



### OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE WASHINGTON 25, D.C.

31

12 October 1964

In reply refer to: 1-28573/64

INTERNATIONAL SECURITY AFFAIRS

Mr. Arnold Freshman Office of Politico-Military Affairs Department of State

Dear Arnie -

Pursuant to our telephone conversation this morning on the draft US/UK agreement on Project CLEAR SKY, I enclose a copy of the "Understandings Reached in US/UK Technical Discussions of September 1964". As you may recall from our meeting in Ray Bronez's office on October 5, Annexes A and B to the proposed agreement forwarded under cover of my memorandum of 6 October are to be based upon material contained in the annex to the enclosed memorandum.

Specifically Annex A is to list all the locations (two in the UK and eight outside the UK) shown in this paper but without any reference to the techniques involved or any other comments.

Annex B is to be the paragraph on security (page 4) with the following changes:

- a. In the first sentence, add "The US or" before "AFTAC".
- b. Amend the third sentence to read:

"All recorded data, derived evaluation and reports exchanged between the designated operating agencies shall be classified SECRET."

c. In the fifth sentence, delete "operated".

I hope that on the basis of this information you will be able to clear the draft agreement and its annexes with all concerned.

(y)

DEPARTMENT OF STATE

Retain class'n Change classify to Sincerely,

With concurrence of Constant State

Declassify In part and excise as shown

DECLASSIFIED E.C. 12038, Sec. 5.4

By Alm Date 10/5/1

EO 12356, Sec. 1.3 (a) (

39-36 Hugh W. W

Hugh W. Wolff Foreign Military Rights Affairs

Attachment: Office, i/62,

Attachment: Dft US/UK Agreement (I-27955/64)

SECRET

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DEF 18-87.

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Test Ban Monitoring Requirements

6)

Understandings Reached in US/UK

Technical Discussions of September 1964

Draft Agreement with Annex

#### Personnel Participating

UK -

Dr. Robert Press

Mr. Richard Faber

Mr. Ieuan Maddock

Dr. Francis Panton

US -

Maj Gen J. F. Rodenhauser, AFTAC

Dr. George Rathjens, ACDA

Mr. Ray Bronez, OSD (ISA)

Mr. D. L. Northrup, AFTAC

Mr. R. O. Blau, AFTAC

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EXCLUDED FROM AUTOMATIC REGRADING, DOD DIR 5200.10 DOES NOT APPLY

TIME

I-27955/64

AFTAC 22445

Test Ban Monitoring Requirements

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Understandings Reached in US/UK

Technical Discussions of September 1964

Draft Agreement with Annex

Noting that the UK proposes to make an independent contribution to monitoring the nuclear test ban treaty by installing and operating UK stations in collaboration with the US network, it has been agreed that:

- 1. The UK operated stations should be located on a basis of full complementarity with the US network;
- 2. The precise number of UK operated stations will be subject to UK budgetary limitations;
- 3. To facilitate full exchange and common evaluation of data, the
  UK will install and operate US equipment as provided by US.

  This clause will not preclude the incorporation of British equipment in due course as or when desirable;
- 4. Whenever US equipment is installed and operated at UK stations, it will be on the basis described in the annex to this paper.

UK stations.



- 5. The preferred locations for UK stations are stated in the annex to this paper;
- 6. The UK stations will be located and operated to provide UK with a reasonably independent assessment of possible violations of the test ban treaty by the Soviet Union;

(3

7. All data from UK operated stations will be promptly transmitted to the US (AFTAC) through a single communications link. The US will similarly provide to the UK data recorded at US detection facilities;

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8. The UK will establish a data analysis center to process data from UK operated stations and effect a maximum exchange of technical data with the US. To this end a technical representative from each operational organization may be stationed at the headquarters of the other.

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9. Operation of the US/NK monitoring systems will be supported by continuing research and development programs on which there will be a rull exchange of information. These programs will be directed towards improving the effectiveness of the monitoring systems.

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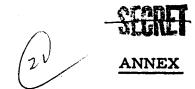
10. This Agreement will operate for a period of 10 years subject to termination thereafter at 1 year's notice on either side.

- This term will in no way preclude introduction of changes in techniques or equipment during the currency of the Agreement.
- 11. Operation in overseas territories will impose varying degrees of disclosure of information concerning the purpose and results of monitoring operations. The extent of such disclosure will be negotiated between the station operator and the bost country.
- 12. The fact of US/UK monitoring collaboration will be unclassified, but the identification of USAF Air Force Technical Applications

  Center (AFTAC) with monitoring activities will be classified

  SECRET.

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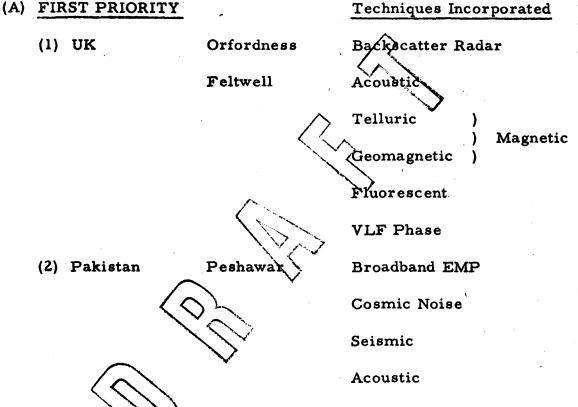


#### DEPLOYMENT OF TECHNIQUES

The proposed UK operated stations are given below in two groups.

Those listed under (A) are regarded as essential and those listed under

(B) are regarded as highly desirable:



Acoustic and seismic techniques are already operated at this site and it may now be possible to add the EMP and cosmic noise techniques at the existing site, or to set up a new station embodying all techniques.

It should be noted that the Peshawar acoustic station is one of the most effective listening points for atmospheric tests at the main Soviet Test Range at Semipalatinsk.



	Techniques Incorporated
(3) Mauritius - a new station	Electromagnetic
	Telluric )
	) Magnetic Geomagnetic )
	VLF Phase
	Atmospheric Fluorescence
	Cosmic Noise
(4) South Africa Capetown	Electromagnetic
a new station	VLF Phase
	Telluric )
	Geomagnetic ) Magnetic
	Air Sampling
	Cosmic Noise
	Atmospheric Fluorescence
(5) Pretoria - a new station	Acoustic

This technique has been separated from the others to be located at Capetown solely to achieve a low acoustic background. These two stations could be merged if a site could be found with noise level simultaneously suitable for the acoustic technique and for the VLF ray paths and EMP.

(B) SECOND PRIORITY

Techniques Incorporated

(6) Fiji - a new station.

Electromagnetic

2

SIME

## SECTI

Techniques Incorporated

Cosmic Noise

Atmospheric Fluorescence

(7) Australia

Perth W.A.

Electromagnetic

an existing station

Atmospheric Fluorescence

VLF Phase

Cosmic Noise

The US regards it as highly desirable that this station should be absorbed into the UK network. From the UK standpoint, this station would complete the independent UK coverage of the main target.

(8) Brisbane - a new station

ŲĻ̀F Phase

The location of this station is governed by the VLF ray paths.

Otherwise it could be incorporated into other major sites in Australia

(9) India - a new station

Seismic

VLF Phase

### EQUIPMENT SURPLY

The US will provide equipment at US expense for operation in UK operated stations. The equipment shall be on loan to the UK for the period of the Agreement. Necessary supplies of spare parts peculiar to the equipment, together with consumable supplies and parts not available in the UK shall be supplied to the UK as necessary at US expense.

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For the operation of US equipment in UK stations the US will at US expense train UK personnel.

The US will provide at US expense specialized equipment and technical assistance as required for site surveys at proposed UK station locations.

The cost of site acquisition, installation and day-to-day running costs at the UK operated stations shall be borne by the UK.

The UK will operate US equipment in accordance with Standard Operating Procedures to be provided by the US.

#### SECURITY

The fact that UK stations are operating in cooperation with AFTAC shall be SECRET.

The details of US techniques used at UK stations shall be SECRET.

All recorded data and derived evaluation shall be SECRET.

The fact that technical equipment from the US is installed at a particular UK station shall be unclassified.

The fact that a particular UK operated station is monitoring the nuclear test ban is unclassified.

(9)