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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

December 16, 1999

EX PARTE OR LATE FILED

HAND-DELIVERED

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Re: Notification of Ex Parte Presentation in  
IB Docket No. 98-172

Dear Ms. Salas:

On December 15, 1999, representatives of the Fixed Wireless Communications Coalition (FWCC) attended a meeting with the following staff members from the Wireless Telecommunications Bureau (WTB), Office of Engineering and Technology (OET) and International Bureau (IB):

<u>Name</u>	<u>Bureau</u>
Ronald Netro	WTB
Steven Selwyn	IB
Geraldine Matise	OET
Michael Pollak	WTB
Edward Jacobs	IB
Thomas Stanley	WTB
Herbert Zeiler	WTB

Representing FWCC were Leonard R. Raish (Fletcher, Heald & Hildreth); William Burhop (Independent Cable Television Association); Ken Kovach (Blonder-Tongue, Inc.); Barry Ohlson (WINSTAR); Randy Young (Keller & Heckman); Ron Coles (DMC); Doug Docherty (Harris Corp.); Ken Ryan and Will Perkins (Comsearch); and the undersigned. At the meeting, FWCC representatives

OH

Ms. Magalie Roman Salas  
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discussed the topics set forth in the enclosed written presentation entitled "The 18 GHz Band," consisting of ten (10) pages.

Two copies of this letter and the enclosed written presentation are being filed in accordance with Section 1.1206 of the Commission's rules. Please contact the undersigned if there are any questions about this matter.

Sincerely,

A handwritten signature in black ink that reads "Thomas J. Keller". The signature is written in a cursive style with a long, sweeping underline.

Thomas J. Keller

Enclosure

cc: Ronald Netro  
Steven Selwyn  
Geraldine Matise  
Michael Pollak  
Edward Jacobs  
Thomas Stanley  
Herbert Zeiler



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# The 18 GHz Band

*Fixed Wireless Communications Coalition*

*Fixed Wireless Communications Coalition*



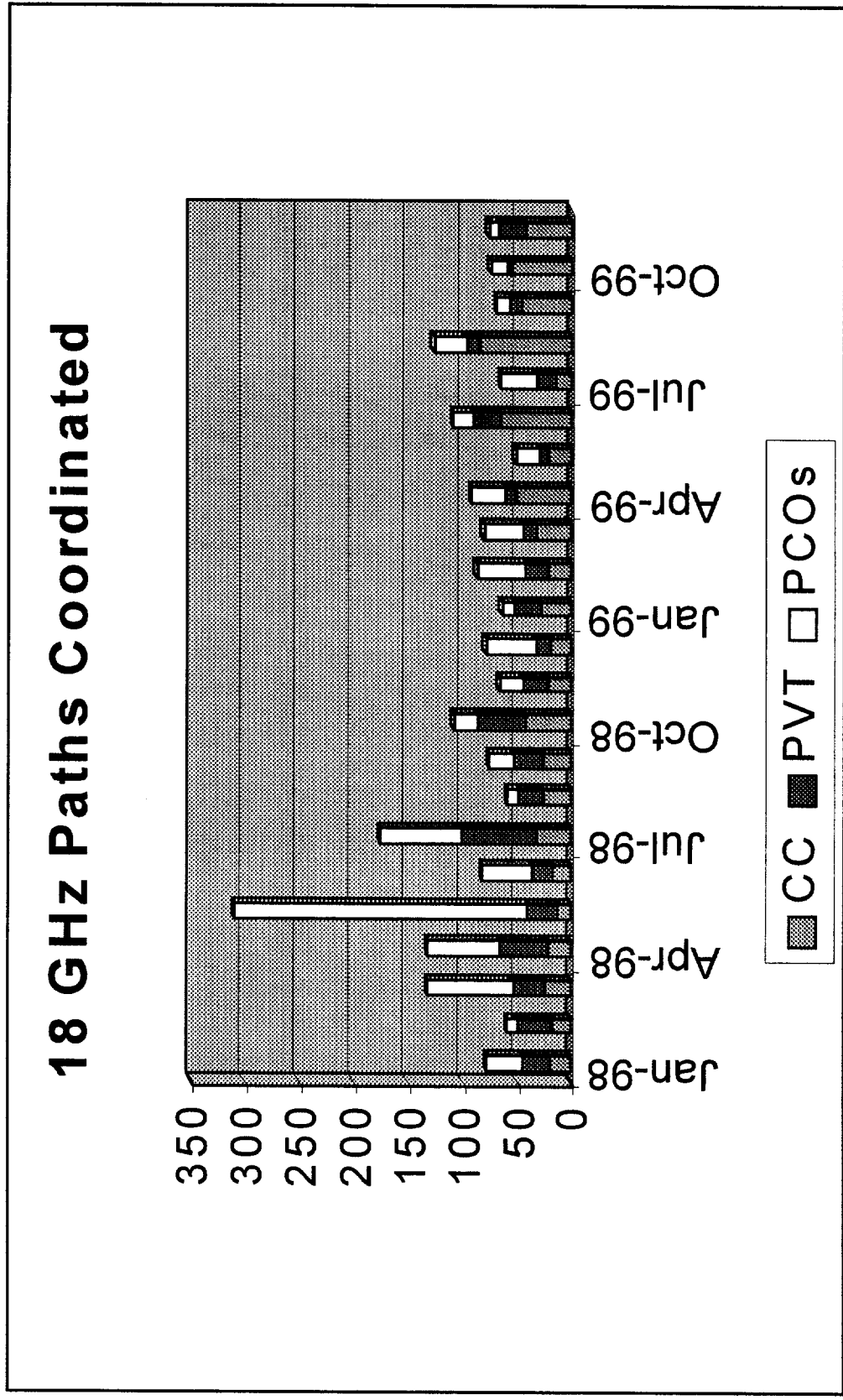
# 18 GHz Today

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- Over 2500 duplex links in the Narrow Band (340 MHz-split) portion of the band.
  - ➔ Effectively made “secondary” by NPRM
- Over 1500 duplex links in the Wide Band (1560 MHz-split) portion of the band.
  - ➔ Either 80MHz or 200 MHz loss implied by NPRM
- Steady Coordination Activity in 1998-1999



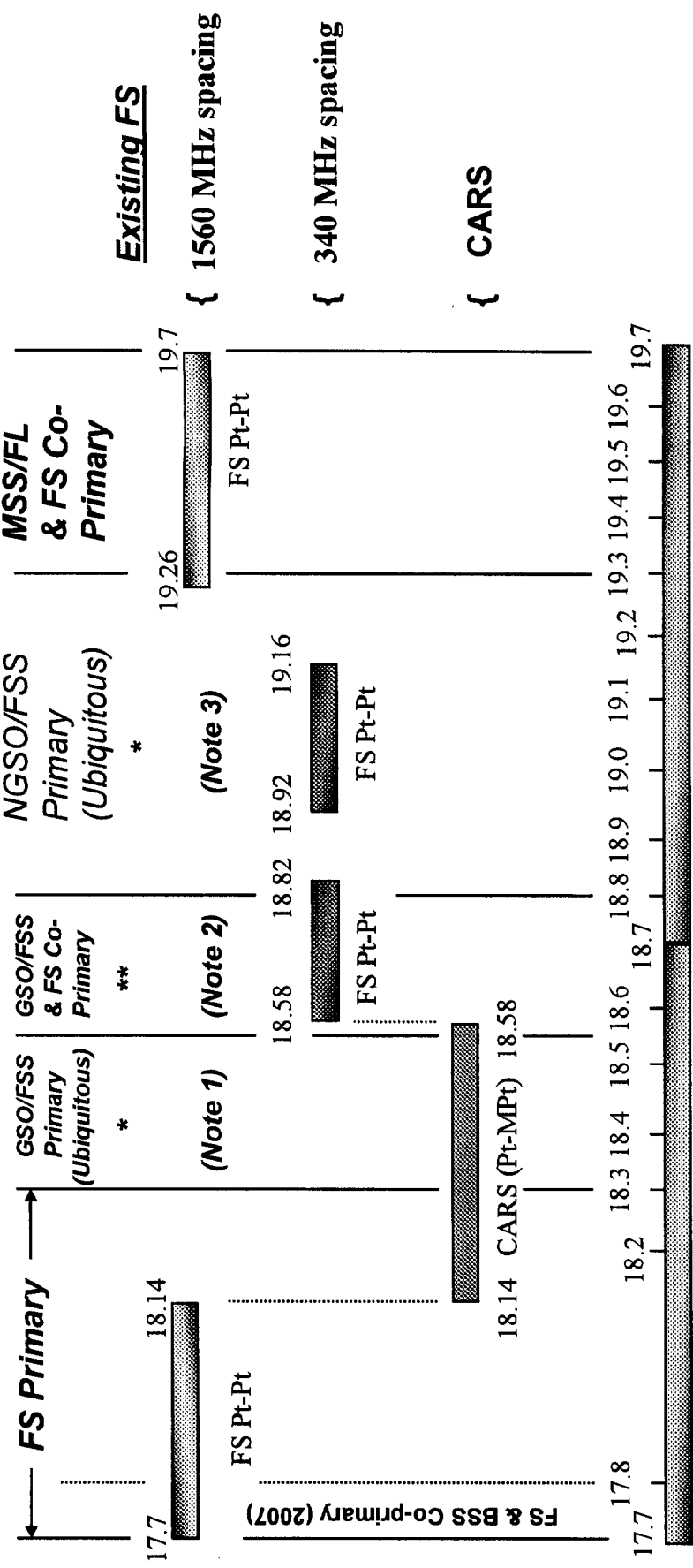
# 18 GHz Coordination Activity





# 18 GHz FCC Band Proposal

Note: Existing FS in non-primary frequencies is to be grandfathered.



\* Ubiquitous Terminals would have difficulty sharing with existing FS, especially CARS

\*\* FS Co-primary of no use, since it is paired with secondary allocation

Note 1: ~14 Applications (incl. Teledesic)

Note 2: Same as Note 1 but NO ubiquitous (coordination req'd).

Note 3: Teledesic (Skybridge II)

*Fixed Wireless Communications Coalition*

- **Current 18 GHz Plan:**
  - ➔ **880 MHz (440 MHz Paired Go/Return) - 1560 MHz Split**
  - ➔ **480 MHz (240 MHz Paired Go/Return) - 340 MHz Split**
  - ➔ **CARS (Private Cable) Occupies 18.14-18.59 (440 MHz)**
- **Total = 1360 MHz Plus 440 MHz CARS**
- **NPRM Proposes FS Secondary from 18.3-18.55 and 18.8-19.3**
  - ➔ **Eliminates 40 MHz Paired (19.26-19.3 GHz) of wide-band (1560 MHz split). Effect is 80 MHz lost!**
  - ➔ **Eliminates 240 MHz paired (340 split). Effect is 480 MHz lost! Plus 280 MHz lost of CARS Band.**

- **NPRM Also Proposes to Give 17.7-17.8 GHz to BSS in 2007!**
  - ➔ **Co-primary, BUT FS and BSS cannot share!**
  - ➔ **Another 200 MHz (100 MHz paired) Loss to FS.**
- **PLUS - Inefficient spectrum use by narrow band radios in wide-bandwidth channels (1560 MHz split)**
  - ➔ **Part 101 requires 1 B/S/Hz radios.**
  - ➔ **340 MHz-split channels are 5/10 MHz.**
  - ➔ **4-DS1 radios fit in 5 MHz**
  - ➔ **Now 4-DS1 radios must go in 10 MHz wideband channels.**





# Relocation

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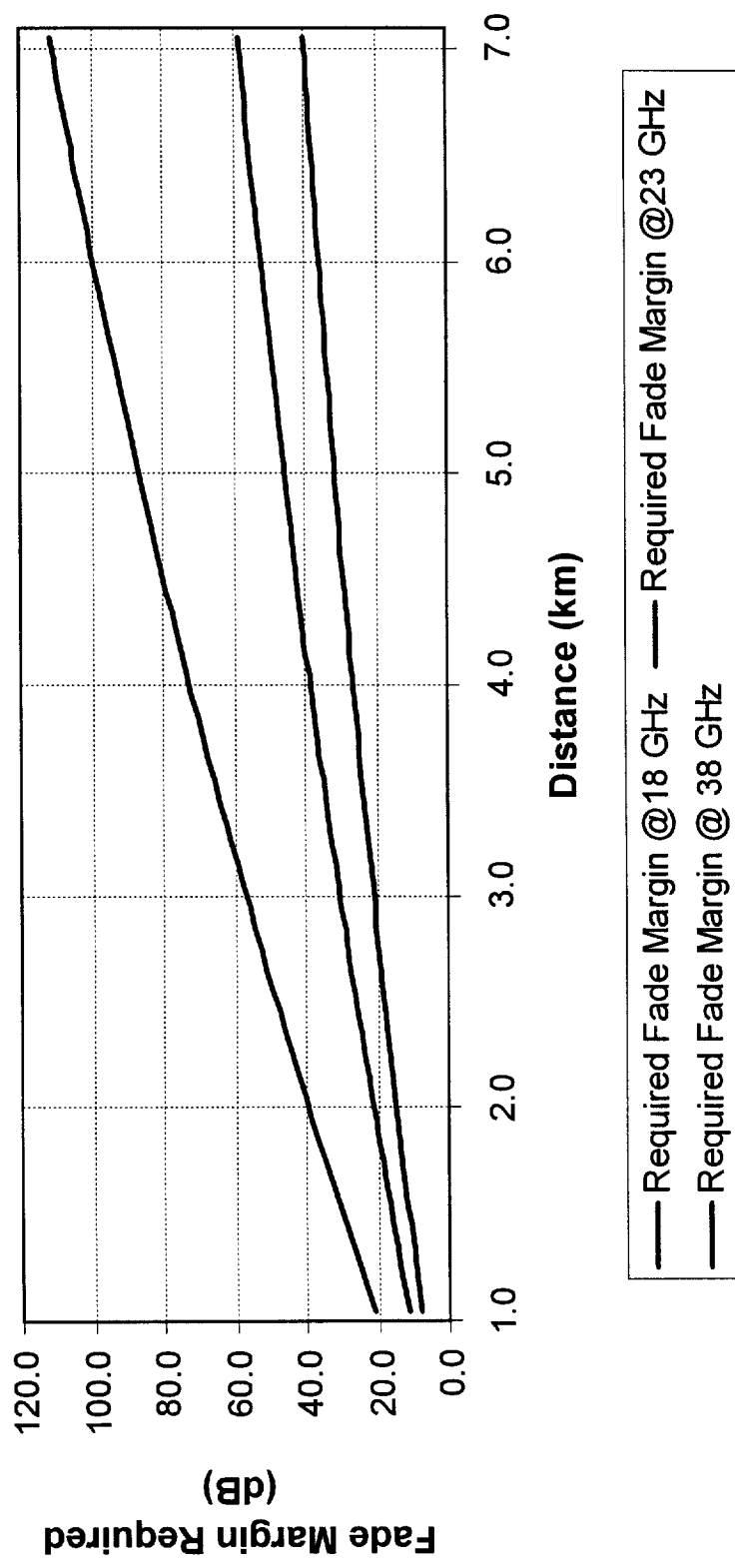
- 18 GHz Relocation?
  - ➔ Narrowband users could be relocated to wideband section.
  - ➔ BUT: 18 GHz WIDEBAND channels (1560 MHz split) must be re-channelized to keep from squandering the reduced spectrum!
  - ➔ Significant compensation required. Radios CANNOT be returned.
- Private Cable CANNOT be accommodated in the WIDEBAND channels.
  - ➔ Must stay where they are or be completely relocated to another band (significant relocation costs).

- Relocation to 23 GHz?
  - ➔ Complete relocation is out of the question.
    - ‡ Band becoming increasingly congested in major metropolitan areas.
  - ➔ Some availability degradation (vs 18 GHz).
  - ➔ Commission must act on TIA petition for re-channelization
- Relocation to 38 GHz?
  - ➔ Shorter path lengths required in most cases.
    - ‡ Higher rain-induced outage
  - ➔ Economic penalty could inhibit FS application to many emerging business opportunities.



# Rain Attenuation

Crane Rain Region D2, 99.999 % Availability



- The FS can give up the 340-MHz narrow band channels at 18 GHz.
  - ➔ But, the wide band channels must be re-channelized.
    - ‡ Bulk of the applications are for 4-DS1 radios.
- 100 MHz to BSS would result in an additional **UNACCEPTABLE 23% FS** frequency loss
- 23 GHz must also be re-channelized.
  - ➔ Required for efficient spectrum use to ensure FS growth.
- Private cable **CANNOT** be relocated into the wide band channels.
- In all cases, relocated FS must be fairly compensated!