[redacted] OFFICIAL USE ONLY

405708

R

JOINT REPORT FROM WEATHER STATION AND OFF-ATOLL INSPECTION PARTY

OFFICIAL USE ONLY

Kwajalein Atoll, 11 December 1955

I. MEMBERS OF PARTY.

Lt. Col. Joseph V. Morey, Cml. Corps, representing JTF 7.
Major Clyde W. Bankes, Cml. Corps, representing DOD.
Mr. Willard A. Gustafson, representing Sandia Corp. and Project 31.1.
Mr. Marvin S. Pickard, Land and Claims Administrator, representing Trust Territory of the Pacific.
Mr. Frank C. Kirk, representing Holmes and Narver Inc.

II. PRELIMINARY ACTIVITIES.

BEST COPY AVAILABLE

Monday, 5 December 1955. - Arrival of Lt. Col. Morey and Major Bankes from Honolulu, meeting Mr. Kirk at Kwajalein Atoll. Initial conference regarding nature of mission, information available from the three sources and general pooling of data.

Tuesday, 6 December 1955. - Conference with Cmdr. L. E. Sloan and Lt. Cmdr. A. L. Walker (Air Operations Officer and Naval Liason Officer for Task Group Seven, respectively). Tentative schedule of inspection tours set up. General discussion of land availability with Mr. William C. White, Land Title Officer for the Marshall Islands. Mr. Gustafson arrived approx. 1800.

Wednesday, 7 December 1955. - Mr. Pickard arrived approximately 0630 and first mission was put under way.

OFFICIAL USE ONLY

III. ITINERARY.

Wednesday, 7 December 1955. - Kwajalein Island to Kusaie, Lele Island. Departed Kwajalein approximately 0730, arrived Lele after two hours forty-five minutes elapsed flight time.

Thursday, 8 December 1955. - Kusaie to Kwajalein. Departed Kusaie approximately 1600 and arrived Kwajalein after approximately two hours fifty minutes elapsed flight time.

Friday, 9 December 1955. - Kwajalein to Ailinginae Atoll. Departed Kwajalein approximately 0700 and arrived Sifo Island, Ailinginae Atoll after approximately one hour thirty minutes elapsed flight time. Did not land because of high winds. After approximately thirty minutes aerial reconnaissance departed Ailinginae Atoll for Wotho Island, Wotho Atoll, arriving after approximately thirty minutes elapsed flight time. Departed Wotho approximately 1430 arriving Kwajalein after approximately one hour eight minutes elapsed flight time.

Saturday, 10 December 1955. - Departed Kwajalein approximately 0700 arriving Uterik Island, Uterik Atoll after one hour forty-five minutes elapsed flight time. Departed Uterik approximately 1230 and arrived Eniwetak Island, Rongerik Atoll after one hour elapsed flight time. Departed Rongerik approximately 1630 and arrived Kwajalein after approx-

3204

[redacted] OFFICIAL USE ONLY

~~OFFICIAL USE ONLY~~

imately one hour ten minutes elapsed flight time.

Sunday, 11 December 1955. - Departed Kwajalein approximately 0700 arriving Ujelang Island, Ujelang Atoll after two hours fifteen minutes elapsed flight time. Departed Ujelang approximately 1430 arriving Kwajalein after three hours fifteen minutes elapsed flight time. Difference in time due to tail wind on outward trip and head wind on return trip.

IV. LAND PROBLEMS.

Through the good offices of Mr. Pickard, Trust Territory Land and Claims Administrator, all land required for the various programs at all sites has been offered freely for use during the projected operation by the local residents without monetary consideration. At Kusaie, Lele Island and Rongerik, Eniwetak Island, previous agreements drawn up with the local landowners stipulate that buildings and facilities may be used by the local population for their own purposes in the absence of the Task Group personnel, provided that no damage is done to such structures and facilities. In all cases where it is necessary to remove existing food-producing trees, e.g., palms, pandanus, breadfruit, citrus trees, such trees will be paid for at the current valuation. It has been requested by the Trust Territory and appears feasible and practical to this party that any low-value items, such as tents, be surveyed at the conclusion of the operation and left for the use of the local population in the interests of maintaining good relations; this especially in view of the fact that salvage of such items would appear to involve a more costly expenditure in labor than the salvaged items would be worth. Specifically, the foregoing does NOT refer to expensive scientific instruments, radios, distillation units and similar items which can be economically salvaged and re-used.

V. DETAILS OF SPECIFIC SITES.

a. Kusaie, Kusaie and Lele Islands. Project 6.2 Station: Effects of Atomic Explosion on Ionisphere. This is a cross-shaped station consisting of five antenna poles, one 90' high in the center of the cross, the other four approximately 8' high located at a distance of 100' from the center antenna. Line of sight between poles should be ground-cleared to a width of approximately eight feet. Arrangements have been made thru the auspices of the Trust Territory Representative to have this clearing accomplished by the local population. Space approximately 30' x 30' between poles in the immediate vicinity of the 90' antenna is required for a project-furnished trailer. It will be necessary to effect minor repairs to a causeway connecting Lele and Kusaie Islands and to shore up two native-built bridges on this causeway sufficiently to support passage of the trailer and prime-mover. The local population has been advised as to what will be required in the way of repair and/or rebuilding of these bridges and has volunteered to do this work at no charge. The bridges are approximately 8' wide x 15' long and as a precautionary measure some heavy bridge timbers and spikes should be sent with the next H&N mission in case additional shoring is required. The natives plan to use heavy mangrove logs laid side by side and extending three feet past each end of the causeway; fifty pounds of 16 penny nails have been obtained free of charge at Kwajalein and will be sent to Kusaie by Cmdr. Walker if and when air traffic to Kusaie is resumed. A site for the Ionisphere

Station has been selected on Kusaie Island on a point of land on the eastern side of the island approximately 1 - 1½ miles by trail from the end of the causeway. The owner of the land in question is Mr. Herbert Fighra. Mr. Jack Youngstrom is an American trader permanently stationed at Lele Island. First choice as a native interpreter is John Melander; second choice is Shileng, Secretary of the Local Council. There is a Weather Station, already erected, at Lele Island. Housing and messing facilities etc. for Project 6.3 personnel will be at the Weather Station which can adequately handle scientific personnel. It is anticipated that the Weather Station will consist of twenty-one men and the 6.3 group will consist of three men with possible replacements of three men. The people of Kusaie and Lele are Protestant Christians; total population is approximately 2700 individuals. Reference maps and charts for this area include: Hydrographic Chart --, Dr-J-6-2085K-5 (Ionisphere Station), and H&N Const. Dwgs. for Weather Station.

b. Ailinginae Atoll, Sifo Island. Project 1.9: Wave Recorder Station. No construction involved. This site is uninhabited. As noted above it was impossible to land at this site due to high winds; however, three aerial photographs of the island are attached to this report, copies of which will be furnished by the DOD Representative to Scripps Institute of Oceanography which is charged with installation of this station. Mr. Pickard has authorized use of the land required at this site. Reference maps and charts of this area include: Hydrographic Chart "Plans in the Marshall Islands" No. 6026 published May 1944.

c. Wotho Atoll, Wotho Island. Projects 5.6 and 31.1. Project 5.6 is a Raydist Station consisting of eight towers 60' high and six guy anchors. The towers are arranged six on a thirty foot radius around one center tower. Guy anchors are on a 60' radius from the center tower except for the tower at 60' from center. The outer guy for this latter tower is 90' from the center tower. Orientation is not critical. Overall area is a square approximately 125' on a side. It is reported that tower bases and guy anchors will require approximately fifty cubic yards of concrete. Beach sand will be satisfactory for "fines" and local natives advise that limited quantities of 1" minus coral aggregate are available on the ocean side of the island, accessible by native road. Time prohibited inspection of this aggregate site, but similar 1" minus coral is used extensively for stabilization around native houses. The site selected for the Raydist Station is on the extreme western tip of Wotho Island; ground clearing is limited to the removal of some palm trees (locally valued at $15.00 apiece) and miscellaneous light island shrubbery. Stabilization of site is unnecessary. Ample room in the vicinity of the village is available for housing facilities. An access road from the village area to the station site will be required for construction purposes; a direct continuation of the existing village road would involve the removal of approximately fifty palm trees and miscellaneous small shrubs, but a winding road following an existing foot path could be dozed out requiring removal of only small island shrubbery. Some stabilization would be required in places. The marine entrance to the lagoon is satisfactory but the reef is wide and shelving on the lagoon side; thus an LST or LSD would be required to anchor at least one-two hundred yards off shore. An LCM would be able to beach at high tide but offloading of equipment might be delayed until following low tide. There are fifty-four locals at this site, all Protestant Christians. Ten to sixteen people will be stationed at this site, including a cook, cook's helper and radio operators. There is an indication that the cook and

helper will be H&N personnel. Quarters, sanitation and messing facilities will be necessary, including a distillation unit for fresh water and a small generator for power. Housing tents should be located at least one hundred yards from nearest native housing. There are three Corps of Engineers Bench Marks located near the point selected for the 5.6 Station. The local chief is Emijwa; one interpreter is named Ado (pronounced Ah-da) and the local schoolteacher (native) is Miss Loomis, who speaks English adequately. The 31.1 requirements are instrumentation in a tent, location not critical. Reference maps and charts are: Hydrographic Chart No. 5429 published November 1944. This is not accurate as to present delineation of Wotho Island, since a sand spit has built up at the western tip of the island. See also SK-5231-52676.

d. Uterik Atoll, Uterik Island. Two Radsafe Monitor Stations. There will be six to eight personnel comprised of two Radsafe monitors, two rotation personnel, three radio operators and one radio maintainance man. Housing, sanitation and limited messing facilities will be required, together with a distillation unit and small generator for power. Access to Uterik Island via sea is questionable as charts indicate entrance passage to the lagoon is inhibited by two coral heads in the middle of the passage with a minimum clearance at low tide of two to two and one-half fathoms. It is suggested that these coral heads be blasted out to provide safer access. The reef is wide and shallow but should permit access by LCM at high or mid tide. There are one hundred ninety locals on Uterik, all Protestant Christians. Adequate land is available north of the village, requiring no clearing and minimum grading. The chief is Aeen (pronounced Hine) who is blind and approximately seventy-five years of age. His "Low Chief" is Gambass. Kito is the local magistrate and Andy is the best-qualified interpreter with an adequate command of English. The owner of the land in question is the Alab, Lanwe. Reference maps and charts include: Hydrographic Chart --.

e. Rongerik Atoll, Eniwetak Island. Projects 6.3, 2.65, 31.1. This island is uninhabited. Project 6.3 station is similar to that on Kusaie, Effects of Atomic Explosion on Ionisphere. The site of Castle Station 6.6 will be suitable for this station. The Castle 60' tower and guys are existing; ground requires light clearing of undergrowth and area will be accessible when existing Castle roads are restored. These roads are presently badly overgrown, but no heavy clearing will be needed. Project 2.65 consists of one project-furnished and installed cessation monitor and one distant total fallout collector with time of arrival detection equipment at the Weather Station. A 50' x 50' area of cleared land is required adjacent to the Weather Station; this is available with minimum clearing. Access to 110 Volt 15 Amp 60 Cycle Single Phase power is required. Ten square feet of indoor storage space is also required. This program will be unmanned except for two maintainance men for two days. Project 31.1 will have similar requirements to the station at Wotho Island, requiring no construction and consisting of instrumentation inside a building or tent. There are four Everwear steel buildings existing at this site which were erected for the Castle Weather Station. Structurally these buildings are sound, requiring only minor rehabilitation; they will, however, require thorough cleaning and removal of debris left behind after Castle. All are rat-infested. One of these structures is the former mess hall and galley; the other three can be used for billeting and general project use. A shower house is existing at this site; shower heads and the structure itself require minor rehabilitation, but piping must be replaced. A 750 gallon storage tank is in place adjacent to the shower

house. Sanitation formerly consisted of a two-place pit latrine, existing but not recommended for use during this operation. In addition a Weather Station Operations Building is located towards the eastern end of the island. The rear door must be re-hung and some rehabilitation of the building is required if it is to be used. Access to the island is acceptable for LST or LSD approach, but sea is rough and LCM approach for off-loading of heavy equipment may be limited to high tide. Portions of old and rusted airstrip matting remain on a crude ramp near the Weather Station, apparently used during Castle for this purpose. Indications are that total personnel at this site will be twenty-eight to thirty-five men. Reference maps and charts include: Hydrographic Chart No. 6026, "Plans in the Marshall Islands" and SK-5231-52675.

f. Ujelang Atoll, Ujelang Island. Project 31.1. This will require housing, sanitation and messing facilities for six to eight men, including distillation unit for fresh water and a small generator for power. There are approximately two hundred locals at this site in a well-developed village. The chiefs are Joanes and Ephraim. Interpreters include Joaje and John. The Medical Assistant is Lonpwe, who also speaks fair English. These people are Protestant Christians and a native missionary is in residence at this site. The Ujelang people are the former Eniwetok people, dispossessed prior to Operation Sandstone. Access facilities for LST or LSD and LCM are adequate, although LCM landings may be limited to high tide. Adequate area, requiring minimum clearing and leveling, is available east of the village. Reference maps and charts include: Hydrographic Chart No. 6035 published September 1944, SK-5231-52677.

VI. COMMENTS.

During the accomplishment of this mission, this party has established excellent relations with the native inhabitants of the various sites. It is suggested that all members of future work parties be specifically briefed with a view towards maintaining and extending the high standards of public relations with the native landowners and population, emphasizing the point that they are considered as guests of the various chiefs and communities.

VII. GENERAL NOTES.

Of the food-producing trees of the Marshall Islands, the breadfruit is the most valuable and least common. For this reason it is urged that wherever possible these trees be spared from destruction. From the results of the present reconnaissance, no breadfruit trees should necessarily be destroyed in this operation.

On all sites the fly situation is severe. Spraying, aerial or otherwise, is not practical since flies would simply reappear from other adjacent islands. It is strongly urged that all tents and other structures be well screened and an ample supply of Aerosol bombs or similar insecticides be made available throughout the operation.

In regard to communications, one to two miles of field telephone wire and two to four field telephones should be provided for each island. A 1/4-ton truck should be available on Kusaie, as well as four miles of field telephone wire.

It should be impressed on all future work parties that local drinking water is not suitable for American consumption and only distilled water should be drunk. Local foods, particularly pork, are possible sources of intestinal troubles and disentery. It is possible that parties located on these islands for considerable periods of time will be affected with hookworm; medical inspection prior to departure should be made. This is not a serious complaint and is easily cured if incurred. Recently a mild form of gonorrhea has been prevalent among the locals; prophylaxis should be observed and personnel should be examined before return to the mainland. Again, treatment is simple and effective.

In all locations local dignitaries have been contacted and oriented in the event that unforeseen fallout or other emergency should make evacuation necessary or require other protective action.

Housing, messing and sanitary requirements have been discussed at length with Mr. Gustafson of Sandia Corporation and it is his intention to make the following suggestions to Colonel Kerwin, J-3. Depending on the number of personnel at the site involved, one each 8-man or 16-man tent should be used for housing purposes, a similar tent for galley, mess hall and storage purposes and one 8-man tent should be used for 31.1 equipment, first aid tent and general administrative headquarters. A "Badger" self-contained distillation unit capable of producing 85 gallons of fresh water per hour seems the logical solution to the water problem. A Navy cube 5'x5'x7' with a capacity of approximately 1312.5 gallons can be used for storage. Simple cover such as canvas on light framing should be provided for the distillation unit. Fuel supply for the distillation unit and generator is required - regular 55-gallon drums on a pre-fabricated timber stand would be satisfactory. A small gasoline-powered generator (capacity to be determined by the Electrical Department) can be used as a power source. It is suggested that a light frame structure be built as a shower room and wash house. Water for cooking and dishwashing purposes can be drawn directly from the Navy cube. A two-place pit latrine located away from the immediate camp area and provided with chloride of lime or calcium chloride should be adequate for sanitation. A canvas screen on light framing can be provided for privacy. Since ample power can be provided, an electric stove would appear practical. Rough laundry can be handled thru negotiation with the local population. It is understood that each site will be serviced at two week intervals by an LST or LSD which will bring in mail, finished laundry, fresh food etc. A portable refrigerator of 150 cubic foot capacity should be provided for food storage. A small household type refrigerator will be project-furnished for storage of medical supplies etc. All tents and buildings should be screened against flies and ample Aerosol bombs or other insecticides should be available. No slats are required but wooden flooring should be provided. A small 16 mm projector, with speaker, should be provided and a simple projection screen could be erected. A jeep with winch attachment would be desirable at each site. If available an 8-man rubber raft might be useful. (Jeep and raft should be obtained thru Task Group rather than thru Holmes and Narver.) Basic medical supplies including penecillin should be furnished.

Throughout the mission the cooperation and diplomacy of Mr. Marvin S. Pickard have contributed in great measure to the successful attainment of desired results with the local populations. Mr. Pickard has further volunteered to prepare a synopsis of local conditions for the enlightenment of future work parties; this will be made available thru the various programs affected, prior to the operation.

OFFICIAL USE ONLY

In conclusion it is desired to recognize the considerable efforts of Captain P. C. Staley, Jr., Commanding Officer, Kwajalein Naval Station, Cmdr. Lloyd E. Sloan, Air Operations Officer, Lt. Cmdr. A. L. Walker, Naval Liason Officer, Task Group, Lt. Cmdr. E. W. Matthews, USN and their associates and express the appreciation of this group for fullest cooperation in the fulfillment of this mission.

Frank C. Kirk

FRANK C. KIRK
Asst. Supt. B/M

19 December 1955

OFFICIAL USE ONLY