NO FOREIGN DISSEM, CONTROLLED DISSEM, EXDIS, TO SEC 788

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.

2. 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.

3. 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 10 TO 60 KILOGRAMS OF PLUTONIUM, ENOUGH TO PERMIT FABRICATION OF SEVERAL ADDITIONAL FISSION DEVICES.
4. OTHER REACTORS IN OPERATION IN INDIA AND WHICH ARE
POTENTIAL SOURCES OF PLUTONIUM ARE UNDER INTERNATIONAL
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
FOR IN THIS REACTOR.

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" LIMITA-
TION, 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 CON-
STRUCTING TWO LARGE UNSAFE GUARDED NUCLEAR POWER REACTORS.
WHEN THESE BECOME OPERATIONAL IN THE LATE 1970S, THEY WILL
PRODUCE ENOUGH PLUTONIUM FOR SOME [50-70] NUCLEAR WEAPONS
ANNUALLY.

8. INDIA’S DELIVERY CAPABILITIES ARE RUDIMENTARY. FOR

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.

UNCLASSIFIED
AND CONCEIVABLY SOME AIR-INDIA BOEING 707S AND 747S (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.