THIS PRESENTATION IS UNCLASSIFIED

# OUTLINE

**ISSUE** 

BACKGROUND OF TESTING

RADIOLOGICAL PROBLEMS IN THE PACIFIC

INTERAŒNCY RESPONSIBILITIES

**RECOMMENDATIONS** 

# SPECIAL BRIEFING FOR ADMINISTRATOR

ON

LONG TERM AEC/ERDA RESPONSIBILITIES FOR EFFECTS OF WEAPONS TESTING IN PACIFIC.

#### **OBJECTIVES:**

- 1. REVIEW BACKGROUND AEC/ERDA IN CLEANUP AND REHABILITATION.
- 2. PROVIDE BASIS FOR DECISION ON FUTURE ROLE OF ERDA.

PRESENTATION BY:

DR. JAMES L. LIVERMAN
ASSISTANT ADMINISTRATOR
FOR ENVIRONMENT AND SAFETY

L. JOE DEAL
ASSISTANT DIRECTOR FOR
HEALTH PROTECTION
DIVISION OF OPERATIONAL SAFETY

**JUNE 1975** 

#### ISSUES

POLITICAL

HUMANITARIAN

TECHNICAL

FISCAL

# HUMANITARIAN

PEOPLE EVACUATED FROM HOME.

PEOPLE INJURED BY RADIATION FROM FALLOUT.

# POLITICAL

PRESIDENTIAL DECISION TO TEST.

PRESIDENTIAL DECISION TO RETURN BIKINI AND ENEWETAK.

U.S. ACCUSED OF USING MARSHALLESE AS GUINEA PIGS.

# TECHNICAL

- CLEANUP OF RADIATION TO PRE-TEST CONDITIONS IMPOSSIBLE.
- RESIDUAL WEAPONS RADIATION REQUIRE LIVING RESTRICTIONS.

# FISCAL ISSUES

- AEC/ERDA BUDGET INADEQUATE.
- ERDA REIMBURSING DOD LOGISTIC COSTS.
- LONG-TERM FOLLOWUP MONITORING COSTS.

# NUCLEAR TESTING PACIFIC

1946 PRESIDENT APPROVED FOR NATIONAL SECURITY USE OF BIKINI ATOLL AND ENEWETAK ATOLL.

- 166 BIKINIANS MOVED
- 142 ENEWETAKESE MOVED
- PEOPLE EXPECTED TO RETURN HOME

TEST PROGRAM PACIFIC

• 99 TESTS TOTAL

42 ENEWETAK

• 23 BIKINI

• 25 U.S. CHRISTMAS ISLAND

• 9 U.K. CHRISTMAS ISLAND

TEST ORGANIZATION PACIFIC

JOINT DOD-AEC

FLAG OFFICER COMMANDER

AEC SCIENTIST DEPUTY COMMANDER

# BIKINI AND ENEWETAK ATOLLS

- BIKINI 1,438 ACRES
- ENEWETAK 1,760 ACRES
- NO MINERAL RESOURCES
- BOUNTIFUL FISH AND SHELL FISH
- ECONOMY BASED ON COPRA NON-INTENSIVE AGRICULTURE

DOE ARCHIVES

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## TEST ATOLLS

### BIKINI

- RADIOACTIVE CONTAMINATION OF ISLAND
- HOUSING RESTRICTED TO BIKINI, ENEU
- 12 CAPITAL SHIPS SUNK IN LAGOON
- 50 HOMES CONSTRUCTED
- SOME FAMILIES RETURNED

### **ENEWETAK**

- RADIOACTIVE CONTAMINATION OF ISLANDS
- HOUSING RESTRICTED TO ENEWETAK, MEDREN, JAPTAN
- ONE ISLAND COMPLETELY DESTROYED
- RUNIT ISLAND HEAVY CONTAMINATED PU

### 1954 BRAVO EVENT

- WIND SHIFTED
- EMERGENCY EVACUATION
   64 RONGELAP ATOLL
   157 UTIRIK ATOLL
   18 AILINGANE ATOLL
   28 RONGERIK ATOLLS (AMERICAN)
- LONG-TERM RADIATION INJURY IN RONGELAP PEOPLE

DOE ARCHIVES

250

#### RADIATION INJURY

AGE AT EXPOSURE	THYROID NODULES	SURGERY	MALIGNANT
IN UTERO			
RONGELAP	1 of 3	1	0
< 10 YEARS			
RONGELAP	17 of 19*	15	1
AILINGINA E	2 of 6	1	0
> 10 YEARS			
RONGELAP	5 of 45	4	2
AILINGINAE	4 of 12	3	0

\*INCLUDES TWO CASES OF HYPOTHYROIDISM WITHOUT NODULES.

## REHABILITATION - BIKINI

- 1958 LAST WEAPONS TESTS AT BIKINI AEC-DOD
- 1966 LETTER, SECRETARY OF INTERIOR TO AEC REQUESTING SAFETY REVIEW
- 1367 RADIOLOGICAL SURVEY RECOMMENDATIONS AEC
- 1968 PRESIDENT'S ANNOUNCEMENT
- 1969 CLEANUP OPERATIONS AEC-DOD
- 1970-1975 AGRICULTURAL REHABILITATION DOI
- 1972-1974 HOUSING CONSTRUCTION DOI
- 1974-1975 RETURN OF FIRST BIKINI FAMILIES DOI
  - 1975 TRUST TERRITORY REQUESTS GUIDANCE ON RESTRICTIONS ON HOUSING & CROPS AEC/ERDA

# REHABILITATION - ENEWETAK

- 1972 ANNOUNCEMENT OF RETURN BY AMBASSADOR WILLIAMS
  AND HIGH COMMISSIONER JOHNSTON
- 1972 INTERAGENCY AGREEMENTS ON RESPONSIBILITIES DOD-DOI-AEC
- 1372-1973 RADIOLOGICAL SURVEY OF ENEWETAK ATOLL AEC
  - 1974 EVALUATION AND RECOMMENDATIONS AEC/ERDA
  - 1975 ENVIRONMENTAL IMPACT STATEMENT DOD
  - 1976 CLEANUP OPERATIONS BEGIN DOD

# RADIATION PROBLEM

- PEOPLE TO LIVE ON ISLANDS CONTAMINATED BY FALLOUT.
- UPTAKE IN SEAFOODS VERY LOW.
- UPTAKE IN AGRICULTURE PRODUCTS HIGH.
- RESTRICTION REQUIRED ON FOODS AND HOUSING.
- LONG-TERM MONITORING ENVIRONMENT AND PEOPLE REQUIRED.
- FEDERAL STANDARDS MAY BE LOWERED.

# IMMEDIATE REQUIREMENTS

- LOCATION FOR PHASE II HOMES BIKINI
- DOSE DETERMINATION OF FOOD BIKINI
- HAZARD FROM SUNKEN SHIPS BIKINI
- DETAILED RADIATION SURVEY OF BIKINI
- DETAILED RADIATION SURVEY OF BRAVO FALLOUT ISLANDS

DOE ARCHIVES

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# NEED FOR DETAILED SURVEYS

- BIKINI SURVEYS USED 1960 TECHNOLOGY
- MODERN TECHNOLOGY IDENTIFIES SPECIFIC ISOTOPES
- KNOWLEDGE FROM ENEWETAK SURVEY
- LOCATION OF HOUSES AND CROPS
- PRESSURE TO MATCH ENEWETAK SURVEY
- REQUEST FOR STATUS OF BRAVO FALLOUT ISLANDS
- LIKELY TERMINATION OF TRUST AGREEMENT
- U.S. OBLIGATION TO DOCUMENT CONDITIONS

# AERIAL RADIOLOGICAL SURVEY

- FASTER
- CHEAPER
- BETTER DEFINITION OF CONTAMINATION CONTOURS
- ISOTOPIC DEFINITION
- COMPLETE COVERAGE OF ISLANDS AND REEFS
- UNIFORM AUTOMATIC DATA HANDLING

#### NEED FOR FOLLOWUP MONITORING

- RONGELAP PEOPLE EXPERIENCE DELAYED RADIATION INJURY.
- BIKINI AND ENEWETAK TO BE RESETTLED IN AREA CONTAMINATED BY WEAPONS FALLOUT.
- RADIATION DOSE PREDICTED TO EXCEED STANDARDS FOR GENERAL PUBLIC.

# ERDA PACIFIC PROGRAM COSTS

# (In Thousands)

FUNDED	FY 75	FY 76	FY 77
MEDICAL SURVEILLANCE - BER	\$ 300	\$ 340	\$ 400
ENVIRONMENTAL SURVEILLANCE - OS	\$ 125	\$ 300	\$ 325
RESEARCH - BER	\$ 566	\$ 620	\$ 625
NOT FUNDED			
BIKINI AERIAL SURVEY		\$ 700	
ALL ISLANDS AERIAL SURVEY		\$1500	\$1500

#### RESEARCH

- BIOGEOCHEMISTRY OF TRANSURANICS.
- CYCLING TRANSURANICS.
- MARINE AND TERRESTRIAL FOOD CHAIN STUDIES.

### RECOMMENDATIONS

- CONTINUE LONG-TERM MEDICAL AND ENVIRONMENTAL SURVEYS
- CONTINUE SUPPORTING RESEARCH
- DETERMINE ERDA ROLE IN PACIFIC
- AERIAL SURVEYS OF BIKINI AND OTHER ISLANDS
- SUPPORT DOD FUNDING FOR LOGISTICS