

GR 750

C O N F I D E N T I A L

C O N F I D E N T I A L

63

DESKBY 170900Z

FM WASHINGTON 162210Z APR 82

TO IMMEDIATE F C O

TOP COPY

See 73

TELEGRAM NUMBER 1316 OF 16 APRIL

FALKLANDS: ARGENTINE REQUEST FOR SATELLITE COVERAGE OF FALKLAND ISLANDS

1. WE HAVE INVESTIGATED THE TECHNICAL CAPABILITIES OF THE LANDSAT SYSTEM. SOME OF THE INFORMATION SET OUT BELOW IS AT VARIANCE WITH WHAT STATE DEPARTMENT TOLD MINISTER YESTERDAY. FULL DETAILS OF THE LANDSAT TECHNICAL SPECIFICATION WILL BE AVAILABLE FROM THE UK NATIONAL REMOTE SENSING CENTRE AT RAE FARNBOROUGH.

2. TECHNICAL SPECIFICATIONS. THE ONLY LANDSAT SATELLITE PRESENTLY OPERATIONAL IS LANDSAT 3. IT CARRIES TWO SENSORS, A RETURN BEAM VIDICON (RBV) CAMERA (ESSENTIALLY A BLACK AND WHITE TV CAMERA), AND A MULTI-SPECTRAL SCANNER (MSS), A SCANNING DEVICE OPERATING IN FOUR SPECTRAL BANDS, TWO IN THE VISIABLE AND TWO IN THE NEAR INFRA-RED. THE SPACECRAFT HAS NO CAPABILITY IN THE THERMAL INFRA-RED. RESOLUTION OF THE MSS IS AROUND 80 METERS AND THAT OF THE RBV IS AROUND 40 METERS. DATA IS NOT (NOT) ENCRYPTED.

3. OPERATIONAL PROCEDURES. THE SATELLITE IS IN A NEAR-POLAR ORBIT GIVING GLOBAL COVERAGE OVER AN 18 DAY CYCLE. SWATHS ARE ABOUT 180 KILOMETRES WIDE. ADJACENT SWATHS ARE ACQUIRED AT A TIME SEPARATION OF AROUND 24 HOURS AND HAVE AN OVERLAP OF AT LEAST 5 PERCENT AT THE EQUATOR AND OF AROUND 40 PERCENT AT 50 DEGREES SOUTH. A USER REQUIRING DATA OF A PARTICULAR AREA MUST REQUEST NASA TO SWITCH ON THE SATELLITE FOR THE APPROPRIATE SWATH. SWITCHING IS CONTROLLED BY AN ONBOARD COMPUTER WHICH IS LOADED VIA A NASA UPLINK. LOADING CAN BE DONE WHENEVER THE SATELLITE IS WITHIN RANGE OF AN APPROPRIATE NASA UPLINK USUALLY AT LEAST ONCE EVERY 24 HOURS OR SO. DATA ACQUIRED THROUGH A FOREIGN GROUND STATION CAN BE PROCESSED BY THE GROUND STATION OPERATOR. PROCESSING OF SELECTED FRAMES CAN BE COMPLETED WITHIN A FEW HOURS.

4. CURRENT STATUS OF LANDSAT 3. THE SATELLITE HAS SUFFERED SEVERAL TECHNICAL MALFUNCTIONS AND NASA AT PRESENT IS TRYING TO RESTRICT ITS USE TO THE MINIMUM AMOUNT NECESSARY IN ORDER TO PRESERVE ITS EXISTING CAPABILITY UNTIL THE LAUNCH OF LANDSAT 4 SCHEDULED FOR JULY 82. THERE ARE ALSO SYSTEM CONTRAINTS THE MOST IMPORTANT OF WHICH IS THAT ONLY ONE TAPE RECORDER IS FUNCTIONAL. (RECORDERS ARE REQUIRED TO HOLD DATA WHEN THE SPACECRAFT IS NOT IN RANGE OF A GROUND STATION). THIS HAS MEANT RESTRICTING CURRENT USERS TO LESS THAN THEIR USUAL RATE OF DATA ACQUISITION PARTICULARLY WHERE THE AREAS OF ADJACENT GROUND STATIONS OVERLAP.

15.

C O N F I D E N T I A L

ALQ 50/304/1
RECEIVED IN REGISTRY

DESK OFFICER		REGISTRY
INDEX	PA	Action Taken

CONFIDENTIAL

5. STATUS IN ARGENTINA. ARGENTINA HAS NO RBV RECEPTION CAPABILITY. ITS MSS DATA PROCESSING FACILITY IS NEW AND NOT COMPLETELY DEBUGGED. THE OPERATOR HAS HAD DIFFICULTY IN PRODUCING DATA PRODUCTS TO TIME. IT IS PROBABLE THAT THE TIME THEY WOULD TAKE TO PROCESS DATA WOULD BE CONSIDERABLY GREATER THAN NORMAL. THE ARGENTINE REQUESTED COVERAGE OF THE FALKLANDS ABOUT A YEAR AGO BUT THIS WAS UNSUCCESSFUL OWING TO PROBLEMS WITH SUN ANGLE. EXISTING ARCHIVE DATA OF THE FALKLANDS IS OF POOR QUALITY BECAUSE OF CLOUD COVER.

6. STATUS IN THE US. WITH REGARD TO CIVILIAN REMOTE SENSING FROM SPACE THE US HAS A POLICY OF QUOTE OPEN SKIES UNQUOTE ALLOWING FREE ACCESS BY ALL TO REMOTELY SENSED DATA. THEY ALSO HAVE MEMORANDA OF UNDERSTANDING WITH GROUND STATION OPERATORS INCLUDING THE ARGENTINE. THEY HAVE TREATED THE REQUEST FROM THE ARGENTINE IN A ROUTINE MANNER AND THE THREE PASSES REQUESTED ARE CURRENTLY SCHEDULED. THE US WILL HOWEVER ACQUIRE THE SAME DATA AS QUICKLY AS POSSIBLE (BY PASSING THE USUAL BACKLOG IN THE DATA PROCESSING) AND MAKE IT AVAILABLE TO ANYONE REQUESTING IT INCLUDING THE UK.

CONCLUSION. THE US STILL HAS THE TECHNICAL CAPABILITY TO REVISE THE SCHEDULE IF NECESSARY. THE DATA TO BE ACQUIRED WILL HAVE A RESOLUTION OF AROUND 80 METRES.

HENDERSON

FCC

S AM D
ESSD
CABINET OFFICE

ADDITIONAL DISTRIBUTION
FALKLAND ISLANDS

COPIES TO

PS/CHANCELLOR }
SIR K COUZENS }
MR LITTLE }
MR HAWTIN } TREASURY
MR PERETZ }
MR ILETT }

MR FULLER DIO CABINET OFFICE

2 MISS DICKSON (EIP DIVN) D/ENERGY

CONFIDENTIAL

