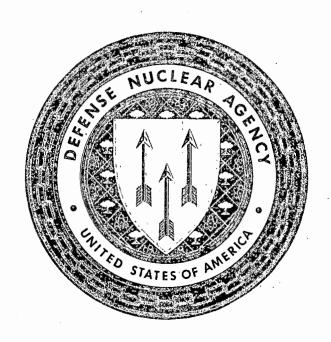
790525

45110

FACT BOOK

MAJOR GENERAL GRAYSON D. TATE, JR.

COMMANDER, FIELD COMMAND, DEFENSE NUCLEAR AGENCY



VISIT, ENEWETAK ATOLL

25-29 MAY 1979

ROBERT W. BAUCHSPIES COLONEL, USA CDR, JOINT TASK GROUP ENEWETAK ATOLL

ITINERARY MG TATE

DATE/TIME	EVENT	LOCATION	REMARKS
25 May 79	(Friday)		
1100 .	ETA ENEWETAK		Colon
1100-1130 1130-1215	Travel to quarters Lunch	B1dg 36	Sedan Mess Hall
1215-1230 1230-1300	Open time Meet w/CJTG	B1dg 15	CJTG Office
1300-1315 1315-1700	Meet new Cdrs and Staff Update briefings	Bldg 15 Bldg 15	HQJTG OPS CEN HQJTG OPS CEN
1010 1700	Command briefing	Diag 10	J3
	Soil removal Debris removal		J3 J3
	Runit operations overview Film badge status		J3/USAE J2
	Fission Product Survey Demob/Sea lift		DOE/ERSP
	Apr 80 completion ceremony		J4 TBD
1700-1745 1745-1830	Cocktails Supper	Bldg 667 Bldg 36	H&N (PTD) Mess Hall
1830-	Open as desired	-	
26 May 79	(Saturday)		
0645-0730	Breakfast	Bldg 36	Mess Hall
0730-0800 0800-0820	Meet w/CJTG CJTG Standup Brief	B1dg 15 B1dg 15	CJTG Office HQJTG OPS CEN
0820-0830	Tvl to Enewetak Helipad	blug 15	ngord or o cen
0830-0850	Enroute Boken (Overfly SW islands)		UH-1
0850-0910	Tour Boken	(Boken)	CDR, USAE
0910-0915 0915-1000	Enroute Enjebi Brief and tour Enjebi	(Enjebi)	UH-1 CDR, USAE
1000-1010	Enroute Lujor	(Liijebi)	UH-1
1010-1120	Brief and tour Lujor	(Lujor)	CDR, USAE
1120-1130	Enroute Lojwa		UH-1
1130-1145	Brief Lojwa	(Lojwa)	USAE
1145-1230 1230-1240	Lunch Mess Hall Tvl Aomon Crypt		Base Camp Vehicle
1240-1330	Brief & tour Aomon Crypt/PACE Crater	(Aomon)	HQJTG
1330-1340	Tvl Lojwa Helipad	(Admon)	Vehicle
1340-1350	Enroute Runit		UH-1
1350-1500	Brief and tour Cactus Crater	(Runit)	USAE
1500-1505	Tvl Runit Helipad		Vehicle
1505-1525	Overfly Medren		UH-1
1525-1535	Enroute Enewetak		UH-1
1535-1550 · 1550-1630	Tv1 to ERSP Rad Lab Rad Lab update	Rad Lab	Sedan ERSP
1000 1000	nad hab update	rau Lau	LKSF

1630-1635	Tvl to Qtrs		Sedan
1635-1730 1730-1830	Open as desired Supper	Bldg 36	Mess Hall
1830-	Open as desired	blug 50	MC33 Hall
27 May 79	(Sunday)		
(Open time)	Breakfast	Bldg 36	Mess Hall
0800-1130	Lojwa/Enewetak Church Svc (As Des		
1130-1230	Lunch	Bldg 36	Mess Hall
1230-1930	Open as desired	D11 #4	
1930-	Hail/Farewell Dinner	Bldg 36	Mess Hall
28 May 79	(Monday)		
0645-0730	Breakfast	Bldg 36	Mess Hall
0730-0800	Visit CJTG	B1dg 15	CJTG Office
0800-0830	Standup	B1dg 15	HQJTG OPS CEN
0830-0900	Update briefing: Rehab Ops	Bldg 15 .	HQJTG OPS CEN
0900-0910	Tvl to Enewetak Helipad		•
0910-0920	Enroute Medren	•	UH-1
0920-1020	Tour Medren	(Medren)	TTPI, H&N(O)/USAE
1020-1030	Enroute Japtan		UH-1
1030-1130	Tour Japtan	(Japtan)	DISTAD Rep, H&N
1130-1140	Enroute Enewetak		UH-1
1140-1150	Tvl to Qtrs		Sedan
1200-1245	Lunch	Bldg 36	Mess Hall
1245-1300	Open as desired		
1300-1430	Soil cleanup Runit		•
1430-	Open Time - as desired		
1730-1830	Supper	Bldg 36	Mess Hall
29 May 79	(Tuesday)		
0645-0730	Breakfast	Bldg 36	Mess Hall
0730-0800	Visit CJTG	Bldg 15	CJTG Office
0800-0830	CJTG Standup	B1dg 15	HQJTG OPS CEN
0845-0915	Change of Command	HQJTG Area	,
0930-1030	Meeting w/CJTG	Bldg 15	CJTG Office
1030-1040	Enroute Airfield	-	Sedan
1040	ETD ENEWETAK		

INDEX

<u>TAB</u>	SUBJECT
Α .	Morale/Welfare Program Summary
В	Military Award Status
С	Summary of Radiation Control Committee (RCC) Actions Since 14 Feb 79
D	Film Badge Handling
E	Beryllium Air Sampling Program
F	Radiation Safety at the Aomon Crypt
G	Personnel Dosimetry Program
Н	Radiation Safety of Cactus Crater
I	Radiological Decontamination and Certification of Retrograde Equipment
J	Radiation Safety on Lujor (Pearl)
K	Plutonium Contaminated Rocks on Aomon
L	Aomon Crypt
M	Boken Subsurface
N	Enjebi (Janet) Soil
0	Enjebi (Janet) Debris
P	Soil Cleanup Review
Q	Island Debris Cleanup
R	Pace Crater
S .	Lujor (Pearl) Soil Haul
T	Runit Overview
U	Typhoon Alice
v	Security/Law Enforcement Operations

TAB	SUBJECT
W	Demobilization Preparations
X	Cement Usage and Requirements
Y	Deep Draft Ship Resupply
Z	Ships/Craft in Enewetak Lagoon
AA	Dri Enewetak Liaison Activities
ВВ	Female Quarters at Enewetak
CC	Equipment Maintenance Status Update
DD	US Navy Element Boat Status, Maint and Repair
EE	Communications Status Summary
FF	Island Status - TRU Program
.GG	Island Status - FPDB Program
нн	Status of AIC Construction
	beards of Ale Constituetion
II ·	Chapel Activities for Enewetak/Lojwa
JJ .	

SUBJECT: Morale/Welfare Program Summary

PURPOSE: To provide a current status of the Enewetak Morale/Welfare

Program.

BACKGROUND: OPLAN 600-77 tasks the HQS JTG with the responsibility for providing recreation services support to the cleanup project personnel on both Enewetak and Lojwa.

DISCUSSION:

- a. The most significant participation is in outdoor sports. The 1st-1979 softball season was completed on 20 May 1979 with HQJTG beating the Lojwa Officers in the Championship Game. The CJTG presented individual and team trophies to Lojwa Officers and HQS JTG. A basketball season is tentatively scheduled to begin in June.
- b. Leathercraft continues to be the most actively supported craft activity. The Photo Lab has seen increased usage as the talents of the Motion Picture Photographer are used to assist interested personnel in developing and printing photographs as well as processing of slides.
- c. USO Shows are popular. The last show, George King and the Fellowship on 9-10 May was seen by over 450 people here and at Lojwa. The next show is Sunshine Express scheduled for 4-5 July. Free movies are well attended each night the new speakers installed at Enewetak theatre have improved performances. Movie projectors are adequate but due to the harsh environment breakdowns are frequent. AFRTS programming is in an expansion phase as increased emphasis is being placed on Command Information topics and safety announcements are broadcast each week in response to RSAIT recommendations.
- d. Water activities are very popular. At present, two sunfish are operable and are located at Lojwa. Two sunfish were recently surveyed and destroyed after inspection certified that these boats were unsafe. The four hobie-cats were painted and three are operational. The swimming pool at Enewetak has been repaired. The chlorinators removed after Typhoon Alice to assist life support system are back at the pool. A diving board was installed, the deck painted and the pool thoroughly cleaned.

SUBJECT: Military Award Status

PURPOSE: To provide the current awards status for awards submitted for personnel assigned or attached to the Enewetak Cleanup Project.

BACKGROUND: Enewetak Atoll Instruction 1301, Military Awards and Decorations in consonance with FCDNA Instruction 1348.16 and DNA Instruction 1348.1C established procedures for submission of awards for military personnel assigned or attached to the Enewetak Cleanup Project.

DISCUSSION:

- a. Recommendations for awards submitted for personnel assigned to HQJTG and those Joint Service recommendations submitted by Element Commanders on behalf of their personnel are reviewed by an Awards Board at Enewetak for content and substance. Recommendations are provided to the Commander, Joint Task Group and if approved are sent to Field Command for further processing.
- b. During the past few months the number of recommendations from Element Commanders has risen considerably as a result of increased emphasis on the part of the Commander, Joint Task Group.
- c. Timely feedback of results from the Awards Board meetings held at Field Command has assisted in maintaining and monitoring status of awards. Information from DNA as to approvals/disapprovals is extremely useful.
- d. Attached as an inclosure is the cumulative status of Awards submitted by the Joint Task Group since the beginning of the project until 1 May 1979.

1 Incl

as

JOINT SERVICE AWARD RECAP

JOINT SERVICE COMMENDATION MEDAL

SUBMISSIONS/APPROVALS

•	SUBMITTED	APPROVED	DISAPPROVED	UPGRADED	DOWNGRADED	PENDING
HQ JTG	43	*34	0	**2	***6	3
USAE	29	18	. 0	0	***7	4
USNE	17	6	. 0	0	***11	0
USAFE	28	. 15	0	**1	***8	4
TOTAL	117	73	0	3	32	11

^{*}Two DMSM downgraded to JSCM.

DEFENSE MERITORIOUS SERVICE MEDAL

SUBMISSIONS/APPROVALS

HQ JTG	7	*6	0	. 0	** 2	1
USAE	1	. 1	0	0	0	0
USNE	1	0	0	0	0	1
USAFE	. 4	*2	0	0	***1	2
TOTAL	13	9	0	0	3	4

^{*2} JTG, 1 USAFE JSCM's were upgraded to DMSM.

^{**2} JTG, 1 USAFE JSCM's were upgraded to DMSM.

^{***}Thirty-two (all service elements) JSCM's were downgraded to C of A.

^{**}Two DMSM downgraded to JSCM.

^{***}One DMSM downgraded to C of A.

FCRR CPT Cherry 19 May 1979

FACT SHEET

SUBJECT: Summary of Radiation Control Committee (RCC) Actions Since 14 February 1979

PURPOSE: To provide subject information.

BACKGROUND: Federal and DoD regulations require that there be a committee such as the RCC to act as the advisory body to the responsible authority, in our case, CJTG. FCDNA OPLAN 600-77, in creating the RCC for the Enewetak Atoll Cleanup Project, further mandates the RCC as follows: The RCC shall advise the commander on all aspects of the radiological protection program, evaluate all real or alleged overexposures of personnel, make recommendations concerning levels of radiological protection, and evaluate all radiation protection SOPs and EAIs, including revisions thereof.

DISCUSSION: Two RCC meetings have been held since 14 February 1979.

- a. The 17 March meeting was concerned with the personnel protective measures which were being followed during the fission product survey. There had been discussion about relaxing the requirement for respiratory protection during the backhoe operations, but the final result was that respiratory protection would continue to be required during the digging operations.
- b. The 17 April meeting addressed radiation safety in the Cactus Crater, where soil-cement operations are underway, and on Lujor, where soil excision and movement are ongoing (these two subjects are discussed in separate Fact Sheets). Preliminary findings of the 7th RSAIT were also discussed: a short-coming (which has been corrected) of the swipe identification system, and the fact that an individual in Cactus Crater was not wearing proper respiratory protection. Finally, a criterion for determining when a departing visitor will furnish a urine sample was recommended by the RCC and approved by CJTG (sample will be provided after a total of 30 days have been spent on controlled islands).

FCRR SFC Wendland 19 May 1979

FACT SHEET

SUBJECT: Film Badge Handling

PURPOSE: Provide information on past and current film badge handling.

BACKGROUND: High incidence of film badge damage in the past has brought about continuing new methods of issuing to minimize or prevent damage to badges. There has been from 20 to 100 percent damage during each film badge period since program went into effect during June 1977. The method used during the 20 February 1979 to 18 March 1979, period used a two mil (0.002 inch) sealed polyethelene inner bag with a three inch square, four mil (0.004 inch) vinyl outer bag which was double heat sealed along with a zip lock closure. During same period, one half of badges, had a small individual dessicant packet added to each inner bag with film badge and holder. During following period 19 March 1979 to 14 April 1979, all badges were issued with individual dessicant packets. The last method is currently in use.

DISCUSSION: Results from Lexington-Blue Grass Army Depot processors indicated 90 to 100 percent film badge damage for September 1978 thru January 1979 (four film badge periods). At that point it was found that possible damage was coming from moisture contamination in shipment between this Headquarters and Lexington-Blue Grass processors. As a result, J2 HQJTG started segregating badges into three groups for shipment to processor. The groups being: wet, suspected wet, and dry. Badges from each group are sealed in separate polyethelene bags with dessicant. Results for the 15 January 1979 thru 18 February 1979 period was reduced to only 49 percent damage. Qaulity control procedures during bagging improved the results for 19 February 1979 to 18 March 1979 period to only 19.7 percent damage. Through improved screening at turn-in, all wet or suspected wet badges are to be segregated for shipment to processor to prevent additional moisture contamination of undamaged badges.

FCRR CPT Cherry 19 May 1979

FACT SHEET

SUBJECT: Beryllium Air Sampling Program

PURPOSE: To provide summary of subject program.

BACKGROUND: Rocket engine tests, involving fuel containing beryllium, took place on Enjebi in 1968 and 1970. After operating normally for a short time, an engine exhibited uncontrolled burning which resulted in contamination of the location by chemicals containing beryllium. Decontamination efforts were performed at the time, but soil samples taken in January 1978 indicated that some beryllium remained. Some concentrations as high as 30 micrograms (µg) of beryllium per gram of soil were found, but as a general rule the most concentrations were much less than this. At present, there are no Federal guidelines for acceptable beryllium concentrations in soil, although industrial standards exist which allows 100 µg Be/g soil around beryllium plants. If this value is divided by ten, which is the ratios between radiological guidelines for radiation workers and those for non-radiation workers, then it is implied that 10 µg Be/g soil may be an acceptable guideline for public use. In any event, Federal guidelines do exist for beryllium concentration in air: 0.01 μg Be/m³ air, averaged over a 30-day period. The HQJTG, beryllium air sampling program, using Root's air samplers, began in early January 1979 and was completed in April 1979.

DISCUSSION: Electric air samplers powered by an on-site generator originally were planned to be used. However, numerous difficulties with generators forced the use of the gasoline-powered Root's samplers. The project ran smoothly from that time except when rain damage to filter papers required additional sampling to make up for the lost periods. In mid-March, when only a week of sampling time remained, the program ran out of the proper kind of filter paper (only half of what originally ordered had been received). The sampling program was completed upon the arrival of the requested paper in late March. A total of almost 12,000 m³ of air were sampled at the four locations on Enjebi. Results received from the Occupational and Environmental Health Laboratory at Brooks AFB, TX, indicated concentrations of less than 0.001 µg Be/m³ air. No further action is anticipated.

FCRR CPT Cherry 19 May 1979

FACT SHEET

SUBJECT: Radiation Safety at the Aomon Crypt

PURPOSE: To provide a summary of the radiation protection program as it has been implemented at the Aomon Crypt.

BACKGROUND: The excavation of radioactive soil and debris from the Aomon Crypt began after extensive planning and coordination. Discussion of radiation protection procedures at the Crypt was a part of the planning process. While the previously established radiation protection program was adequate for a large portion of the excavation operation, certain aspects peculiar to the excavation required special attention.

DISCUSSION: The Aomon hotline, which is near the Crypt, is routinely manned by not less than two FRST members. In the early part of the operation, an additional FRST member was always present at the excavation site when work was underway to insure that appropriate radiation safety procedures were being followed and to monitor personnel, equipment, and debris for radioactive contamination, as necessary. As work progressed and personnel became familiar with radiological requirements, only periodic checks were performed. Saturated soil and wet debris were removed from the Crypt, so respiratory protection was not normally required during excavation. However, when the dryer soil was being moved from the Crypt to the beach stockpile and later loaded onto boats, the established protective measures were enforced, such as requiring the dump truck drivers and bucket loader operators to wear respiratory protection. Air sampling also followed the established EAI: one air sampler at the hotline, one at the Crypt during excavation or soil movement, and one at the beach stockpile site when soil movement occurred there. No significant airborne activity has been found. Handling of debris by personnel (wearing gloves), rather than by machine, was kept to a minimum because of the likelihood that a person could be cut and the wound become contaminated. The debris was found to be plated with plutonium and coated with an asphalt-like substance which easily flakes off. These highly contaminated flakes fell into the Crypt water and thus the Crypt soil was declared to be contaminated and designated for removal to Cactus Crater whether or not actual measurements of transuranic contamination had been performed by the DOE/ERSP. Finally, rubber boots were required within the Crypt area near excavated soil and debris because the wet conditions in the Crypt enhanced the chances for contamination of footgear. However, significant levels of personnel contamination were never observed.

FCRR SFC Wendland 19 May 1979

FACT SHEET

SUBJECT: Personnel Dosimetry Program

PURPOSE: To provide information and current status of program.

BACKGROUND: A film badge program was instituted in June 1977, using the standard Army film badge holder with film dosimetry, being processed by Lexington-Blue Grass Army Depot. This program was to provide data for posting onto DD Form 1141 (Record of Occupational Exposure to Ionizing Radiation). Because of film badge damage during the first six month period, ranging from 80 to 100 percent, Thermoluminescent Dosimeters (TLD) were obtained for use in conjunction with film badge by personnel on northern island cleanup. The TLD co-issue with film badges began on 25 May 1978. Because of continued high percent damage to film badges, additional TLD's were obtained so that as of 18 March 1979 all personnel on film badge program have both film badge and TLD. Since the beginning of the personnel dosimetry program there have been 2,436 DD Form 1141's initiated.

DISCUSSION: During early months of program, the film badge damage created problems of coming up with an administrative dose for posting to 1141's. The period 17 June 1977 thru 20 November 1977, was first calculated by the Office of the Surgeon General and then posted to 1141's. All the administrative doses for the same period were recalculated by FCDNA using island access information. This created a requirement to remake numerous 1141's. Delays were encountered in calculating the administrative dose thru the period ending 20 May 1978 because of the lack of back up dosimetry and compiling the island access and exposure information. Administrative doses are coming more rapidly allowing proper posting of data to the individual 1141's. To date 9,670 entries have been made to 1141's using film badge results and administrative dose calculations which has allowed completion of 734 DD Form 1141's. As the administrative/TLD doses are compiled and returned, this Headquarters will be able to complete the remaining 1200 DD Form 1141's on personnel who have completed their tour at Enewetak Atoll.

FCRR CPT Cherry 19 May 1979

FACT SHEET

SUBJECT: Radiation Safety at Cactus Crater

PURPOSE: To provide the radiation protection program implemented at Cactus Crater on Runit.

BACKGROUND: The majority of personnel inside the hotline are now employed in or near Cactus Crater. The large number of personnel involved in the soil-cement operations and the distance between the crater and the Runit hotline necessitate special considerations in the implementation of the radiation protection program. First, it was necessary to establish a break area for water close to the job site. A second consideration is the variety of activities in the crater: trucks, graders, rollers, dozers, surveyors, and keywall and molewall construction. Not all of these operations require respiratory protection at all times, so when a change of the personnel protection level was appropriate it is preferred that personnel not have to return all the way to the hotline for the change. Third, it was also appropriate that the variety of operations should be constantly observed by a FRST member, who is responsible for the maintenance of appropriate personnel protection levels.

DISCUSSION: Established policy in the Atoll requires all personnel downwind of contaminated soil movement operations to wear respiratory protection. However, only surgical masks are otherwise usually required in the controlled area of Runit. To enable personnel to switch between surgical masks and respiratory protective masks and also allow them to take breaks for water, a "break area" serves as a special "crater hotline." Personnel can be monitored by the FRST member, who is always present, before unmasking and taking a break, exchanging masks, or drinking water. The break area is on the ocean-side of the crater where cool breezes blow in and, at the same time, is located so that the FRST member can monitor the crater for radiological violations. It is set on clean beach sand in an area where the exposure rate is less than 50 microroentgens per hour. As required by EAI and SOP, an air sampler is operated downwind of crater operations. Also, trucks are routed such that those loaded with soil enter from the downwind side of the crater, dump their loads, and exit from the upwind side. Monitoring of personnel and air sampler filter papers at the crater so far have indicated no significant levels of contamination.

FCRR 1LT Tupin 19 May 1979

FACT SHEET

SUBJECT: Radiological Decontamination and Certification of Retrograde Equipment

PURPOSE: To provide information on the radiological decontamination and certification of retrograde equipment.

BACKGROUND: FCDNA OPLAN 600-77 and other Federal standards require that all equipment that has been used on radiologically controlled islands and destined to be released for unconditional use be within the limits of ANSI N328-1976 Table 1 (as amended by DOE/NV) before release. All activities which have equipment that has been on any island while the island was radiologically controlled must ensure that the equipment has been monitored and decontaminated as necessary to comply with the limits of the ANSI standards.

DISCUSSION: All equipment identified as having been on a radiologically controlled island will be monitored by the FRST or HQ JTG RADCON Division personnel. If all radiological data on JTG Form 39-R satisfy the criteria stated in the ANSI standards, then the JTG Radiation Protection Officer or his alternate may issue JTG Form 40-R, RADCON Certification of Enewetak Atoll Retrograde Equipment, which appears at Attachment 1. Monitoring will consist of direct field instrument measurements (total contamination) and the use of paper swipes (removable contamination). Prior to monitoring, equipment will be cleaned by the user by steam cleaner, high pressure soap/solvent system or other appropriate method to remove accumulate grease, oil, or other foreign matter. A copy of JTG Form 39-R, which lists decontamination limits, appears at Attachment 2.

2 Attachments

	RADCOM ID #
···	
RADCON CERTIFICATION OF ENEVETAR	ATOLL RETROGRADE EQUIPMENT
Equipment Homenclature:	
Equipment Serial Humber:	
Certification:	

I hereby certify that the described equipment may be released for uncontrolled use based on portable instrument readings and swipe analysis procedures and limits as set forth in Tab B to Appendix 3 to Annex Y to FCDNA OPLAN 600-77 dated 18 December 1978 and FCRR SOP 603-03.1, Decontamination of Facilities and Equipment, dated 18 August 1978.

BOBBY R. ADCOCK
COL, USA
Radiation Protection Officer

ENEWETAK	PETRO	BANE	EUUI	PMEN	!T
PADIOLO	GICAL	DNAL	SIS	*	

. !				NAME:			
Equipment Nomencl Equipment Serial							
1. Highest total Location;	alpha activity	measured wi	th PRS-1/A	C-3-7, (2	min scale	r)	:
Gross Counts (2 min)	Background (2 min)					5 Remarks	
						•	• :
2. Highest total Location:	beta activity	measured wit	h PRS-1/HP	-210, (2mi	n scaler)		
l Gross Counts (2 min)	2 Background (2 min)		ounts			5 Remarks	,
						yo	
3. Highest total Location:	gamma intensit	y measured w	ith PRS-1/	SPA-2 (app	ropriate	ratemeter	scal
1 Gross µR/hr	2 Background	µR/hr	3 Net uR (Col 1) ~			4 Remarks	90000
			,		*		
Decontamination L	.imits:						'
 Total - Alpha Beta Gamma Removable (Swing) 	- 5000 dpm/100 - 5000 dpm/100	cm ⁴ or 140 c	pm/under a /hr at con	rea of pro tact (SPA-	be (HP-21	0) Counter	
Alpha	3.5	cpm/swipe (7	counts/2	min)	20 dpm/sw	ipe	
Beta	35 c	pm/swipe (70	counts/2	min)	200 dpm/s	wipe	

JTG Form 39-R 1 Apr 79 * For use of this form see FCRR SOP 608-14, 18 Mar 79

SWIPE ANALYSIS

Date:	·	NAME:		·	0	ounting	g Syst	em:		Sat	nple C	ount T	ime:_	٠.	
10 MIN α	Background:			α Back		-		·	αΕ	fficiency	/:				
10 MIN β	Background	· · · · · · · · · · · · · · · · · · ·		β Back	ground	rate: _		• • :	β, E	fficiency	7:				
		' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	· •	AI	LPHA		:	•	3	BETA					i i
SWIPE #	LO	CATION		GROSS	BKG	CPM	EFF		90% C.L. ERROR	GROSS CPM	BKG	NET CPM	EFF	NET DPM	90% C.1
								,	0	, , , , , , , , , , , , , , , , , , ,					
	•						<u>:</u>	ļ		es j					
	•					<u>;</u>	<u>.</u>				ji Janon			·	
************	: 	•••••			<u>.</u>	<u>:</u> .					<u>.</u>	<u>.</u>	<u>.</u>		
												<u>;</u>		.	3
					: ;	į		; ;	* * * * * * * * * * * * * * * * * * * *	- d - d - d - d - d - d - d - d - d - d	:	;			
	• • • • • • • • • • • • • • • • • • • •				<u>;</u>		:	ļ					ļ <u>.</u>		
	• •			•	;	100		<u>;</u>				<u>:</u>	<u>:</u>		i ` !
				'. '1 '2	, 	<u>;</u> ; ;	<u>.</u>	<u>;</u>					<u>:</u>	,	
							!	{	: 0 , A ;		! • • • • • •		<u>:</u>	}	
							<u> </u>		;		; 		<u>.</u>	; { }	
***********			- <u>rij</u>				; ;	,				<u>;</u> {••••••	<u>;</u>		
	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	79		:	; ;	; ;	<u>.</u>			}	; ;	: {	·	• • • • • • • • • • • • • • • • • • • •
	• •		4 <u>4</u>		, <u>4</u> ;	<u>;</u>	,			· · · · ·				, ,	
	•						:	, , 4						(****
				4				0 # P		•		}			• • • • • • • • • • • • • • • • • • • •
			, , , , , , , , , , , , , , , , , , , ,		•			, , ,	:						• • • • • • • • • • • • • • • • • • • •
								, ,							*****
			1	<u>.</u>					# H = E + = # # # * \ ##						-
			:			:				:	•				

FCRR CPT Cherry 19 May 1979

FACT SHEET

SUBJECT: Radiation Safety on Lujor (Pearl)

PURPOSE: To provide a brief description of the radiation safety program as it is implemented on Lujor.

BACKGROUND: In addition to the Atoll established radiation protection program, two aspects of the situation on Lujor cause special emphasis on certain parts of the radiation protection program and require special coordination between all concerned. First, the boat ramp and soil stockpile are downwind of the soil excision areas. This means that the hotline must be located in the interior of the island, upwind of soil excision areas, making it difficult to observe the arrival of boats and to observe the stockpile area without moving to another position. Second, the soil on Lujor is generally more easily blown about than that encountered elsewhere in the Atoll. The hazard due to airborne contamination extends to longer downwind distances than usual and the possibility of personnel and equipment becoming radioactively contaminated is increased.

DISCUSSION: The hotline has been located upwind of the soil excision area near the mess and motor pool areas. To closely monitor the operations at the stockpile and boat ramp, a FRST member remains in this vicinity during the day and is able to avoid being downwind of any soil movement operations by remaining on the beach north of the boat ramp where the wind blows in from the ocean. The FRST member also controls access to the drinking water at this point so personnel can be monitored for contamination before drinking water (this also eliminates the requirement to travel all the way to the hotline for water). Coordination has been achieved with the Lojwa Naval Element so that Whalers bringing personnnel in during the day wait until operations at the boat ramp cease. The FRST member at the ramp also can control this situation. Finally, water pumps and sprinklers are being used on the soil stockpile and at soil excision sites to reduce the suspension of dust which may be radioactively contaminated. With these special efforts being made, personnel monitoring and air sampling have so far given no indication of significant radiation hazards to the workers.

FCRR CPT Cherry 19 May 1979

FACT SHEET



SUBJECT: Plutonium Contaminated Rocks on Aomon

PURPOSE: To discuss the pickup of plutonium contaminated rocks in the area of the Kickapoo ground zero on Aomon.

BACKGROUND: Plutonium contaminated rocks at the Kickapoo ground zero were first discovered and picked up last Fall (reference Fact Sheet, FCRR, 1 Dec 78, subject as above). Estimates by ERSP personnel of the TRU activity in these rocks are on the order of picocuries to microcuries per gram of material, depending on the sample. With about 150 pounds being picked up last October, it may be estimated that as much as a few millicuries of plutonium was involved. It was thought at that time the problem was solved. However, a large number of these rocks were again noticed at the Kickapoo ground zero in early May, largely as a result of Typhoon Alice on 5 January 1979.

DISCUSSION: ERSP personnel now believe that these rocks may be a recurring problem. It is probable that when the Kickapoo shot occurred, pieces of the molten tower were impregnated with plutonium and then imbedded in the reef.

Now, as surf action and storms operate on the deteriorating metal fragments, the fragments are breaking loose and gradually washing ashore. It may be that this debris will continue to wash ashore for many years. DOE/ERSP is currently considering recommendations for solving the long term problem. As for the present, the area has again been cleaned by J2, HOJTG, and the FRST (about 200 pounds were picked up) and been placed off limits to vehicles (to preclude the crushing of the brittle fragments and spreading contamination).

SUBJECT: Aomon Crypt

PURPOSE: To provide current status of the Aomon Crypt Excavation.

BACKGROUND: The Aomon Crypt was a known, marked AEC burial crypt located on the Aomon (Sally)/Bijire (Tilda) Land bridge. Between April 1978 and Jan 1979, the crypt was explored using various methods to determine the type and extent of contaminated material in the crypt. Excavation began on 15 January 1979. The estimated excavation depth (18 ft), required construction of a sheet pile enclosure.

DISCUSSION:

- a. Excavation presented numerous challenges. Since the isolation area enclosed by the sheet pile remained filled with water, the crane clamshell operation was very slow. Also, DOE/ERSP sampling techniques required modification. A bottom sampling device, usable under water was developed and proved to be highly successful. After the initial excavation was completed, bottom sampling resulted in fourteen 5x5 meter areas requiring additional soil removal. After the soil was removed, six isolated areas required additional work. Excavation of the isolated areas was completed on 30 Apr 1979. A soil cement blanket requested by DOE/ERSP was placed over the original 14 "hot spots" before backfill began. During excavation, sheet pile on the lagoon side began to buckle inward due to extensive excavation (24 ft). Further excavation was accomplished with great care and no additional buckling occured.
- b. The area east of the isolation area was cleared and reImped to provide location to stockpile clean soil.
- c. The area west of the isolation area has been re-excavated, bottom sampled and cleared.
- d. All remaining red debris was moved to Runit for encryptment and the excavated soil was moved to the beach stockpile area.
- e. Backfill operations began 7 May 79 with an estimated completion date of 30 May 79. The sheet pile removal began on May 15 with an estimated completion date of 28 May 79. Soil transport from the Aomon Crypt began on 19 May 79 using the facilities constructed on Aomon. The estimated stockpile is 8300 cys.

FCRE LTC Erickson 24 May 1979

FACT SHEET

SUBJECT: Boken Subsurface

PURPOSE: To provide information on Boken (Irene).

BACKGROUND: Boken (Irene) tasking was to lower the subsurface contamination level to less than 160 pCI/G to meet condition "D". The primary source of contaminated soil was a subsurface area resulting from the Seminole Event of 6 June 1956. Initial excision plan was delayed two months due to the Sooty Tern choosing the island for a nesting site. Work continued after the eggs hatched. Limited access to the island was aggravated by Typhoon Alice in January 1979 and all soil had to be removed by LARC to Enjebi for transfer to Bulk Haul Craft.

DISCUSSION: A total of 3997 cy were removed from the subsurface area and the backfill has been contoured. Final DOE/ERSP Test results were received on 5 May showing a surface reading of less than 80 pCI/G (condition B) and less than 160 pCI/G subsurface (condition D).

FCRE LTC Erickson 24 May 1979

FACT SHEET

SUBJECT: Enjebi (Janet) Soil

PURPOSE: To provide a current status of Enjebi (Janet) soil removal.

BACKGROUND: Cleanup of Enjebi (Janet) with a goal to meet condition C (40 pCI/G) was started in July 1978. In addition to the surface contamination, there was subsurface TRU contamination located at the Easy, X Ray, and Item ground zeros.

DISCUSSION:

- a. A single lift of a nominal 6" depth successfully reduced contamination to well below 40 pCI/G in each surface area identified by DOE. A technique of removing the areas of highest TRU readings first (to reduce the halo effect on adjacent areas) in combination with a fine grid Imp survey (25m grid versus 50m grid) resulted in lower volumes of soil necessary to be moved. As "hot spots" were identified, excisions were made to reduce all areas to condition C.
- b. On 28 April 1979, DOE/ERSP requested removal of soil in the Plow "X" area.
- c. The removal of soil from Enjebi (Janet) including the Plow "X" excision was completed on 9 May 1979 with a total of 53,007 cy removed. The DOE/ERSP report has been received showing that condition C (less than 40 pCI/G) has been achieved in regards to the surface and that the subsurface TRU meets condition D (less than 160 pCI/G over 1/16 hectare).

SUBJECT: Enjebi (Janet) Debris

PURPOSE: To provide status of Enjebi (Janet) debris removal.

BACKGROUND: Enjebi (Janet) was the site of ten (10) tests either on the island or on barges anchored off shore. This island was the site of the "Enjebi Hilton" which was a multi-design building that successfully withstood all the tests; numerous instrumentation stations; and had considerable debris remaining from WVII.

DISCUSSION:

- a. Heavy debris removal and numerous Master Index Items posed a challenge to the Army Element as well as to the Water Beach Cleanup Team, Navy Element. Bunkers remaining were agreed to by Director, DNA during his visits in June and December 78 and since then with TTPI for the Enewetak People's concurrence. Approximately 530 cy of "red" debris were removed to Runit and approximately 15,900 cy were removed to dump site "Charlie" in the lagoon.
 - b. The island was accepted by the CJTG on 10 May 1979.

SUBJECT: Soil Cleanup Review

PURPOSE: To review the status of soil removal.

BACKGROUND: Soil excision and removal was not required on all islands in the atoll. Soil has been excised on five islands and the Aomon Crypt.

DISCUSSION:

a. The soil excision plan of establishing a 50 meter grid for Imping of the island and identification and surgical removal (excision) of only those areas which exceeded the required TRU levels has produced excellent results. By using selective excision and by taking out the hottest spots first, large portions of the islands were undisturbed. This minimized ecological disturbance and significantly reduced TRU readings.

b. STATUS:

- (1) Islands of Aomon (Sally), Boken (Irene), and Enjebi (Janet) have been completed.
- (2) Excavation of the Aomon Crypt is complete. Estimated completion of the soil removal is 23 June 1979.
- (3) All soil has been windrowed on Lujor (Pearl) and soil removal is in progress. Estimated completion date is 23 June 1979.
 - (4) Soil excision in the Fig/Quince area of Runit has been halted.
- (5) The attached chart provides the detailed information for each island.

1 Incl

ISLAND	PC	I/GM	SOIL ESTIMATE				VED	COMPL	500		
ISLAIAD	INIT	REQ'D	SUR	SUB/SUR	TOTAL	SUR	SUB/SUR	TOTAL	DATE	PCI/GM	ECD
AOMON	124	< 80	9,200	NONE	9,200	10,603	NONE	10,603	9-28-78	33	N/A
AOMON CRYPT	<40 (>400)	<40 (<400)	NONE	12,000	12,000	NONE	886	.886	-	< 40 (<400)	6-24-79
вокеЛ	< 80 (435)	< 80 (< 160)	YONE	1,406	1,406	MONE	3,997	3,997	3-31-79	<80 (<160)	N/A
ENJEBI	55 (>160)	<40 (<160)	54,300	1,307	55,607	49,587	2,600	52,187	4-21-79	· (<160)	N/A
ENJEBI (PLOW"X")	75	·40	9	NONE	60 <u>0</u>	820	NONE	820	5-19-79	65	N/A
RUNIT (FIG/QUINCE)	>400	<160	N0 0	FICIAL	EST.	5,720	HONE	5,720	4-1-79		QUARAN- TINEP
LUJOR	106	₹8 0	20,130	NONE	20,130	6772	YOYE	677Z			6-23-79
	-	-									·
TOTAL			84,230	14,713	98, 943	73502	7483	80985			

(SUB SURFACE)

FCRE LTC Erickson 24 May 1979

FACT SHEET

SUBJECT: Island Debris Cleanup

PURPOSE: To provide status of debris removal.

BACKGROUND: Only three islands remain for removal of debris. These islands are Enewetak, Medren and Runit.

DISCUSSION:

- a. The large quantities of debris on these islands and the unknown quantity to be generated during demobilization calls for innovative planning to insure timely completion of debris lagoon dumping.
- b. There are currently two barges (YC & BC) configured for debris haul with cranes on board. Two LCU's and five (5) LCM 8's have been configured for bulk soil haul. After the soil haul has been completed a number of boats will be converted to debris haul configuration. The number to be converted is under study.
- c. The LARC's are available for debris removal but their production capability is limited in comparison with the other craft.
- d. Maintenance, especially of the loading and unloading equipment will continue to be a problem. The cranes and bucket loaders have done an outstanding job but the climate, and wear and tear are taking their toll on the equipment.

e. STATUS:

- (1) All known red debris has been encrypted.
- (2) On Medren there remains approximately 18,000 cy of concrete rubble, to be moved to the northern point of the island for shore protection. Mixed with this rubble is a significant quantity of metal debris which must be removed to dump site "Alpha" in the lagoon.
- (3) The stockpiling of debris on Enewetak continues. The Navy Water Beach Cleanup Team has begun working on the many Master Index debris items around the island.
- (4) Runit debris stockpile and removal to dump site "Bravo" in the lagoon will be executed as resources are available.
 - (5). The bulk haul boats will be available after 1 July to haul debris.

FCRE LTC Erickson 24 May 1979

FACT SHEET

SUBJECT: PACE Crater

PURPOSE: To provide current status of PACE Crater backfill.

BACKGROUND:

a. The Pacific Area Crater Experiment (PACE) conducted by the USAF during 1971 - 1973 involved the moving of more than 110,000 cy of soil to prepare an area on Aomon (Sally) for conventional explosive cratering experiments on bare coral surface.

b. As a result of the amended stipulation of U. S. District Court, HI, Civil Case No 72-3649; HQ JTG was tasked by FCDNA in January 1978 to "...assure restoration of Aomon island..." in accordance with the Court directives. The only specific Court stipulation was that "...materials used to fill the salt pond to the north of the test bed will remain in place..."

DISCUSSION:

- a. A cut/fill study by the USAE in July 1978, indicated over 100,000 cy of soil would have to be moved by bulldozer from the surrounding berms of the PACE area to the PACE Crater. Borrow areas for clean soil were Imp'ed by DOE/ERSP and work began in late July 78.
- b. The final grade in the crater is approximately +6 foot in reference to the mean low sea level datum and graded so that normal drainage will occur toward the lagoon. Re-Imping of the area proved that the island remains at 40 pCI/G, meeting condition "C".
- c. The PACE Crater backfill was completed on 29 March 1979 and involved the movement of over 141,000 cy of soil. Natural reseeding should occur during the current rainy season.

SUBJECT: Lujor (Pearl) Soil Haul

PURPOSE: To provide the status of Lujor (Pearl) soil haul.

EACKGROUND:

- a. On 12 Feb 79, FCDNA directed HQJTG to advise on the feasibility of cleaning Lujor to 80 pCI/G (agriculture).
- b. HQJTG then tasked the JTG elements on 6 Mar 79 to plan for Lujor cleanup guided by the following principles:
 - (1) Remove the minimum amount of soil to meet the criteria.
 - (2) Transport soil to Runit in time to complete encryptment.
 - (3) Tentative milestones:

Lujor channel cleared Completed 18 Mar 79

Concrete ramp construction Completed 31 Mar 79

Underway

Berms and debris stockpile Underway

on beach

Re-Imping and detailed Underway ·

excision maps

Movement of soil to Runit

- c. Assuming a 20 cm cut, DOE-ERSP estimates excision of 23,500 cy of soil to meet 80 pCI/G.
- d. On 13 Mar 79 tasking received from FCDNA directed that Lujor cleanup begin ASAP and run concurrently with other operations.

DISCUSSION: The swift current and narrow channel made it impossible to use the LCU's for soil haul. Limited to LCM 8s, it was apparent that the quantity of soil exceeded the capability of the three (3) LCM 8s. An aggressive program to modify 3 additional LCM 8s for bulk soil was undertaken. The total soil in the windrows was re-estimated and several factors became significant:

a. Lujor soil is a fine powder and little or no fluffing takes place when the soil is removed from its in situ location.

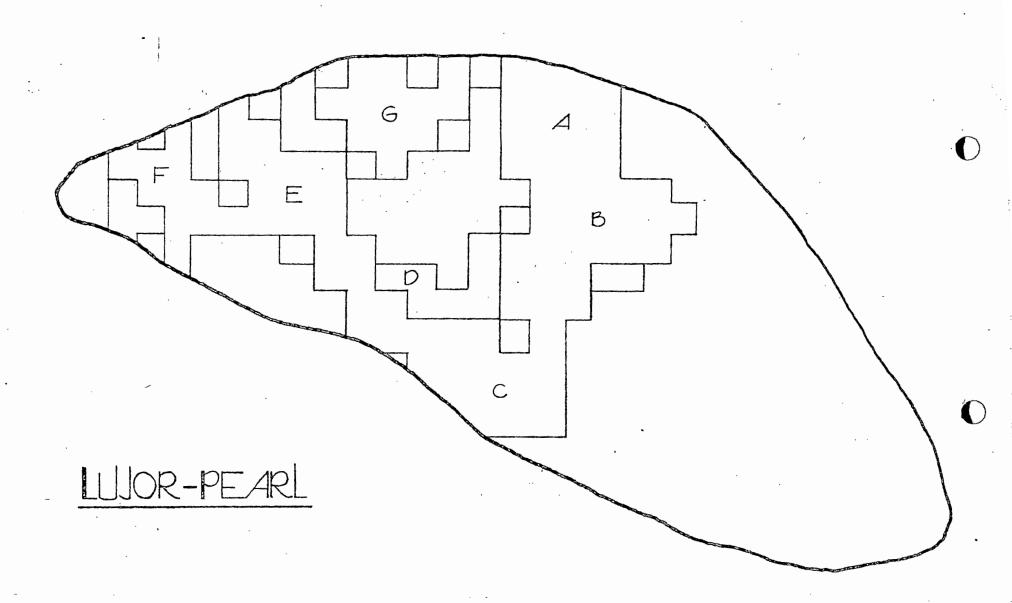
FCRE

SUBJECT: Lujor (Pearl) Soil Haul

22 May 1979

- b. The total soil excised is approximately 16,000 cy.
- c. STATUS:
- (1) A total of five (5) LCM 8s have been converted to handle bulk haul soil loads and conversion of a sixth is almost complete. The estimated completion date for the sixth boat is 1 June 1979.
- (2) Re-Imping is preceding as quickly as the material is removed from the windrows. Preliminary readings in areas A & B indicate that Condition C (less than 40 pCI/GM) exists. See attached sketch.
 - (3) Final soil removal is estimated to be completed by 23 June 1979.

1 Incl



FCRE LTC Erickson 24 May 1979

FACT SHEET

SUBJECT: Runit Overview

PURPOSE: To provide the current status of the Runit encryptment operation.

BACKGROUND: Runit (Yvonne) is the site of the contaminated soil encryptment operation. There are three distinct elements to this task: Tremie operation, soil-cement placement, and keywall/dome construction.

DISCUSSION:

V,

- a. Tremie operations (underwater concrete placement) in the Cactus Crater were completed in February 1979.
- b. In March 1979, HQJTG was directed to construct a 25 foot dome. Work progressed ahead of schedule for the soil-cement operation until the middle of April. The continuous flow volume of contaminated soil arriving at Runit decreased due to completion of Boken and Enjebi; the Lujor access problem which limited soil movement to only LCM 8's; and the need to dredge a channel to remove the Aomon Crypt soil. All channels were closed by Typhoon Alice. The U.S. Army Element (USAE) is now estimating soil-cement completion date as 23 July, which constitutes a slip of three weeks from the original schedule. Now that transport of soil from both Aomon and Lujor is again in full swing, USAE cannot maintain front loader capability on a continuous basis to load/off load boats. With the completion of debris removal from the Aomon Crypt, the debris donut hole (center of the dome) can be closed.
- c. Keywall construction is nearing completion. A portion of the Cactus Crater lip had to be removed to ensure proper alignment IAW the Pacific Ocean Division Engineer Design. Soil from the Cactus Crater lip has been stockpiled and tested by DOE/ERSP. Preliminary results indicate that the lip material is below 40 pCI/gm. Most of those sections of the keywall removed have been placed as armor rock on the molewall.
- d. Although cap placement was not originally scheduled by USAE to begin until July 1st, the initial 20x20 cap section was placed on 14 May 1979, and five additional sections have been placed. It was estimated by the USAE that a capability existed to place four cap sections a day. This has now been decreased to three sections per day. On 22 May 1979, CDR, USAE informed CJTG that estimates now indicate a 25 ft dome completion date of 1 November 1979. This completion could be accelerated by a dual team placement effort; however, a second power screed would be needed. FCDNA was notified in a effort to obtain the screed. Upon early arrival of the screed, a completion date of the dome is possible for 30 September-first week in October 1979 time frame.

SUBJECT: Typhoon Alice

PURPOSE: To provide storm damage repair update.

BACKGROUND: On 5 January 1979, Typhoon Alice hit the Enewetak Atoll causing extensive damage to the main base camp.

DISCUSSION:

a. Recovery operations required a major effort by the JTG personnel and support from numerous other agencies. After extensive study and evaluation, repair has been limited to those structures essential for life support or cleanup operations.

b. STATUS:

(1) Expenditures to date:

(a)	General clean up (Labor)	\$290,864.00
(b)	Material Costs	24,209.00
(c)	Air Movement Costs	54,647.00
		\$369,720.00

(2) Remaining Programmed Work. (Labor only, all materials are on hand).

		•	
(a)	Bldg 721	(Tradewinds Club)	\$1,400.00
(b)	Bldg 597 house).	(H&N Shipping/Receiving Ware-	4,000.00
(c)	B1dg 641	(H&N Shops)	5,000.00 \$10,400.00

(3) Significant Changes: The hangar (Bldg 118) was scheduled for repairs but the Council of Enewetak in their Planning Meeting of 1 May 1979 passed a resolution that the hangar is to be removed. The projected savings will be \$12,391.00 in materials which will be purchased by H&N/TTPI and approximately \$28,000.00 in labor and material costs which will not be incurred. It will not be necessary for FCDNA to expend the \$41,000 for hasty repairs. Ongoing actions for relocations of personnel/offices per Annex Y, Oplan 600-77 now under review.

FCRS CPT Johnson 19 May 1979

FACT SHEET

SUBJECT: Security/Law Enforcement Operations

PURPOSE: To provide the current status of Security/Law Enforcement Oper-

ations on Enewetak Atoll.

BACKGROUND: The HQJTG Security Division is a Joint Security Division and is responsible for law enforcement operations on Enewetak Atoll. The Division consists of TTPI and Military Police Officers and has jurisdiction over civilian and military personnel on Enewetak Atoll.

DISCUSSION:

- a. Between 6 December 1978 and 5 May 1979, 64 incidents have been processed by the Joint Security Division (see incl 1). Incidents have ranged from aggravated assault to major drug (marijuana) seizures. Approximately 12,795 miles have been driven in preventative patrol and security checks during this period. Routine patrol mileage per 24 hour period averages 105 miles or 35 miles per shift.
- b. Since 6 December 1978, the Joint Task Group Elements have administered Article 15's for offenses committed on Enewetak Atoll (see incl 1).
- c. During this period over 73.33 oz. of marijuana, 4 vials of Hash oil, amd 75 "HITS" of LSD have been confiscated. These seizures resulted from 13 separate cases. Total value of confiscated drugs at Enewetak selling prices is approximately \$10,532.90 (MJ= \$130.00 per oz., LSD= \$5.00 per hit, Hash oil= \$250.00 per vial). There is no indication that hard drugs have been introduced to the Atoll. Majority of cases have been initiated as a result of mail searches by Hickam AFB marijuana dogs.
- d. All military security personnel have been accepted for cross support training in the Volunteer firefighter program which will consist of training in utilization of fire apparatus and operational aspects of crash trucks. This should greatly enhance both departments' strength in case of a serious atoll emergency.

1 Incl

as

Crime Statistics - 6 December 1978 - 5 May 1979

COMPLAINT	NUMBER	PERCENTAGE
LARCENY OF GOVERNMENT PROPERTY	10	16
LARCENY OF PRIVATE PROPERTY	15	23
HOUSEBREAKING/BURGLARY	2	3
ASSAULT	1	2 .
AGGRAVATED ASSAULT	4	6
DISORDERLY CONDUCT	8	13
DRUGS (MARIJUANA)	13	20
VEHICLE ACCIDENT	2	3 .
DESTRUCTION/DAMAGE/LOST GOV'T PROPERT	Y 6	9
DRUNK/RECKLESS DRIVING	3	5
TOTAL	64	100

	ARTICLE 15	COURT MARTIAL
HQJTG	0	0
USAE	14.	3
USNE	10	0
USAFE	0	0

FCRL LTC Rogers 23 May 1979

FACT SHEET

SUBJECT: Demobilization Preparations

PURPOSE: To provide current demobilization preparations status.

BACKGROUND: Retrograde of equipment is continuous; however, until mission completion, it is largely concerned with uneconomically repairable equipment.

DISCUSSION: Screening of equipment to determine ultimate disposition is time consuming. US Army Element equipment, which represents the bulk of mission equipment, for example, must be screened first by DARCOM. During the most recent DARCOM screening, only four pieces of a total of thirty eight were selected for return to the Army's supply system. The next level of screening takes place 22-25 May when GSA and DPDO representative make a determination on the remaining thirty four pieces of equipment. Items not determined to be economically salable off island must then be screened by other US agencies. Only after all screening has been accomplished is disposition known. Hopefully, a meeting of all interested agencies, to take place at Enewetak in June, will result in streamlining these procedures so that future retrograde shipments can be preplanned to a greater extent.

FACT SHEET

SUBJECT: Cement Usage and Requirements

PURPOSE: To provide current status of cement for the crater encryptment project.

BACKGROUND: A total of 330,000 bags of cement were ordered for the crater encryptment project. Since February, two shipments have been received; 50,440 bags on the February resupply barge and 87,000 on the tandem tow barge in April. The balance on the contract, 16,000 bags, will be shipped on the barge now enroute to Enewetak. All cement previously borrowed from H&N (TTPI) has been repaid.

STATUS: Based on latest engineering estimates, a surplus of about 23,000 bags will exist after receipt of the next shipment. Coordination has been made to sell this remaining surplus to H&N (TTPI).

FACT SHEET

SUBJECT: Deep Draft Ship Resupply

PURPOSE: To provide information on surface resupply after discontinuance of the bi-monthly shallow draft barge.

BACKGROUND: Surface transportation for resupply has been accomplished largely by the Military Sealift Command (MSC) charter shallow draft barge on a bi-monthly basis. This service will be discontinued effective with Voyage VI which is expected to arrive Enewetak 7 Jun 79.

DISCUSSION: MSC time charter, deep draft ships will provide surface resupply on a 90 day frequency. The first ship in this new service is the American Chieftan which is expected to arrive Enewetak 29 Jul 79. Following are significant factors considered:

- a. Enewetak does not have enough crane operators to operate cranes on land as well as operate ship's winches. MSC has stated that ship's crew can provide this service.
- b. Additional cargo handlers may be required to rig and position cargo on board the ship. H&N (PTD) will provide these additional personnel, if needed, by deployment of a "Tiger Team" from Johnston Atoll.
- c. Since unloading of cargo from deep draft ships will be an "over-the-shore" operation, boat assets otherwise engaged in cleanup operations or support will have to be diverted while cargo is being unloaded. At maximum, this will entail diversion of these boats for one day.
- d. The increase in resupply interval from bi-monthly to every 90 days will increase the need for storage facilities at Enewetak. Refrigerated storage will become more critical than ever. A solution has been coordinated with MSC who has agreed to let us hold additional refrigerated containers between voyages.

FACT SHEET

SUBJECT:	Ships/Craft	in	Enewetak	Lagoon	<u> </u>	and the second s

PURPOSE: To provide current status of visiting ships.

- a. 19-20 Feb The Trust Territory Ship Micro Pilot visited for the purpose of delivering supplies to the residents of Japtan.
- b. 23 Feb 1 Mar Tug Mikiala arrived with resupply barge. After unloading part of cement, reefer vans and milvans, barge was towed to anchorage off Island of Runit where 23,840 bags of cement (slightly less than half) was unloaded. Due to slowness of the operation and the use of lay-time decision was made to bring the barge back to Enewetak where remaining cement was offloaded and retrograde was backloaded.
- c. 4 Mar 13 Apr The Liktanur II was in the lagoon supporting the Fission Product Survey of the Northern Islands.
- d. 19-22 Mar The USS Takelma, a fleet tug, delivered a YC barge from Guam to be used in the cleanup.
- e. 20-26 Mar The USS Denver provided wet well service to USNE craft involved in the cleanup.
- f. 24-30 Mar The USS Safeguard conducted salvage operations in the lagoon.
- g. 26-27 Mar Thirteen ships of PHIBRON's 1 and 7 were in the lagoon for their turnover. The Westbound PHIBRON (7) brought in cargo from CONUS and Hawaii while the Eastbound PHIBRON (1) was utilized for shipment of all available retrograde.
- h. 8-13 Apr Tug Mana arrived with tandem tow. One of the barges was unloaded at anchorage off the Island of Runit---during this over-the-shore operation, a total of 37,440 bags of cement were offloaded at Runit.
- i. 21 Apr Trust Territory Ship Micro Palm, arrived and took Japtan population to Ujelang.
- j. 24 Apr M.S. Micro Palm arrived with members of the Planning Council.

FCRA					23	May	1979
SUBJECT:	Ships/Craft	in	Enewetak	Lagoon			

- k. 25 Apr 11 May M.S. Marshal Islands brought cargo of copra cake and additional representatives to the Planning Council. Ship stayed in the lagoon supporting the Planning Council and making two round trips to Ujelang.
- 1. 30 Apr 1 May Yacht Endurance, home port Portland, Oregon, visited lagoon without prior clearance. Ship was sold provisions and instructed to sail without delay.
- m. 9 May M.S. Micro Palm visited with about 100 members of the Bikini/Kili population to visit Medren and tour new housing constructed by H&N (TTPI).
- n. 17-19 May M.S. Micro Pilot arrived with cargo of food and supplies for Japtan residents.

FACT SHEET

SUBJECT: Dri Enewetak Liaison Activities

PURPOSE: To provide an update on current activities of the Dri-Enewetak.

BACKGROUND: The Early Return Program provides for a maximum of 50 Dri-Enewetak living on the island of Japtan. This maximum can be exceeded by the following persons:

PERSON/POSITION District Administrator's Representative Teacher Medical Technician School Cook Agriculture Representative Policeman TOTAL 28

DISCUSSION: Two current significant problems exist with respect to the Early Return Program:

- a. There is insufficient potable water on the island. One lens-water well barely provides enough water for the maximum population of 78 to bathe and wash clothes. Catchment basins situated to contain roof run off from existing buildings are not used because the population are reluctant to maintain rain gutters. As a result, potable water must be hauled from Enewetak. In recent months, this has been necessary on a weekly basis and requires a LCM 8 for a full day each time water is needed.
- b. The recent election of Ishmael John to the Nitajela, the legislature of the Marshall Islands Government, has resulted in the absence of Ishmael John on a frequent basis. No successor as District Administrator's Representative has been named and although the Medical Technician, Joe Saul, has been named by Ishmael John to act for him, he has no apparent authority and does little more than act as an interpreter.
- c. On 21 May, HQJTG was notified that Chief Johannes Peter was departing the Atoll via MAC flt on 22 May to Majuro. He will be gone for at least a week.

FACT SHEET

SUBJECT: Female Quarters at Enewetak

PURPOSE: To provide current status of female quarters.

BACKGROUND: Since the designation of trailer number 7 as female quarters, it has become apparent that the five spaces thus created were insufficient to meet peak numbers of females to be housed.

DISCUSSION: Quarters adjacent to the chapel were redesignated for female occupants. In order to provide more "livability" one bed was removed and a temporary closet constructed. In addition, some repair work was performed utilizing operation/maintenance funds, to provide minimum security for the facility. This facility is also used for male occupants when not needed for female guests.

US Army Element, JTG LTC George R. Kleb 21 May 1979

FACT SHEET

SUBJECT: Equipment Maintenance Status Update

PURPOSE: To provide an appraisal of the Army Element's current maintenance posture and the anticipated maintenance challenge.

BACKGROUND: Widely scattered worksites, the hostile environment, the variety of equipment, much of which is non-standard, high personnel turbulence, and lengthy supply lines combine to produce a challenging maintenance mission.

DISCUSSION:

- a. Current Status: There are 334 items of equipment assigned to the Army Element; of these, 74 are inoperative.
- b. Retrograde: Thirty-five major items of equipment assigned have been classified in preparation for retrograde by June Operation Sea Lift.

c. Class 9 (Repair Parts):

- (1) Approximately 85-90% of requisitions are being submitted on 03 or 06 priority. While appearing inconsistent with normal supply guidelines, this reflects the current procedure of limiting requisitions to those necessary to keep equipment functionally operational or free of safety hazards.
- (2) Order Ship time has decreased since December 1978 from an average of more than 90 days to approximately 54 days for all 06 and higher priority requisitions. The lack of adequate quantities in Hawaii of unique parts needed for non-standard equipment continues to be a source of delay.
- (3) The ASL has received a 100% inventory and has been purged to eliminate non-demand supported lines. The reduction of the number of authorized lines from 4824 to 2370 has resulted in the turn-in of approximately \$250,000 worth of serviceable parts.
- d. Support: MG Wolff and his WESTCOM staff are personnally involved in the life support of spare parts. Without such assistance, it is probable that the Army Element's mission would have ground to a halt some time ago.
- e. Anticipated Challenge: Completion of the mission as scheduled will depend on the operational status of dozers, scoop loaders, cranes, water distributors, graders, and vibratory rollers. Rock crushing, screening, and batch plant operations will also remain critical. With continued dedicated support and an aggressive maintenance management program, the operational status is expected to improve.

US Navy Element, JTG CDR W.D. Hiatt, USN 19 May 1979

FACT SHEET

SUBJECT: US Navy Element Boat Status, Maintenance and Repair

PURPOSE: To provide information concerning the current status of US
Navy Element Boat Operations, Maintenance and Repair of craft

BACKGROUND: The current inventory of Navy Craft is as follows:

- a. Basically, all craft are in service and operating. One LCU (1551) and one Yard Craft (BC 6281) were received from Guam in March. LCU 1532 was retrograded to Guam and authority to dispose of YC 306 in the lagoon has been received. In March the self-propelled, side-by-side causeway was converted to a warping tug. Four causeway sections are in good condition, two are in poor condition.
- b. Two LCUs and five LCM8s have thus far been converted for bulk soil transport. A sixth LCM8 is in the process of being converted. YC 1462 and BC 6281 (500 ton capacity) have been provided with a crane and deck protection. Both are being used to shuttle debris from Medren to Dump Site Alpha.
- c. All craft requiring repairs were dry-docked in USS DENVER (LPD 9) in March. Preventive maintenance scheduling (PMS) is being continued on a weekly basis. Craft availability remained at about 71% throughout the first quarter of this calendar year.
- d. Taxi Craft (J5) and Boston Whalers have tender hulls and it is anticipated they may not survive to the end of the project. Two whalers have been replaced from Navy assets but there is no scheduled replacement for the J5. Barring unanticipated damage, no further replacements should be required for the present craft inventory.

USAF Element, JTG Major Prenez 21 May 1979

FACT SHEET

SUBJECT: Communications Status Summary

PURPOSE: To delineate present communications capabilities and major problem areas.

BACKGROUND: Project success and ability to meet schedules is highly dependent on effective on and off atoll communications capability. The minimal communications resources originally installed are showing marked deterioration.

DISCUSSION:

- a. The communications mission at Enewetak is to provide adequate but austere communications both on and off atoll. The hostile environment and other factors have combined to diminish the installed minimum capabilities. Some of the problems can and will be corrected; others are simply not cost effective to repair at this stage of the project.
- (1) <u>Problem</u>: Inadequate antenna systems. All of the antennas serving the HF radio shot to Hawaii were severely damaged by Typhoon Alice. One of the best was completely destroyed. Antenna maintenance personnel from the 1957 Communications Group, Hickam AFB, were able to make most of the antennas usable, but all required further work. A replacement is also required for the antenna that was destroyed.
- (a) Status: A four member antenna maintenance team from Hickam AFB arrived to accomplish repairs 8 May 79. VLP Antenna was treated for corrosion and broken/loose element connections. Large RLP Antenna had a broken element retainer clamp replaced. An Antenna Rotor Assembly was installed and temporary guy wires removed from the small RLP antenna. No replacement for the destroyed Rhombic was possible due to lack of parts.
- (b) <u>Prognosis</u>: With all other antennas now fully operational, it is desirable, but no longer essential that a replacement for the Rhombic be installed. Situation will be monitored and, if parts become available, a "Sloping V" antenna may be erected utilizing the old Rhombic support poles.
- (2) <u>Problem</u>: Damaged telephone cables. Typhoons Rita and Alice, movement of heavy equipment, and normal deterioration have caused the loss or partial loss of thousands of feet of cable.
- (a) Status: Most severely affected is the southern half of Enewetak Island. Some offices have lost phone service, others are continuing operations with substandard service.
- . (b) $\underline{\text{Prognosis}}$: Unless mission accomplishment dictates, the cables will not be replaced.

NOTE: To a large degree, the same situation also holds true at Lojwa.

b. Present capability is adequate to meet current mission requirements. Any increase in communications requirements would place great strain on our ability to meet all requirements.



Department of Energy Enewetak Radiological Support Project APO San Francisco 96333

> DCE/ERSP Manager Paul J. Mudra 18 May 1979

FACT SHEET

SUBJECT: Island Status - TRU Program

PURPOSE: To provide the current status of the Department of Energy Transuranic (TRU) Measurement Program for Enewetak Atoll.

BACKGROUND: The DOE/ERSP is responsible for providing the Commander, JTG with both surface and subsurface measurements of total transuranic isotopic concentrations in the soils on islands of Enewetak Atoll. In order to meet this responsibility the DOE employs EG&G to provide surface TRU measurements using the IMP system, EIC to provide soil sampling and laboratory analytical systems and DRI to provide data processing and management services. In addition DOE provides technical radiological advice to the CJTG as may be needed.

DISCUSSION:

A current TRU island-by-island summary status can be found in the attachment entitled Table No. I. The most significant events occuring in the program since 6 December 1978 are identified below.

- a. Completed post-excavation imping of Boken.
- b. Completed post-excision imping of Enjebi.
- c. Re-imped Lujor for definition of lift boundaries based on 80 pCi/g TRU.
 - d. Re-imped PACE refill area of Aomon.
- e. Supported Aomon Crypt definition and excavation programs using the Imp for soil screening.
 - f. Imped a significant portion of Runit.
 - g. Made initial imping of Lojwa.
 - h. Re-imped island of Kate.

DOE-ENEWETAK RADIOLOGICAL SURVEY

TABLE I

ACTION ISLANDS SINCE DEC 78 ISLAND STATUS UPDATE TRU PROGRAM 25 MAY 1979									
ISLAND	AREA	BENCHMARK	SURVEY		FINAL		SUBSURF	LATEST RESULTS TO JTG	COMMENTS
IRENE-BOKEN	18.0	YES	DONE	DONE	DONE	DONE	DONE	7MAY79	SURFACE < 80 SUBSURFACE < 160
JANET-ENJEBI	118.0	YES	DONE	DONE	DONE	DONE	DONE	22MAY79	SURFACE < 40
	/								SOIL REMOVAL IN PROGRESS NO SUBSURFACE PROBLEM
PEARL-LUJOR	22.0	NO	DONE	DONE	_	PEND	DONE		SURFACE < 40
SALLY-AOMON	40.0	YES	DONE	DONE	PEND	DONE	DONE	19APR79	SUBSURFACE < 160 BACK FILLING IN PROGRESS
AGMON CRYPT			-	-		INC	INC	1ØMAY79	< 400 AS DEEP AS 24 FEET
YVONNE-RUNIT	5.0	YES	DONE	DONE	PEND	INC	INC	19APR79	ON GOING INVESTIGATIONS

. INC = INCOMPLETE
PEND = PENDING DUE TO OTHER ONGOING ACTIONS



Department of Energy Enewetak Radiological Support Project APO San Francisco 96333

> DOE/ERSP Manager Paul J. Mudra 18 May 1979

FACT SHEET

SUBJECT: Island Status - FPDB Program

PURPOSE: To provide the current status of the Department of Energy Fission Product Data Base Program (FPDB) for Enewetak Atoll.

BACKGROUND: The DOE/ERSP launched the FPDB program in late February 1979 in an attempt to acquire essential information needed by the scientific community to provide dose assessments for 18 selected islands (Alice to Wilma plus Leroy) of Enewetak Atoll attributed to nuclear fission products (principally Sr-90 and Cs-137).

- a. This program consisted primarily of collecting profile soil samples from each selected island on a 50 meter re-surveyed grid. Six samples per grid location to a depth of 60 cm were collected and prepared for analysis at Enewetak. Sample counting has been done on Enewetak with Sr-90 chemistry being performed by EIC in Albuquerque, New Mexico.
 - b. Current program status is depicted in Table No. II.

DOE-ENEWETAK FISSION PRODUCT DATA BASE ISLAND STATUS

	DATE: 25 N	YAP	79		מטבייב	HENEIVE	ISLAND	TABLE II		
	ISLAND, USE		TOTAL AREA HECTARES	# OF POINTS SAMPLED 50m	DATE SAMPLING COMPLETED			GRID TIE-IN. BENCHMARK	COMMENTS:	
	ALICE-BOKOLUO	Р	. 9. Ø	25	20 MAR	1	1 11 APR	YES-PIERRE	· NOTE:	ALL BUT LUJOR 100m
	BELLE-BOKOMBAKO	Р	12.0	40	19 MAR	30 MAR	11 APR	YES .		
	CLARA-KIRUNU	Р	3.0	8	21 MAR	4 APR	11 APR	YES BUTCH		Cs AND Sr ANALYSIS
	DAISY-LOUJ	Р	8.5	25	22 MAR	4 APR	1 11 APR	YES-STA. F	•	
	EDNA-BOKINWOTME	Р	4.0	5	22 MAR	4 APR	1 11 APR	YES .	•	HAS BEEN COMPLETED
İ	IRENE-BOKEN	P	18.0	51	23 MAR '	4 APR	11 APR	YES	•	· -
	JANET-ENJEBI	λ	118.2	371	15 MAR	6 APR	11 APR	YES-PORKY	•	AND RESULTS SENT
	KATE-MIJIKADREK	Р	6,5	18	30 MAR	4 APR	11 APR	YES-MUZIN		
ļ	LUCY-KIDRINEN	Р	8.0	22	3Ø MAR	6 APR	1 11 APR	YES-ASTER		TO LLL.
	PERCY-TAIWEL	Р	Ø . 8	2	3Ø MAR	26 APR	i –	YES	•	
	MARY-BOKENELAB	Р	5.0	12	29 MAR	11 APR	1 5 MAY	YES-BOKEN	•	
	MARY'S DAUGHTER	Р	Ø . 5	3	29 MAR	11 APR	I 5 MAY	YES		
	NANCY-ELLE	Р	4.5	14	29 MAR	6 APR	I I 11 APR	YES-JON		
	OLIYE-AEJ	A	16.5	48	8 MAR	14 MAR	1 30 MAR	YES-AITSU		
	PEARL-LUJOR	λ	22. Ø	74	-	-	 -	סא	WILL COMPLETE AFTER S	OIL REMOVAL
	PEARL'S DAUGHTER	Р	Ø . 5	2	31 MAR	6 APR	1 11 APR	YES	••	
	RUBY-ELELERON	Р	1.5	Э.	24 MAR	-	1 - 1	МО .		•
	SALLY-AOMON	A	40.0	135	28 MAR	4 APR	11 APR	YES-SALLY		
	SALLY'S CHILD	P	8.8	4	3 APR	11 APR	5 MAY	YES		
.	TILDA-BIJIRE	A	21.0	. 48	13 MAR	21 APR	SØ MAR	YES-PAT		
	URSULA-LOYJA	٨	16. Ø	15	14 MAR	23 MAR	30 HAR	YES	100m GRID ONLY	
	YERA-ALEMBEL	λ	15.5	48	2 MAR	7 MAR	1 11 APR	NO ,		
	WILMA-BILLAE	Р	6. 5	17	27 FEB	2 MAR	1 1 30 MAR	YES-PIRAAI	•	
	YYONNE-RUNIT SO	۵	5.5	13	7 APR	-	! 	YES-YOSH		
,	LEROY-BIKEN	Р	5.5	8	17 APR	20 APR	YAM C	YES	NO SURVEY-COMPASS & C	HAIN ONLY.
						1	!			

H&N/TTPI R. Loftfield 23 May 1979

FACT SHEET

SUBJECT: Status of AIC Construction

PURPOSE: To provide the current status of the Rehabilitation and Resettlement Contract - H&N/TTPI/AIC.

BACKGROUND: The Contract between H&N/TTPI and AIC provides for the construction of 116 houses, two Community Centers, rehab of the Medren Deep Water Pier, planting of residential and commercial crops, and demolition of selected structures and slabs.

DISCUSSION: As of May 18, 1979 the status of the resettlement contract on the islands of Japtan, Medren, Enewetak and Ananij is as follows:

- a. <u>Japtan</u> Total Requirement 8 homes. Four foundations and three slabs have been placed. 2,600 stakes have been set for coconut trees.
- b. Medren Total Requirements 32 homes. All foundations and slabs placed; "W" panel erection complete on all sites; stuccoing complete on 28 homes, door and windrow installation complete on 11 homes, and painting complete on 11 homes. Community Center approximately 60 percent complete, deep water pier 90 percent complete, and 5 water wells developed. Approximately 6,000 stakes have been set for coconut trees.
- c. Enewetak Total Requirement 76 homes. 11 homes are completed through the stuccoing stage and 3 model houses are complete. Contractor to resume home construction the first part of June. Staking completed for approximately 2,000 coconut trees. Approximately 22 slabs have been demolished and moved to dump site.
 - d. Ananij Island has been cleared and staked for 934 coconut trees.
- e. <u>Miscellaneous</u> Nurseries on Medren and Enewetak are being maintained on a daily basis for coconut, pandanus, and breadfruit plants.

US Army Element, JTG CH (CPT) McCoy 19 May 1979

FACT SHEET

SUBJECT: Chapel Activities For Enewetak/Lojwa

PURPOSE: To provide the current status of Chapel Activities on Enewetak Atoll.

BACKGROUND: The Chapel Section is responsible for all Chapel Activities for the Atoll to include the conduct and coordination of religious services for Protestants, Roman Catholics, Jews and Latter Day Saints (Mormons), pastoral counseling, administration of the Chaplain's Fund, spiritual growth activities such as Bible Studies and "coffee house" and special programs for major holidays and spiritual enrichment. The Chapel Section consists of a Chaplain and one Chapel Activity Specialist, both assigned to the U.S. Army Element.

- a. From 1 Jan 30 Apr 1979, 35 Protestant, 42 Catholic and 21 LDS services have been conducted with a total attendance of 1331. The Catholic and LDS services are conducted by Lay Leaders. There is also a monthly visit by a civilian Catholic Priest from Kwajalein. No Jewish services were held on the Atoll. One person of Jewish faith did attend Passover Services at Kwajalein.
 - b. Special programs since 1 Jan 79 have included:
- (1) Establishment of Enewetak Scholarship Program to provide tuition assistance to Marshallese attending Marshalls. Theological College. A total of \$1,306.09 has been raised to date.
- (2) Support to an Anti-Hunger Campaign. Almost \$2,000 dollars was raised from pledges.
 - (3) Concerts by Carolyn Hardwick, Christian vocalist from Hawaii.
 - (4) Ecumenical Easter Services at Enewetak and Lojwa.
 - (5) A visit by Chaplain (MG) Orris Kelly, Army Chief of Chaplains.
- c. As a final note, Chaplain (Major) Wilson G. Parks will replace Chaplain (Captain) McCoy as Staff Chaplain on 13 June 1979.

MPML Michael V. deGruy 19 May 1979

FACT SHEET

SUBJECT: Mid Pacific Marine Laboratory

PURPOSE: To provide current information on operations at MPML.

BACKGROUND: MPML is funded by the U.S. Department of Energy and administered by the University of Hawaii in Honolulu. The staff includes a Director and Scientific Project Coordinator, as well as a Logistics Officer in Honolulu and a Laboratory Manager and two Assistant Managers on site in Enewetak. The function of the MPML is to provide a support facility for visiting investigators who qualify to come to Enewetak to study various aspects of the environment, including redionuclide surveys. MPML requires a report to be provided by each investigator which is published annually and made available to the public.

DISCUSSION: MPML has the longest standing record of any laboratory in an atoll environment. This wealth of information collected over the last 25 years is a tremendous asset to current and future visitors to the lab in providing a rich baseline study from which to begin their work.

a. DOE related projects:

- (1) Dr. Steven Smith of the Univ. of Hawaii has for several years carried on research through MPML dealing with the lagoon's circulation patterns. This information is quite valuable in understanding the possible pathways radionuclides, etc., may travel through the atoll.
- (2) Dr. Robert Buddemeier has worked closely with Steve Smith in his lagoon circulation project. Also along with his co-workers from Univ. of Hawaii he has dug wells on several of the islands of the atoll and placed groundwater guages at these locations. MPML staff services these gauges in their absence. This information is crucial to the understanding of the movement of water through the islands related to the tides, as well as giving an understanding of the potability of the freshwater lens of the islands. Also there are tide gauges recording both lagoon and ocean tides for comparison.
- (3) Dr. Richard Ford and Dr. Tom Ebert of San Diego State University have an ongoing study of the spiny lobster population of Enewetak, Ananij, and Enjebi Islands. They are also supplying specimens to Dr. Victor Noshkin of LLL to aid in his radiation studies.

SUBJECT: Mid Pacific Marine Laboratory

- (4) Although most of their work occurs in the northern islands, MPML also supports whenever necessary Lawrence Livermore Lab studies of the radionuclide presence in the atoll.
- (5) Dr. William Jackson heads up a group of scientists from Bowling Green University, Ohio who for quite a few years have visited the lab continuing their studies of the resident rat populations of Enewetak Atoll. Their interesting studies include implanting docimeters in live rats and recapturing them months later. One individual was involved with the Northern Marshall Islands survey just completed.
- b. Basic research. In addition to radiation related projects, MPML carries on projects that provide valuable information to the understanding of the ecosystem as a unit. These projects deal with the behavior and migrations of fishes, birds, rats, coconut crabs, ocean critters from zooplankton to sharks.
- c. Future of MPML. MPML plans to continue to reside in Enewetak after the cleanup is complete. It is hoped that it will be integrated into the community as closely as possible. Plans are being made to incorporate alternate energy sources to supplement, or possibly render as backup units the two 85KW generators now present on the lab site. If this becomes a reality, it will represent an "Energy Park" for all of Micronesia, as well as the rest of the world. Additionally plans also include education programs for the Marshallese, and aquaculture training from a resident aquaculturist at MPML. The possibility exists also for a medical facility to be adjacent to MPML. MPML's future will be interesting!

FCRE MAJ Colio May 1979

FACT SHEET

SUBJECT: Sand Dredge Opn

- 1. The sand dredge (see sketch) consists of a fabricated 5 pontoon steel barge with pump and winch mounted. The pump has a maximum capability of pumping 70 cy/hr sand under ideal conditions. In current environment it is presently pumping 35 cy/hr. The dredge barge is moored through an anchoring system and two vertical spuds. The dredge operator swings the intake (suction) across the channel bottom by "walking" the dredge barge on the spuds.
- 2. On 13 Mar 79 a dredge technical representative arrived to advise H&N on design and assist in fabrication of the dredge barge. On 31 Mar 79 the dredge barge was towed to Lojwa by LCU and LCM 8. The intake tower (ladder) was damaged during bouying operations at Lojwa on 31 Mar. By 5 Apr 79 the req'd repair/rewelding was completed on the damaged tower. On 6 Apr the dredge pump starter was replaced. On 7 Apr the dredge pumped for one hr before operations ceased in order to fine tune the anchoring system. During the initial pumping small pieces of coral began to clog the intake and clump around the couplings in the discharge pipe. This necessitated uncoupling the pipe and clearing by hand. During the week of 9 Apr the dredge pumped 10-15 seconds before clogging with coral. On the night of 11 Apr 79-poor sea conditions stressed one of the anchor spuds and it fractured. On 12 Apr 79 a meeting was held at Enewetak to discuss redesign of the dredge to alleviate coral clogging. Possible solutions were discussed and H&N called in two dredge experts who arrived 18 Apr 79. The dredge experts/engineers redesigned the intake by adding a "squirrel cage" to preclude pickup of coral. They also added a high pressure water pump to jet the sand into suspension, thereby facilitating suction. At the present time the dredge is pumping 35 cy/hr.

