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REPORT

OF

REPATRIATION OF THE RONGELAP PEOPLE

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HOLMES & NARVER INC



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PART I

NARRATIVE SUMMARY

INTRODUCTION

On 1 March 1954 a thermonuclear device (the Bravo event) was detonated in Bikini Atoll. A shift of winds occurring after the detonation carried radioactive particles towards the islands of RONGELAP, RONGERIK, and UTIRIK. Thirty-one American test personnel and 236 Marshallese were exposed to radiation. Because the level of residual radioactivity at RONGELAP remained unacceptable from a health point of view, emergency evacuation of 82 Rongelapese was effected by the vessels of TG 7.3 (U. S. Navy). These people were landed in KWAJALEIN Atoll, where they were housed in emergency quarters on EBEYE Island until a village could be constructed for them.

Holmes & Narver was directed in April 1954 by the Atomic Energy Commission to prepare plans and estimates for the construction of a suitable village on EJIT Island in MAJURO Atoll. The project was constructed, and in June 1954 most of the Rongelapese were moved to this newly constructed village, where they remained until they could be returned to their homeland.

During their residence at MAJURO and KWAJALEIN, the people were joined by a number of Rongelapese who were away from their home atoll at the time of the fallout. The size of the group was also increased by marriages with non-residents of RONGELAP and by births. The repatriation of this group was effected on 29 June 1957, when 250 persons were

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landed at RONGELAP Atoll to occupy villages containing new homes, community buildings, increased and better fresh water storage facilities, two-way radio communication, and other facilities.

The entire project was effected in four distinct phases. During Phase I engineering was completed, plans were drawn, materials were procured and moved to Parry Island, Eniwetok, M. I., where prefabrication of building assemblies was undertaken. The islands of RONGELAP and ENIAETOK were air sprayed for insect control during this phase. During Phase II the construction crews, equipment, and materials for the first structures to be built were moved to RONGELAP. The clearing of construction sites, roads, and ship ramps were undertaken, insect control was continued by land, siting and setting of footings for all structures were accomplished and a few structures were erected. The representatives of the High Commissioner, Trust Territories, and the Native Council arrived to remain throughout the construction period. The reconstruction of the native villages was completed during Phase III. During this Phase the natives destined to return to RONGELAP were prepared with their personal effects for evacuation from MAJURO and KWAJALEIN Atolls. Phase IV encompassed the actual return of the natives and their occupation of their reconstructed villages.

This report of the repatriation is presented in three parts: Part I, a Narrative Summary; Part II, a Pictorial Review; and Part III, Plot Plans and Building Lists.

PLANNING

The U. S. Atomic Energy Commission, together with other governmental agencies, planned for the return of the natives as soon as it was considered that the residual radioactivity level was acceptable from a health point of view. At regular intervals, the Commission's representatives made radiological surveys. The data from these were carefully evaluated, and on 16 June 1956, Holmes & Narver was authorized to make necessary surveys, a report of the existing facilities, and to prepare preliminary plans for rebuilding the village utilizing criteria with respect to space, facilities, and layout similar to that used in the construction of the EJIT village at MAJURO Atoll in 1954. Coincidental with this request, a radiobiological team was set up to make an additional rad-safe survey of the area to determine steps necessary for landing engineers and constructors on the island.

A reconnaissance party was dispatched to RONGELAP to inspect existing facilities and determine field conditions; a report was filed on 25 June 1956. The District Administrator at MAJURO also filed a report on 18 June 1956 containing a detailed preliminary statement of the needs of the RONGELAP people on their return. This reflected their requests with respect to general criteria of living quarters, bath houses, eating houses, cisterns, storehouses, and other buildings; re-internment of deceased persons; and the clearing of land in certain areas for roads and

agricultural uses. Additional criteria were furnished Holmes & Narver by letter dated 28 June 1956. Preliminary drawings were then made, incorporating all known criteria.

On 9 July 1956 a survey party of 15 Homes & Narver personnel departed PARRY Island in the LST 618 and arrived off RONGELAP Atoll at 0130 hours on 11 July. This party was joined by a representative of the Trust Territories and five members of the Native Council, all of whom were flown from MAJURO by seaplane, which arrived at 1330 hours on 11 July. The purpose of this reconnaissance was to confer with the RONGELAP people on the spot, to establish the locations of the proposed buildings, to tie all buildings to base lines, to gather information necessary for the drawing of plot plans for three villages (one each on ENIATOK, RONGELAP, and JOBWAAN Islands), and to stake building locations. After looking over the site plans, the representative of the Trust Territory assured Holmes & Narver that the RONGELAP people were satisfied with the preliminary drawings of buildings and the layout for their village. At that time, the building requirements were as follows:

	Rongelap Island	Jobwaan	Eniaetok
Dwellings	23	3	8
Cisterns	3	2	5
Toilets	14	2	7

	Rongelap Island	Jobwaan	Eniaetok	
Bath Houses	18	2	7	
Eating Houses	13	2	6	
Cook Houses	13	2	6	
Chicken Coops	17	2	6	
Boat Houses	1	· -	•	
Chapel	-	-	1	

Other miscellaneous requirements included a cistern on six other islands, building materials for four dwellings to be constructed by natives at two other sites, the building of roads, and the clearing of areas for agricultural purposes. On 14 July the members of the Native Council departed by seaplane for MAJURO, and the H&N survey party left for PARRY Island in the LST 618.

On 26 July 1956 the Manager of the ENIWETOK Branch, AEC, was furnished four sets of plans for the proposed construction of native villages on RONGELAP and AILINGINAE Atolls. It was understood that these plans were preliminary and subject to review and comment of the Trust Territory officials. The plans were also transmitted to Holmes & Narver's home office along with bills of materials. Arrangements were effected with the home office for incorporating into final plans any comments and recommendations of the Trust Territory officials in order to better coordinate

the submission of final plans with cost estimates. The Chief, ENIWETOK Branch, AEC, transmitted copies of the preliminary plans to the High Commissioner, Trust Territories of the Pacific Islands on 8 August 1956.

On 16 August 1956 representatives of the AEC and Holmes & Narver met at MAJURO with representatives of the Trust Territory and 20 RONGELAP people for a discussion of the preliminary plans. The details of construction, the siting of cisterns and buildings, and all changes that had been made since the last meeting with the natives of RONGELAP in July were pointed out and were confirmed as satisfactory. Several minor revisions were agreed upon which were later included in revised plans.

At this discussion the Trust Territory representative advised that communication facilities might be required at RONGELAP. However, it was agreed to delay a decision pending a firm request to the AEC and approval at higher levels.

On 23 August 1956 Holmes & Narver was advised that the preliminary plans of the RONGELAP villages had been approved by the High Commissioner, Trust Territories of the Pacific, and was requested to furnish revised drawings and cost estimates to the Deputy Director, Test Division, AEC, for his approval and for necessary funding. Therefore, on that date, the revised plans and an original cost estimate were

transmitted to Holmes & Narver's Chief Estimator for cost estimating and submission to the Test Division in accordance with established procedure. This was accomplished on 5 September. In accordance with a telephone request from the Director, Test Division, ALOO, copies of the drawings and original cost estimates were also furnished the office of Director, Military Application, AEC, and CINCPACFLT. The total estimated cost at the time was \$276,190.

In order to insure that all requests of the RONGELAP natives with respect to the proposed construction had been satisfied, representatives of the AEC, Holmes & Narver, the High Commissioner of the Trust Territories, and his District Administrator again met with the natives at MAJURO on 30 August 1956 After thoroughly discussing the construction program, several minor revisions to the plans were requested which were included in the final plans

The Director, Test Division, by dispatch on 14 September 1956, requested the AEC Branch Manager, ENIWETOK, to clarify and justify various items of planning, including that for chapel, schools, dispensaries, roads, recreational areas, and flagpole and advised him of the need for the participation of a CINPACFLT representative in all conferences with respect to construction planning.

On 1 October 1956 a meeting was held in the office of the Commanding Officer, U.S. Naval Station, KWAJALEIN, M. I., representing

CINCPACELT, for the purpose of discussing various details involved in the repatriation of the RONGELAP people. The agenda for this meeting as furnished by the CO of the Naval Station are quoted below:

"CONFERENCE REGARDING SURVEY AND RECOMMENDATIONS ON REPATRIATION OF RONGELAPESE

- "1. Commander in Chief Pacific Fleet (CINCPACFLT) has directed the Commanding Officer, U. S. Naval Station, KWAJALEIN, M. I., to convene a Survey Groupto draw upa report to CINCPACFLT via Commander, Joint Task Force Seven (CJTF SEVEN) concerning the repatriation of the Marshallese people removed from RONGELAP Atoll in 1954. The survey group is composed of representatives of CINCPACFLT, CJTF SEVEN, the Atomic Energy Commission (AEC), and the Acting High Commissioner of the Trust Territories of the Pacific Islands (HICOMTERPACIS).
- "2. CINCPACFLT further directed that the report will include recommendations on the following:
 - (a) Return of the natives by ship.
 - (b) Number of natives to be returned.
 - (c) Utilization of existing construction at MAJURO for the rehabilitation of RONGELAP.
 - (d) Details of construction and other rehabilitation measures and the agencies to accomplish each portion thereof.

- (e) Measures of support required by the natives after return.
- (f) Estimate of the cost involved.
- (g) Utilization of the natives as a labor force.
- "3. For the information of the Survey Group CINCPACFLT has ascertained that:
 - (a) COMSTS has indicated that the rehabilitation lift can be accomplished by an MSTS LST.
 - (b) The AEC contractor, Holmes & Narver, has prepared preliminary estimates and drawings for the native villages which are under study by the AEC.
 - (c) Natives who cannot be returned due to lack of medical facilities on RONGELAP are the responsibility of HICOMTERPACIS.
 - (d) It is mandatory that the group report be forwarded through channels to reach CINCPACFLT in early October to permit the decision concerning the repatriations to be made in October or November.
- '4. It is the intention of the Commanding Officer, U. S. Naval Station,

 KWAJALEIN, to gather the data from the representatives as quickly

 as possible to rough out a report on the specific questions asked, in

 cluding other pertinent details; to submit this rough report to the

 group for further discussion; and then to break up the survey group

as soon as possible to permit the representatives to return to their stations. If necessary, trips to MAJURO and/or RONGELAP can be arranged."

The decisions reached at this meeting at KWAJALEIN were so significant that the complete report of this meeting by Holmes & Narver's

Resident Engineer is quoted verbatim:

"A meeting was held in the office of Captain Staley 1 October 1956 at KWAJALEIN for the purpose of discussing details involved in returning the RONGELAP natives from EJIT and EBEYE to RONGELAP. In attendance at the meeting were the following:

Capt P. C. Staley, Jr.	Commanding Officer, Naval Station, KWAJALEIN
Cdr H. C. Jipson	Naval Station, KWAJALEIN
Cdr C. M. Stewart	Naval Station, KWAJALEIN
Cdr J. W. Lawyer	Naval Station, KWAJALEIN
Mr. M. Neas	Trust Territories of Pacific
Mr. Byron Bender	Trust Territories of Pacific
Lt Col W. A. Gray	Joint Task Force SEVEN
Maj B. J. O'Donnell	Joint Task Force SEVEN
Mr. Arthur L. Merrill	Atomic Energy Commission

Eniwetok, M.I.

Mr. Ralph Johnson

Atomic Energy Commission

Asst. Mgr. for Mgf., ALOO

Mr. Charles Dunlap

Holmes & Narver, Inc.

Mr. Samuel Howell

Holmes & Narver, Inc.

"The meeting was opened at 1300 hours, and the items discussed were those shown on the preceding sheet.

"Captain Staley is to forward minutes of the meeting to Holmes & Narver, PARRY Island, as soon as possible for record purposes. A brief resume of the items discussed which affect Holmes & Narver are as follows:

"For the purpose of over-all planning and an approximate determination of the length of time that the LST will be required, Captain Staley suggested that we assume that plans and funding would be approved by 1 November 1956. On this basis we discussed the time necessary for the several operations involved with the following general conclusions.

- ''(A) 50 days For LST movement (carrying materials) from ZI to PARRY Island.
 - 21 days For prefabrication at PARRY Island and loading of LST.
 - 90 days -For construction (possibility of being reduced to 60 days).
 - 161 days Total
 - 25 days Return of LST from PARRY Island to ZI.

186 days

"It appears that JTF SEVEN will therefore request the services of an LST (MSTS) for approximately 180 days with the possibility that this interval may be reduced by 30 days.

- the writing of memo ETE:FWH:H-4654, dated 16 June 1956, from F. W. Hohner to Holmes & Narver, ENIWETOK. This letter stated that there would be 188 native personnel. It now appears, as stated by Mr. Bender, that approximately 175 natives will be returned from EJIT, approximately 33 from EBEYE, and 16 may move from KWAJALEIN to RONGE-LAP, making a total of approximately 224.
- "(C) The utilization of existing construction at MAJURO for the rehabilitation of RONGELAP was discussed; however, it was agreed that it would not be expedient to attempt to utilize these facilities due to difficulty in dismantling and re-erection and to the fact that this would remove all housing facilities from EJIT Island.
- JALEIN Naval Station once each week during the construction period and the capability of making additional emergency flights, as may be required, will be maintained. It was also

tentatively agreed that it would be more expeditious for the SA-16 from KWAJALEIN to fly to ENIWETOK before making the trip to RONGELAP. By this method it will not be necessary to transport cargo and personnel by C-47 from ENIWETOK to KWAJALEIN prior to leaving for RONGELAP. The details of construction were briefly discussed, and it was agreed that plans as now drawn would stand approved by those in attendance at this meeting but would be subject to final approval by higher authority. The possibility of the requirement for communication facilities was discussed generally; however, this item is to be held in abeyance pending a firm request to H&N by AEC, together with a firming up of the type of communication facility required. Also discussed was the possibility of a requirement for a laboratory building which would probably include a power requirement; however, this facility will also be an additional item when and if a firm request is received.

"(E) The measures of support required by the natives after return to RONGELAP were discussed, and while this did not directly concern Holmes & Narver, it should be noted for general information that JTF SEVEN is to supply approximately \$1300 per month for support of the natives for the first six months

- and this support is to be phased out by the end of the first year.
- "(F) The estimate of the cost involved affecting the Holmes &

 Narver participation was restated as that appearing on our

 preliminary estimate of \$276, 190.
- "(G) The utilization of the natives as a labor force was discussed, and it was agreed that 24 natives would accompany the Holmes & Narver construction party. This was in agreement with the meeting of 18 August 1956 at MAJURO.

"A general discussion followed wherein it was agreed that prior to the departure of the LST from PARRY for RONGELAP the Air Force (4951st Squadron) is to lift 24 natives from MAJURO and EBEYE to ENIWETOK where they will be picked up by LST to accompany the construction crew to RONGELAP JTF SEVEN will attempt to secure the necessary 020 clearance. The Trust Terri tories have agreed to supply the necessary pens and cages for shipment of livestock by LST from MAJURO to RONGELAP. Two 30 foot boats are to be included in this shipment, and it was agreed that the Trust Territories would load this craft on the LST at MAJURO and the boats would be off-loaded at RONGELAP by H&N.

"The movement of native personnel, household goods, and livestock will be accomplished by LST, which will depart the construction site at RONGELAP approximately 10 days prior to completion of construction, travel to MAJURO and EBEYE for cargo and native passengers, and return to RONGELAP by the end of the construction period.

"Lt Col R. Schnittke and Dr. Robert Conard are scheduled to arrive at approximately 1700 hours this date; however, Messrs. Howell, Johnson, Merrill, and Dunlap will return to ENIWETOK immediately following this meeting. They may be contacted at ENIWETOK for any additional information required. The meeting was adjourned at 1500 hours."

By 1 November 1956 the post Redwing radiological survey of RONG-ELAP and adjacent atolls to determine whether the RONGELAP people could be safely returned to their former home was completed. The data from this survey were being analyzed and evaluated, from which the Atomic Energy Commission would base its decision as to whether or not the return of the RONGELAP people could be accomplished. The Director of Military Application, AEC, took up the matter of funding the project with the Chief of Naval Operations. Arrangements had been previously established which assigned primary responsibility to CINCPACFLT and which directed CJTF SEVEN to allocate funds to the AEC for the work involved. Subsequent to the original

understanding between the pertinent governmental agencies, there were developments with respect to funding which required clarification before funds could be committed.

In order that the materials required in construction could be procured as early as possible after funds were made available, on 1 November 1956 the H&N field forces submitted to their home office fifteen requisitions for the materials indicated in the drawings that were approved at that time.

On 5 November 1956 the Holmes & Narver field forces informed their home office by dispatch that revisions to the plans for the dispensary and for the installation of radio communication equipment, including a 1.5-kw generator to be housed in a shed built adjacent to the council house, had been clarified with Trust Territory officials. These revisions called for an increase in the gross cost estimate amounting to \$6,950. The revised plans were sent to MAJURO for the District Administrator's approval, in addition to appropriate AEC offices.

During the month of November 1956 the tempo of logistic planning increased. It was determined that the Chief of Naval Operations would make available an LST through the Commander, Military Sea Transport Service. This vessel would be utilized to carry construction materials to ENIWETOK from the United States, then would be used to carry materials and men to RONGELAP. It would remain there to support the

construction forces, providing quarters and subsistence. The Manager, AEC ENIWETOK Branch, requested the Commander, Military Sea Transport Service, to assign Mr. Harold Berg as Master of this supporting vessel. This request was based on Mr. Berg's familiarity with the waters around RONGELAP, his intimate knowledge of beaching conditions (these were not favorable) for an LST, and his outstanding cooperation in past projects at ENIWETOK.

In early December 1956 another reconnaissance of RONGELAP was made to determine conditions then existing. Houseflies and mosquitoes were found prevalent at the proposed construction sites. Air-spraying the islands of RONGELAP and ENIAETOK was later successfully accomplished.

By message on 21 December 1956 the DMA advised all interested parties that a decision concerning the return of the RONGELAP people could not be expected prior to early January.

On 26 February Holmes & Narver received a copy of a message from the Assistant Director, Test Division, addressed to CJTF SEVEN, which read as follows:

"Return of Marshallese natives to RONGELAP approved by parties concerned. Request LST required to lift construction material from CONUS to ENIWETOK; to lift construction workers and materials from ENIWETOK to RONGELAP; to act as station vessel at RONGELAP during constructions; and to lift natives from MAJURO and

EBEYE to RONGELAP; be available for loading in Oakland, California, March 25, 1957. Please advise upon completion of arrangements."

The Contract Representative, AEC, Los Angeles, advised Holmes & Narver that in accordance with the above message, the contractor was authorized to proceed with the project.

On 27 February 1957 the AEC informed CINCPACFLT by dispatch that as a result of the evaluation of recent radiobiological resurveys of RONGELAP and adjacent islands it was determined that the RONGELAP people could be safely returned to their home atoll; the High Commissioner of the Trust Territories had concurred in this decision; and CINCPACFLT was requested to implement previously approved plans. The AEC responsibility was defined as supervision of the services of the AEC Contractor for construction; the provision of emergency radio facilities on RONGELAP to the specifications of the Trust Territory Government, at a cost of approximately \$1,500; and annual medical inspection of the people originally removed from RONGELAP. Authority to proceed with the construction was confirmed. Information addressees to this dispatch were COMNAVSTA, KWAJALEIN; U. S. AEC, ALOO; CJTF SEVEN; HICOMTERPACIS; CNO; U. S. AEC ENIWETOK; Holmes & Narver, Los Angeles; and Department of Interior Offices of Territories.

CONSTRUCTION

Steps were taken by the various governmental agencies involved to implement the program. On 1 March 1957 CJTF SEVEN requested Chief of Naval Operations to arrange for the LST support vessel. On 2 March 1957 Holmes & Narver, with the approval of the AEC Field Representative, issued a construction work order. Two days later a meeting was held at KWAJALEIN, M.I., between representatives of the AEC, Holmes & Narver, CINCPACFLT (CO, U.S. Naval Station), CJTF SEVEN, and the High Commissioner of the Trust Territories (DISTAD MAJURO) for the coordination of the functions of each agency with respect to the following three schedules:

- 1. Ship's Schedule. An outline of the movement and use of an LST from its date of arrival at NSC, Oakland, until its release from this assignment.
- 2. Construction Schedule. An outline of the work to be done by the AEC contractor beginning about the time of departure of the LST from Oakland, California, and continuing until fulfillment of obligations under the contract.
- 3. Support Schedule. An outline of work to be done by all otheragencies associated with the repatriation of the RONGELAP natives.

The above schedules were revised from time to time as became necessary with the development of the program and as significant dates of

its timetable could be firmed. The following is the detailed breakdown that finally evolved (12 April 1957):

PHASE I - 3 April to 24 April - 21 Days

- Ship's Schedule. Load at NSC, Oakland, California, material requisitioned for this job and proceed to PARRY Island, ENI-WETOK.
- 2. Construction Schedule. Pre-cast concrete cistern. Pre-cut material for council house and 2 storage sheds. Fabricate flagpole. Make forms for casting of concrete footings. Make arrangements with Air Force to air spray for insect control, RONGELAP and ENIAETOK Islands. Arrange for purchase of radio equipment ref: TWX ET: JAS-3632 of 3/19/57.
- 3. Support Schedule. One seaplane flight to RONGELAP from KWAJALEIN for reconnaissance prior to arrival of LST from CONUS. DISTAD to inform Mr. Pieris and five council members that they will be flown to jobsite on or about 26 April and will remain at RONGELAP during entire construction period. DISTAD to procure native subsistence, which will be sent to RONGELAP by LST about 28 June to be loaded at MAJURO.

PHASE II - 24 April to 17 May -- 23 Days

- 1. Ship's Schedule. Off-load material at PARRY Island. Back-load material, equipment, supplies, and personnel. Proceed to RONGELAP and serve as base ship. At end of Phase II, back-load equipment and men and proceed to PARRY Island.
- 2. Construction Schedule. Proceed with men, equipment, material, and supplies to RONGELAP and do the following work: Clear land, roads, and sea ramps. Continue insect control by land. Erect storage sheds and council house. Install pre-cast cisterns. Clear sites and set footings for all structures. Complete engineering surveys.
- 3. Support Schedule. Transfer, via air, Mr. Pieris and Council members from MAJURO to RONGELAP for siting purposes during construction period. ETA RONGELAP 26 April. Provide weekly and emergency air support, mail and personnel, KWAJALEIN, RONGELAP, and MAJURO.

PHASE III - 17 May to 26 June -- 40 Days

Ship's Schedule. Off-load men and equipment at PARRY. Make trips as time will allow to BIKINI and return ENIWETOK during materials fabrication period. Back-load fabricated materials, men, equipment, water to fill cisterns, and supplies and proceed to RONGELAP.

- 2. Construction Schedule. Complete fabrication of materials at PARRY. Proceed to RONGELAP and complete construction.

 Install and operate RONGELAP Radio Station. Native operator or radio to be checked out on this equipment. Fill fresh water cisterns, deliver material to off-island sites as shown on drawings, clean up area, and evacuate men and equipment to PARRY Island.
- 3. Support Schedule. Arrange transportation of 25 native males to RONGELAP for training purposes to arrive about 16 June. Continue air support. At MAJURO and EBEYE, make shipping pens for animals, prepare natives with their personal effects for evacuation to RONGELAP. At MAJURO make cradles for boats to be taken aboard the LST. This work to be done as a responsibility of DISTAD. Evacuation to take place about 28 June/1 July.

PHASE IV - 26 June to 4 July -- 8 Days

- 1. Ship's Schedule. Off-load at PARRY Island men, equipment, materials and supplies. Proceed to MAJURO and to EBEYE and pick up natives with their personal effects and off-load at RONGELAP. Proceed to new assignment.
- 2. Construction Schedule. Completed under Phase III.

3. Support Schedule. Evacuate natives from MAJURO and EBEYE to destination.

Actual construction was started on 4 March 1957 at PARRY Island in pre-cutting building materials, pre-casting cisterns and building footings, and undertaking as much prefabrication as possible. Eventually the pre-fabrication at PARRY Island constituted 25% of the total construction pro-ject.

On 12 March 1957 representatives of the AEC and Holmes & Narver accompanied the RONGELAP Project Officer of CINCPACFLT on another visit to the construction site to evaluate the conditions immediately prior to the start of work at the site.

On 15 April 1957 a meeting was held in the office of DISTAD, MA-JURO, at which procedures and scheduling of construction were clarified. This meeting resulted in revisions to road plans and agreement on the installation of cisterns on isolated islands, and the cutting of trees in convenient 4 x 6-foot lengths. It was also agreed that the District Administrator and an agriculturist of the Trust Territory would accompany five members of the RONGELAP Native Council to the construction sites to advise and act for the native people. Arrangements were effected for the support of this group.

On 22 April 1957 Holmes & Narver transmitted a Current Cost Estimate and drawings which had been approved by the AEC Contract Representative on 19 April 1957. The Current Cost Estimate amounted to

\$348,375, which exceeded the original estimate of \$276,190 because of revisions in original drawings, changes in equipment usage rates, and changes in the indirect cost rates. Of the \$72,185.00 increase, \$63,885.00 resulted from an increase in applied indirect cost. This was due partially to an increase in the application rate, but principally to the fact that in FY 1957 indirect costs were applied to the direct costs of aggregate, batch and equipment usage, whereas in FY 1956 no indirect costs were added to these factors.

The LST 618, which had been assigned as the support vessel, arrived at PARRY Island in ENIWETOK Atoll on 24 April 1957. The construction materials were loaded, 51 construction personnel were berthed, and the vessel departed for RONGELAP on 26 April 1957. It arrived there at sunrise on 28 April 1957. The ship anchored in the lagoon, while a demolition party in a DUKW dynamited the coral heads which obstructed the landing area. This work was completed to permit beaching of the LST at 1530 hours that day. The beach was of very soft sand, and two bull-dozers, one pulling and the other pushing, were required to move the loaded trailers ashore. As soon as shipment was placed ashore, clearing of areas for roads and those areas that had been previously staked for buildings was started.

On 1 May 1957 the five members of the RONGELAP Native Council,

accompanied by a representative of the District Administrator at MAJURO and an agriculturist of the Trust Territory, arrived in a Navy UF-1 plane in accordance with plans arranged at MAJURO on 15 April 1957. This group, accompanied by Holmes & Narver's General Superintendent of Construction, who also arrived by plane, inspected the work underway. After the inspection the five Council members acting for the RONGELAP people made certain decisions and requested revisions which involved the demolition of old buildings, the orientation of living quarters, rehabilitation of three brackish water wells, and the requirement of burial vaults for an adult, two stillborn infants, and a four-month old child.

In accordance with the over-all construction plan, the first structures completed were two warehouses and the council house. Additionally, the floor slabs for the church and eight community cisterns were poured. Old native huts in areas of new construction were demolished, and the precast footings and cisterns for living quarters were positioned. On 9 May the work on RONGELAP Island that had been planned for Phase II of the Rehabilitation Program was completed, and the LST departed for ENIAETOK Island where it beached at 1400 hours that day. At this construction site, all the materials were unloaded, and work on roads, settings of footings for houses, and construction of latrines was started. The planned work progressed faster than had been expected and was completed on 13 May.

On that date LST 618 with the construction force on board departed for PARRY Island.

Construction under the Third Phase of the program commenced when a construction force boarded LST 618 at ENYU Island, Bikini Atoll, on 25 May 1957. The vessel anchored off RONGELAP Island on the morning of 26 May and dispatched a boat ashore to pick up four council members who had remained on the island. The vessel then proceeded to ENIAETOK, where it beached at 0815 hours that day, and work commenced shortly thereafter. On 27 May with the construction crews ashore at ENIAETOK, the LST with six construction men journeyed to RONGELAP Island, where it unloaded materials destined for that site and then returned to ENIAETOK Island. Here seven living quarters, one church, seven latrines, six eating houses, seven bath houses, and five new community cisterns were constructed by 1 June 1957.

At 1300 hours that date the LST departed for RONGELAP Island.

At the close of two and one-half working days 21 living quarters were erected to floor level. At the end of one week 11 houses were completed, as were all latrines, six bath houses, and two eating houses. Work progressed at a rapid pace; on 14 June all construction, except final cleanup, was completed. Each of the four Native Council members expressed his satisfaction with the houses and the general reconstruction of the villages. On 17 June 1957, 10 days ahead of schedule, the construction crews

departed RONGELAP Atoll.

The construction job per se was a simple one. However, it required a great deal of planning and cooperation by the many governmental agencies involved. The construction effort is presented both pictorially and graphically at the end of this Narrative Summary. Part II of this report presents the Pictorial Review and Part III Building Lists and Plot Plans of the reconstructed villages. For record purposes a building list and plot plan of RONGELAP, as determined by a Holmes & Narver survey party on 27 April, are also included. (1954)

On 20 June 1957 representatives of the AEC and Holmes & Narver met with the District Administrator at MAJURO for a discussion of acceptance of the construction. The District Administrator stated that he had conferred with his representatives at RONGELAP and was prepared to accept the RONGELAP program with the exception of that scheduled for AILINGINAE. In the interests of economy the scheduled transfer of cisterns and building materials to AILINGINAE had been deferred. The acceptance by the Trust Territory Government would be confirmed by letter from the High Commissioner. The off-loading of the cisterns and the miscellaneous construction materials at AILINGINAE was accomplished 11 July 1957. Therefore, this is the completion date for work performed by Holmes & Narver in accordance with plans and specifications approved

for this program; the final cost of the engineering-construction was \$348,375. The acceptance by the Trust Territory Government is quoted below:

"ACCEPTANCE

"15 July 1957 ...

"I, Jack Adair Tobin, representative of the High Commissioner of the Trust Territory of the Pacific Islands, do hereby accept all installations constructed by the Atomic Energy Commission in connection with the rehabilitation of the Rongelap people, which have been turned over to them.

"/s/Jack Adair Tobin
"/t/Jack Adair Tobin"

HOMEWARD BOUND

While construction was still in progress, plans for implementing

Phase IV - the actual return of the natives - were being firmed. On 22

May 1957 the AEC Branch Chief at ENIWETOK requested the High Commissioner of Trust Territories to furnish the following information:

- 1. Separate lists of natives who would board the LST at EJIT and EBEYE upon completion of the construction.
- List of Trust Territory personnel would accompany the natives from above locations and transportation requirements
 for return of Trust Territory personnel to MAJURO and
 KWAJALEIN Atolls.
- 3. Medical facilities required for the natives during the trip.
- 4. The name of the Trust Territory representatives empowered with authority to accept all facilities and structures for Trust Territories Government in accordance with agreements; these representatives were requested to arrive at RONGELAP approximately four days prior to completion of construction.

On 24 May 1957 the Department of Interior issued a press release with text as follows:

"RONGELAP people to return to their homes in the Trust Territory of the Pacific Islands.

"Plans are being made for the return of the RONGELAP people who

were exposed to fallout during the nuclear experiments at the U.S.

Atomic Energy Commission's ENIWETOK Proving Ground in March,

1954, to their home atoll in the Marshall Islands in about two months,

the Department of the Interior announced today.

"The plans are being made as a result of information from the Atomic Energy Commission that the people may be returned to RONGELAP. The Commission has advised the Department that it has carefully evaluated data from several radiological surveys made during the past two and one-half years. The results of the latest survey indicate the presence of residual radioactivity at a level that is acceptable from a health point of view, both as regards the potential external gamma radiation exposure and Strontium-90 in the food supply, with the possible exception of land crabs. The RONGELAP inhabitants will be advised not to eat land crabs pending the results of future radiological surveys. Land crabs are not a major item of their normal diet.

"Eighty-two RONGELAP inhabitants were removed from their home atoll following the fallout that occurred after the March 1, 1954, nuclear test at the ENIWETOK Proving Grounds. They remained on KWAJALEIN until June, 1954, when they were moved to a village constructed for them on EJIT Island in the MAJURO Atoll.

"A number of RONGELAP inhabitants who were away from the atoll at the time of the fallout also have been living on EJIT or elsewhere in the Marshall Islands. The size of the group also has been increased by marriages with non-residents of RONGELAP and by births; about 200 persons will be returned to the island. The superficial radiation skin burns received by some of the people as a result of their exposure were healed by the fall of 1954. There has been a re-growth of hair, normal in color, texture and amount, in the individuals who experienced loss of hair following the fallout. The people have received periodic medical examinations from Atomic Energy Commission specialists and Trust Territory physicians. Medical examinations will be continued in the future.

"Plans for the rehabilitation of RONGELAP include the construction of new homes and community buildings, replacement of village access paths, increased water storage facilities, and installation of a two-way radio communications facility."

On Friday, 21 June 1957, the LST 618 departed PARRY Island, ENIWETOK Atoll, to pick up the natives and their personal property. The vessel arrived at EJIT, MAJURO Atoll, at 0800 hours on 25 June 1957. The loading and boarding started soon thereafter and were completed by the evening of 26 June 1957. At 0600 hours on 27 June 1957 the vessel departed

from MAJURO lagoon for KWAJALEIN to pick personnel and property at EBEYE Island. The vessel arrive there at 0840 and after completion of the evacuation departed at 1320 the same day for RONGELAP.

On board the LST 618 for the return of their homeland were 250 natives with their personal belongings, carried in every conceivable kind of container, from woven mats to galvanized wash tubs to new airplane luggage. Also on board were five coffins bearing the remains of Rongelapese who had died during the intervening 39 months since their forced evacuation in 1954. Returned with the natives were 30 pigs, 60 chickens, six dogs, one cat, one duck, one pet pigeon, and 12 outrigger canoes.

For this journey, special arrangements had been effected in the LST 618 for the safety and comfort of the passengers. Wire screening was placed at the ship's rail, at hatches, and at ventilators to protect children while playing on deck. On the troop deck were located bunks with mattresses, one for each person, made up with clean bed linen. During the daylight hours of the return voyage, all the Rongelapese remained on the upper deck beneath a large canvas awning. In spite of close confinement the people appeared contented: they were returning home. The trip was pleasant and uneventful, and the vessel arrived at RONGELAP on the morning of 29 June 1957. Before debarking, all the Rongelapese gathered beneath the deck awning. There they offered prayers and hymns

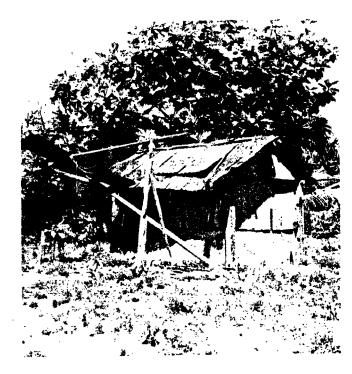
of thanksgiving to God for their safe return to their native land.

The ship beached at 0900 hours that date. First object to be seen upon debarking was a huge canvas sign strung up between palm trees. In Marshallese it proclaimed, "GREETINGS, RONGELAP PEOPLE. WE HOPE THAT YOUR RETURN TO YOUR ATOLL IS A THING OF JOY AND YOUR HEARTS ARE HAPPY." By evening the natives, their livestock, and other personal possessions had been set ashore. With the exception of unloading of materials at AILINGINAE, as previously noted, this marked the completion of Phase IV of the repatriation of the RONGELAP people.

On 11 July the AEC Branch Chief, ENIWETOK, received the following message from the High Commissioner, Trust Territories of the Pacific Islands:

"Greatly pleased to learn successful completion AEC and Holmes & Narver phase of Rongelap Repatriation Program. Our heartiest thanks and congratulations to you and all those participating in the return of Rongelapese to their Island."

PART II
PICTORIAL REVIEW



SINCE THE DAWN OF RECORDED TIME . . .



.... THE RONGELAPESE LIVED



.... IN FLIMSY HOUSES LIKE THIS



... AND THIS

■ BEFORE RECONSTRUCTION ■

PAGE 2-1

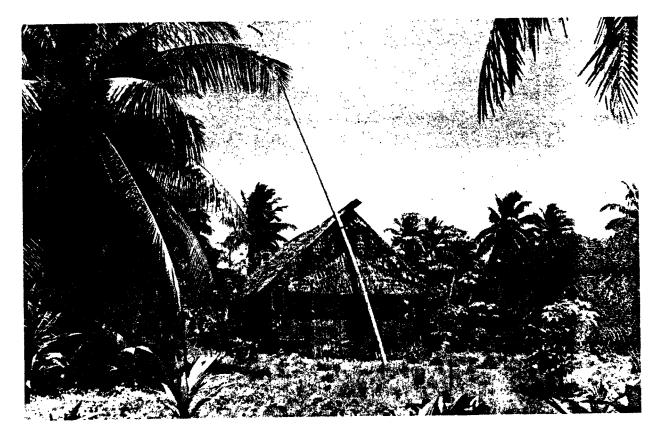


THE MAGISTRATE'S HOUSE

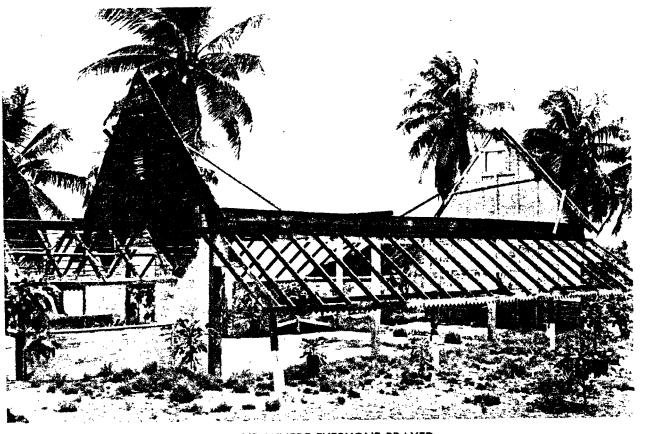


INTERIOR OF RONGELAP HOUSE

BEFORE RECONSTRUCTION



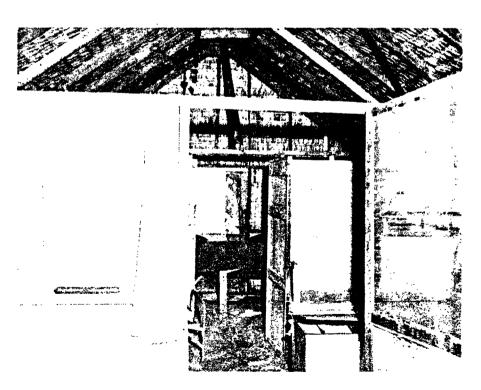
THIS IS WHERE THE YOUNG WERE EDUCATED



.... AND WHERE EVERYONE PRAYED



NATIVE COOK HOUSE



INTERIOR OF DISPENSARY



JAPANESE SURVEYING MONUMENT



RONGELAPSE CEMETERY



DRYING SHED - GROUND LEVEL



COPRA DRYING SHED - RAISED ON SUPPORTS

BEFORE RECONSTRUCTION



LUMBER SHED



TWO-STORY STOREHOUSE



BOAT HOUSE . . . DENUDED BY TIME



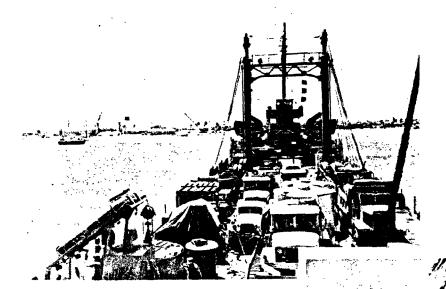
GALVANIZED IRON WATER TANK

THIS WAS A WELL

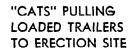


20-FT. DIAMETER CONCRETE RESERVOIR

11



LST LEAVES PARRY LOADED WITH CONSTRUCTION MATERIALS



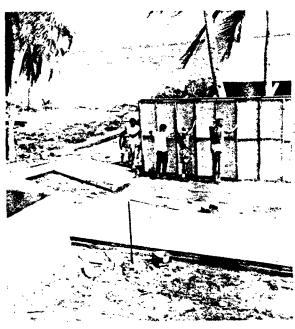


MIXING CONCRETE FOR CHURCH FLOOR SLAB

CONSTRUCTION VIEWS



MATERIALS AND EQUIPMENT UNLOADED



PLACING PRE-CUT WALLS OF WAREHOUSE



NATIVE COUNCIL INSPECTING CONSTRUCTION



COUNCIL HOUSE FLOOR SLAB

CONSTRUCTION VIEWS

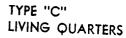
PAGE 2-9

TYPE "A"
LIVING QUARTERS



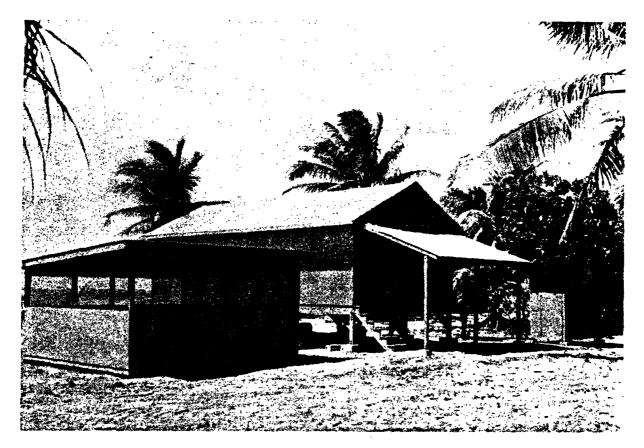


TYPE "B"
LIVING QUARTERS
WITH CISTERN (LEFT)

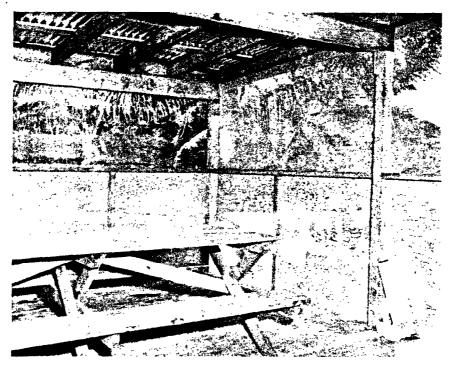




AS-BUILT STRUCTURES



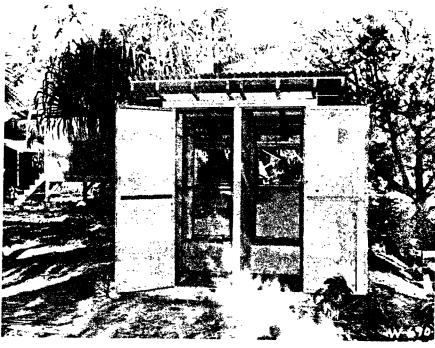
EXTERIOR OF EATING HOUSE (FOREGROUND)
WITH TYPE "C" LIVING QUARTERS (BACKGROUND)



INTERIOR OF EATING HOUSE

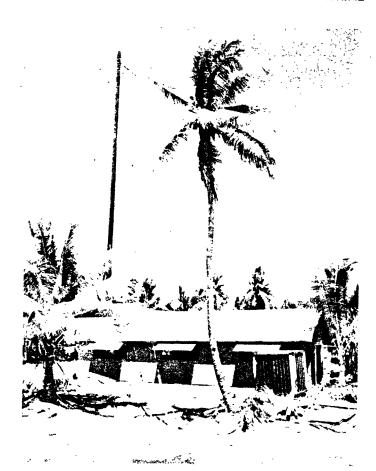
■ AS-BUILT STRUCTURES =





BATH HOUSE

TYPICAL LATRINE

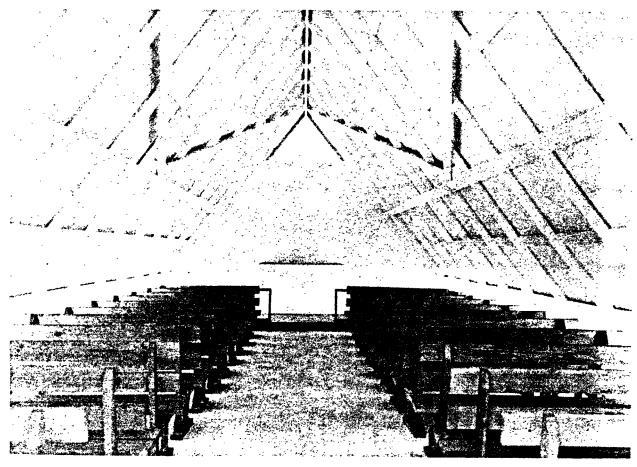


COUNCIL HOUSE WITH RADIO ANTENNA AND FLAGPOLE

= AS-BUILT STRUCTURES ==

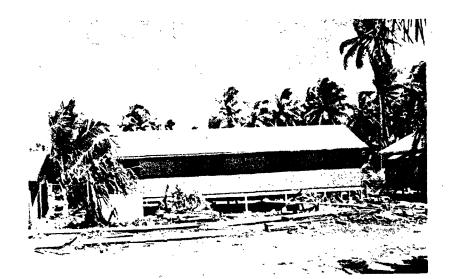


EXTERIOR OF CHURCH



INTERIOR OF CHURCH

AS-BUILT STRUCTURES



SCHOOL HOUSE ALMOST COMPLETED



INTERIOR OF LIVING QUARTERS



BOAT HOUSE

RONGELAPESE VILLAGE ON EJIT ISLAND MAJURO ATOLL





ASSEMBLY OF HOUSEHOLD EFFECTS FOR SHIPMENT

PREPARATION FOR DEPARTURE FROM EJIT ISLAND



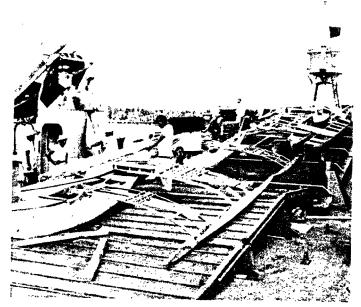
≡ LEAVING TEMPORARY HOME **=**



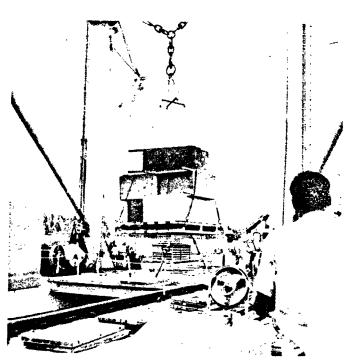
NATIVE COFFIN BEING PLACED INTO NEW CASKET



A NATIVE FAMILY BEFORE BOARDING THE LST



DUGOUTS AND PERSONAL EFFECTS BEING LOADED ABOARD THE LST



E LEAVING TEMPORARY HOME



LOADING A CRATE FOR FERRYING TO LST

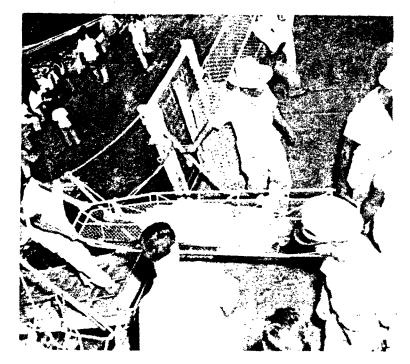




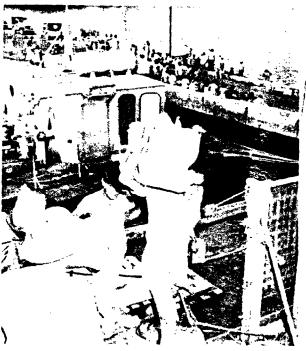


PLACING WIRE MESH TO PROTECT CHILDREN

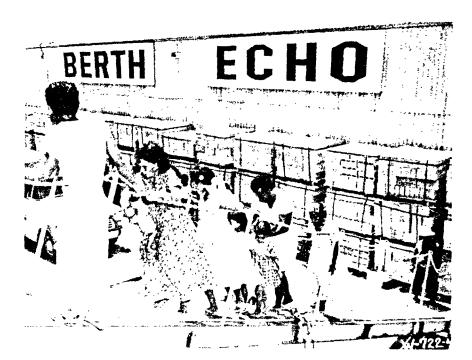
LEAVING TEMPORARY HOME



THEY CAME ABOARD ON STRETCHERS



... LADEN WITH THEIR POSSESSIONS



.... AND WITH THEIR CHILDREN



FAREWELL

.... ADDRESS IS DELIVERED BY NATIVE PREACHER

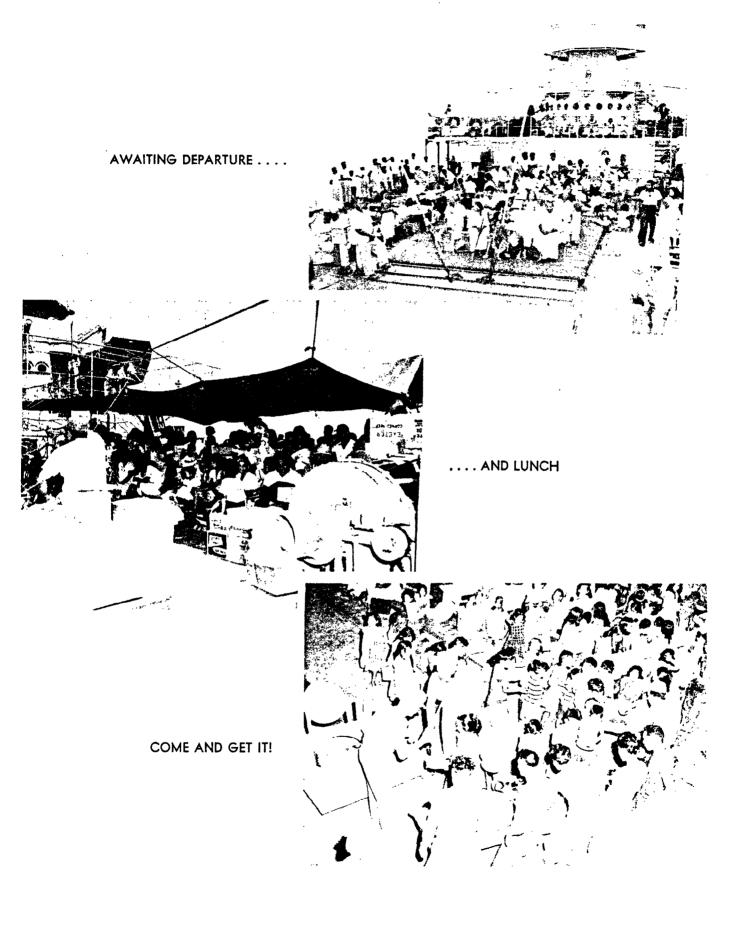
.... GIFTS ARE PRESENTED BY MAJURO NATIVES TO DEPARTING RONGELAPESE



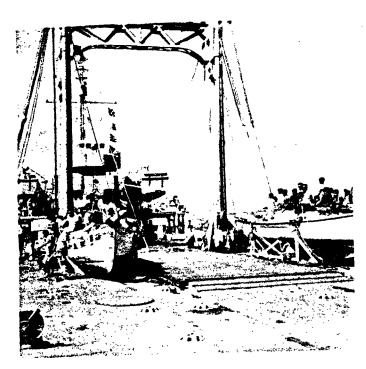
.... HYMNS ARE SUNG
BY RONGELAP (LEFT)
AND MAJURO NATIVES (RIGHT)

ELEAVING TEMPORARY HOME

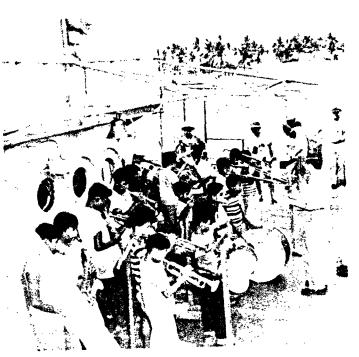
PAGE 2-19



EN ROUTE



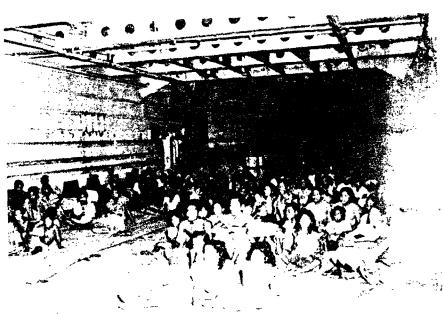




YOUTHFUL BAND PRACTICES



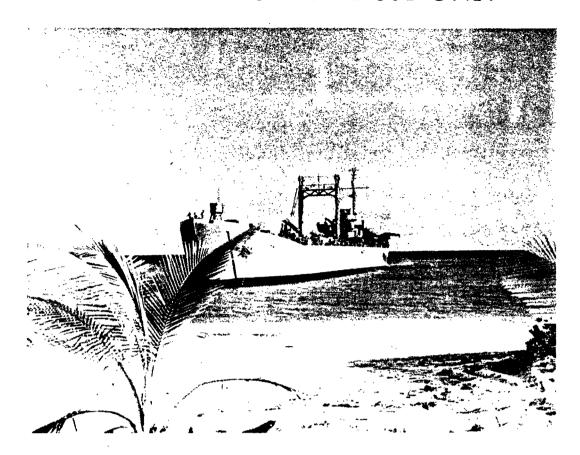
ONE PIGEON RETURNS TO RONGELAP



EVERYBODY LOVES THE MOVIES

EN ROUTE

PAGE 2-21



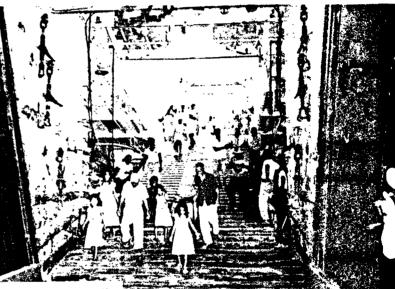
THE LST APPROACHES THE BEACH OF RONGELAP ATOLL

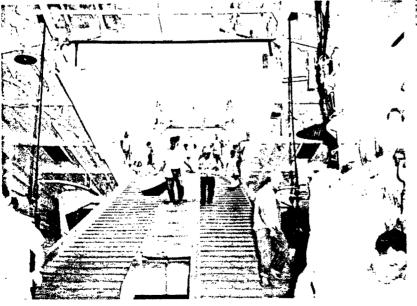


EN ROUTE =



THE OLDEST RONGELAP RESIDENT AWAITS DEBARKATION





YOUNG, OLD

....AND BOATS HAPPILY GO ASHORE

EN ROUTE

PAGE 2-23



THE NATIVES HAVE RETURNED

....AND ARE WALKING

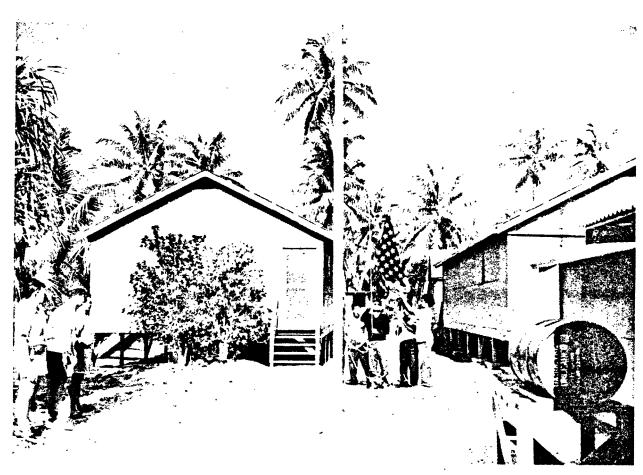


... OR ROLLING HOME



A WELCOME SIGN GREETS THE RETURNEES.—

"GREETINGS, RONGELAP PEOPLE. WE HOPE YOUR RETURN TO YOUR ATOLL IS A THING OF JOY AND YOUR HEARTS ARE HAPPY."



THE FLAG IS RAISED



NEARING THE NEW VILLAGE



E AT HOME



....PERSONAL EFFECTS ARE PILED UP



AT BOTH WAREHOUSES



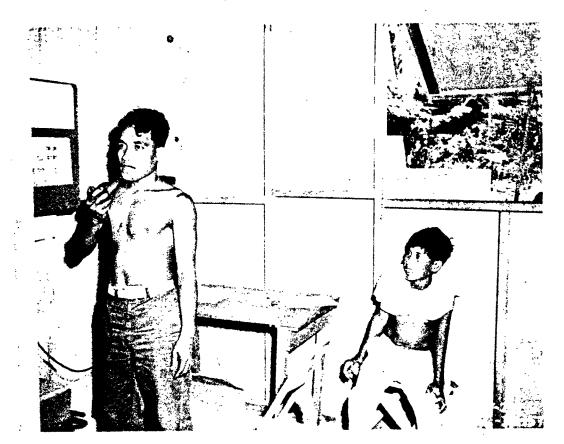
ALL RONGELAPESE



....CLEARLY ARE DELIGHTED



....WITH THEIR NEW HOMES



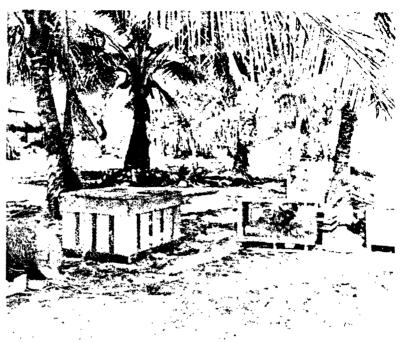
THE FIRST RADIO MESSAGE IS SENT



THE LAST MEAL FROM THE LST IS SERVED



"SUSIE," THE SOW THAT STAYED BEHIND



CRATED CHICKENS AWAITING RELEASE



YOUNG COUPLE STROLLS TO BEACH



DUGOUTS UNLOADED ON THE BEACH

■ AT HOME ■



PROUD MOTHER HOLDS HER CHILD



NATIVE GIRL STRUMS A TUNE



FISHERMAN CASTS HIS NET



.... FOR A FAIR CATCH



GRATEFUL RONGELAPESE LEAVE THANKSGIVING SERVICE

PART III

SITE PLANS AND BUILDING LISTS

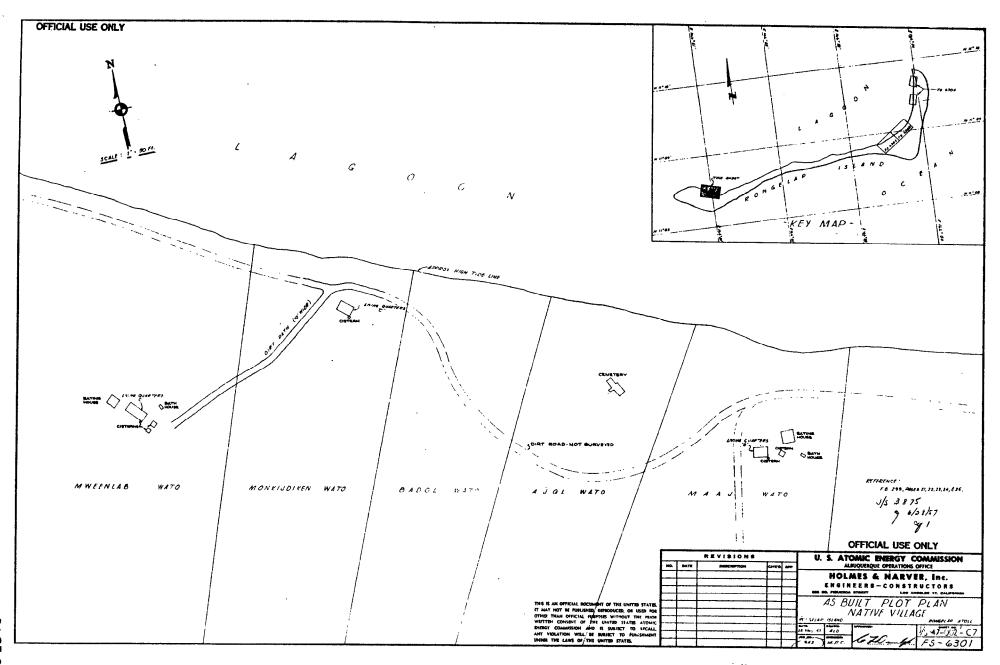
OFFICIAL USE ONLY

BUILDING LIST 1957

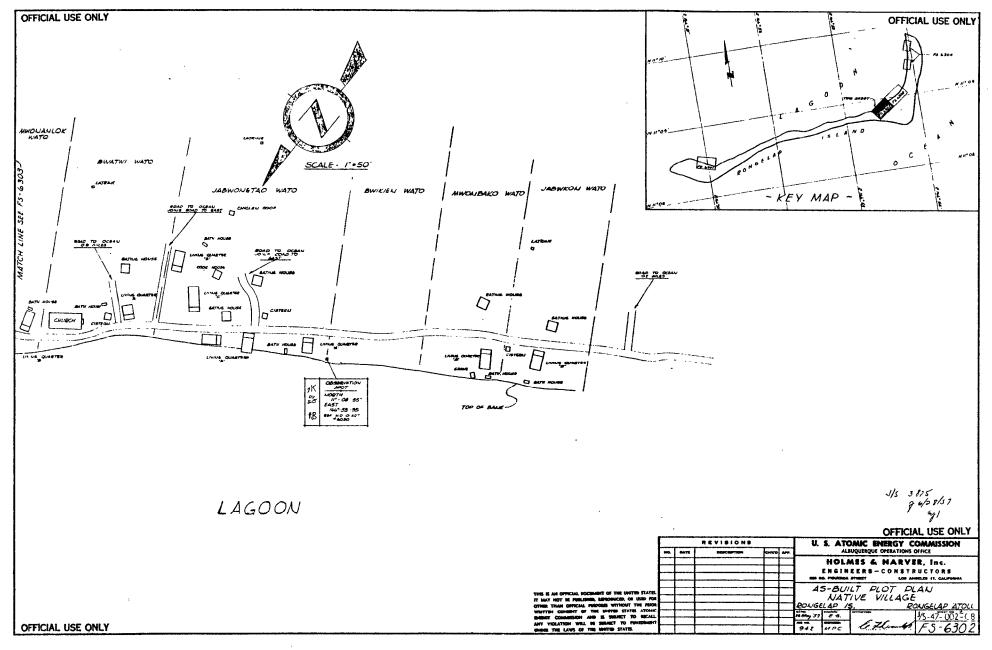
(Refer to Figures on pages 3-3 to 3-8 inclusive).

Ī	Required	H&N to build	Furnish materials for
Type A - living quarters	9	5	4
Type B - living quarters	18	18	2 interior parti- tions per house
Type C - living quarters	11	11	3 interior parti- tions per house
Boat house	1	1 .	
Cook houses	21	1	
Community cisterns (total)	34		
a. Aluminum cisterns (new) 7	7	•
b. Concrete cisterns (new)	•	15	
c. Reconstructed cisterns	12	12	
House cisterns	39	39	
Chicken coops	25	1 .	24
Bath houses	27	27	
Latrines	23	23	
Eating houses	21	21	
Burial vaults (caskets)	4	4	
Church	1	1	,
School	1	1	
Dispensary (school)	1	1	
Chapel	1	1	

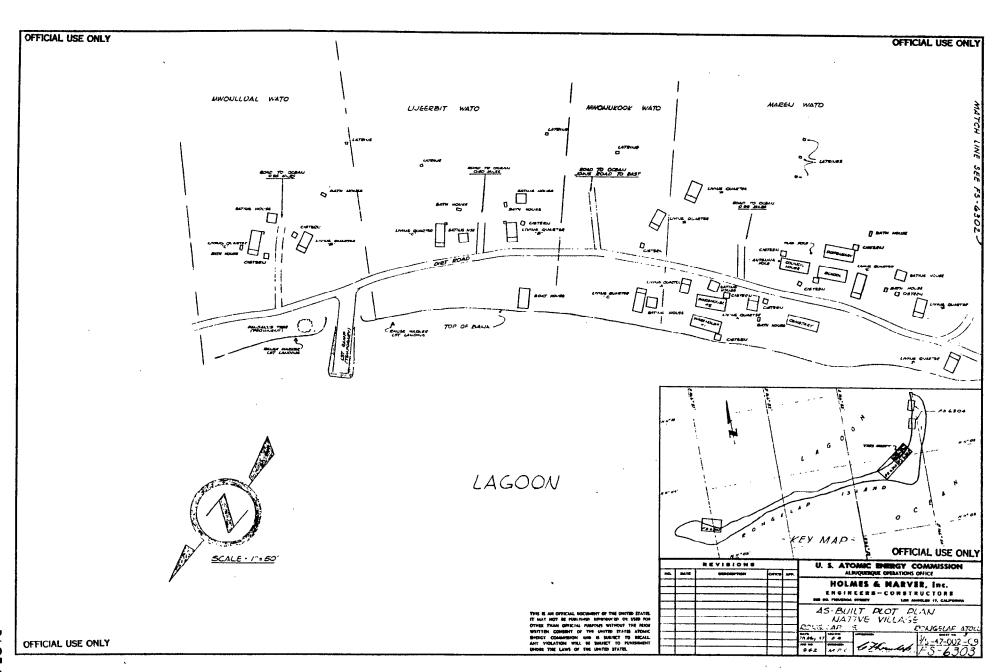
	Required		H&N to build
Storage sheds	2		2
Council house	1		1
Flag pole	1		1
			•
Removal of coral heads		930 cu yd	
Roads graded		8.2 miles	
Recreation areas		6944 sq yd	
Thin coconut groves		64 acres	
Tree nurseries cleared		666 sq yd	

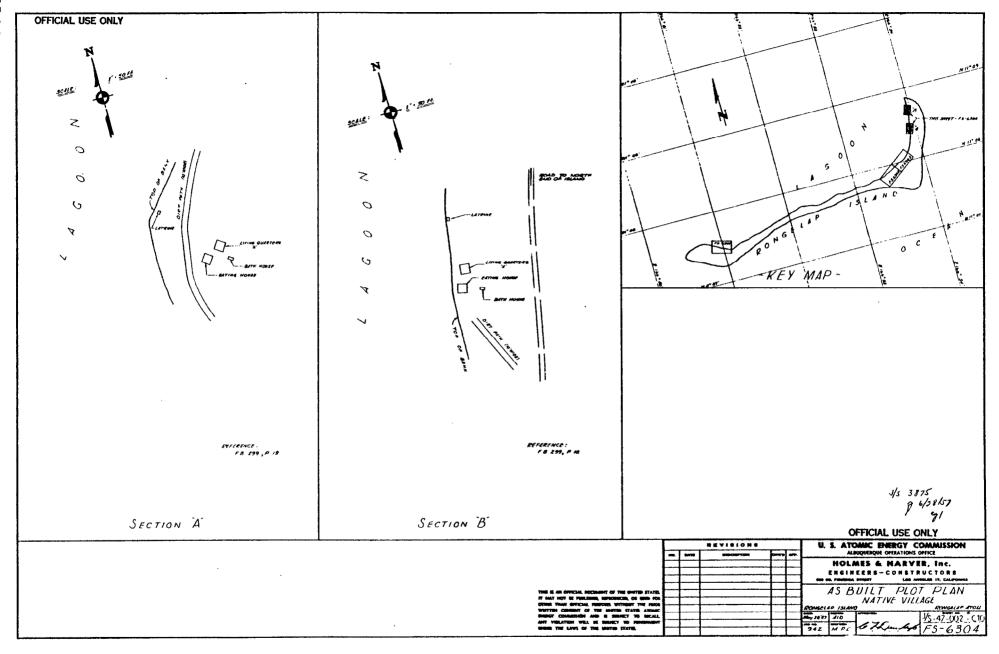


PAGE 3-3

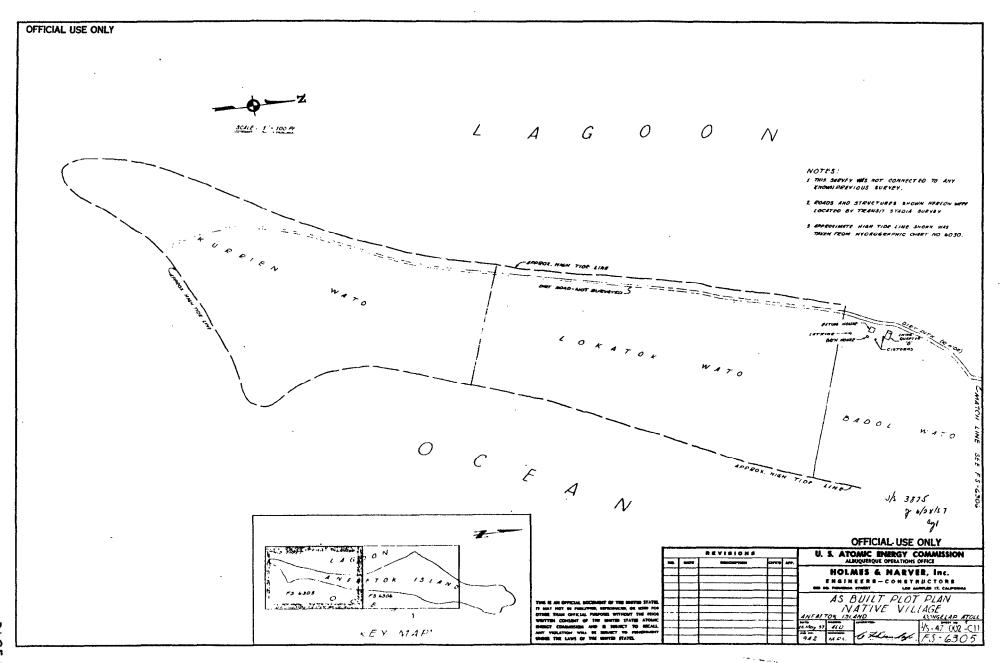


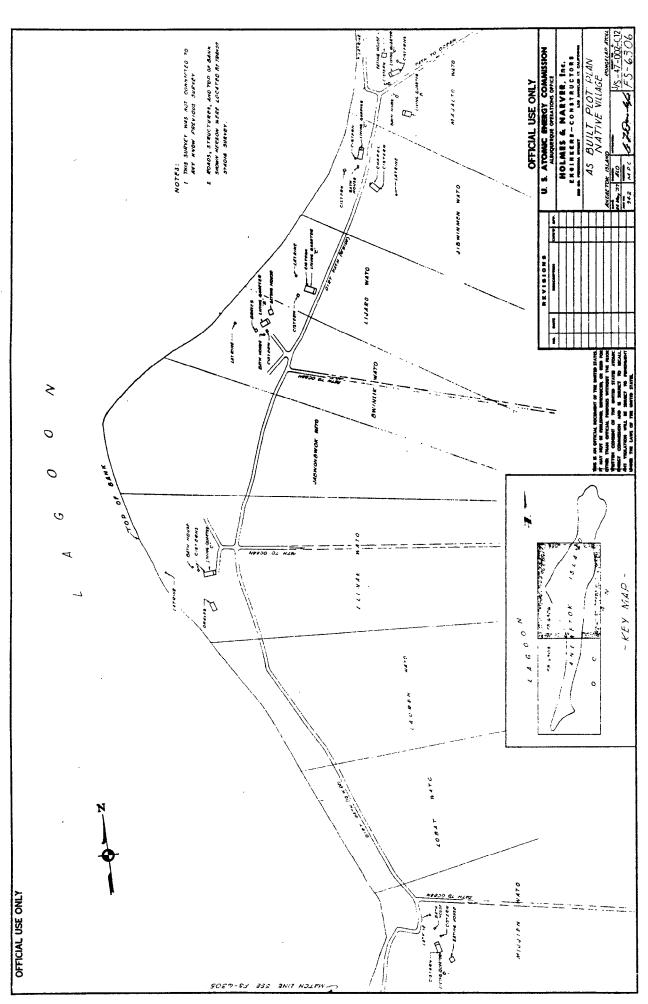
OFFICIAL USE ONLY





OFFICIAL USE ONLY





OFFICIAL USE ONLY

BUILDING LIST 1954

(Refer to Figure on page 3-15).

Bldg. No.	Rooms - Size	Construction	Floor & Roof	Use
1	9 x 15	One Room Pole & Palm	30" off ground Wood Floor Palm Roof	Copra Drying
2	7 x 7	Wood Upperstruc. Concrete Base		Cistern - Fresh Water
3	One Room 8 x 13	Pole & Palm Some Lumber	Coral Floor	Residence
4	One Room 6 x 10	Pole & Palm	Coral Floor Palm Roof	Repair Shop
5	One Room 5 x 8	Pole & Palm	Coral Floor Palm Roof	Shed somewhat dilapidated. Not used.
6	One Room 8 x 10	Pole & Palm	Coral	Chicken Pen
7	One Room 5 x 25	All Sides Open	Coral Floor Palm Roof	Shed
8	7 x 7	Concrete Base Wood Upper	Concrete Floor Corr. Iron Roof	Cistern - Fresh Water
9	6 x 10	Pole & Palm	Coral Floor	Lean-to
10	One Room 12 x 15	Pole & Palm 18" off ground	Wood Floor Palm Roof	Residence
11	Two Room 24 x 30	Wood Const. Palm on Part of Sides	Wood Floor Palm Roof	12' x 18' main house with a 6' roofed porch all around magistrates residence

Bldg. No.	Rooms - Size	Construction	Floor & Roof	Use
12	One Room 12 x 24	Palm & Pole Const.	Coral Floor Wood & Palm Const.	Residence
13	6' Dia.	Galv. Iron		Water Tank
14	One Room 6 x 15	Palm & Pole	Coral Floor Palm Roof	Cook House
. 15	One Room 6 x 6	booW	Coral Floor Palm Roof	One Hole La- trine
15A .	One Room 4 x 6	Palm & Pole	Coral Floor Corr. Iron Roof	Latrine
16	One Room 10 x 20	Pole & Palm 12" off ground	Plywood Floor Palm Roof	Residence
17	4 x 5	All open	Palm Roof	Pen or utility shed
18	One Room 9 x 15	Pole & Palm	Wood Floor Palm Roof	12" off ground Residence
19	7 x 12	Conc. Base Wood Sides	Corr. Iron Roof	Cistern - Fresh Water
20	One Room 10 x 20	Pole & Palm Matting Siding	Coral Floor Palm Roof	Residence
21	8 x 10		Palm Roof	Chicken Coop
22	5 x 5 out. 3 x 3 inside	Stone - Const.	Open	Brackish Wa- ter Well 8' deep 7' to wa- ter

Bldg. No.	Rooms - Sizes	Construction	Floor & Roof	<u>Use</u>
23	One Room 8 x 12	Pole & Palm Screen Windows	Coral Floor Palm Roof	New Residence
24	One Room 4 x 6	Pole & Palm	Coral Floor Palm Roof	Contains headwood- not large enough for Residence - must be a HONEY- MOON COTTAGE
2 5	20 x 40	2 x 4 & Wood siding - good const.	Open sides Roofed Wings	Church'- Burned' Down
26	One Room $7 \times 10 \&$ lean to 7×7	2 x 4 Frame Const.	Coral Floor Palm Roof	Residence
27	6 x 6	Pole	Palm Roof	Chicken Coop
28	5 x 10	Wood Frame	Corr. Roof Wood Floor	Drying Shed
29	One Room 6 x 9	Wood Frame Wood Siding	Coral Floor Palm Roof	Residence
30	One Room 6 x 10	Wood Frame	Coral Floor Palm Roof	Shed
31	Two Room 7 x 20	Pole & Palm	Coral Floor Palm Roof	Residence
32	One Room 6 x 12	Pole & Palm	Coral Floor Palm Roof	Cook House
33	8 x 8	Concrete	Corr. Iron	Water Catcher - Cistern Fresh Water

Bldg. No.	Rooms - Sizes	Construction	Floor & Roof	Use
34	7 x 15	Pole & Palm	Coral Floor Palm Roof	Boat House
35	30 x 75	Plot		Cemetery
36	Three Room 18 x 32	2 x 4 Wood Frame Const.	Plywood Floor & Partitions Palm Roof	12" Above ground on Conc. Piers- Dispensary
37	7 x 7	Conc. Base Wood Upper	Corr. Iron Roof	Cistern - Fresh Water
38	One Room 24 x 36	2 x 4 Frame Woven Siding	Coral Floor Palm Roof	Contains 2 - 3 x 8 Tables School
39	Three Room 15 x 21	2 x 4 Frame Palm Sides	Plywood Par- titions Coral Floor Palm Roof	Store
40	One Room 8 x 18	Pole Const. Wood Sides	Coral Floor Palm Roof	Residence
41	5 x 5	Pole Frame Wood Sides	Coral Floor Corr. Roof	(Could be a Latrine) Shed
42	Two Room 8 x 10	Pole & Palm	Coral Floor	6 Hole Latrine
43	One Room 10 x 15	Pole & Palm	Coral Floor Palm Roof	Lumber Shed
44 .	9 x 18	Pole Frame	Coral Floor Palm Roof	All sides open Drying or Work Shelters
45	9 x 25	Same as 44	Same as 44	Same as 44

Bldg. No.	Rooms - Sizes	Construction	Floor & Roof	Use
46	One Room 12 x 18	Pole & Palm	Coral Floor Palm Roof	Residence
47	One Room 6 x 10	Pole & Palm	Coral Floor Palm Roof	Residence
48 a.	One Room 9 x 12	2 x 4 Frame Wood & Screen Sides	Coral Floor Palm Roof	Store - has lean- to on one end.
ъ.	12 x 18	2 x 4 Frame Wood Sides	Wood Floor Palm Roof	Sail Loft-has porch 24" above ground.
с.	7 x 9	2 x 4 Frame Bldg. Siding	Palm Roof Coral Floor	Storage Bldg.
49	7 x 7	Concrete Base Wood Upper	Corr. Roof	Cistern - Fresh Water
50	One Room 12 x 15	Pole & Palm	Coral Floor Palm Roof	Residence
50A	3 x 5	Wood Const.		Latrine
51	One Room 9 x 15	Pole & Palm	Coral Floor Palm Roof	Residence
52	4 x 6	Pole & Palm	Coral Floor Palm Roof	Shed
53	One Room 12 x 18	Wood Frame Const.	Coral Floor Palm Roof	Residence
54	7 x 7	Conc. Base Wood Upper	Corr. Iron Roof	Cistern - Fresh Water

BUILDING LIST 1954 (Continued)

Bldg. No.	Rooms - Sizes	Construction	Floor & Roof	Use
55	Two Room 10 x 20	Frame Const. Wood Sides	Coral Floor Palm Roof	Plywood Par- tition Residence
56	5 x 6	Wood Const.		Shower Room
57	Four Room 18 x 24	2 x 4 & 4 x 4 Frame Woven Mat Sides	Wood Floor Palm Roof	Residence
58 a & b	20' Dia.	Two Conc. Reservoirs - Conc. Roof		
59	One Room 12 x 18	Pole & Palm Wood Sides	Wood Floors Palm Roofs	Residence
60	Two Room 12 x 15	Pole & Palm Wood Sides	Wood Floors Palm Roofs	Residence
61	6 x 9	Conc. Base Wood Upper	Corr. Iron Roof	Cistern - Fresh Water
62	One Room 10 x 15	Wood 2 x 4 Frame Wood Sides		Shed
63	One Room 8 x 10	Pole & Palm	Coral Floor Palm Roof	Residence
64	8 x 12	Pole Sides	Palm Roof	Chicken Pen
65	One Room 15 x 20	Pole & Palm	Coral Floor	Cook House
66	4 x 4	Coral Rock & Cement Mortar	7' Deep 2' Water	Well-Brackish Water

NOTE: The above Uses for the structures as determined by the best ability of the H&N survey crew is not necessarily the exact use the buildings were put to by the natives.