

CORF Meeting May 14-15, 2003

Open Session

Tom Gergely report. WRC-03 looms large.

GAO telecommunications reports of September 2002 and January 2003.

Mike Davis asked about process, Tom may have URLs for the reports.

WP7D and IUCAF

Andy Clegg is vice chair of US WP7D.

Dick Thompson completed editing the ITU Handbook. CORF voted thanks to Dick.

Problems with Rec. 3.14 for SiO line at 42 GHz.

Task Group 1/7 is doing a band-by-band review of radio astronomy use. How to ensure that some radio astronomers participate in TG1/9?

Ken Tapping

Canada involved with JCMT, ALMA, and SKA. Interest in International Radio Quiet Zones. Sidelobe vulnerability noted by DRAO. The need to protect historical use of 2.8 GHz for long-term solar flux measurements.

Peter Schloerb

LMT under construction. The largest science project in Mexico, located in a national park.

David DeBoer mentioned a survey that the Consortium of the Southwest made of the proposed SKA site near the VLA.

Tom stressed the need for registration of frequencies, especially 31.3-275 GHz.

Chuck Wende and John Zuzek.

Remote sensing use. Impact of vehicular radar and other interference. (see their handouts).

Ron Carbury

Bob Taylor is international chair of SG7.

Warren Martin is conducting a noise floor study for NASA. A strategic plan for space communications is being prepared.

The DSN is negotiating with the DOD concerning increased use of Ft. Irwin training base.

JWST will use X-band.

NASA and NOAA are hosting the Space Frequencies Coordination Group (SFCG) meeting September 9-15, 2003.

Andy Clegg

Problems with the use of UWB in protected bands.

Barry Geldzahler

Use of DSN in Madrid almost impossible. Expect significant increase in telemetry bandwidth both ways with the extra power available from the proposed nuclear-powered spacecraft for the Mars and Jupiter and Inner-Moons Orbiter (JIMO) missions.

The Next Generation DSN will cost about \$500 million, possibly three arrays each with 400 12-m dishes.

Paul Steffes and Allen Petrin

Two year noise survey (see slides). Also see NAIC RFI material on Phil Perillat's website at

[www.naic.edu/~phil/rfi/rfi.html#azswing%2019%20degrees](http://www.naic.edu/~phil/rfi/rfi.html#azswing%2019%20degrees)

Mike Marcus, FCC

How to avoid the tragedy of the commons for the passive bands?

It is important to brief the commissioners, accompanied by Nobel laureates, movie stars, or other celebrities. Joe Taylor, Jodie Foster, and Jill Tarter sprang to mind. Bring along a single sheet with bullets containing everything a commissioner should know about radio astronomy and remote sensing frequency needs. More than that is lost.

Mike asked for a web-based test for mm-wave use, which includes terrain, propagation, beam width, etc. The FCC currently uses the RFCAD even though it does not account for absorption. Dick Barth, NOAA, suggested contacting the Institute for Telecommunications Science in Boulder, Colorado.

Channel 37/Medical telemetry sharing as a prototype for the future.

1. 4.9 GHz MO&O and 3<sup>rd</sup> R&O. Rely on Tom here.
2. 76 GHz automobile radar, Europeans pushed this, nit thinking of harmonics, should have picked 72 GHz instead. Would a fence at Kitt Peak solve the problem?
3. Frequencies greater than 76 GHz. Based on implementation of several outcomes at WRC-00. FCC dismissed CORF's argument against vehicular radar.
4. Broadband powerline NOI. Potentially many problems with harmonics.
5. UWB in ET Docket No. 98-153. "Got to find a way to make this work." Because UWB is here.
6. 70-90 GHz, WT Docket No. 02-146. Mike facetiously asked "You have 6 GHz, why do you want more?"

## DAY 2

Open Session: The committee was joined by Charles Wende and Richard Barth.

Paul Feldman explained the various types of FCC notices:

NOI--a request for a change in rules.

NPRM--a proposed rule change based on inputs.

Report and Order--an order out of an agency as a result of an NPRM.

Memorandum Opinion and Order--a response to a petition for reconsideration of a prior Order.

The following status of FCC issues that CORF has filed or may need to file Comments in:

1. WT No. 00-32. The 4.9 GHz. The FCC references RA 769. The FCC also reserves the right to revisit this. It is good for CORF in not having rule changes, especially since it involves public safety issues.
2. WT No. 02-146. Millimeter-wave. Old part is from June 2002. CORF filed to be consistent with international. CORF already said how this spectrum was used. We should add the language to the Handbook. Create a terrain propagation website, e.g., Commsearch in Virginia does this. Dick Barth offered to contact the NTIA's Institute for Telecommunications Science concerning the program, if we give him the questions. Get NRAO, Haystack, CARMA, Kitt Peak-UA-Mt. Graham, Green Bank, VLBA, Hawaii, FCRAO, SMA, NAIC, and others to each have one full-time equivalent. CORF may want to file an ex parte letter, but may need to consult with Tom Gergely and the observatory directors about what is going on.
3. ET No. 03-102. What is the sharing criteria with vehicular radar? This is right in the oxygen line.
4. EPIRBs--no need for comment.
5. ET No. 00-258. 3G systems. No need for a comment now.
6. ET No. 02-380. From the Spectrum Policy Task Force report. Wireless where TV broadcast frequencies are not being used. Is Channel 37 in jeopardy?
7. WT No. 02-364 and 03-15, also 0-258 and 99-67. Iridium's request for additional frequencies. CORF may not need to join in with NRAO and NAIC.
8. Use of cellphones on aircraft. The FAA asked the RTCA to study this. Probably no response needed.
9. ET No. 03-66. RA and Space Research are mentioned in the notice.
10. ET No. 98-153. Ultrawideband. CORF should invite NTIA person to the next CORF meeting, since they are involved. Comments due July 21, 2003.
11. Powerline broadband systems. Since this is a Notice of Inquiry, CORF has time to file an ex parte within the next two years or so. The FCC commissioners are interested in this. Frequencies span 10-400 MHz and harmonics.
12. RM-10371. C-based sensing affected. CORF may need to do something, Paul will send more information and the dates.
13. Secondary market. Geographical and temporal criteria, e.g., leasing for secondary users.

The FCC Spectrum Policy Task Force report was summarized by Paul Feldman. The concept of interference temperature raised a number of questions and CORF may need to generate a 1-page white paper. Mike Marcus said this may be out for comments in mid-2004. The STF interference report is at [www.fcc.gov/sptf/files/IPWGFinalReport.pdf](http://www.fcc.gov/sptf/files/IPWGFinalReport.pdf).

Make up a mailing list for observatory directors:

Leo Blitz

James Moran

Fred Lo

Robert L. Brown

Anneila Sargent

Tom Prince

Peter Schloerb

James Ulvestaad, VLA

Phil Jewell

Don Altschuler

Jill Tarter

OVRO Solar

And EESS folks, Chuck Wende, Dick Barth.