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Pacific Southwest Region
HOLMES & NARVER, Inc.
ENGINEERS-CONSTRUCTORS

REPOSITORY NATIONAL ARCHIVES PACIFIC SOUTHWEST REGION

TO: C. L. Coray JOB: 884

COLLECTION RG 326 ATOMIC ENERGY COMMISSION

FROM: R. A. Boettcher RE: Roll-up, Station 70, Communications Equipment

BOX No. 199624 (#608) A16334 326-65 V. 70 ELMER GENERAL

DATE: 23 April 1954 405731

FOLDER JOB 884 PROJECT ENGINEERING FILE

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Reference is made to HAN 2437, dated 10 April 1954, wherein the responsibility of maintaining, protecting and operating the radio teletype and telephone circuits between Eniwetok and Bikini has been placed in the hands of Holmes & Narver.

Inasmuch as the teletype and cryptographic equipment in Room #15, Station 70, Man, is compact and comes in packaged units, it can be transported to Elmer for dehumidified storage. Some 7000 square feet of dehumidified space in scientific buildings will become available at Elmer approximately two weeks after the end of this operation.

The radio telephone equipment in Room #2, Station 70, on the other hand, is large and bulky and moving this becomes more of a problem. In conjunction with this if Bikini is reoccupied, either temporarily or permanently, communications between the two atolls will be necessary.

The radio telephone equipment can be left in place provided it is protected from deterioration due to humidity. Some means of providing accessibility will be necessary so that the equipment can be periodically checked and operated, if need be. Any equipment requiring electrical power could be supplied by a portable generator brought in by the inspection team. Station 70 was built with necessary provisions to use such a power unit.

Hermetically sealing is possible, and can be accomplished by building a wooden enclosure around all six sides of the equipment or by enclosing it in a canvas type covering and then applying plastic vapor seal. Prior to applying the plastic, the area to be sealed will be dehumidified and silica gel bags placed in and around the equipment. This procedure will be followed each time the container is resealed after the periodic inspections. To dehumidify the area in and around the equipment before sealing and after each inspection, lamps, heaters, or an air force type arctic heater can be used. The latter is a self-powered unit.

Another method being considered at this time is the possibility of sealing Rooms #2 and #3 and maintaining constant dehumidification by using a small absorption type (Servel) room dehumidifier which does not require electric power. Information is being obtained from the Home Office on equipment available for this purpose.

If a Servel type dehumidifier is not used in Rooms #2 and #3, it will also be necessary to remove the telephone equipment in Room #3.

Misc drawing 253 is enclosed for purposes of further discussion to arrive at a satisfactory method of roll-up for Station 70 communications equipment.

Other problems related to the above, which should be resolved at the same time, are protection of electrical switchboards in Station 70 and powerhouse NA-500, and the roll-up of mechanical equipment at both locations.

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EQUIPMENT & SUPPLIES/0