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UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY

RELEASED IN FULL

November 7, 1978

MEMORANDUM FOR THE RECORD

Per conversation with the Operations Center (the Director's Office, Ippresume William Rope, but I regrettably did not get the name), ACDA authorized to show visiting DOE official a copy of State 278247, which is Nodis, dated November 1, 1978.

I initially requested that a copy be sent to DOE. The Operations Center was not comfortable with this, did not want copies of this floating around, at which pointtI offered an alternative which had been proposed to me by Thomas W. Graham (NP/NX). I suggested that the DOE person might read the tedegram in question in ACDA's Front Office. I was told by the Operations Center that this would be preferable to sending DOE a copy. I requested and was granted permission to do this.

I indicated to Rope that I felt State would prefer sending DOE a copy so that they could maintain a record of who had access to the information. ACDA could maintain informal records, but I presumed that they would want complete formal records. He indicated that this was not necessary and that the approach I had suggested would be preferred.

All of the foregoing transpired duringgatelephone conversation.

UNITED STATES DEPARTMENT OF STATE REVIEW AUTHORITY: ROBERT O HOMME DATE/CASE ID: 28 DEC 2010 201000057

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Addendum

The name of the DOE official who is to see the cable in question is Jerimiah Kratz. He is in DOE/ISA (per T.W.Graham).

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ORIGIN NODS-00

ISU-00 /001 R DCT-01 INFO

DRAFTED BY:PM/NPP:AWLOCKE APPROVED BY:PM/MPP:MHHUMPHREYS T/O - UR NYE; S/S-D: TREYNDERS

DES/NET - MR DEMING

S/AS - MR KELLEY

- MR BENNETT

EUR/RPE - MR BARMON

ACDA - MR VANDOREN

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CORRECTED COPY - BERN ADDED AS ADDEE

R 012339Z NOV 76 ZFF6

FM SECSTATE WASHDE

AMENDASSY BONN

AMEMBASSY THE HAGUE

AMEMBASSY CANBERRA

AMEMBASSY OTTAWA

ROME AMEMBASSY

AMEMBASSY BERN

TUKYD

AMEMBASSY VIENNA

INFO AMEMBASSY LONDON

AMEMBASSY ISLAMABAD

S E C R E Y STATE 278247

NODIS

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E.D. 11652:GDS

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NOT TO BE REPRODUCED WITHOUT THE AUTHORIZATION OF THE EXECUTIVE SECRETARY **UNCLASSIFIED** REVIEW AUTHORITY: ROBERT O HOMME DATE/CASE ID: 28 DEC 2010 201000057



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TAGS: PARM, MNUC, ENRG, TECH, UK

SUBJECT: UK APPROACH TO SUPPLIER GOVERNMENTS ON PAKISTAN

1. UK EMBUFF CALLED ON DEPARTMENT (PM) OCTOBER 27 TO PRESENT PAPERS ON PAKISTANI NUCLEAR ACTIVITIES AT PARAS 2 AND 3. UK 15 ALSO MAKING THIS DEMARCHE IN ACTION ADDRESSEES CAPITALS. IF SUBJECT IS RAISED BY HOST AUTHORITIES, ACTION ADDRESSEES MAY NOTE THAT US HAS BEEN APPROACHED BY UK AND SHARES COMPLETELY UK CONCERNS. WE WILL BE TAKING ALL APPROPRIATE STEPS TO ENSURE THAT NO US EXPURTS CONTRIBUTE TO A PAKISTANI ENRICHMENT EFFORT.

ACTION ADDRESSEES (EXCEPT CANBERRA AND STOCKHOLM) SHOULD ALSO BE AWARE THAT WE WILL SOON BE TRANSMITTING A SIMILAR DEMARCHE ON PAKISTANI EFFORTS TO OBTAIN FOREIGN ASSISTANCE IN ATTAINING A CAPABILITY IN NUCLEAR FUEL REPROCESSING AND PLUTONIUM RECOVERY. WE WOULD WELCOME ANY REACTIONS

HOST GOVERNMENTS MAY BE IN A POSITION TO CONVEY REGARDING THE UK DEMARCHE.

2. <u>FOLLOWING IS TEXT OF BRITISH "CONFIDENTIAL" PAPER ON</u>
PAKS EFFORTS TO ACQUIRE INVERTERS FOR USE IN AN ENRICHMENT
PLANT:

BEGIN TEXT:

A. EVER SINCE THE NUCLEAR SUPPLIERS GROUP (NSG) DREW UP AN EXPORT TRIGGER LIST IN 1975 WHICH INCLUDED READILY INDENTIFIABLE COMPONENTS OF NUCLEAR PLANTS, WE AND OTHER NSG MEMBERS HAVE BEEN AWARE THAT A GREAT MANY OTHER FAIRLY SECRET

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STANDARD INDUSTRIAL AND SCIENTIFIC ITEMS, THE SO-CALLED "GREY AREAS", COULD ALSO BE USED IN NUCLEAR PLANTS. SUCH ITEMS WERE NOT, HOWEVER, INCLUDED IN THE TRIGGER LIST BECAUSE THEY WERE INDIVIDUALLY OF LESS IMPORTANCE AND WERE NOT SOLELY FOR NUCLEAR USE. SINCE SUCH ITEMS ARE NOT SPECIFICALLY INCLUDED IN THE TRIGGER LIST MOST NSG MEMBERS, INCLUDING THE UK, HAVE TENDED NOT TO INCLUDE THEM IN EXPORT CONTROL LEGISLATION.

AS A DEPOSITORY STATE OF THE NON-PROLIFERATION TREATY AND AS A MEMBER OF THE NSG, THE UK IS PARTICULARLY CON-CERNED TO ENSURE THAT OPPORTUNITIES FOR PROLIFERATION ARE AVDIDED WHEREEVER POSSIBLE. DUR CONCERN ABOUT UNCON-TROLLED EQUIPMENT WHICH COULD BE USED IN REPROCESSING OR URANIUM ENRICHMENT PLANTS HAD LED US TO RECONSIDER ISSUE OF THE "GREY AREA" WITH A VIEW TO COMPILING A LIST OF THE MOKE SIGNIFICANT ITEMS WHICH SHOULD PERHAPS BE MADE SUBJECT TO EXPORT CONTROL. WE MUULD BE INTERESTED ID LEARN HOW OTHER NSG MEMBERS VI EN THIS PRUBLEM AND WHAT STEPS THEY ARE TO DEAL TAKING

FROM OUR KNOWLEDGE AS CONSTRUCTOR AND OPERATOR OF A CENTRIFUGE ENRICHMENT PLANT WE HAVE RECENTLY BECOME AWARE OF A POTENTIALLY SERIOUS LOOPHOLE IN OUR EXPORT CONTROLS CONCERNING INVERTERS (FREQUENCY CHANGERS) OF A SPECIFI-CATION WHICH COULD BE USED IN A GAS CENTRIFUGE ENRICHMENT PLANT CAPABLE OF PRODUCING WEAPONS-GRADE (HIGHLY ENRICHED) URANIUM. THE GOVERNMENT HAVE ACCORDINGLY DECIDED TO AMEND THE EXPORT OF SUCH INVERTERS. THE AMENOMENT COMES INTO EFFECT ON 9 NOVEMBER 1978: AN ANNOUNCEMENT WAS MADE IN THE DEPARTMENT OF TRADE JOURNAL ON 19 OCTOBER. SOUGHT A DEFINITION WHICH WILL CATCH ALL SUCH ITEMS WHICH MIGHT BE USED IN A CENTRIFUGE PLANT, BUT AS LITTLE ELSE AS POSSIBLE. WE RECOGNIZE THAT THIS WILL MEAN SUBJECTING TO CONTROL SOME ITEMS WITH PERFECTLY INNOCENT USES. TERM FREQUENCY CHANGER AS DEFINED IN THE AMENDING DRDER! SECRET



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COVERS ALL ITEMS WITH A MULTI-PHASE ELECTRICAL POWER OUT-PUT WITHIN THE RANGE 600 TO 2000 HERZ; SUCH EQUIPMENT IS ALSO KNOWN BY THE TERMS "INVERTER", "CONVERTER", "GENERATOR", OR "AMPLIFIER".

- U. A CONTRACT FRUM PAKISTAN PLACED WITH A BRITISH FIRM THROUGH AN INTERMEDIARY IS THE FIRST TO BE AFFECTED BY THE NEW PROVISION. IT IS FOR 100 HIGH FREQUENCY INVERTERS.
- SUPPLIER GOVERNMENTS TO TAKE PARALLED STEPS TO ENSURE THAT ITEMS OF THIS KIND ARE CON-TROLLED AND THAT THE FAKISTAN GOVERNMENT IS NOT ABLE TO OBTAIN ELSEWMERE WHAT WE ARE BRINGING UNDER CONTROL. ARE WELL AMARE THAT PAKISTAN MAY QUITE RAPIDLY BE ABLE TO DEVELOP A CAPADILITY OF HER OWN AND INDEED HAS ALREADY OBTAINED SOME ITEMS FROM ABROAD. THERE ARE LIKELY TO BE PROBLEMS IN PARTICULAR WITH CONTROLLING THE EXPORT OF INDIVIDUALLY NON-SENSITIVE COMPONENT PARTS AND ATTEMPTS MAY SE MADE TO OBTAIN ITEMS THROUGH THIRD COUNTRIES. WE NUNETHELESS THAT EVEN TO SLOW DOWN A WEAPONS DEVELOP-FEEL MENT PROGRAMME IS WELL WORTHWHILE IN NON-PROLIFERATION TERMS. WE ARE CONFIDENT THAT IN PURSUIT OF SHARED NON-PROLIFERATION AIMS, AS WELL AS OUR COMMON NSG INTEREST IN KELPING COMMERCIAL AND NON-PROLIFERATION CONSIDERATIONS APART, OTHER GOVERNMENTS WILL WISH TO SUPPORT US IN THIS.
- F. AGAINST THIS BACKGROUND, WE UNGE GOVERNMENTS TO TAKE STEPS WHICH WOULD PUT THEM IN A POSITION
- (1) TO KNOW IF A FIRM HAS AN EXPORT ORDER FOR INVERTERS OF THE RELEVANT SPECIFICATIONS:

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- (2) TO REQUIRE AN EXPORT LICENSE FOR SUCH EQUIPMENT:,
- (3) WHERE APPROPRIATE TO REFUSE A LICENSE UPON APPLICATION,

END TEXT.

3. FOLLOWING IS TEXT OF BRITISH "SECRET" PAPER ON PAKISTAN NUCLEAR INTENTION, WHICH MAY NUT HAVE BEEN SHARED WITH ALL ACTION ADDRESSEE HOST GOVERNMENTS AND ACCORDINGLY SHOULD NOT BE REFERRED TO BY POSTS UNLESS RAISED BY HOST AUTHORITIES.

BEGIN TEXT

- A. FOLLOWING IS DUR ASSESSMENT OF PAKISTAN'S INTENTIONS
- B. THERE IS INFORMATION WHICH INDICATES THAT PAKISTAN IS PURSUING A MUCLEAR WEAPONS DEVELOPMENT PROGRAMME. THIS INCLUDES RECENT EVIDENCE THAT PAKISTAN INTENDS TO CONSTRUCT A URANIUM ENRICHMENT PLANT AND MAY HAVE ALREADY BEGUN TO DO SO.
- C. PAKISTANI DRGANIZATIONS (WHICH ARE BELIEVED TO BE CONNECTED WITH THEIR NUCLEAR WEAPONS DEVELOPMENT PROGRAMME) HAVE ORDERED ON A PIECEMEAL BASIS FROM FOREIGN SUPPLIERS COMPONENTS AND EQUIPMENT, INCLUDING INVERTERS OF CERTAIN SPECIFICATIONS, WHICH ARE LIKELY TO BE USED TO BUILD OR OPERATE A GAS CENTRIFUGE PLANT CAPABLE OF ENRICHING URANIUM TO WEAPON-GRADE LEVELS. THIS DEMONSTRATES THE PROBABILITY OF PAKISTAN'S COVERT ASSEMBLY OF A PLANT OF FISSILE MATERIAL, WHICH WILL NOT BE SUBJECT TO INTERNATIONAL SAFEGUARDS. PAKISTAN HAS ITS OWN RESOURCES OF URANIUM, WHICH ARE NOT SUBJECT TO SAFEGUARDS AND WHICH COULD AFTER CONVERSION BE ENRICHED IN SUCH A PLANT.

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4. FOR ROME: NYE, PICKERING, VAN DOREN AND HUMPHREYS WILL WISH TO DISCUSS SUBSTANCE OF BRITISH APPROACH WITH APPROPRIATE GOI OFFICIALS.

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