

PB90130-1284

RELEASE IN FULL



21 JUL 1955 Department of State

INCOMING TELEGRAM ACTION COPY

SECRET NOD161

PAGE 01 PARIS 19955 211534Z COPY 1 OF 15 COPIES ACTION NOUS-00

INFO OCT-01 ADS-00 /001 W -----025769 211535Z /42

O 211456Z JUN 79 FM AMEMBASSY PARIS TO SECSTATE WASHDC IMMEDIATE 1635

SECRET PARIS 19955

E.O. 12065: RDS-L 6/20/2009 (FRIEDMAN, A.S.) OR-S TAGS: TECH, MNUC, ENRG, PK, FR SUBJ: PAKISTAN'S NUCLEAR PROGRAM

L. (S - ENTIRE TEXT)

2. AT JACOMET'S REQUEST, SCICONS MET WITH MR. LEYGONIE WHO HAD INFORMATION ON PAKISTAN'S NUCLEAR PROGRAM TO PASS ON TO USG (LEYGONIE IS "CHIEF ARMAMENT ENGINEER" WHO HAD SERVED AS ASSISTANT TO JACOMET AND IS TEMPORARILY ACTING SECRETARY OF THE PRESIDENT'S NUCLEAR POLICY COUNCIL, FOLLOWING JACOMET'S RESIGNATION EFFECTIVE TODAY, JUNE 20).

3. LEYGONIE, WHO PARTICIPATED IN LAST FEBRUARY'S MEETING IN PARIS WITH GUMIN, ET. AL. ON PAKISTAN, SAID FRENCH INTELLIGENCE AGENCIES HAD MADE A THOROUGH INVESTIGATION OF FRENCH INDUSTRY ASSISTANCE TO PAKISTAN'S CENTRIFUGE PROGRAM.

4. LEYGONIE RECALLED THAT AT FEBRUARY BRIEFING HE GAVE SOME DETAILS ON STATUS OF PAKISTAN CENTRIFUGE PROGRAM, NOTING, FOR EXAMPLE, THAT THEY WERE USING AL-7075 TUBES OF 10 CM DIAMETER WHICH WOULD HAVE A PERIPHERAL VELOCITY OF 350 M/S. THE FRENCH ARE...

SECRET

Cat. X - Caption removed; transferred to O/FADRC
Cat. B - Transferred to O/FADRC with additional access controlled by S/S
Cat. C - Caption and custody retained by S/S
Reviewed by: [Signature]

NOT TO BE REPRODUCED WITHOUT THE AUTHORIZATION OF THE EXECUTIVE SECRETARY

REVIEW AUTHORITY: Marvin Russell, Senior Reviewer



Department of State

**INCOMING
TELEGRAM**

SECRET

PAGE 02

PARIS 19955 211534Z

CONVINCED THAT THE PAKISTAN CENTRIFUGES ARE FAR MORE SOPHISTICATED AND EFFICIENT THAN THAT.

5. AFTER U.S. HAD INFORMED FRENCH OF ROLE THAT SOCIETE CALORSTAT HAD IN FABRICATING BELLOWS, GOF IMMEDIATELY ALERTED THEIR CUSTOMS AND EXPORT CONTROL PEOPLE AND ON MAY 2 STOPPED CALORSTAT FROM ANY FURTHER WORK IN THIS AREA. BY THAT TIME ONE THOUSAND BELLOWS HAD ALREADY BEEN FABRICATED AND EXPORTED TO PAKISTAN OF A TOTAL ORDER OF TEN THOUSAND BELLOWS. THE BELLOWS DESIGN SPECIFICATIONS AND THE PLANS FOR THE MACHINES TO FABRICATE THE BELLOWS WERE TRANSMITTED TO CALORSTAT FROM THE PAKISTAN EMBASSY IN WEST GERMANY. THE MACHINES WHICH WERE USED FOR MAKING THE BELLOWS HAD A CAPACITY OF 200 BELLOWS PER MONTH. CALORSTAT WAS ADVISED TO SEND THE FABRICATED COMPONENTS TO "SPECIAL WORKS ORGANIZATION, 669 KITSON RD., WESTRIDGE, RAWALPINDI, PAKISTAN".

6. THE PAKISTAN BELLOWS AND CENTRIFUGE TUBES ARE MADE OF MANGANESE STEEL AND NOT ALUMINIUM AS WE HAD THOUGHT. THE MANGANESE STEEL WAS IMPORTED FROM THE NETHERLANDS. A DETAILED EXAMINATION BY THE FRENCH OF THE PLANS FOR THE BELLOWS AND THE MACHINES TO CONSTRUCT THEM CONVINCED THE FRENCH THAT THEY ARE IDENTICAL TO THOSE USED AT URENCO. THE ELECTRON BOMBARDING WELDING TECHNIQUE REQUIRED FOR MANGANESE STEEL AND THE DEGREE OF THE SOPHISTICATION OF THE TECHNOLOGY INVOLVED HAVE LED THE FRENCH TO CONCLUDE THAT THE PAKISTANIS HAVE DETAILED URENCO PLANS AND THE FRENCH ARE VERY CONCERNED ABOUT THE INADEQUACY OF URENCO SECURITY. THEY BELIEVE THE PLANS CAME FROM H.A.N., THE GERMAN COMPANY FABRICATING THE URENCO CENTRIFUGES, AS WELL

SECRET

NOT TO BE REPRODUCED WITHOUT THE AUTHORIZATION OF THE EXECUTIVE SECRETARY

#848130-1786



Department of State

**INCOMING
TELEGRAM**

SECRET

PAGE 03 PARIS 19955 211534Z

POSSIBLY FROM PHILIPS IN THE NETHERLANDS. ANOTHER FRENCH COMPANY HAD BEEN ASKED BY PAKISTAN TO SUPPLY HIGHLY SPECIALIZED FLOW METERS DESIGNED SPECIFICALLY FOR LOW CENTRIFUGE FLOW RATES AND RESISTANT TO UFG.

7. LEYGONIE HAS SUGGESTED THAT IT MIGHT BE USEFUL FOR FRENCH AND U.S. INTELLIGENCE AGENCIES TO COLLABORATE ON THIS PROBLEM.

8. COMMENT: ALTHOUGH LEYGONIE MAY NOT BE INVOLVED IN MFA MEETINGS WITH AMBASSADOR SMITH, IT MIGHT BE VERY USEFUL FOR GALUCCI TO SEE LEYGONIE SEPARATELY ON JUNE 28.
HARTMAN

SECRET

NOT TO BE REPRODUCED WITHOUT THE AUTHORIZATION OF THE EXECUTIVE SECRETARY

SECRET