

Spectrum Study

M. Cohen, co-chair

A. Gasiewski, co-chair

Report to BPA

December 16, 2007

Statement of Task

The committee will prepare a report exploring the scientific uses of the radio spectrum emphasizing the passive services which will:

1. Portray the science and applications that are currently being conducted by passive observations using the radio spectrum;
2. Identify the spectrum requirements necessary to conduct such research and facilitate such applications;
3. Identify the anticipated future spectrum requirements for at least the next 10 years; and
4. Advise spectrum policy-makers on the value to the nation of accommodating scientific uses of the spectrum by the passive services, recognizing the need to balance multiple communities.

The committee will comment on spectrum use by the relevant scientific communities but will not make recommendations on the allocation of specific frequencies.

Members

- Radio Astronomy
 - D. Backer UC Berkeley
 - M. Cohen Caltech, co-chair
 - A. Evans SUNY Stony Brook
 - J. Moran Harvard
 - L. Mundy U. Md.
 - T. Pearson Caltech
- Remote Sensing
 - A. Gasiewski U Colorado, co-chair
 - D. Kunkee Aerospace Corp.
 - C. Ruf U. Michigan
 - F. Solheim Radiometrics Corp.
 - D. Staelin MIT
- Interference and Mitigation
 - S. Ellingson Va. Tech.
 - D. Emerson NRAO
 - P. Kolodzy Kolodzy Consulting
 - A. Tanner JPL
 - J. Johnson Ohio State (consultant)
- Policy
 - R. Balstad Columbia
 - M. Macauley RFF
- Staff
 - B. Dewhurst, NRC
 - D. Lang, NRC

Schedule

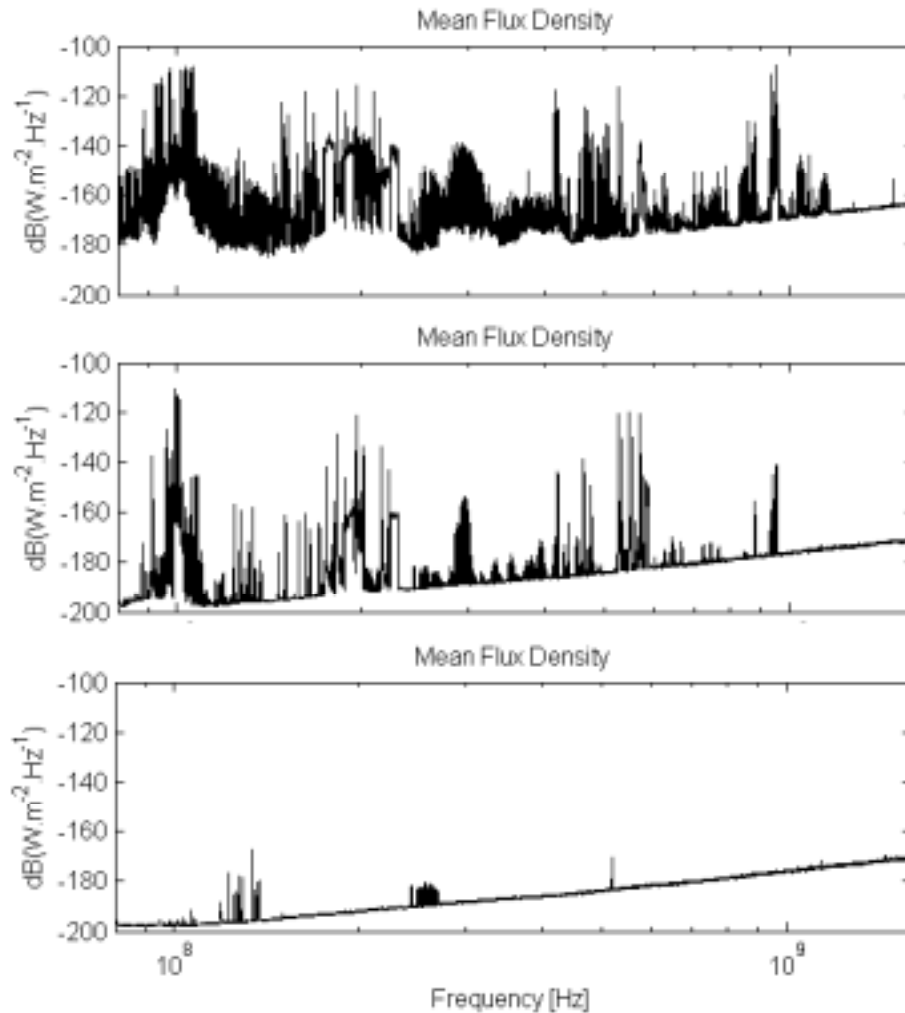
- *June 12-13, 2007 Meeting #1, Washington*
- *Sept 29-30, 2007 Meeting #2, Irvine*
- *Dec 17-18, 2007 Meeting #3, Irvine*
- *Mar 29-30, 2008 (?) Meeting #4, Boulder*
- *May 2008 Review*
- *July 2008 Release*
- **Town Halls**
 - *July 24, IGARSS, Barcelona (AJG)*
 - *December 13, AGU, San Francisco (AJG)*
 - *January 3, URSI, Boulder*
 - *January 9, AAS, Austin (MHC)*

Status

- Presentations (June 2007, Sept 2007, Dec 2007)
- Data Collection (June 2007 – present)
- Outline (June-Sept, 2007)
- First Draft (Dec 2007)
- Completion (Apr 2007)

Website: http://www7.nationalacademies.org/bpa/Spectrum_Study_Home.html

RFI Example: RFI Survey for SKA Site Selection



Sydney:
population 4 mill

Narrabri:
population
4000

Mileura:
population 4

Table Name:	t_20050126t124130
Antenna:	HF-CoaxDipole
Sweeps:	518
Resolution Bandwidth:	30 kHz
Technician:	Aaron
Polarization:	V
Bearing:	Omni