



I'm from the Government... (*Planning Department*) ...and I'm Here, too!

Presenter:

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RF Engineer and Attorney at Law
Telecom Law Firm, P.C.
Los Angeles, California

10/03/2019

Lawyers **LOVE** Disclaimers!

This lecture is for informational purposes only. Hopefully, you will find it entertaining, as well. If not, well, tough.

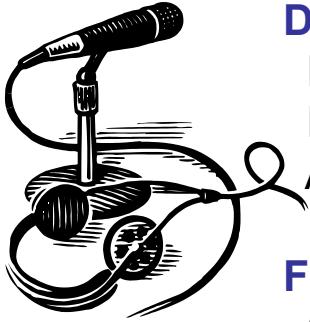
This lecture is not intended to provide legal advice, and may not reflect recent law changes, court cases, ARRL petitions, or your deepest, darkest hopes and dreams.

Also this lecture does not (necessarily) reflect the official positions, views, hopes, or even the deep, dark secret desires of the, ARRL, the ARRL SW Division, any of my local government clients (including RPV, Torrance, Redondo Beach, Gardena, Lawndale, Santa Monica, yada, yada, yada), or any person, animal, plant, mineral, or space alien presently on this or any other planet.



Ta Da #1

Get Ready, take aim (at me)...



Dr. Jonathan Kramer, W6JLK (Extra Class)

Licensed has a Ham since 1971

Life Member of the ARRL since 1975ish

ARRL Volunteer Counsel & Volunteer Examiner

FCC General Radio Telephone w/ Ship Radar

Originally 1st Phone/radar,

GMRSS Maintainer & Operator, bunch more...



RF Engineer for local, state, fed governments since 1984

Wireless siting reviews, including amateur tower apps, for nearly 30 years

Wireless Ordinances, Amateur Provisions

RF safety issues (Co-author of FCC's guide to local governments)



I'm a lawyer, too

Admitted in California and New Mexico

Eye R really, really Sumrt. Just ask me.

JD

LL.M (IT/Telecom Law)

Doctor of Law & Policy

Regulatory Law and Policy Instructor at Northeastern University



**But really,
I'm just...**



Government Scum

PRB 1...

“Waiter! Reality check, please!”

- National policy established by the FCC defining the relationship between antennas (antenna structures) and local zoning considerations.
- *Limited* preemption of local zoning considerations
- **Codified at 47 C.F.R. § 97.15(b), which says...**

PRB 1...

“Waiter! Reality check, please!”

Sec. 97.15 Station antenna structures.

(a) *[deals with antennas in excess of 200' AGL or near public airports]*

(b) *Except as otherwise provided herein, a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. (State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose. See PRB-1, 101 FCC 2d 952 (1985) for details.)*

[64 FR 53242, Oct. 1, 1999]

PRB 1...

“Waiter! Reality check, please!”

- History
 - 1984: ARRL Petitions FCC to preempt local government restrictions on amateur radio antenna structures
 - 1985: FCC adopts PRB 1.
 - 1999: ARRL petitions FCC to extend PRB 1 to preempt CC&Rs (more on this, later).
 - 2000; ARRL petitions FCC to reconsider 1999 denial.

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California's PRB 1 Law

Gov. Code § 65850.3 (2003)



California's AB 1228 (Gov. Code § 65850.3) (2003)

65850.3. **Any** ordinance adopted by the legislative body of a city or county that regulates amateur radio station antenna structures shall allow those structures to be erected at heights and dimensions sufficient to accommodate amateur radio service communications, shall not preclude amateur radio service communications, shall reasonably accommodate amateur radio service communications, and shall constitute the minimum practicable regulation to accomplish the city's or county's legitimate purpose. It is the intent of the Legislature in adding this section to the Government Code, to codify in state law the provisions of Section 97.15 of Title 47 of the Code of Federal Regulations, which expresses the Federal Communications Commission's limited preemption of local regulations governing amateur radio station facilities.

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HAM SHACK



CC&Rs: Read the fine print!

- CC&Rs = Covenants, Codes, and Restrictions
- Covenants = ***Enforceable promises.***
- Codes = ***Rules you're bound to follow.***
- Restrictions = **(Huh? What restrictions?)**
- ***A private contract*** between ***consenting adults*** (***ahem***)
- CC&R's can be 'enforced' by others bound by the same promise (an 'equitable servitude')
- How far is the boundary of enforcement? Sight? Feet?
- Is a non-interference covenant legal? (**yes**)
- Is a no external antenna covenant legal? (**yes**)



CC&Rs: Read the fine print!

- PRB 1 and CC&Rs (2001):

- **ARRL to FCC:**

- Ah, would you please extend PRB 1 to preempt those pesky CC&Rs and similar private contracts based on OTARD?

- **FCC to ARRL:**

- Thanks for asking, but the answer is **no**.

But while we're on the subject, we will talk about **OTARD**, and you *won't like* what we have to say.

H.R. 555

Amateur Radio Parity Act of 2017

AN ACT

- To direct the Federal Communications Commission to amend its rules so as to prohibit the application to amateur stations of certain private land use restrictions, and for other purposes.
- *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, SECTION 1. Short title.*
- This Act may be cited as the “Amateur Radio Parity Act of 2017.”

(Passed the House; Something is Better Than Nothing!)

*“That's the
signpost up ahead...*

your next stop

*...the
Planning
Counter
Zone!”*



Putting your best foot (and planning case) forward

- Some basics (Information collection):
 - **What, exactly, are the local zoning rules in your community governing amateur radio antenna structures? Get a copy (likely online) and study them. Add a musical score.**
 - **What previous cases have been decided under the current rules? Ask to review the files and find out why the cases were approved or disapproved. Explain why you're asking (“...so I can do the best job putting together a complete application...”)**
 - **Ask the counterperson for all of the forms you'll need, and find out all of the fees you may be asked to pay.**
 - **What about a fee waiver? PRB1? Cal PRB1?**

Putting your best foot (and planning case) forward

- Some more basics (Information display):
 - **Know, exactly, what you're going to ask permission to do.**
 - **Loser: "I want to put some antennas up about 65 feet in the air. I know what's best here, not you!"**
 - **Better: "I want to erect an XYZ tower with a LMN rotator and an ABC yagi. Here's a drawing..."**

YOUR PLANNER'S RESPONSE?

STOP! TAKE A BREATH...

- Things to remember...the odds are very high that:
 - Your planner has **little or no experience** with ham radio antenna and tower projects;
 - Your planner thinks **your project is just like a cell tower**;
 - Your planner has **no technical expertise**...
 - And...Your planner wants to take an **immediate leave!**

STOP! TAKE A BREATH...

- And your planner thinks that Radio Frequency Emissions are...



Time for some PLANNER CPR:



- **HELP** restart your planner's heart by:
 - Keeping. Your. Voice. Calm. And. Friendly.
At. All. Times. And. Speaking. Slowly.
 - Take the time to explain, in detail, your project and why you need what you're asking for, and that this is not a cell site;
 - **How?**

Making Your Case

Planner: “Why does it have to be that tall? It not permitted by our code.”

Ham: “This is an issue controlled by both federal PRB1 and state PRB1 rules. Let me show you the engineering for the XYZ Yagi antenna. That engineering justifies the height I need, and demonstrate that I comply with the federal and state laws that govern antenna height.”

- Roll your own antenna? NEC and EZNEC are your friends...use ‘um if you’ve got ‘um.
- Commercial antenna? Your antenna manufacturer is your friend...use ‘um to get NEC/EZNEC outputs.
- Show the relationship between height above terrain versus the angle of the main lobe (launch angle). Show the launch angle for multiple heights around your requested height. Explain why a low launch angle is critical for HF long-haul communications. ***This is likely the most important evidence you can submit to justify your height request!***
- **BEWARE: never, Never, NEVER use the “R WORD”**
- **...But be prepared to show compliance with FCC OET Bulletin 65 for amateur operations.**

How did we get here?

- Why did the FCC set RF safety emissions limits based on power versus frequency versus time versus height?

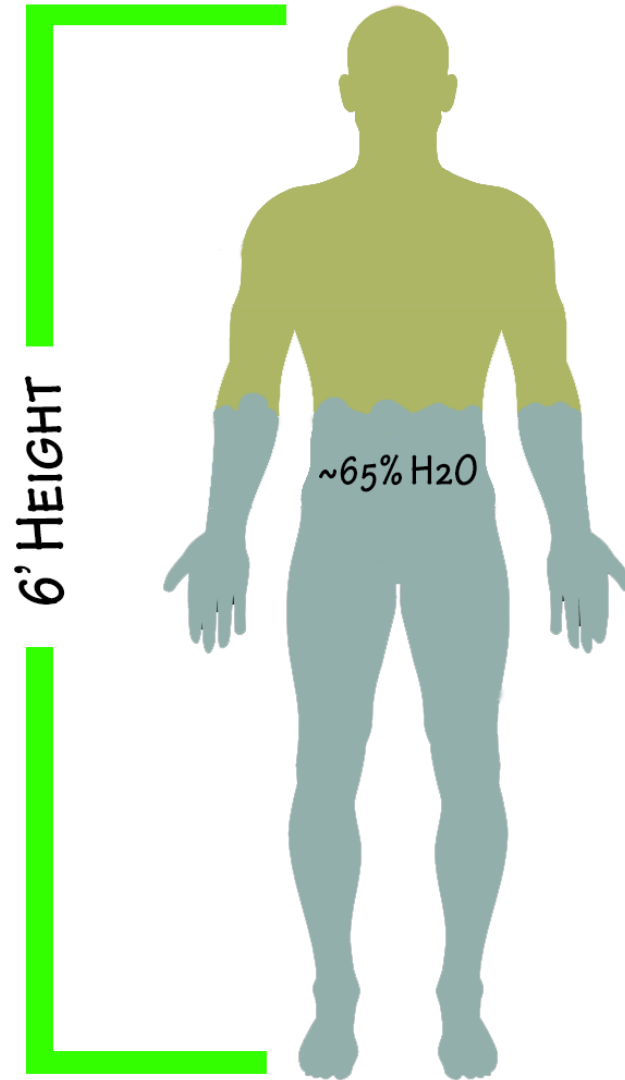
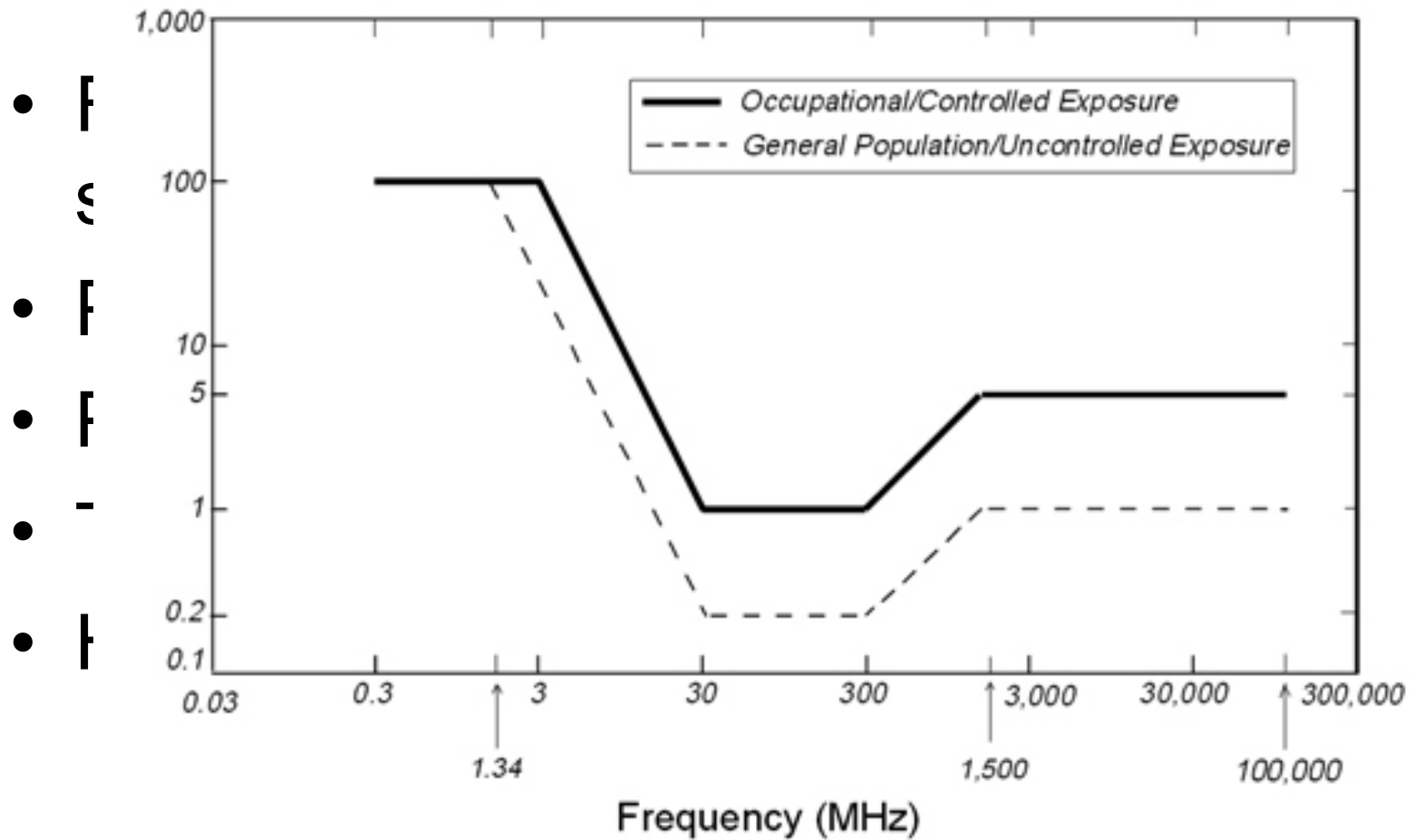


Figure 1. *FCC Limits for Maximum Permissible Exposure (MPE)*

Plane-wave Equivalent Power Density



Document that your antenna system, as proposed, will comply with the FCC rules (47 CFR § 1.1307 et seq) *and* FCC Office of Engineering and Technology Bulletin 65 for the 'Uncontrolled/General Population.'

see:

<https://transition.fcc.gov/bureaus/oet/info/documents/bulletins/oet65/oet65b.pdf>

I like this online calc:

http://hintlink.com/power_density.htm

Making Your Case

- **Before and at the hearing:**

- Find out what the hearing notice range is (typically 300 feet). Figure out who might have a problem with your project and reach out. Inviting your neighbors over before the hearing to discuss your project, and ham radio in general, is a good move. Talk about emergency communications. Be sure to highlight that you held the pre-meeting when you get to your hearing, *EVEN IF NO ONE SHOWED UP*.
- Get a copy of the Planner's Staff Report as soon as it's available; usually 3 days before the hearing. Carefully review it. Be prepared to respond to every negative point and error (if any).
- Prepare ***and repeatedly practice*** an opening and closing speech. Practice responses to potential objections. Watch the clock! If you've never been to a planning hearing before, consider going to observe the process *before* it's your turn!
- **Dress in formal attire.**



Making Your Case

- **At the hearing:**
 - **Calmly explain why under both PRB 1 and G.C. § 65850.3 your project is justified *in light of the engineering documentation you provided, and the special consideration of ham projects is required by those federal regulations and state laws.***
 - **IT'S CRITICAL TO GET OUT 'THE TROOPS' (Hams, friendly neighbors, CERT members, others) TO THE HEARING, AND TO GET THEM TO SPEAK IN SUPPORT OF YOUR PROJECT!!!! (Each fills out their own speaker's card).**
 - **Stress EmComm!**



EmComm





EmComm!





EmComm, EmComm,
EmComm and Dogs!

Your Antenna Project is...

DENIED

What the **f**requency, now?

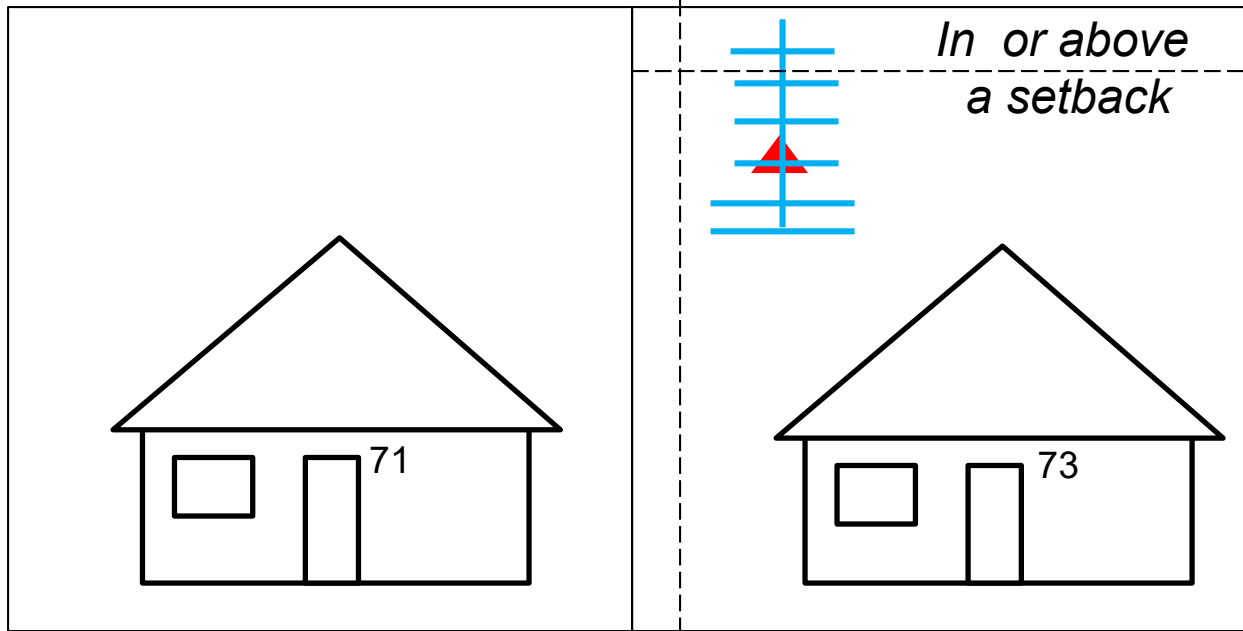
Making Your Case

- **If you have to deal with an appeal:**
 - Get a copy of the formal reasons for a City denial. If an appeal of an approval is filed by someone else, get a copy of the appeal application.
 - If you must file an appeal on a denial, it **MUST** be timely, and you must address and appeal every basis of denial in your appeal (risk of waiver).
 - **Explain, softly and clearly, why the initial decision maker erred. DO NOT ATTACK, but be clear, and explain (again) why, under both PRB 1 and Cal. G.C. § 65850.3, the project is justified on evidence you provided.**
 - **IT'S EVEN MORE CRITICAL TO GET “THE TROOPS” (Hams, friendly neighbors, CERT, others) TO THE HEARING, AND TO GET THEM TO SPEAK IN SUPPORT OF YOUR APPEAL!!!! (Each fills out a speaker’s card).**



**BUT DON'T APPLY FOR
OR APPEAL
SOME REAL LOSERS!**

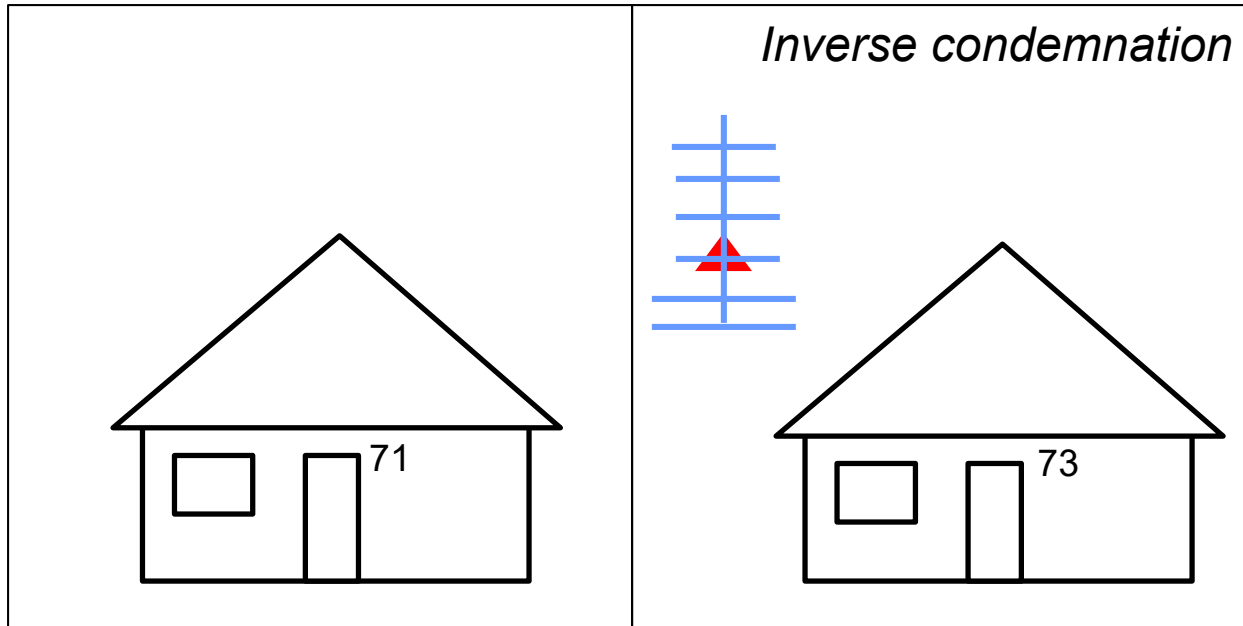
There are two planning cases you will lose



----- HAM AVENUE N.W. -----

Yeah, the perspectives are all screwed up. **Tough.**

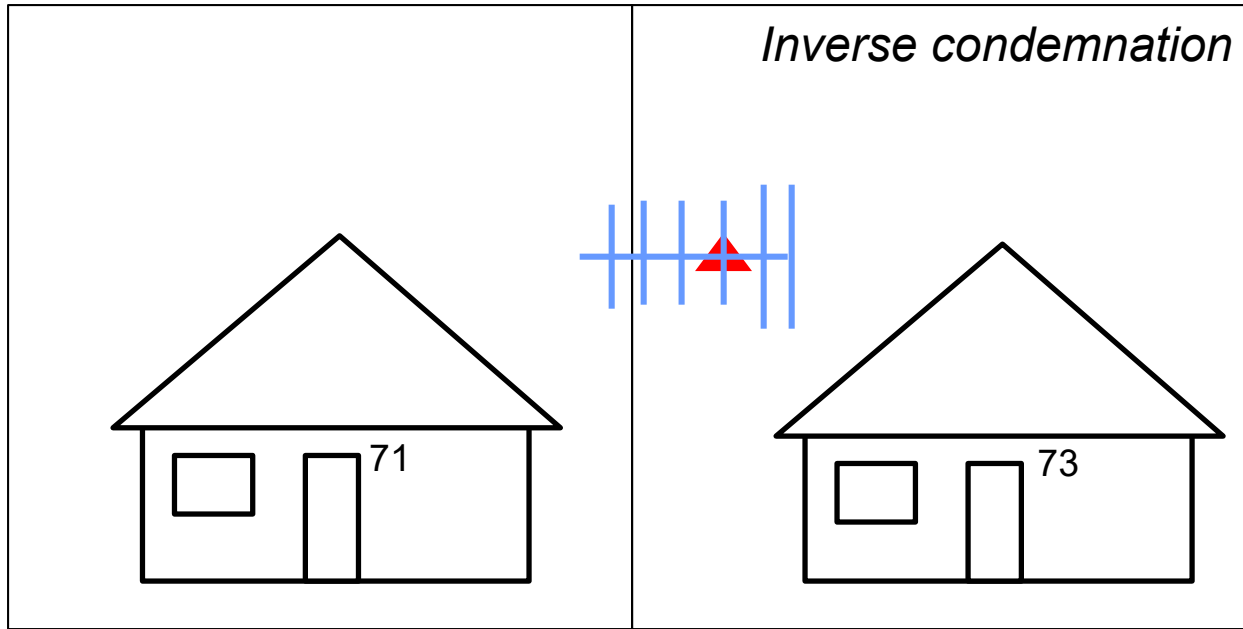
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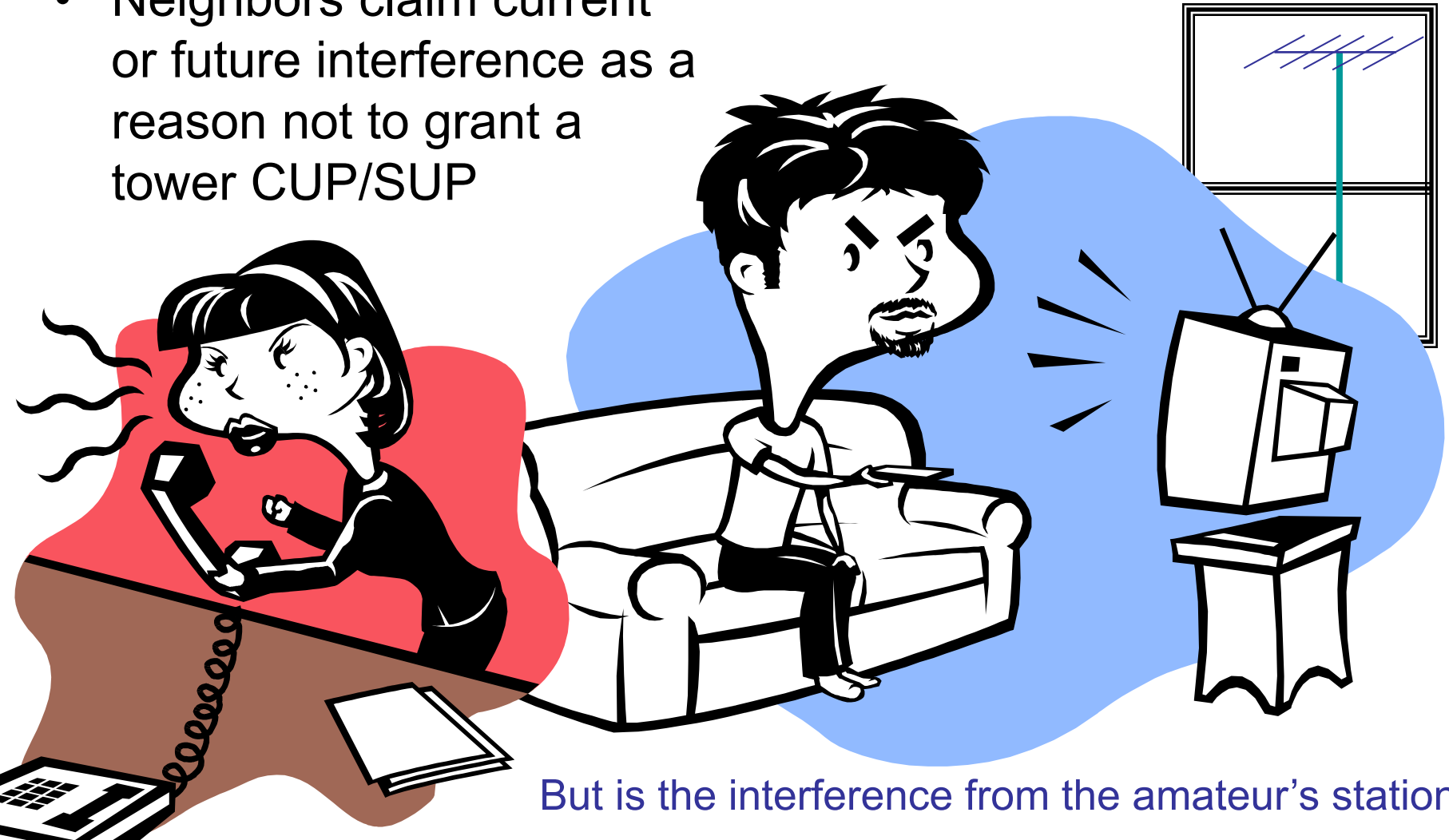


----- HAM AVENUE N.W. -----

Yeah, the perspectives are still all screwed up. **Tough.**

Yo__'re Inte_fe_ring w____th me

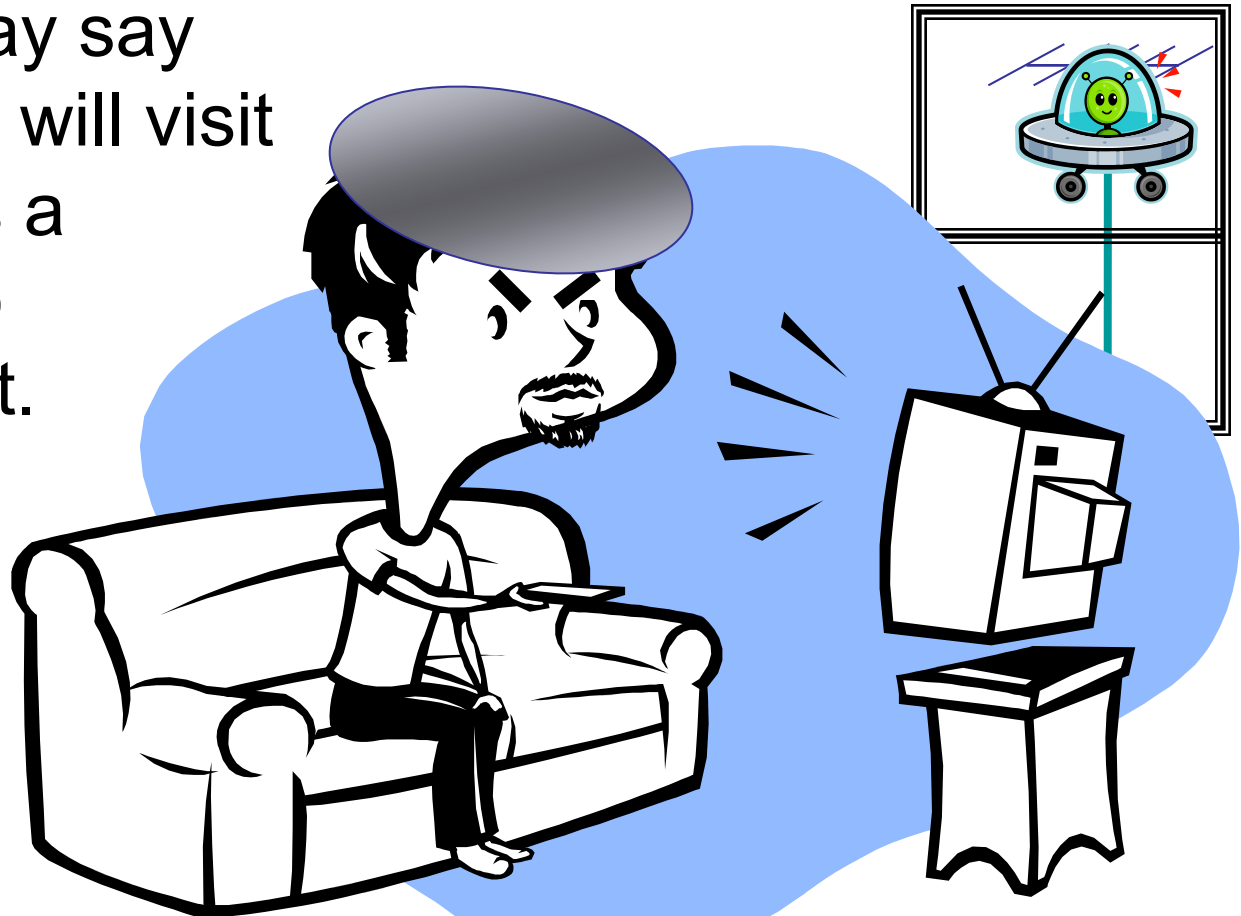
- Neighbors claim current or future interference as a reason not to grant a tower CUP/SUP



But is the interference from the amateur's station?

YoIU'sre Intuxzerfeering wizth my Telaevizsion

- Neighbors may say **space aliens** will visit your tower as a reason ***not*** to grant a permit.
- Offer them an aluminum foil cap!



(NO! NO! NO! Just kidding!)

You're Interfering With Me

- The FCC has spilled some ink on this subject.

Federal Communications Commission DA 03-2196

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Petition of Cingular Wireless L.L.C. for a)
Declaratory Ruling that Provisions of the Anne) WT – Docket No. 02-100
Arundel County Zoning Ordinance are Presumpted)
as Impermissible Regulation of Radio Frequency)
Interference Reserved Exclusively to the Federal)
Communications Commission)

MEMORANDUM OPINION AND ORDER

Adopted: July 3, 2003 Released: July 7, 2003

By the Chief, Wireless Telecommunications Bureau:

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APPENDIX: List of Commenters

I INTRODUCTION

1. In this order, we find that federal law preempts provisions of the Anne Arundel County, Maryland ("County") zoning ordinance involving radio frequency interference ("RFI"). The provisions require that, prior to receiving a County zoning certificate, owners and users of telecommunications facilities must show that their facilities will not degrade or interfere with the County's public safety communications systems.¹ The Ordinance provisions also permit the County to revoke a zoning

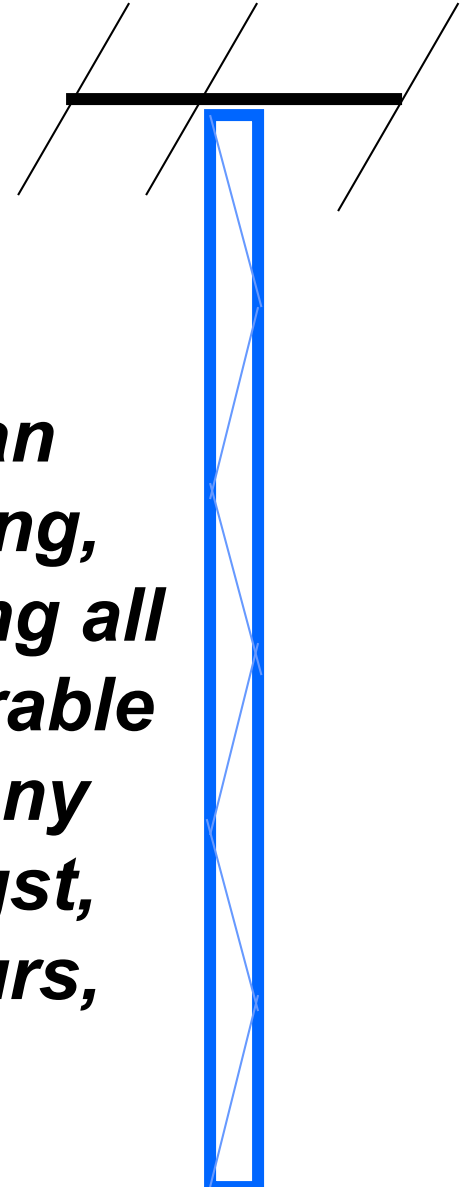
¹ See Article 28, §§ 1-101(14B), 1-128(a)(1)(c), 10-125(j)(1)-(2), (k)(1)-(2) of the Anne Arundel County, Code ("Ordinance").

17. Taken together, these Commission and court decisions clearly establish that the Commission has sole jurisdiction to regulate RFI, to the exclusion of provisions in local zoning or other regulations.

Yoiu'sre Intuxzerfeering wizth da Birdz

What neighbors may claim that...

“Amateur antennas are absolutely an anti-American abomination, attracting, affecting, and afterwards annihilating all airborne aviary (and additional adorable and agile animals) approaching at any angle, all absolutely absent any angst, anger, and agitation against amateurs, anywhere and anytime!”

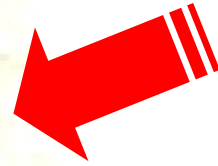


**We're just 4 slides
away from the end
of the lecture!**

(Get your pen and paper ready)

Smartphone

Likely **NOT** a space alien, but the jury's still out



My thanks to **Dick Norton**,
N6AA our ARRL SW Division
Director, for his **misguided**
courage appointing me as a
SW Div Volunteer Counsel
some 11ish years ago!



Clearly **NOT** a space alien



Also thanks to our **Diana Feinberg**, AI6DF, the fearless ARRL L.A. Section Manager, for **her lapse in good judgment** every time she begs me to present this lecture!





**... YOU CAN DOWNLOAD AN
ADOBE PDF OF THIS INCREDIBLE
WIT AND WISDOM COLLECTION
FROM MY HAM RADIO WEB SITE:**

W6JLK.com/pvarc19

Nope, sorry, I *mostly* don't do VC work in planning cases unless it's on the government side (hey, they need help, too!), but if you find yourself dealing with interference or FCC issues, give me a call.

More Really Important Legal Notice Stuff

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Storage and/or duplication in any stone table, paper written, electronic, physical, or meta-physical format is strictly encouraged without the express permission of Dr. Jonathan L. Kramer, Esq.

Sorry, No MCLES tonight

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PS: If you're reading through these slides without having first suffered through the live lecture, all I can say is, "too bad; so sad!" Certain portions of some of the slides won't make any sense to you if you weren't there for the real thing. Some of the slides may not make sense to people where were actually at the meeting. It's kind of like real life, right? Ta Da, again.