignments as follows

- Capt R. J. Budder Operations Section
- 1/lt James Wingate Monitoring Section
- 2/lt James Crawford Chief of Platoon & Briefing
- Ens Haling Briefing office
- 2/lt Fowler Briefing & Muster office
- 2/lt McIligan Briefing & Muster & Mess office

The P & B section mounted the large Red situation maps. They are not too good for briefing but they do make good eye wash. The day ~~ends~~ continues with the setting up of the office furniture and in general getting situated.

Tues 15 April

Assignments of the monitoring officer was switched to that of an asst ops officer. This move eliminates the middle man between the ops officer and the troops who

do the monitoring. This more should make for a smoother operation as the ops office can deal directly with the NCOs.

MSgt Jones appointed NCOIC

Sgt Kilgore appointed Ops NCO

Sgt Izaway appointed Seccon Sect. Chief. Plotting and Briefing spent the day in site orientation and the location of specific project stations on the island of the atoll. The Seccon section was made operational with four men. Season was established with J-3 plus J-3 air section for transportation requirements. Preliminary arrangements were made for choppers to orient, inspect, and to project on the island of the atoll.

Wed 16 April

Miscellaneous carpentry work was initiated in order to finish the last minute details in the operations section. The Standard Operating Procedures were revised by the officers of the Ops section with changes recommended to the sections of the JOP given to the Ops Sect. Choppers were scheduled for the training flights for the first event in Cactus. Cactus Survey points located and plotted.

be
ed

Chief

safe
all

I
with
him
are
at

Thur 17 April

Arrangements were made with J-3 Comis section for the installation of both the Kleaned and the Beachcomber nets. P+B assisted in the organization of the chopper orientating flight utilizing two H-21's. This first flight went to Yvonne, Janet, and to the Dene-Drone complex. 18 personnel of TO 6 were taken on this flight. Unfortunately the flight record for this flight was lost, therefore there will be no account given of this flight time. Cactus recently cards submitted to J-3 such as the T-6 radar surveys will be included in the schedule of events on shot day.

April
the
lab

Fri 18 April

Drason was established with the 24th chopper squad for the processing of Form 1 for flight records of personnel authorized flight pay. Plotting & Briefers set up a Red safe situation map reproduction method such that interested sections would get the current Radra situation. The Chabrelum, would be made later. I expected the Dron facilities and they were found to be operational and in good running order. All Dron equipment was given a hot run. EMT teams were set up on a roster basis to meet SAM planes.

my

COPIED/DOE
LANL RC

per
Dec
Chief
except
tell
it
with
them
were
eat
April
initial
details
the
is
p
try

Thur 17 April

Arrangements were made with J-3 Comi section for the installation of both the Kleenex and the Braclamb nets. P+B assisted in the organization of the chopper orientated flight utilizing two H-21s. The first flight went to Yvonne, Janet, and to the Gene-Irene Complex. 18 personnel of TUC were taken on this flight. Unfortunately the flight record for this flight was lost, therefore there will be no account given of this flight time. Cactus ready cards submitted to J-3 such that TUC rad surveys will be included in the schedule of events on spot day.

Fri 18 April

Deacon was established with the 24th chopper squad for the processing of Form 1 for flight records of personnel authorized flight pay. Plotting & Briefers set up a Rad safe situation map reproduction method such that interested sections would get the current Radex situation. The distribution would be made later. Inspected the Deacon facilities and they were found to be operational and in good running order. All Deacon equipment was given a hot run. EMT teams were set up on a roster basis to meet SAM planes.

COPIED/DOE
LANL RC

SAT 19 Apr

EMT teams trained on the PAC
 - 3 G in order to survey for alpha
 contamination should this be a requirement
 EMT teams were briefed on their duties
 and responsibilities. Troops were given 1/2
 day off for recreation purposes. The
 monitor school operators both a 4 day
 school and a four hour school this
 week.

SUN 20 Apr

EMT met C 124 SAM flight on
 Ford and recovered the device back to
 Elmer. The EMT is a very vital part
 of this mission of recovering a device from
 the ZI. 2 officers and 3 C.M. participated
 in the mission. Otherwise the work load
 was light this day.

Mon 21 Apr

Communications set up for transmission
 of rad survey data to be transmitted
 on regular chopper communications net
 This will be done through the Elmer
 dispatches. Final survey points for
 Cactus plotted on survey officer's map

Tues 22 Apr

The organization of the Radar
 control system was set up this day. It
 included the preparation of the Radar
 Area Entry Log Book and forms. Also
 the Hoa shot survey points were

plotted from the Koa operational letters and preparations made for the Koa event. Orientation flights were run today such that the personnel running the surveys would know the island complex thoroughly.

Wed 23 April

P + B began plotting weather hodographs showing the forecast winds at the various levels of the atmosphere. This predicted wind hodograph is quite valuable in that it gives a trend as to the fall out pattern and the direction of the hot line. Decontamination section was given a final check out and the section is ready to go.

Thurs 24 April

More dry runs and in general a normal day. Spent the morning talking with Maj Weaver on the operation thus far. He stresses the familiarization flights that the flight personnel are now taking, also we talked about the check point system in order to control the entry into the radar areas.

Fri 25 Apr

Arrangements were made for the transmission of fallout data to Bikini. The fallout prediction unit will give the data to TU-6 and TU-6 will transmit the data to Bikini via the I B M data transceiver. The code to be used will be a 12 digit number group. The first three the direction the second three the distance in nautical miles to the 100 R line, the third three the distance to the 10 R line and the fourth group of three digits the distance to the 1 R line. This is in essence a polar coordinate plot of the contamination envelopes. Personnel were detailed to the Rectus and Coa events.

Sat 26 Apr

A somewhat light day. The monitoring school ran a few days and a few hour course for personnel of the various projects in order to train project monitors.

Sun 27 Apr

EMT team went to Laid to recover a device. Capt Buddie went to Bikini to clear up problems on the fallout plot transmission. Day very light.

5 Apr
the
them
' give
will
is
the
difficult
action
noticed
there
the
time
some
' the
U
C

Apr
in
and
of
train

Apr
account
Bukine

Mon 28 Apr

Personnel assigned to the Batterment event surveys and dry run scheduled for this. Plan dry run finalized today. Duty officer and C-9 started this evening, it was necessary to start this in order to man the phones after working hours.

Tues 29 Apr

Telephones installed in N @ S tent today and this will help when a detail is needed in a hurry during the night. The final meeting was held at the J-3 office concerning the Cactus event ~~event~~ also held another dry run today but it looks like the last one as J-3 does not want to run the choppers as maintenance is quite a problem. Therefore we will use the shot runs as training exercises for the next slot.

Wed 30 Apr

Contact was made today with the weather control such that the actual slot time winds can be plotted. This will give a better fix on the hot link to the survey party. The upper air data will be sent via telephone to the ops section.

COPIED/DOE
LANL RC

Thurs 1 May
 Normal day - all preparations have been made and the unit is now in the waiting phase. The "Renoville" began transmissions on the backhaul network.

Fri 2 May
 Discussed with Col Brooks the plan for procuring personnel who will go into the Waloo recovery program. Maj Jacks directed that the Renoville was to be used as a sub unit of the Elmer Red base facilities. Access forms, film badges, and clothing will be issued at that point in that recovery parties will have to go to the Renoville prior to going to the target area, this will take some load off of TV-6 for this event.

Sat 3 May
 Light day with sections working about a half day. EMT went to Ford this morning, but mission took all day as planes did not arrive quite as scheduled. I wonder who won the Kentucky Derby today?

Sun 4 May
 In that this is today the sections operated, but the work load was light. However the EMT went to Ford to help convey a driver back to Elmer.

Mon 5 May

Arrangements were made on the Wahoo shot as to who would run the surveys. St Angel is to run the pre entry rad survey and May Jacks will take the detailed survey aboard a tugboat with Ens Kelms and two enlisted monitors. St Angel will also pick up a 5 gallon water sample from the hottest radioactive spot that he can find. Decision has been made with projects 2.3 and 7.3 regarding their rad safe requirements on this Wahoo shot. May Jacks in his prior planning committed 16 T-5 rad safe monitors to monitor and survey the ships on their return to the Lagoon. Re entry cards were submitted to 2-3 on the Wahoo and Sally shots. Col Palmer arrived today.

Tues 6 May

At best Cactus day! Rad safe surveys were run on this shot. Three surveys were the H+2 and the H+5 two surveys. In that the surveys were quite detailed - high intensities were encountered. The contamination was confined to Yvonne and La Roy islands. Station 1130 on Yvonne was one of the primary focal points of the surveys as

Continued

Tues 6 May

this experiment was critical and success depended upon an early recovery. At H+2 a rate of intensity of 440 R/hr was found near the bunker. At H+5 an intensity of 230 R/hr was found at the same location. Since the door was blocked with sand and that the radiation intensities were too high, recovery efforts were delayed till a later time. An interesting point came out in the film badge dosimetry of the H+2 and the H+5 survey parties, in that the H+5 party received three times the dosage (1800 mr) that the H+2 party received (600 mr). The difference in dosage was due

Wed 7 May

Dry run for Walco arranged today and personnel were assigned to their jobs and given a detailed briefing on their duties. The Cactus plus one survey was made and activity was concentrated on Yvonne. Readings were taken at sta 1130 and the intensity is still too high to allow recovery operations to begin on this experiment.

Thur 8 May

Cactus + two survey run today and again emphasis was on station 1130. The intensity near the bunker was 30 R/hr, based

6 May
at
the was
+5
at
door
at
two
er till
point
dosimetry
charts,
ver
that
) The

May
and
and
was
on
May
again
not
used

upon this reading the project de
upon a recovery run to the bunker
When the party reaches the door
survey meter went off scale (more
50 R/hr) and the recovery party
about their mission. On critical
recovery it will be necessary
survey the doorway to bunker,
the area near the bunker. The
various sections of the unit are
working well together and a safe
mission is assured. The decon
section has operated both the
and the personnel decon stations
of equipment that have been de
nated were jeeps, helicopters and
amphibious truck. Plotting and
section is also doing a fine job
plotting the maps and disseminating
radiation data to all interested
sections of the task force. The
dosimetry cards giving the total
daily dosage were used for the
first time and the system worked
FBI

The cactus plus three survey were
this morning and the contamination
concentrated on the northern end of
island. The radia area is quite
and recovery of equipment took place
today. The project with the

COPIED/DOE
LANL RC

PRIVACY ACT MATERIAL REMOVED

gauges contaminated the helicopters and flight operations were such that it was necessary to decontaminate the area in front of the operations shack. Also the recovery of the neutron which was made at the 1130 using teams of workers in relays. The project contaminated many of the workers, aircraft and equipment. All in all it was a very contaminating situation with these recoveries. Two Navy officers Lt [unclear] and Lt (JG) [unclear] arrived from Treasure Island to participate in Wahoo and Umbrella events. Also dry run in Koa run this day for detailed survey.

Sat 10 May
Orders for officers to make flight certificates were requested from 7:30 to 7:10 A.M. Normal working day.

Sun 11 May
EMT required at 0215 this date as it was thought a Tritium container arrived which was a leak. The tritium was not leaking only the liquid nitrogen surrounding the container leaked. Normal day for a Sunday, however plans were formed up for the Butternut shot.

COPIED/DOE
LANL RC

at
2
A.
had
,
off
is
-
/

Mon 12 May

Butternut fired this morning. Two surveys were run this morning the pre entry survey and the initial detail survey was run at H+4 hours. This shot was much larger than Cactus but not nearly as contaminating. Recoveries were made from Yvonne and there has been but a slight radiological problem from this shot. Koa is still scheduled for tomorrow and plans finalized as to our participation

Tues 13 May

The Koa shot was fired this morning and the pre entry survey was run at H+4 hours. Considering that this was a surface shot, the radiation intensities over the northern Islands could be deemed as light to moderate as everything read about 40 R/hr over the land masses on the down wind side. Sta 1410 was the critical station on this recovery and from the survey it looks as if the recovery can be made as planned on H+1. The H+5 initial detail survey was cancelled on that bad weather and high winds were forecast for the atoll for the afternoon thus grounding the helicopters and ending recovery operations for the day.

May
1st
7.1

May

COPIED/DOE
LANL RC

Wed 14 Nov

Today the Hoa plus 1 post shot survey was run, and the radiation levels were such that recoveries can be made on items. A new problem has arisen, the whole area is reading 20-30 m/hr. We on Eniwetok are in a fall out area. In that it is impossible to check a person for contamination checkpoint monitors have been instructed to send everyone returning from a radon area to the showers for decontamination. Also the background on the island is so high counting is impossible on a scale.

Thur 15 Nov

Today the Hoa plus two post shot survey was run, but it had to be rerun as the readings were not touchdown reading. On the second survey it was shown that our factor of two multiplier for a 25 ft reading is just about right for the reading on the ground. Sgt. Helgrod ran a fallout survey of Elmer and found a average reading of 8.5 m/hr. Counting techniques are still impossible today.

COPIED/DOE
LANL RC

PRIVACY ACT MATERIAL REMOVED

May
level
made
9-33
bar
the
the
b
May
shot
to
t
urry
two
t
and
y
why
is

Fri 16 May

Today the Makos underwater shot was fired
were aboard the Navy tug Procteron
to make a survey of the radiation on
the target area plus Enz Berry was
to obtain a few gallon sample of sea
water from an area reading 5 to 10 R/hr.
The survey the tug went first to the
DD593, then obtained the water sample,
and then proceeded to the EC-2.
Philobeth led the mission of defining the
envelope of the hot water by using
sea dye as a marking agent. Sgt
flew as a monitor aboard a
helicopter to obtain the fall out
recovery from the YC2 they led to
about their first mission as the intent
was greater than 10 R/hr but resumed
the mission in two hours. It
orbited near the bubble as marked
by the mission of reporting to Prof Jacobs the
direction and movement of the hot
water. Philobeth decanted the
hot water sample 380 ml/hr at surface
of container and placed sample aboard
aircraft with SCDR Jacor who will
escort sample to LASL

COPIED/DOE
LANL RG

PRIVACY ACT MATERIAL REMOVED

SAT 17 May

Today in Wahoo +1 and Koa +4 therefore a detailed survey of the install was made but noted but little change. The wahoo situation is a bit unbalanced and it is hoped that the EC-2 and the DD's can be brought onto the bay and the surveys made as the men have been standing by all day for this mission. EG+G has requested that a four hour school be started for their new personnel. Two EMT's were run today to bring new devices in to Elmer.

Sun 18 May

Today radiation surveys were made aboard the destroyers and the EC-2. The levels of the radiation intensity were very low almost insignificant. Also preparation was made for the Holly shot today. The work load was very light today.

Mon 19 May

The EMT was called out today on a run to Ford to account at device. The target ships from the Wahoo shot were surveyed inside and very little contamination found. The contamination that was found had been tracked in by casual workers. Plans for Magnolia and Elders were submitted today.

COPIED/DOE
LANL RC

PRIVACY ACT MATERIAL REMOVED

7 May
before
o
re.
below
and
begin
in
that
other
on
in

May
made
2. The
very
two
of the

May
at
to
and
contam-
ished

Tues 20 May

Very light day as far as work load is concerned. The only survey that was run today was that of surveying the barges from the Wahoo shot.

Wed 21 May

The Hally shot was fired today and two surveys run in order to locate the contamination pattern. The pre entry survey left at 14+2 hours and the initial, detailed survey left at 14+5 went to Bikini for the Uplamou shot. Preparations were made for the Yellowwood shot. A special survey was made to read Plate tower.

Thur 22 May

Today we made the Hally plus one survey and the contamination is limited to a small area. More preparations for Yellowwood shot made this day. The operation of this job has become somewhat routine which makes it quite easy.

Fri 23 May

Today helped make the final recovery at station 1130 on Yvonne. Other than this today might be closed as a normal day.

COPIED/DOE
LANL RC

PRIVACY ACT MATERIAL REMOVED

PRIVACY ACT MATERIAL REMOVED

Normal Day

Sat 24 May

Sun 25 May

Today the work load was extremely light and check points were released early.

Mon 26 May

Yellowwood was fired at 1400 this afternoon. I originally scheduled the survey for 1700 but I wanted the survey run as soon as possible so that the Magnolia shot could be fired tomorrow. There was a hazard in that the choppers were not on Elmer and the survey took off at 1600 and found that the contamination was very light almost negligible on the upper island.

Tues 27 May

Magnolia was fired this morning. Both the pre entry and the initial detail surveys were made. Yvonne had a moderate amount of contamination but all recoveries were made with ease. Mack Photo tower was checked again and was reading 10 R/hr.

PRIVACY ACT MATERIAL REMOVED

COPIED/DOE
LANL RC

May

Wed 28 May

Magnolia plus one survey was run this morning also a special survey was sent to track photo towers to check the results of the decontamination procedure. Washing by fire hoses did not prove to be too satisfactory.

May
to
only

May
this
survey

Thur 29 May

Magnolia plus two surveys was run this morning and in general from the results of the survey the atoll is relatively clean. Plans were begun on the Umbrella shot this morning. TUC has responsibility for the water sample pickup on a reel survey by L-19 and the ship survey using M boats to survey the target ships. This day was very much a normal day.

more
exp
at

May
30th

Fri 30 May

Tobacco shot was fired this morning and the fire entry survey made. In that this is Memorial Day the workload was light. Communications for the Umbrella shot were arranged today - that off using the command channel (Kleenex) but a separate cell sign (Beach combor). The weather today is bad with squalls.

at
c.

COPIED/DOE
LANL RC

Sat 31

Tobacco plus one survey made and the day was just a normal working day.

SUN - 1

Normal Day

Mon 2

Plans were formulated for the Umbrella shot in which the personnel of T-46 were assigned their individual missions. Also today the plans and arrangements were made for the Rose shot.

Tues 3

Rose was fired today. Both a pre entry and a detailed survey were made of the contamination resulting from this shot. Plans were made for a dry run on Umbrella with particular emphasis to be placed upon the communications.

Wed 4

Rose plus one survey was run today. The dry run on Umbrella went very very well and the comm. worked beautifully.

Thur 5 Jun

The Rose plus two survey was run today. The EMT had a mission to Fried and returned early. Other than this the day was quite normal.

Fri 6 Jun

Today the EMT had another mission to Fried. We also had another atoll survey for the Rose plus three surveys. Umbrella plans are proceeding very nicely. However at this time supply section does not have enough wet weather gear for the people who will go into the contaminated waters. Today we received three men from Conus and they were most welcome as the personnel in the section was reduced a bit too low. Sadly we had a TV 6 party today.

Sat 7 Jun

Another EMT mission today. There were more Umbrella plans formulated today but our basic plan practiced in the dry run is still the same. We received the balance of the wet weather gear required for the Umbrella shot. The day in general was quite a normal day.

COPIED/DOE
LANL RC

23

Sun 8

Today was a very light work day and very few requirements.

Mon 9

Umbrella was fired today! The initial survey was made by two M boats. The Navy tug Arakora made the run into the hot water to pick up a hot water sample at an intensity of 50 R/hr. But no hot water could be found as the hot water intensities were uniform about 2-3 R/hr. The sample read 350 mR/hour at the surface of the sea two hours after the burst. The contamination from the shot was very light.

Tues 10

A detailed survey was made of the atoll today and the radiation contamination picture had not changed much. An Emergency Monitoring team was required at Ford to receive a device. Normal day -

Wed 11

Preparations were made today for walnut. A rad situation map of the Umbrella shot at L+1 hour was made by Lt Milligen. Otherwise it has been a normal day.

Thur 12 Jun
 An Emergency monitoring team was required today at Ford. Normal day.

Fri 13 Jun
 Normal day —

Sat 14 Jun
 A special water survey was made today of the waters and islands between Bruce and Yvonne. This water survey was necessary in that shell hunters and swimming parties who frequent this area want the areas delineated where they can hunt + swim. The area south of Zone was designated as a clean area. Normal day.

Sun 15 Jun
 Walnut was fired today. Two surveys were run, the pre entry survey and the initial detail survey was run in the afternoon. Also the emergency monitoring team was called out to escort two devices off the atoll.

Mon 16 Jun
 The Walnut plus one survey was run today. Also an EMT was required at Ford. Normal day —

Tues 17
 The Walnut plus two day survey
 was run today. Normal day

Wed 18
 Linden was fired at 1500 hrs. During
 a pre entry survey was the only
 survey run on the shot for this day.
 A special survey was sent to Na
 photo tower to see if it had
 been clobbered with fallout. It
 had @ 10 R/hr. Two emergency
 monitoring teams were used today to
 escort the devices both coming in
 and going out.

Thur 19
 The Linden initial detail survey
 was run this morning. Normal day.

Fri 20
 The Linden plus two survey was
 run this day. Normal day

Sat 21
 A special survey was run by the
 jacks to see if on a copter
 survey if the rotor wash disturb
 the contamination on the ground such
 that a false reading is found. The

results of this survey show that the rotor work did not alter the intensities of the readings. Today there were two EMT missions to Fred to escort devices both coming and going. Normal day in the section's operations.

Sun 22 Jun

An EMT mission was required at Fred this afternoon. The day was light with just a few work parties out.

Mon 23 Jun

A detailed survey was made of the itell today.

Tue 24 Jun

Normal Day

Wed 25 Jun

Normal Day

Thurs 26 Jun

Light Day
Survey made of reef between Alice and Liberty.

Fri 27 Jun

Normal Day

COPIED/DOE
LANL RC

Sat 28 J
 Eldes fired today two surveys of the atoll were made, the pre entry and the detailed survey. Also a survey was made of which photo towed in order to check for fall out at this point. A special monitoring team was sent with the pumping team which accompanies the "Oak" barge as there is danger that the hot water from Eldes will move into the Oak slot area via the action of the currents and wind. This precaution was well founded as at 1900 hot water began to move into the Oak area with readings of 2 to 2.5 R/hr. In that the crews were almost finished with their work they stayed until the job was done.

Sun 29
 Oak fired today only one survey was made as the contamination to the islands of the atoll was almost negligible. Recovery operations were quite slight. About 2000 heavy rains hit the island and the background shot up to 2 m/hr for a shot which gave for the period 0.7 m/hr.

COPIED/DOE
LANL RG

Mon 30 Jan

A detailed survey of the atoll was made this morning. Contamination levels were very light. The day in general was quite busy with much traffic moving up atoll.

Tue 1 July

A detailed survey was made of the atoll this morning with particular emphasis made on the western reef. The reef was reading about 300 m/yr at 400 ft of altitude from Alice to Jerry. An interesting point the hot water had a greenish turgid look.

Wed 2 July

Sequoia was fired today with light contamination found on Yvonne. The water was reading 14-15 R/hr at 100 ft of altitude. Two surveys were run, the pre-dry survey and the initial detailed survey. In the detailed survey the west reef was surveyed more in detail. The readings today were in the order of 10-30 m/yr with a high of 50 m/yr found in one location. The point of interest was that the green turgid water was proportional in its coloring to the radiation intensity. Dr. Donaldson of the University of Maryland

Department of Fisheries theorized that the detonation of Cordite causes calcium, phosphates and nitrogen compounds to be released which algae could use as food. With this food available the algae increased very rapidly with the available food, and at the same time collecting radioactive particles.

Thurs 3 July

Today there were many parties working in the northern part of the atoll for the preparation class of Dogwood. Other than this the day was normal with the usual function of the organization.

Fri 4 July

In that this was a holiday the work load was quite light as H & M crews did not work today. Several groups that were concerned about the ~~status~~ of Dogwood shot used the facilities of the unit. The E.M.F. went to Fred to receive a diver.

Sat 5 July

The E.M.F. went again to Fred to receive and travelling a diver. The work load of the unit was light today and the check point class at

1900

COPIED/DOE
LANL RC

31
2

Sun 6 July

Dogwood lived today and two surveys were run - the preliminary and the initial detailed survey. The contamination was heavy particularly in the water. One of the objectives of this survey was to survey the Helen - I rem complex such that by knowing the contamination levels whether it would be wise to use the Koa crates for the Pine shot. If the Helen - I rem complex was fairly clean better recoveries would be made if 'DD' experiments made back during the Koa shot. It is expected that these recoveries will take 2 days. With a recovery period of this length it is necessary that the radiation intensity be quite low. Two CMT missions to the area were required today.

Mon 7 July

Dogwood plus one survey was run today with particular emphasis upon Helen and I rem. The work load was moderate today.

COPIED/DOE
LANL RC

21

Dogwood plus two survey run today
 J 11 of LASL has a requirement for
 a recovery from the barge of the
 scavola slot. In that this
 slot is to be a one foot diameter
 alpha contamination will be a
 big problem for TV6. The main
 problems raised in this slot

- 1 The S11 recovery
- 2 The S12 recovery
- 3 The deposition on land disturbed
of the barge.

All three of these problems must be
 met by exposure as few people
 as possible to alpha. Only in the
 S11 case will people board the
 barge, otherwise no one will
 physically touch the barge. Ed Hyes
 will be in charge of the S11 slot
 and safe portion of the recovery.

Dogwood plus three survey run
 today. More plans were made for
 the scavola recovery missions. Fr.
 Jacks returned to the Z I for two
 weeks. The day in general was
 light. A survey was made of
 the scrap metal that might be
 hot on ground. If the survey shows
 a lot of hot metal a dozen or 3
 will be used to push the
 metal into the lagoon.

Thurs 10 July

Very light day. Dr Aumont informs Ed Hyatt that the J-11 recovery would not take place as originally scheduled. J-11 said that they would try to get their sample from Windel Bigger experiment. Ed Hyatt has transferred his efforts now to supporting the J-12 program and has it well under control. Ed and St Angell are going to have high interests when Rodgers can call to measure the radiation dose. Rodgers was relieved of command by Ed Harvey this date so that he could return to the ZI to take care of an emergency matter. One flight today - purpose to give Ed Hyatt an indoctrination tour of Yvonne.

Fri 11 July

Very light day. Normal duties accomplished by all sections. It was decided to send a decon truck to Yvonne on Learola-1 to assist in decontamination of recovery party when the shot goes. Rad-Safe will also fly a pre-entry survey at H+30 minutes if the shot does not go nuclear to any extent.

Saturday 12 July

PRIVACY ACT MATERIAL REMOVED

A normal workday. A conference was held with Lee Cammelt at which it was decided to run an H+5 minute survey to determine if an air sample was required. The CO was kept on 24 hour alert following the shot on Bikini yesterday. The air monitor recorded a maximum of 20,000 counts at 0345 hrs. Maximum background was about 3 cps/hr.

An EMT met the Scaevola device, and Lt Angeff took some film samples etc. to the barge site for installation. He remains there overnight.

Sunday, 13 July.

Routine activities performed. Fuel preparations for Scaevola were accomplished, including the placing of a dozen fallout trays on Yvonne. A decom. truck was placed on Yvonne to perform on-the-spot decontamination of the recovery party the following day.

Monday 14 July.

Scaevola was detonated at 1600. Five, ~~at~~ minutes later were hovering over the barge. Sufficient β radiation was detected to warrant an air sample. The recovery party, including ⁰ dips at 1630, returned at 1900.

No alpha contamination was detected on Yvonne at first but at about 1800 ~~it~~ it was washed onto the shore line. Some contamination

31

PRIVACY ACT MATERIAL REMOVED

COPIED/DOE
LANL RC

ination was picked up by the recovery party, but not a great deal. It was disposed of without difficulty, except on one small spot on the recovery chopper. Further work will be done on this tomorrow.

Three men with alpha instruments were sent to Fred to monitor aircraft ~~in~~ from the shot area, specifically the ~~shot~~ ~~sample~~ planes. Twelve to fifteen thousands counts was the maximum detected on these planes.

Tuesday, 15 July.

Normal work was accomplished. Determination of aircraft was completed. Back photo tower was monitored and is contaminated to the extent of 7-8,000 counts per minute. Henceforth each party which goes there will be provided with a T.V.C. monitor.

Wednesday, 16 July.

Nothing happened other than normal daily activities. The T.V.C. was called out at 1400 hrs to meet the Piconia device ~~which~~ when it came in.

Thursday, 17 July.

Normal daily activities.

Friday, 18 July.

Piconia was retrieved at 1100 hrs. The weather was bad; consequently no helicopter survey was made. An M¹ boat was dispatched to Mack tower at 1430 to recover film there. The boat received some fallout and was reading 1R/hr, but its recovery was effected. ~~The M¹ boat was~~ ~~35~~

COPIED/DOE
LANL RC

dispatched to Wilma, but circumstances dictated its return. The boat cracked the "turn back" dose rate of 15/hr near Yvonne, turned around, and ran into a 150 fidd while retracing its route. The personnel involved received 1500-2000 mR. The boat was contaminated to the extent of 100 mR/hr; it was decontaminated the following day.

Saturday, 19 July

Normal operations were performed. A survey was run out at 0730. It reported no increase in the radiation intensity of the island. Apparently, the hot water which was at Yvonne yesterday, moved out with the tide during the night.

Sunday, 20 July

Normal duties accomplished.

Monday, 21 July

Ditto.

Tuesday, 22 July

Col. Harvey outlined TO-6 responsibilities for the Ounce Shot. It looks very much as if we'll have our hands full. A dry run will be effected a few days prior to the detonation.

Otherwise, normal work was completed.

Wednesday, 23 July

Dogwood was detonated at 0830. The field entry survey left at 10:43, and shortly cleared the area for recoveries. Gamma Radiation levels were low. The initial survey was at 1330.

Personnel were shown working in

radio reason you are without red safe clearance. As a result, closer control will be established, and if necessary, a check point will be set up there.

Mr. Barry arrived here from Bikini for the remainder of the operation. Yesterday Lt Tyler and Sgt Giles came down. It is anticipated that Giles will return to 22 when Sgt Boyle returns here from S.I.

Wednesday, 23 July
The D+1 survey left at 0740. There were no increases in birds from the pre-shot levels. The laundry barge arrived from Bikini to be used on the Quince shot. Preparations for that shot. Other normal activities were performed.

Thursday, 24 July
A meeting was held with the projects involved on Quince to determine more definitely TV & requirements. It appears we may have as many as 30 people committed as monitors and decontaminators. The D+2 survey was run and other normal duties accomplished.

Friday, 25 July
It was decided to fire Pine before Quince, so preparations for this shot were delayed. The EMT was called out to meet the Pine device. Other activity was normal.

COPIED/DOE
LANL RG / 3

Saturday 26 July

A meeting was held with all Prog. 34 recovery party leaders and red-sep people with the object of further clarifying recovery activities. A list of monitors was drawn up for the various parties, both for Program 34 and for Program 2. The Pac-segs which were supposed to be on flight 73 yesterday did not show. It appears we will still have a shortage of X instruments for the shot (Quince).

Sunday 27 July

Pine was fired at 0830. The pre-enter survey went as far as Janet at 1130, when there was still an indication of some fallout levels were low, however. The initial survey at 1600 went around the atoll, finding very hot water from Janet as far west as Edua. In land radiation levels were quite low. A tentative ready date of 2 Aug was set for Quince.

Monday 28 July

The P+1 survey was run at 0750; the hot water was still near Janet, but the intensity has fallen off 600-700 cur/hr. Janet; ~~the~~ ~~in~~ ~~the~~ were once more limited radar areas. Not much else happened.

Tuesday 29 July

The P+2 survey was run at 0900. A class on use and fitting of respirators was given by " " for all personnel involved in Quince recoveries. Dry runs on all Prog 34 recoveries will be held on A-1 and a part of Prog. 2 on A-2. Otherwise, all as usual.

COPIED/DOE
LANL RC

35

COPIED/DOE
LANL RC

Wednesday, 2 July 1958

Further participation of T-6 in the planning for Quinn event has been made with T67.1 + Project 34.

Thursday, 31 July 1958

Preparations for the dry run with Proj 34 + T-6 were made.

Friday, 1 Aug 1958

Further preparation for the Quinn event. Projects put out some of their equipment.

Sat 2 Aug 1958

Project 34 ran a dry of their participation together with our monitors. A detail survey was made of Helen and Irene prior to turning them over to H+R. The shot was rescheduled from 1000 3 Aug to 1300 3 Aug.

~~Sun 3 Aug 1958~~

Preparations for the shot began early. A water tank transported ~~to the permit~~ Sun 3 Aug 1958.

Final preparations were made for the Quinn event. The red-safe bags were moved to the fire shot location, and personnel were moved to Yonnie. The shot was postponed at minus eight minutes.

Sunday, 4 Aug 1958

Preparations for the shot began early. A water tank transported T-6 + personnel to Yonnie at 6:00. The shot was also postponed several times, finally going at 1445. Recorder started immediately. Red-safe had little outside the situation. Most, but not all, personnel were monitored + discerned at Yonnie. The red-safe bag was not used for survey, except clothing. Personnel were not contaminated, other than their clothing.

The T-6 survey took off at 1445, & found no gamma radiation. Cmdr. Harvey remained at Yonnie to take charge of red-safe operations at the site. A preliminary survey was

Saturday 26 July

A meeting was held with all Prog. 34 recovery party leaders and red-seg people with the object of further clarifying recovery activities. A list of monitors was drawn up for the various parties, both for Program 34 and for Program 2. The Pac 1 sigs which were supposed to be on plot 73 yesterday did not show. It appears we will still have a shortage of X instruments for the shot (Quince).

Sunday 27 July

Pine was fired at 0830. The pre-entire survey went as far as Janet at 1130, when there was still an indication of some fallout levels were low, however. The limited survey at 1600 went around the atoll, finding very hot water from Janet as far west as Edna, but land radiation levels were quite low. A tentative ready date of 2 Aug was set for Quince.

Monday 28 July

The P+1 survey was run at 0750; the hot water was still near Janet, but its intensity has fallen off 600-700 ncp/hr. Janet, ~~Edna~~ and ~~Edna~~ were once more limited radar areas. Not much else happened.

Tuesday 29 July

The P+2 survey was run at 0900. A class on use and fitting of respirators was given by Ed. Fyatt for all personnel involved in Quince recoveries. Dry runs on all Prog 34 recoveries will be held on A-1 and on most of Prog 2 on A-2. Otherwise, all was normal.

COPIED/DOE
LANL RC

38

completed at about 1730, at which time the last pig departed the area.

Tuesday, 5 Aug 1958

A permanent checkpoint & decon station was established on Yponne to afford better Red life control. A temporary fence was built to mark the hot from the area.

Wednesday 6 Aug 1958

Preparations for the Pig event were in progress. The checkpoint on Yponne is operated with one officer and 4 C.M.s.

Thursday 7 Aug 1958

Further preparations for the Pig event were made. Continue checkpoint & decon station on Yponne.

Friday 8 Aug 1958

Meeting with Project personnel as to Red life requirements.

Saturday 9 Aug 1958

The final briefing of TC-6's mission was rounded out today. Work was started on a commander's report. A requirement for personnel staying at Yponne at night. The Red life checkpoint is now open 24 hours a day.

Sunday 10 Aug 1958

This was a routine work day.

Monday 11 Aug 1958

ET at 1800 hrs. Continue 24 hr. Red life checkpoint and decon station.

Tuesday 12 Aug 1958

A meeting with CTC 7.1, Program 34, & TC personnel.

COPIED/DOE
LANL RC

40

Wednesday 13 Aug 1958

After numerous tries the Fig went was cancelled.

Thursday 14 Aug 1958

After numerous tries the Fig went was cancelled.

Friday 15 Aug 1958

TU-6 personnel were at their assigned stations and the Fig went was cancelled.

Saturday 16 Aug 1958

Fig cancelled after numerous tries.

Sunday 17 Aug 1958

Fig cancelled after numerous tries.

Monday 18 Aug 1958

Fig was ~~down~~ detonated at 1615 hrs. at H+1 min the Red life survey was underway. Gamma radiation was detected. Comdr. Harvey directed Red life operations from the site. Very few if any people were contaminated. The checkpoint was closed at 130 in the morning. A H+8 hr ground survey was taken.

Tuesday 19 Aug 1958

Red life checkpoint and down station opened at 0700 hrs on Yvonne. A F+1 survey at 0900 hrs.

COPIED/DOE
LANL RC