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TO MAJOR GENERAL FRANK A CAMM ASST GEN MGR FOR MILITARY APPLICATION

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UNCLAS RE: ENIWETOK PLUTONIUM STUDIES

THIS RESPONDS TO YOUR TELETYPE OF AUGUST 3, 1972. ANY COMMENTS WE MAKE CONCERNING THE USE OF RUNIT (YVONNE) AS A SPECIAL STUDY AREA ALSO APPLY TO AOMON (SALLY) AND POSSIBLY TO OTHER SELECTED ISLANDS. COMMENTS CONCERNING PLUTONIUM ALSO APPLY TO OTHER BIOLOGICALLY IMPORTANT RADIONUCLIDES IN THE MARINE/ATOLL ENVIRONMENT. TO ANSWER YOUR QUESTIONS DIRECTLY:

QUESTION 1: WOULD THERE BE BENEFITS TO STUDYING THE PHYSICAL DISTRIBUTION AND TRANSPORT OF PLUTONIUM IN THE ATOLL ENVIRONMENT AS DIFFERENTIATED FROM PLUTONIUM IN THE DESERT ENVIRONMENT?

QUESTION 2: ARE THERE POSSIBILITIES AT RUNIT FOR USEFUL OBSERVATION OF THE BIOLOGICAL BEHAVIOR OF PLUTONIUM IN THE TERRESTRIAL AND/OR MARINE ENVIRONMENT?

COMMENT: THE ANSWER TO BOTH QUESTIONS IS IN THE AFFIRMATIVE.

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PRESUMABLY, BEFORE HUMANS ARE RETURNED TO THE SO CALLED "CLEAN" ISLANDS, THE ENDS OF FOOD CHAINS WILL HAVE BEEN SAMPLED WITH ENOUGH STATISTICS TO HAVE DETERMINED THAT HUMAN FOODS ARE EITHER SAFE FOR CONSUMPTION OR CAN BE CONTROLLED. A CONTROL STUDY AREA WOULD PROVIDE USEFUL DATA BOTH FOR PREDICTING WHAT THE LEVEL OF FOOD CONTAMINANTS WOULD BE IN THE FUTURE AND ALSO FOR CONTINUED DOCUMENTATION TO PROVIDE ASSURANCES TO THE NATIVE POPULATION. THE MOST CONTAMINATED AREA WITHIN THE ISLAND COMPLEX WOULD BE THE MOST USEFUL FOR THIS PURPOSE.

QUESTION 3: COULD PILOT STUDIES WITH THE RUNIT CONTAMINATION CONTRIBUTE TO THERE BEING PROCEDURES FOR CONTROL AND/OR CLEAN-UP OF PLUTONIUM CONTAMINATION SITUATIONS?

COMMENT: OUR BELIEF IS THAT THE LESSONS LEARNED DURING THE CLEAN-UP OF RUNIT CONTAMINATION WOULD NOT LIKELY BE APPLICABLE TO OTHER WORLD-WIDE SITUATIONS GENERALLY. CONVERSELY, IF RUNIT WERE THE LAST ISLAND TO BE CLEANED UP, MOST OF THE APPLICABLE LESSONS WOULD HAVE BEEN LEARNED FROM THE CLEAN-UP OF THE OTHER ISLANDS. ONE POSSIBLE EXCEPTION IS THAT IF THE PLUTONIUM CONTAMINATION WERE JUDGED EXTENSIVE ENOUGH TO WARRANT IT, PILOT REPROCESSING OR MINING OPERATIONS MIGHT BE TRIED RATHER THAN EVERY EXPENSIVE EARTH

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REMOVAL, SHIPMENT, AND BURIAL.

QUESTION 4: IF RUNIT ISLAND WERE RETAINED UNDISTURBED FOR STUDY PURPOSES, WOULD THAT POSE ANY HEALTH HAZARDS TO HUMANS LIVING ON OTHER ENIWETOK ISLANDS FROM FISHING, BOATING, AND SWIMMING IN ENIWETOK LAGOON?

COMMENT: WE DO NOT HAVE SUFFICIENT INFORMATION TO ANSWER THIS QUESTION. SUCH THINGS AS BOATING AND SWIMMING OFF THE OTHER ISLANDS AWAY FROM RUNIT SHOULD NOT BE HAZARDOUS. THE QUESTIONS OF RADIONUCLIDES IN EDIBLE MARINE LIFE AND MIGRATING BIRDS REMAIN TO BE ASSESSED AS PART OF THE DETERMINATION TO RETURN HUMANS TO THE CLEAN ISLANDS. A BETTER TIME TO MAKE THIS ASSESSMENT IS AFTER THE INITIAL SURVEYS HAVE BEEN COMPLETED. IN ANY EVENT, RUNIT, IF CHOSEN, WOULD HAVE TO BE CONTROLLED AS AN EXCLUSION AREA.

QUESTION 5: WOULD PLACING A CAMP AT THE UNCONTAMINATED END OF RUNIT POSE HEALTH HAZARDS TO A CARETAKER OR TO FIELD SCIENTISTS?

COMMENT: ADEQUATE PROVISIONS AND PRECAUTIONS CAN BE TAKEN FOR THE ESTABLISHMENT OF A CAMP FOR WORKERS AND INVESTIGATORS ON THE ISLAND. THIS SHOULD NOT BE TOO MUCH OF A PROBLEM.

QUESTION 6: WOULD THE EARTH DISTURBANCE THAT WILL BE CAUSED BY THE PACE EXPERIMENTS SIGNIFICANTLY DETRACT FROM THE VALUE OF RUNIT

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FOR PLUTONIUM STUDIES?

COMMENT: THIS WOULD BE SOMEWHAT DEPENDENT UPON THE PARTICULAR INVESTIGATIONS POSTULATED. HOWEVER, OUR FEELING IS THAT ONE MORE DISTURBANCE OVER AND ABOVE THOSE WHICH HAVE ALREADY TRANSPIRED SHOULD NOT HAVE A GREAT IMPACT. HOWEVER, UNFAVORABLE METEOROLOGICAL CONDITIONS DURING THE PACE EXPERIMENTS COULD DISTRIBUTE RADIOACTIVE DEVRIS OVER OTHER ISLANDS WHERE SURVEYS AND CLEAN-UP ACTIVITIES MAY BE UNDERWAY.

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