

CCIR

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS POLICY
WASHINGTON, D.C. 20504

Date: February 25, 1971

Subject: CCIR Special Joint Meeting Study Groups

To: Mr. C. T. Whitehead

Based on a report received from Don Jansky dated February 21, the following is an update of my memorandum of February 18 on subject matter.

The situation is as follows:

a. The technical work has been all but completed, the difficult task remaining being the integration of material of the subgroups into individual reports and subsequently a unified report for the WARC.

b. Study Group F. on radio astronomy has completed its report.

c. Broadcasting interests are having problems demonstrating how their service might share with terrestrial radio services already allocated in spectrum areas where broadcasters desire to operate.

d. The French are giving opposition to the U.S. proposal in vicinity of 400 MHz for maritime purposes but considerable support is developing elsewhere.

e. In the orbit/spectrum area it has been learned that the USSR is still interested in "slotting up" the orbit. They have, however, agreed to a methodology for calculating the increase in noise temperature from an interfering satellite and have also agreed on some standards for the amount of interference noise temperature tolerable. Since the angle of calculation is implicit in these procedures, not much has been lost.

f. The information resulting from the NASA/ITS RIPP Program has made a significant contribution to the Conference. The effective inputting of RIPP material has provided about the only area of substantive technical progress made at the subject meetings *in the propagation area.*

Will
W. Dean, Jr.

cc: G.F. Mansur, W. Hinchman, J. M. Thornell

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Will Dean
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Subject: CCIR Special Joint Meeting Study Groups

To: Mr. C. T. Whitehead

The Special Joint Meeting of the CCIR Study Groups convened in Plenary Assembly in Geneva on February 3 with 39 countries, six international organizations and a total of 362 participants.

Two reports have been received from the Delegation to date as set forth in Enclosures 1 and 2.

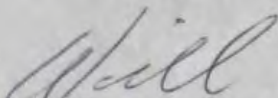
Actions of significance follow, all of which are generally consistent with U.S. positions except item (k):

- a. Australia proposal for new space service definitions (aeronautical, maritime, etc.) rejected.
- b. Discussions on technical bases for regulations concerning efficient utilization of geostationary orbit proceeding in accordance with recommendations of International Working Party (IWP) on this subject.
- c. Agreement near on maximum e.i.r.p. for communication satellite earth stations in vicinity of 45 dBW. Some countries had recommended as low as 40 dBW.
- d. No problems have arisen with respect to accommodation of space research stations.
- e. General agreement reached on need for accommodation of earth resource satellites, Soviets now supporting concept.
- f. Agreement near with respect to retention of footnote 273A which would preserve option for VHF aeronautical satellite.
- g. U.S. proposal for accommodation of maritime mobile in the vicinity of 400 MHz receiving favorable technical endorsement.
- h. U.S. proposal for maritime and aviation accommodation in band 1535-1660 MHz receiving support from a technical standpoint.
- i. Broadcasting satellite considerations center on technical matters and general agreement exists for an allocation provision in the vicinity of 12 GHz.

j. Radio Astronomy proposals proceeding in accordance with U.S. planning with exception of Soviets seeking accommodation of hydrogen line in vicinity of 36-38 GHz--this not contained in U.S. proposals but no major difficulties seen in accommodating.

k. Only contentious area thus far has to do with sharing between space systems and terrestrial tropospheric scatter operations, particularly with respect to U.S. proposal at 2500-2690 MHz. U.K. and Australian positions oppose accommodation of space services in view of sharing difficulties for those countries having limited geographical flexibility. Guidance given to U.S. Delegation, as a result of coordination in IRAC, to ensure no limitations placed upon tropo or space systems, relying on engineering on case by case basis. Al Horley has returned from Geneva and the undersigned is meeting with him on 18 February to determine if further action is necessary. *(Meeting held, no further action required at moment.)*

l. It appears that power flux density limitations will not be imposed in the case of aeronautical service.


W. Dean, Jr.

Attachments: (1) IRAC Doc. 13779
(2) IRAC Doc. 13818

cc: Dr. G. Mansur
Mr. W. Hinchman
Mr. J. Thornell



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FOR: EYTT/TD

SUBJECT: CCIR SPECIAL
 JOINT MEETING OF STUDY GROUPS:

1. SPECIAL JOINT MEETING (SJM) CONVENED IN PLENARY ASSEMBLY FEBRUARY 3. THIRTY-NINE COUNTRIES AND SIX INTERNATIONAL ORGANIZATIONS REPRESENTED BY TOTAL OF 362 PARTICIPANTS. NO POLITICAL ISSUES. DECISIONS BY PLENARY INCLUDE THE FOLLOWING:

A. CHAIRMEN OF JOINT WORKING GROUPS ARE: A-CRAIG (AUSTRALIA), B-TERZANI (ITALY), C-GLEADLE (UK), D-RANZI (ITALY), E-PLACE (FRANCE), F-HAGEN (USA), G-DIETRICH (FRG) AND H-SAXTON (UK).

B. JOINT WORKING GROUP D IS COMPOSITE OF FORMERLY PROPOSED GROUPS D (SPACE RESEARCH) AND E (METEOROLOGICAL).

C. TERMS OF REFERENCE FOR NEW GROUP E ARE QUOTE. A JOINT MEETING OF INTERESTED STUDY GROUPS TO DEVELOP THE TECHNICAL BASIS FOR REGULATIONS CONCERNING THE EFFICIENT UTILIZATION OF THE GEOSTATIONARY ORBIT (COORDINATION ANGLE

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PROCEDURE, STATEION-KEEPING, INTERFERENCE NOISE ALLOWANCES, ETC.) BY ALL SERVICES AND THE CONTROL OF INTERFERENCE BETWEEN GEOSTATIONARY AND NON-GEOSTATIONARY SATELLITE SYSTEMS. END QUOTE.

2. JOINT WORKING GROUPS HAVE FORMED TOTAL OF 28 SUBGROUPS OF WHICH 10 ARE CHAIRED BY MEMBERS US DEL.

3. UK AND CANADIANS PROPOSE 40 DBW AS MAXIMUM EIRP FOR COMMUNICATION SATELLITE EARTH STATIONS. AUSTRALIA FAVORS 45 DBW AND US MAY ACCEPT AS COMPROMISE. NOT YET CLEAR IF EFFORT WILL BE MADE APPLY EIRP LESS THAN 55 DBW TO EARTH STATIONS IN SPACE RESEARCH SERVICE IN SHARED BANDS. IF LATTER CASE DEVELOPS, US WILL STRONGLY OPPOSE.

4. AUSTRALIA PUSHING FOR CCIR RECOGNITION OF NEW SPACE SERVICE DEFINITIONS, I.E., FOR DISTRIBUTION, AERONAUTICAL AND MARITIME MOBILE, US OPPOSING ALL PARTICULAR PROBLEM IN RESPECT 2500-2690 MHZ WHERE APPROPRIATENESS OF EITHER COMMUNICATION SATELLITE OR BROADCASTING SATELLITE SERVICE DEFINITIONS BEING ARGUED.

5. MAJOR ISSUE EXPECTED IN RESPECT FLUX DENSITY LIMITATIONS FOR AERONAUTICAL AND MARITIME APPLICATIONS AT BOTH VHF AND UHF. FRANCE EXPECTED PROPOSE FLUX LIMITATION IN BAND 118-136 MHZ WHICH WOULD EVENTUALLY KILL POSSIBILITY OF SPACE APPLICATIONS UNDER PROVISIONS OF FOOTNOTE 273A. IN OPPOSING FRENCH POSITION, US DEL MUST RATIONALIZE NEED TO KEEP OPTIONS OPEN; USE OF RATIONALE AS RECENTLY STATED BY AIRINC, HOWEVER, WOULD LIKELY SPEED THE DEMISE OF OUR POSITION. NETHERLANDS PROPOSE FLUX LIMITS BAND 1535-1660 MHZ; US OPPOSING PER POSITION PAPER.

6. FIRST MEETING ON EARTH RESOURCE SATELLITES HELD FEBRUARY 5. HEAD OF US DEL DID NOT ATTEND IN ORDER PLAY DOWN ISSUE. INTERESTING TO NOTE THAT BADALOV (HEAD OF RUSSIAN DEL) ALSO DID NOT ATTEND. RESULTS OF FIRST MEETING ENCOURAGING. RUSSIAN SPOKESMAN STATED AGREEMENT WITH ESSENCE OF US PAPERS BEING INCORPORATED IN SJM'S REPORT AS LONG AS NO SPECIFIC RECOMMENDATIONS ARE MADE (LATTER IS RUSSIAN POSITION IN RESPECT ALL MATTERS TO BE REPORTED BY SJM). IN HUFFCUTT-BADALOV DISCUSSIONS TO

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DATE, ERS HAS BEEN AVOIDED BY BOTH. NEXT ERS MEETING (EXPECTED BE FEBRUARY 11) SHOULD ENABLE BETTER ASSESSMENT OF WHAT RUSSIAN POSITION REALLY IS AND WILL BE FOLLOWED BY DISCUSSION, AS APPROPRIATE, WITH BADALOV.

7. WORK IN BROADCASTING SATELLITE GROUP HAS BEEN CONFINED TO TECHNICAL MATTERS PROCEEDING SMOOTHLY. NO POLITICAL ISSUES.

8. RUSSIANS WANT CCIR RECOGNITION OF BAND 36-38 GHZ WHICH THEY USE FOR OBSERVATIONS OF THE EXCITED HYDROGEN LINE. THIS POSITION STATED ORALLY IS SOMEWHAT INCONSISTENT WITH POSITION IN SJM DOCUMENT NO. 221 WHERE THEY REFER TO SPECIFIC BAND 35.458-36.488 GHZ. SJM DOCUMENT NO. 191 (US PAPER ON BANDS REQUIRED FOR RADIO ASTRONOMICAL AND SCIENTIFIC MEASUREMENTS IN THE 20-300 GHZ RANGE). RELATES.

9. NEXT PLENARY EXPECTED BE FEBRUARY 12.

10. WOULD APPRECIATE EARLY WASHINGTON COMMENTS, PARTICULARLY ON RUSSIAN POSITION 36-38 GHZ.

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FOR: CVTTVID

SUBJ: CCIR SPECIAL JOINT MEETING (SJM) STUDY GROUPS

REF: A) GENEVA 378; B) STATE 024328, FEBRUARY 12

WEEK OF FEBRUARY 8 SAW EXTENSIVE ACTIVITY AND PROGRESS IN SUBI GROUPS.

HAVE GENERAL SUPPORT FOR US POSITION ON ESCALATION OF POWER FLUX DENSITY (PFD) IN BAND 1-10 GHZ, IE: -152 DBW RELATIVE TO 1 METER SQUARED PER 4 KHZ INCREASING LINEARLY IN DB BETWEEN 5 AND 25 DEGREES TO -142 DBW. ESCALATION ABOVE 10 GHZ STILL BEING DEBATED AND OTHER ADMINISTRATIONS PROPOSING PFD HIGHER THAN US POSITION. ✓

MAXIMUM EIRP FOR COMMUNICATION-SATELLITE EARTH STATIONS APPEARS LIKELY TO BE COMPROMISED AT 45 DBW. NO PROBLEM IN RESPECT SPACE RESEARCH STATIONS. ✓

MATTER OF SHARING BETWEEN SPACE SYSTEMS AND TERRESTRIAL FIXED (TROPOSCATTER) HAS BEEN DIFFICULT SUBJECT, PARTICULARLY IN RESPECT US PROPOSAL BAND 2500-2690 MHZ. UK AND AUSTRALIAN POSITIONS ADAMANT AGAINST RECOGNIZING POSSIBILITY OF SHARING. ✓

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AND IN AVOIDING ANY SPECIFICATIONS FOR RESTRICTIONS ON EIRP OR ANTENNA POINTING OF TROPOSCATTER STATIONS IN EXISTING OR PLANNED BANDS. GENERALLY, US DEL HAS MAINTAINED POSITION CONSISTENT WITH STATE 024328 BUT MATTER OF GREAT CONCERN TO INTERESTS AT 2500 MHZ. DR. ALBERT HORLEY (HEW) RETURNING TO WASHINGTON, FEBRUARY 15, AND CAN FURNISH DETAILS TO IRAC-FCC.

NEW SERVICE DEFINITIONS HAVE BEEN RATHER CONTENTIOUS ISSUE BUT AUSTRALIAN POSITION DEFEATED INSOFAR AS SJM REPORT IS CONCERNED. POLICY NOW THAT JSM WILL NOT PROPOSE NEW SERVICE DEFINITIONS.

AFTER DIFFICULT WEEKEND SESSION IT LOOKS LIKE US POSITION ON THE CRITICAL ISSUE OF INTERLEAVING OF CHANNELS IN BAND 118-136 MHZ WILL PREVAIL IN SJM REPORT. RECOGNITION OF NEED TO RETAIN FOOTNOTE 273A, SEEMS ASSURED. IT IS NOW NOT LIKELY THAT SJM REPORT WILL SPECIFY PFD LIMITATIONS, LEAVING MATTER COMPLETELY FOR RESOLUTION BY WARC-ST. THE PFD IN US PROPOSAL FOR RR 457A FOR MARITIME MOBILE 100-200 MHZ IS WITHIN NARROW RANGE OF VALUES STILL UNDER DISCUSSION. NEEDS OF MARITIME MOBILE IN TERMS OF NUMBER OF CHANNELS AND BANDWIDTHS STILL UNDER DISCUSSION.

US PROPOSAL ADD RR 310A AND COMPANION UP BAND FOR MARITIME MOBILE SERVICE IS RECEIVING GENERALLY FAVORABLE REACTIONS ALTHOUGH DESIRE FOR WIDER BANDS IS INDICATED. NOW NO PRESSURE FOR PFD IN BAND 1535-1660 MHZ.

SECOND MEETING ON EARTH RESOURCE SATELLITE PAPERS ALSO ENCOURAGING. NO PROBLEMS. CONTRIBUTION TO SJM RUOPOT NOW BEING DRAFTED UNDER US CHAIRMANSHIP. HEAD US DEL COMMENTED TO BADALOV THAT ERS GOING VERY WELL. BADALOV'S RESPONSE WAS QUOTE. IN THE BEGINNING THERE WERE SOME MISUNDERSTANDINGS. END QUOTE. READ BADALOV'S COMMENT IN REFERENCE TO PROBLEMS IN PAST.

WORK IN BROADCASTING SATELLITE GROUP CONTINUES FOCUS ONLY ON TECHNICAL MATTERS. INDICATIONS ARE THAT EBU MEMBERS CONFIDENT THAT WARC WILL ALLOCATE BAND NEAR 12 GHZ FOR BROADCASTING SATELLITES AND THAT EUROPEAN AREA CONFERENCE WILL SUBSEQUENTLY PREPARE AN ASSIGNMENT PLAN.

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WORKING GROUP ON RADIOASTRONOMY HAS COMPLETED DRAFT REPORT WHICH INTER ALIA CONCLUDES THAT A) A SINGLE BAND OF AT LEAST 20 KHZ WIDTH NEAR 20 MHZ WOULD BE SATISFACTORY SCIENTIFICALLY FOR OBSERVATIONS AND IF MADE AVAILABLE WOULD VIRTUALLY END OBSERVATIONS IN STANDARD FREQUENCY AND TIME SIGNAL BANDS 2.5, 5, 10, 15, 20 AND 25 MHZ; AND B) THERE IS NEED FOR BAND FOR OBSERVATIONS IN THE ATMOSPHERIC ABSORPTION MINIMA NEAR 36 GHZ. ✓

IN RESPECT WORKING GROUP ON EFFICIENT USE OF GEOSTATIONARY ORBIT, REPORT BY IWP 4/1 (DOCUMENT M-195) HAS RECEIVED GENERAL ACCEPTANCE. MAY YET BE PROBLEM WITH COORDINATION ANGLE. NO PARTICULAR PROBLEM HAS SURFACED IN SJM IN RESPECT TO US PROPOSAL FOR -160 DBW PFD IN BAND 6625-7125 MHZ, HOWEVER, CANADIANS STATE WILL NOT ACCEPT AT WARC. ✓

DURING PERIOD FEBRUARY 13-15, FOLLOWING PERSONS DEPARTED FOR WASHINGTON: DIXON, LEVATICH, PODRACZKY, E.K. SMITH AND A.P. WALKER (COMPLETED WORK) AND HORLEY (BY DIRECTION HEW). ✓

DEPARTMENT COMMENTS REQUESTED.

DECONTROL AFTER FEB 15, 1972. RIMESTAD

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