

COMMUNICATIONS CENTER

COMPLETED BY ORIGINATOR

SERVICE REQUIREMENT:

<input type="checkbox"/> SAME DAY	<input type="checkbox"/> PAID	<input type="checkbox"/> MULTIPLE ADDRESS
<input type="checkbox"/> OVERNIGHT	<input type="checkbox"/> MONEY ORDER	<input type="checkbox"/> COLLECT
<input type="checkbox"/> PRIORITY	<input type="checkbox"/> BOOK	

PLT	
TWX	
MIL	
WUX	MAR 27 4 50 PM '64
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COMPLETE MESSAGE IN THIS SEQUENCE:

1. LIST ALL ADDRESSES — *All addresses should be on this page. Include name, company, street number, city, and state. For addresses at Belfast private line stations use name and organization only.*
2. "RE" LINE IF NEEDED
3. TEXT
4. LOCAL DISTRIBUTION — *Originator is responsible for making local distrib*

1. Review Date: 3-06-97		2. Classification (if changed)	
3. Authority: D ABC ADD W. Lape		3. Contains No UNCL Assailable Information	
4. Review Date: 4/3/97		4. Coordinate With:	
5. Authority: ADD		5. Contains UCI/7	
6. Name: [Signature]		6. Comments: [Signature]	

JAMES E. REEVES, NVOO/AEC  
LAS VEGAS, NEVADA

REF: DELMAR L. CROWSON'S CD TWX MA:T:BRP:87-1, DATED MARCH 26, 1964.

ACCORDING TO THE TREATY ENDING NUCLEAR TESTS, THE PARTIES OF THE TREATY AGREED NOT TO CAUSE, IN THE ENGLISH TEXT, "RADIOACTIVE DEBRIS TO BE PRESENT OUTSIDE THE TERRITORIAL LIMITS"; AND IN THE RUSSIAN TEXT, THERE IS THE IMPLICATION THAT NO RADIOACTIVE FALLOUT SHOULD BE DEPOSITED ON THE GROUND OUTSIDE THE TERRITORIAL LIMITS. BOTH TEXTS ARE EQUALLY AUTHENTIC AND IT WOULD SEEM TO CLEARLY STATE THAT NO PARTICULATE MATTER SHOULD BE OBSERVABLE OUTSIDE THE CONTINENTAL LIMITS. THE STRONGER VIEW CAN BE TAKEN THAT NO SINGLE ATOM OF RADIOACTIVE MATERIAL IS TO BE PRESENT. SINCE THIS VIEW CANNOT BE EXPERIMENTALLY VERIFIED IN PRACTICE, EVEN THOUGH IT MIGHT BE IN THEORY, A REASONABLE POSITION SEEMS TO BE THAT WE SHOULD NOT CAUSE AMOUNTS OF RADIOACTIVE MATERIAL FROM TESTING TO OCCUR IF PRACTICE OF EXPERIENCE SHOWS THEM TO BE MEASURABLE.

ON THIS BASIS, IT WOULD APPEAR WISE TO TAKE INTO ACCOUNT METEOROLOGY IN CONNECTION WITH UNDERGROUND EXPLOSIONS. SINCE THE TRACE AMOUNTS WHICH HAVE OCCURRED DO NOT CONSTITUTE A HEALTH HAZARD, IT WOULD SEEM COMPLETELY UNWISE TO IMPOSE THE SORT OF RESTRICTION OF WEATHER WHICH IS IMPOSED IN TESTING IN THE ATMOSPHERE. WIND CONDITIONS CAN BE SELECTED TO AVOID SHORT TIME CROSSINGS OF THE BORDER IN CONNECTION WITH UNDERGROUND TESTING. THIS WOULD INDEED IMPOSE SOME RESTRICTIONS BUT NOT AS

ORIGINATOR <i>Thomas B. Cook</i> THOMAS B. COOK, JR.	ORG. 5400	REF. SYM
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1. Review Date: 4/3/97		2. Classification (if changed)	
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SEVERE RESTRICTIONS AS ONE WOULD IMPOSE FOR ATMOSPHERIC TESTING.

CONSIDERABLE EXPERIENCE OF SUCCESSFUL STEMMING OF TESTS WHICH HAVE YIELDS APPRECIABLY ABOVE 1 KT IS AN ITEM OF FACTUAL EXPERIENCE, AND IT WOULD SEEM UNWISE TO IMPOSE GREATER DEPTH-OF-BURIAL RESTRICTIONS. YIELDS NEAR 1 KT AND LESS HAVE RECEIVED SPECIAL ATTENTION FOR STEMMING AND SHOULD CONTINUE TO RECEIVE SPECIAL ATTENTION INCLUDING CONSIDERATION OF LARGER SCALED DEPTHS. OUR EXPERIENCE AT SANDIA WITH 250 LB UNDERGROUND HIGH EXPLOSIVE TESTS SHOWS THAT A DEPTH WHICH WOULD BE EQUIVALENT TO  $500 W^{1/3}$  HAS NEVER RELEASED GASES, AND THIS MAY EVEN BE TRUE NEAR A DEPTH WHICH CORRESPONDS TO  $425 W^{1/3}$ . THE ACTUAL EXPERIENCE AT NEVADA HAS SHOWN THAT SCALING FROM HIGH EXPLOSIVES GIVES PESSIMISTIC RESULTS. THEREFORE, WE WOULD BE SURPRISED IF DEPTHS-OF-BURST APPRECIABLY GREATER THAN 350 OR  $400 W^{1/3}$  SHOULD VENT, PROVIDING THEY WERE FULLY TAMPED.

THUS IT WOULD APPEAR WISE TO PAY ATTENTION TO METEOROLOGY IN CONNECTION WITH TYPE B TESTS SO AS TO AVOID SHORT TIME CROSSINGS OF THE BORDER BY DEBRIS.

Copy to:  
S. P. Schwartz, 1  
G. A. Fowler, 7000

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