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E.O. 11652: XGDS-2 TAGS: PARM, TECH, IN

SUBJECT: INDIA NUCLEAR EXPLOSION

- 1. FOLLOWING IS INR'S REVIEW OF INDIAN NUCLEAR PROGRAMS AS THEY RELATE TO THE INDIAN NUCLEAR EXPLOSION IN THE RAJASTHAN DESERT AT 0805 LOCAL TIME ON MAY 18.
- BASED ON A SEISMIC MAGNITUDE OF ABOUT 4.8 AND ASSUMING THE DETONATION OCCURRED WITH HARD ROCK COUPLING, THE PRELIMINARY ESTIMATE OF THE YIELD OF THE UNDERGROUND EXPLOSION IS AROUND 15 KILOTONS. /

THE FISSIONABLE MATERIAL EMPLOYED IN THE NUCLEAR DEVICE ALMOST CERTAINLY WAS PLUTONIUM PRODUCED IN THE CANADIAN-BUILT CIRUS RESEARCH REACTOR AT THE BHABHA ATOMIC RESEARCH CENTER AT TROMBAY. THIS REACTOR HAS BEEN IN OPERATION FOR MORE THAN 10 YEARS AND PROBABLY HAS PRODUCED SOME 70 TO 80 KILOGRAMS OF PLUTONIUM, ENOUGH TO PERMIT FABRICATION OF SEVERAL ADDITIONAL FISSION DEVICES.



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UNITED STATES DEPARTMENT OF STATE REVIEW AUTHORITY: APPEALS REVIEW PANEL CLASSIFICATION: SECRET REASON: 25X6 **DECLASSIFY AFTER: 22 SEP 2034** APPEAL ACTION: ADDITIONAL INFORMATION RELEASED **REASON(S): B1, 25X6** 

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4. OTHER REACTORS IN OPERATION IN INDIA AND WHICH ARE UNCLASSIFIED POTENTIAL SOURCES OF PLUTONIUM ARE UNDER INTERNATAONAL SAFEGUARDS PROVIDING INSPECTION RIGHTS. THE CIRUS REACTOR DIFFERS FROM THESE IN THAT NO PROVISION WAS MADE FOR INSPECTION RIGHTS WHEN CANADIAN ASSISTANCE WAS PROVIDED IN CONSTRUCTING THE REACTOR AND US HEAVY WATER WAS PROVIDED

- 5. US ASSISTANCE TO INDIA'S NUCLEAR ACTIVITIES HAS BEEN PROVIDED ON THE CONDITION THAT THE PLUTONIUM PRODUCED THEREFROM BE USED FOR "PEACEFUL PURPOSES." INDIAN REPRESENTATIVES HAVE INDICATED IN THE PAST THAT THEY DID NOT AGREE THAT THERE WOULD BE A VIOLATION OF THIS CONDI-TION IF NUCLEAR EXPLOSIVE DEVICES WERE USED FOR SUCH CIVIL PURPOSES AS CONSTRUCTING CANALS AND RESERVOIRS. US VIEWS WERE STATED TO THE GOVERNMENT OF INDIA IN 1970 THROUGH THE EMBASSY IN NEW DELHI SO THAT THE INDIAN GOVERNMENT COULD BE UNDER NO MISAPPREHENSION OF OUR POSITION. AT THAT TIME WE CLEARLY REITERATED OUR POSITION THAT THE TECHNOLOGY FOR THE CONSTRUCTION OF ANY NUCLEAR EXPLOSIVE DEVICE IS INDISTINGUISHABLE FROM THE TECHNOLOGY INVOLVED IN A NUCLEAR EXPLOSIVE WEAPON. WE STATED THAT THE USE OF THE PLUTONIUM FOR ANY NUCLEAR EXPLOSIVE DEVICE, WHATEVER THE DEVICE WAS INTENDED FOR, WOULD BE INCOMPATIBLE WITH THE GUARANTEE OF PEACEFUL USES.
- 6. CANADA HAS MADE SIMILAR REPRESENTATIONS TO NEW DELHI. INDIA HAS STEADFASTLY REFUSED TO ACCEPT THE US AND CANADIAN INTERPRETATION OF THE "PEACEFUL PURPOSES" LIMITATION, HOWEVER. INDIA HAS CITED ITS INTEREST IN PEACEFUL NUCLEAR EXPLOSIVES AS THE CENTRAL ISSUE IN ITS REFUSAL TO SIGN THE NON-PROLIFERATION TREATY, AND NOT SURPRISINGLY HAS IDENTIFIED ITS INITIAL NUCLEAR EXPLOSION AS FOR PEACEFUL PURPOSES.
- 7. LOOKING TO THE FUTURE, INDIA IS CONSTRUCTING TWO LARGE UNSAFEGUARDED NUCLEAR POWER REACTORS. WHEN THESE BECOME OPERATIONAL IN THE LATE 1970S, THEY WILL PRODUCE ENOUGH PLUTONIUM FOR SOME 50-70 NUCLEAR WEAPONS ANNUALLY.



3. INDIA'S DELIVERY CAPABILITIES ARE RUDIMENTARY. FOR SECRE

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FOR IN THIS REACTOR.

SOME YEARS AT LEAST THEY WILL CONSIST OF A FLEET OF CANBERRA LIGHT JET BOMBERS WITH AN EFFECTIVE RADIUS OF ONLY ABOUT 1,000 MILES, A VARIETY OF SMALL FIGHTER-BOMBERS, AND CONCEIVABLY SOME AIR-INDIA BOEING 70.7S AND 74.7S (WHICH WOULD REQUIRE EXTENSIVE MODIFICATIONS FOR USE AS BOMBERS). THUS A THREAT COULD BE POSED ONLY TO SMALL COUNTRIES ON INDIA'S PERIPHERY. RELYING ON NATIVE RESOURCES ALONE, INDIA PROBABLY COULD NOT DEVELOP A DELIVERY SYSTEM CAPABLE OF THREATENING KEY CHINESE TARGETS IN THIS DECADE RUSH

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