

HAMWAN

KU7M



**so,
what is
this?**



Home Wifi

HAMWAN DEF #1

Home WiFi

- Shelf/Desk in House
 - Access Point
 - Antenna (omni)
- Laptop
 - WiFi Radio
 - Antenna (what will fit)
- Router

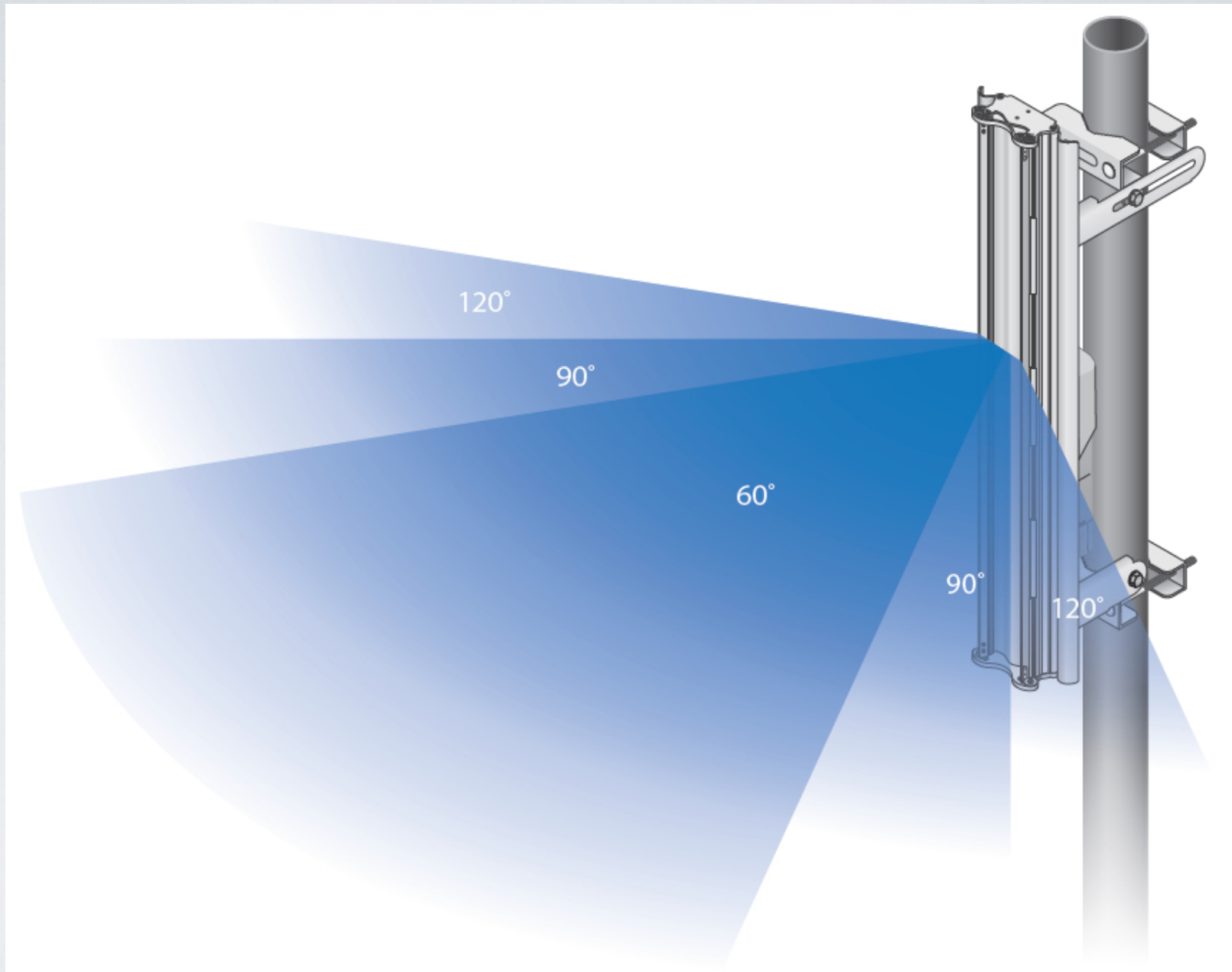
HamWAN

- Mountain Top (or tall building)
 - Access Point(s)
 - Antenna (sector)
- QTH
 - Wifi Radio
 - Antenna (dish)
- Router



HamWAN Client and Sectors





Sector Antenna



The nice thing about standards is that there are so many to choose from.

-Andrew S. Tannenbaum

HamWAN DEF #2

A modern, multi-megabit, IP-based, digital network for amateur radio use!

HamWAN is a non-profit organization (501c3) developing best practices for high speed amateur radio data networks. HamWAN also runs the Puget Sound Data Ring, which is a real-world network implementation of the proposed designs.

So far, HamWAN networks have been used for things like low-latency repeater linking, real-time video feeds from distant locations, serving APRS I-gates, providing redundant internet access to emergency operations centers, and more. Any licensed radio amateur in the service area can connect their shack directly to the network with just a small investment in equipment and no recurring cost. Since many traditional uses for Internet at home are not compatible with [Part 97 rules](#), this won't replace your home Internet connection. However, it works and acts just like one.

State of the Puget Sound Data Ring

HamWAN cells have been deployed to six sites. Each site is interconnected with 5.9 GHz modems and fully routed with OSPF. HamWAN provides routing to all existing AMPRNet systems. Examine the map below to determine if you're within the current HamWAN coverage area!

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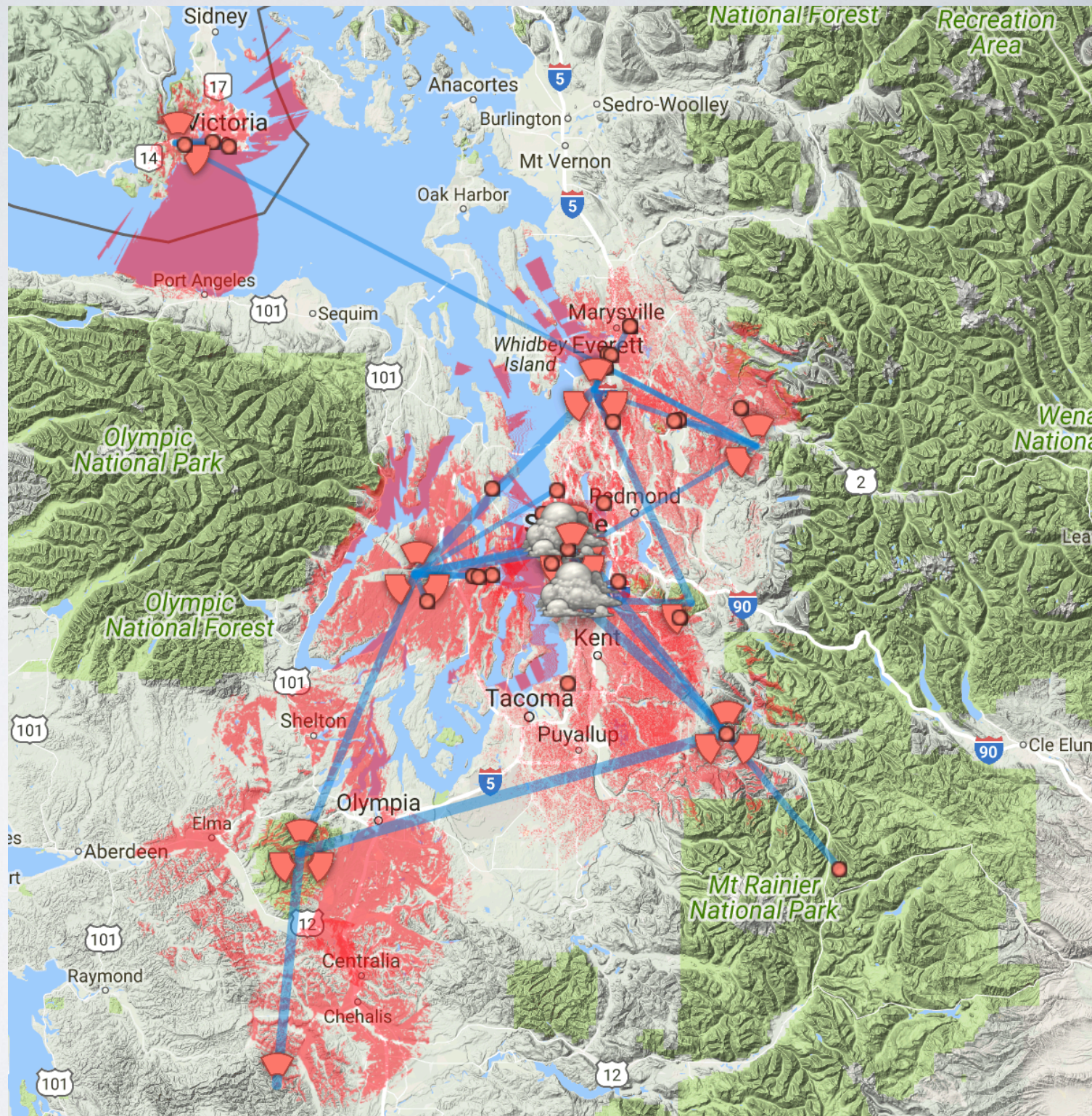
HamWAN DEF #3

HAMWAN FACTS

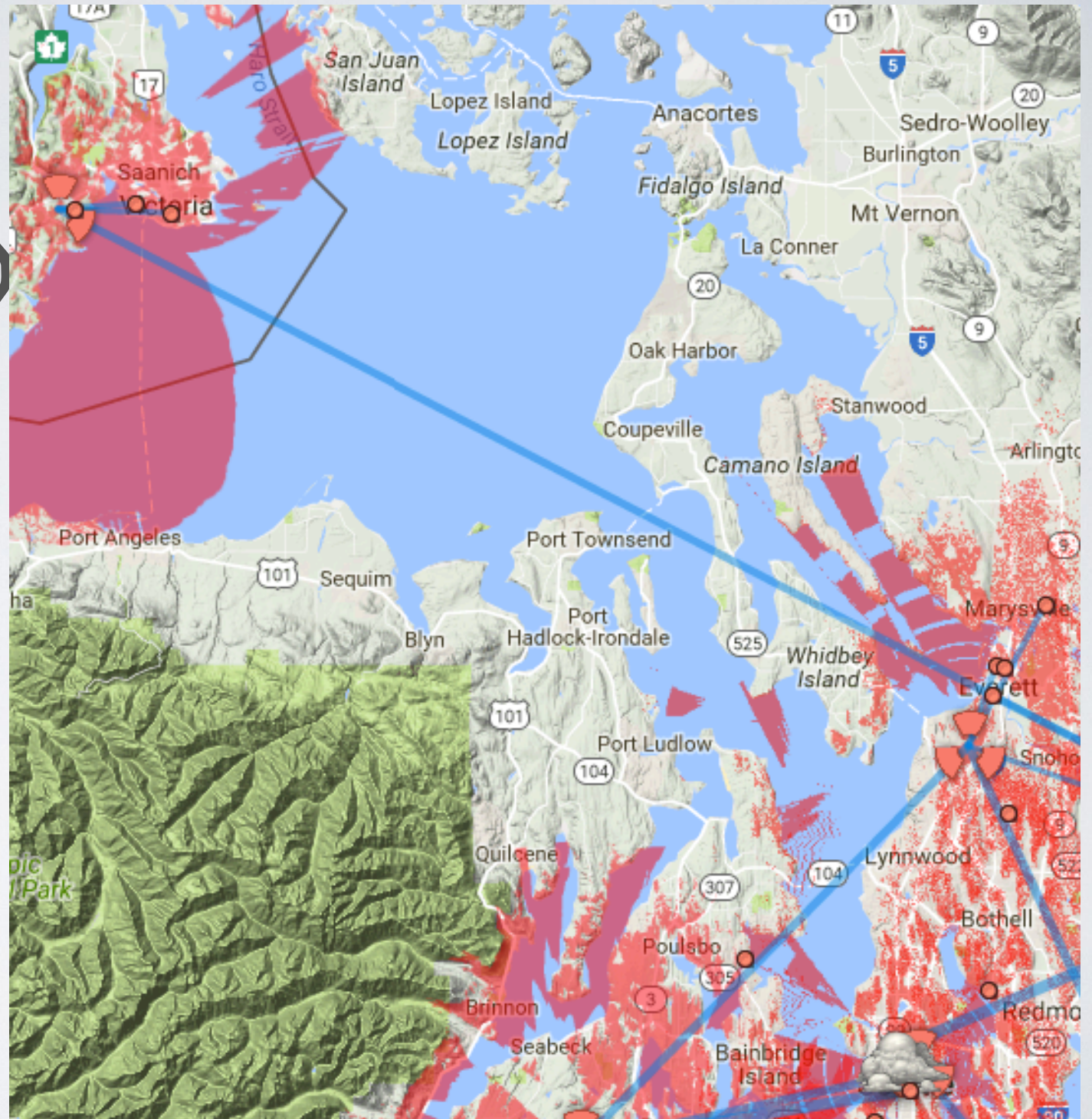
- Puget Sound Data Ring has nine sites today
 - Baldi, Beacon Hill, BawFaw, Capital Park, Capital Peak, E. Tiger, GoldMnt, Haystack & Paine (SnohDEM)
 - PoP's - Westin (Seattle) & Queen Anne
 - Seattle not only HamWAN group
 - MemHamWAN, HamWAN-Tampa, NM-HamWAN, HamWAN-South (Atlanta) & MiBWAN (Michigan) (Plus Victoria BC)
- Client Cost ~\$250

HamWAN (Puget Sound)

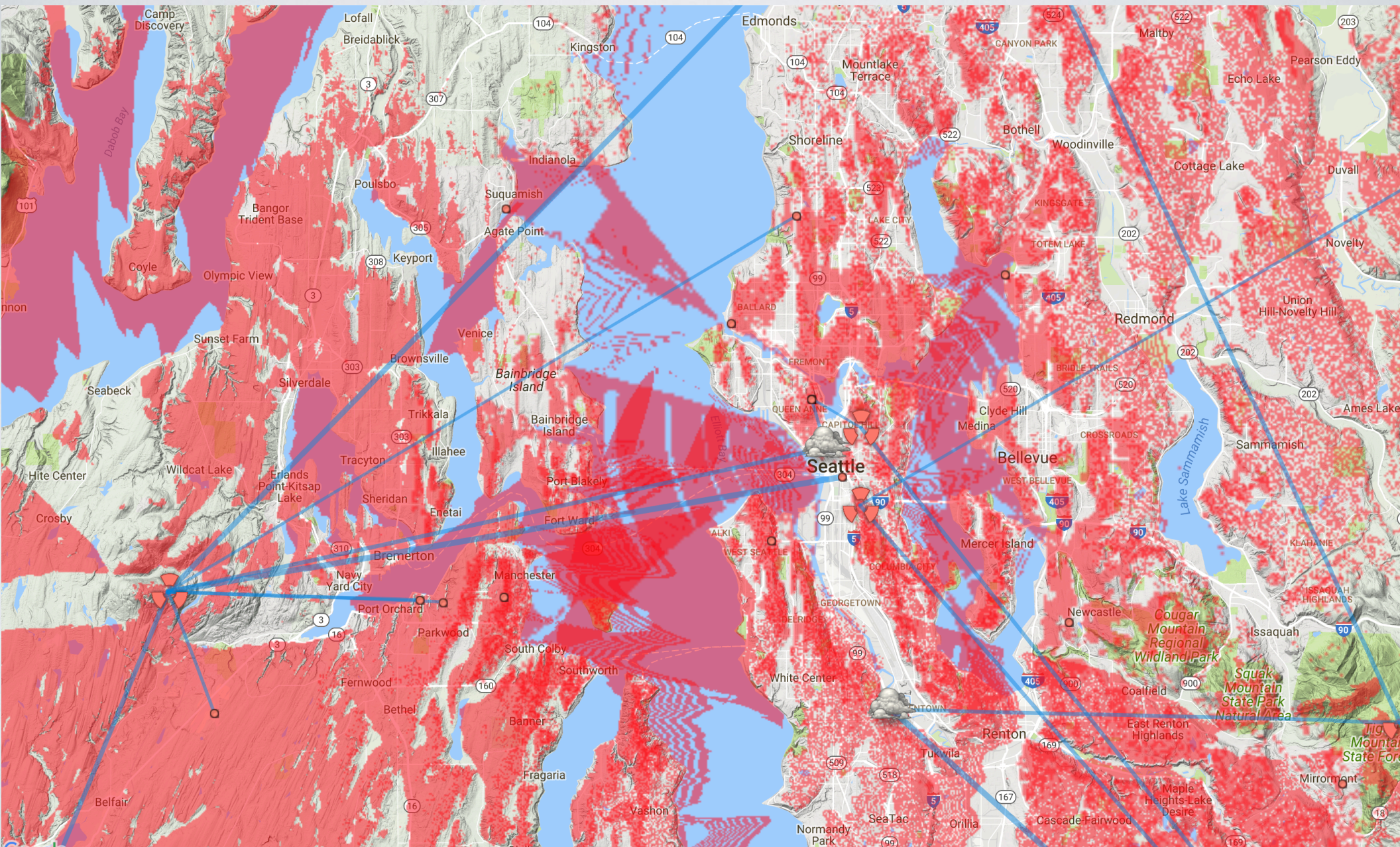
Coverage Map



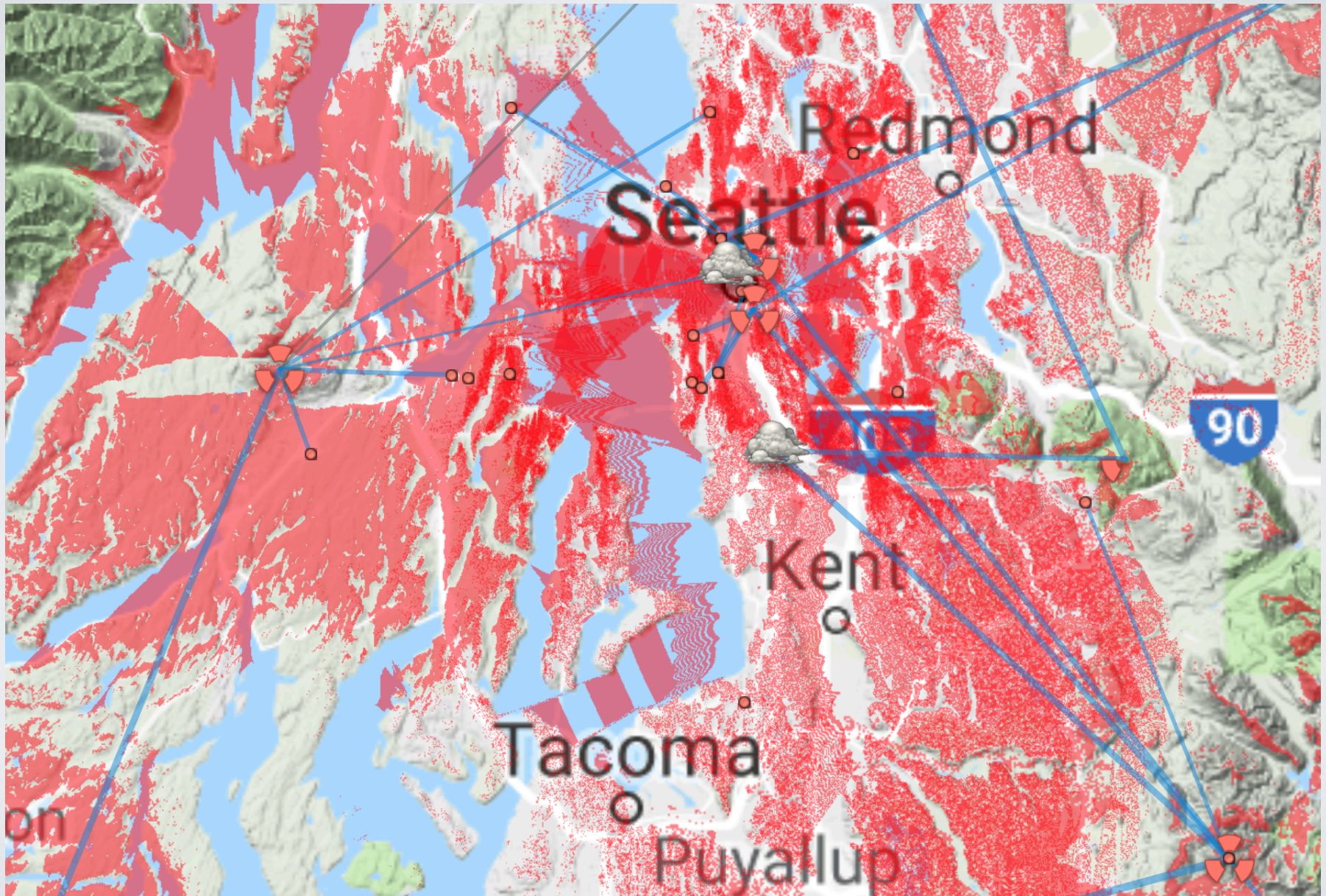
HamWAN (N. Sound) Coverage Map



Coverage Map: HamWAN (Seattle)

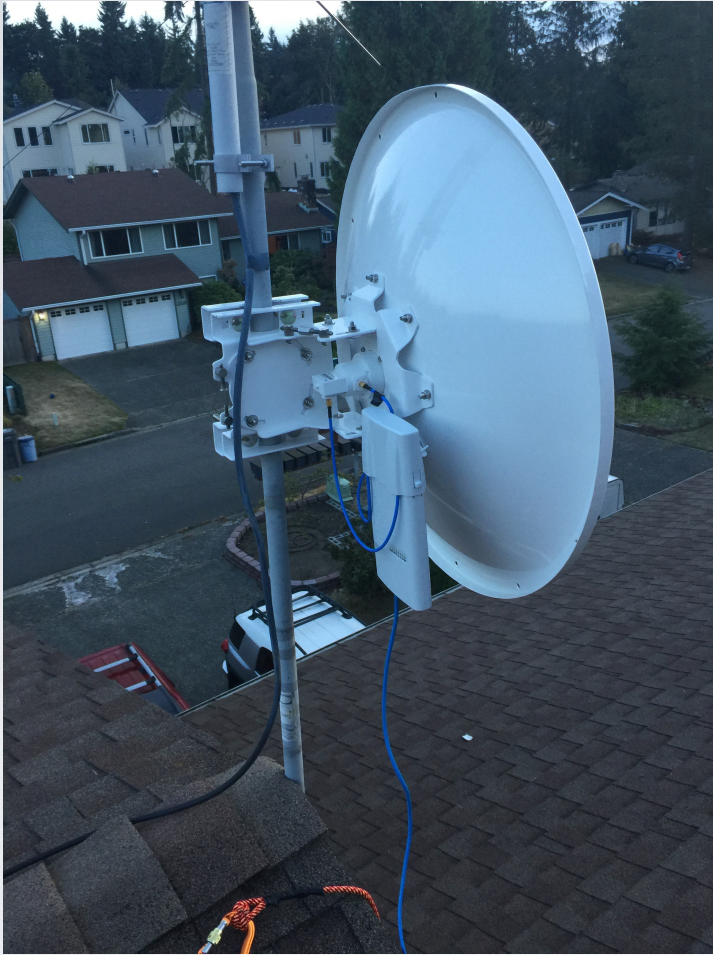


Coverage Map: HamWAN (South King County)



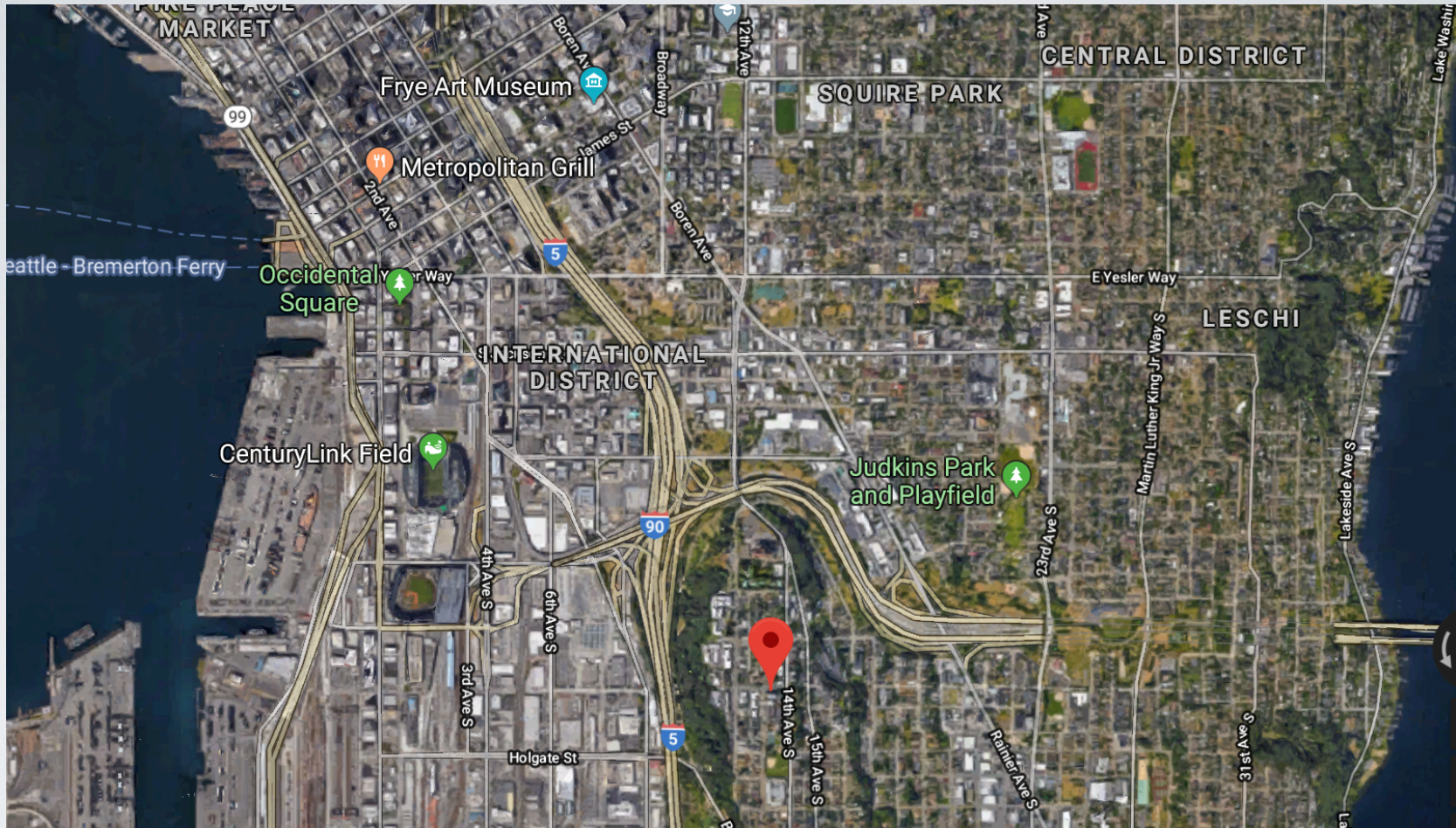


KU7M Link to CapPark



KU7M Link to Beacon

**BEACON HILL
SITE BUILD**



BEACON HILL

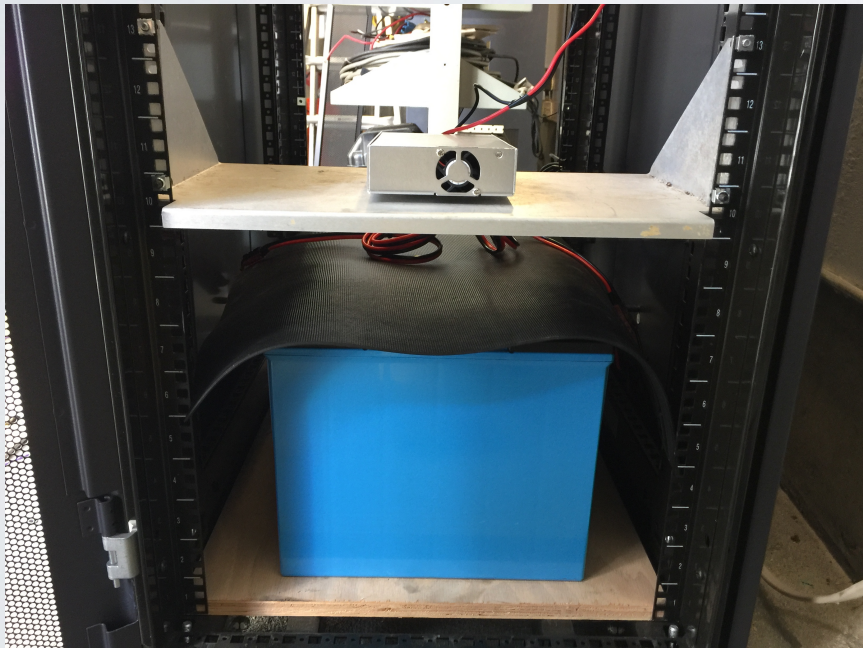
Housing Authority Building



Elevator Stack



Step 1: Rack / Materials

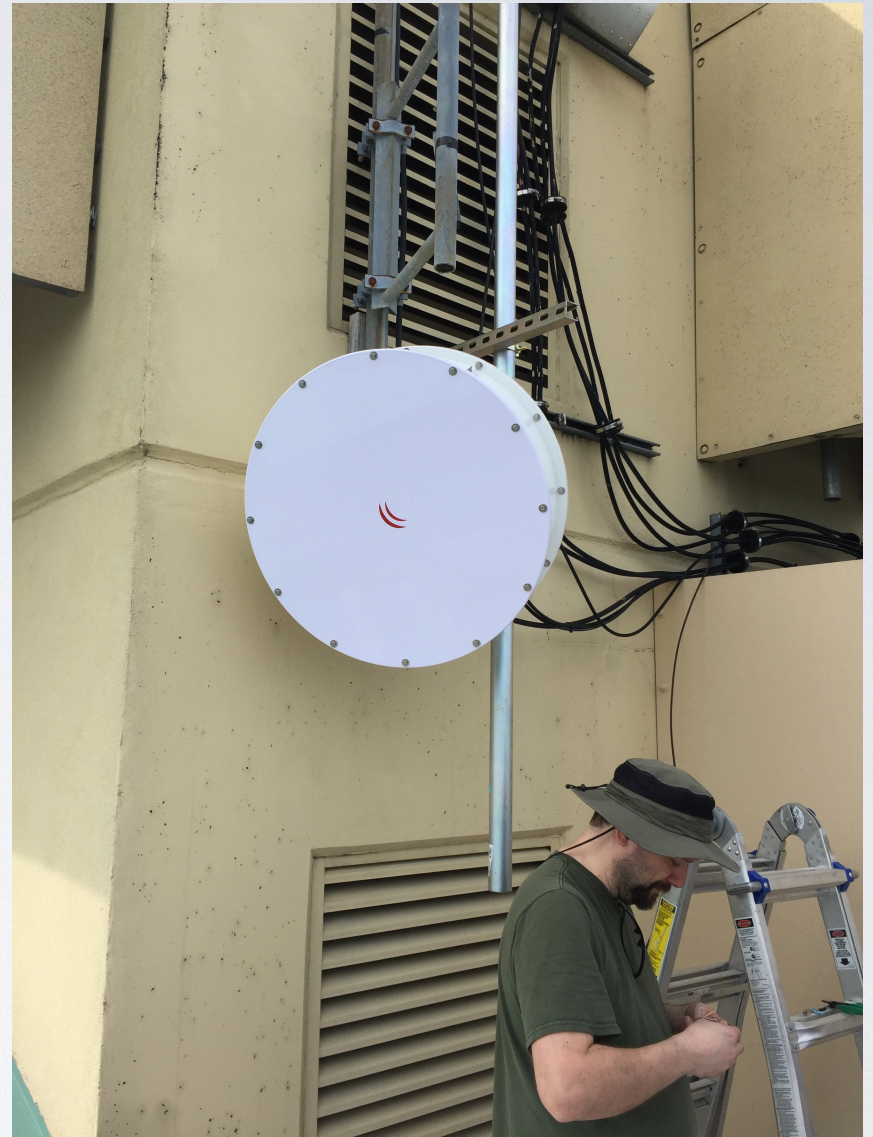


Nigel Vander Houwen

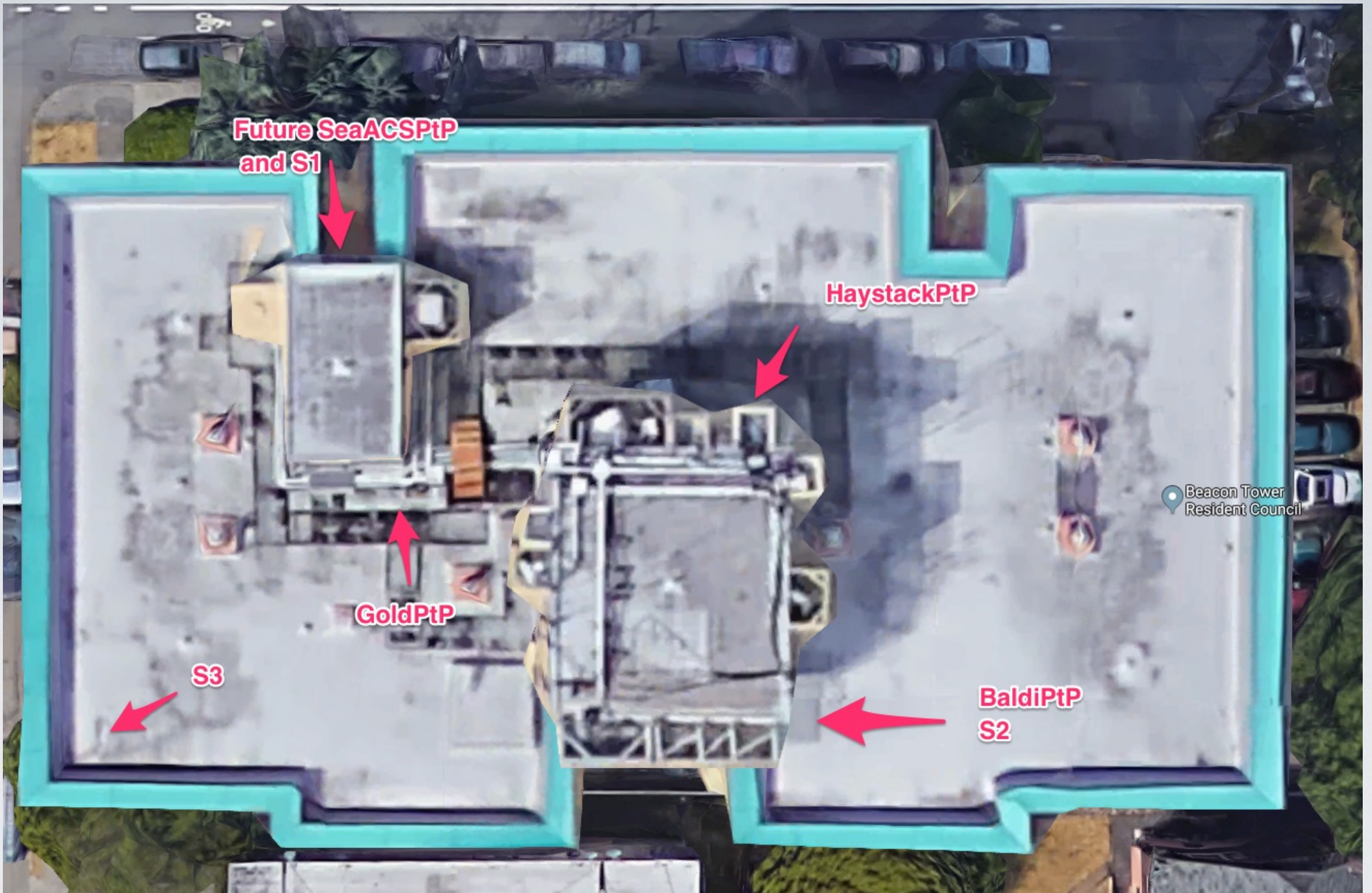
Rack / UPS



Layout



Step 2: Link to Network



Layout



Step 3: More Network Links



Layout



Step 4: Scary Install



Layout



Step 5: S3



Views



Questions?

STUFF

- HamWAN Seattle
 - <http://www.hamwan.org>
 - Mailing list: psdr-join@HamWAN.org
 - IRC: channel #HamWAN on irc.freenode.org
- Link to Client Options - <https://goo.gl/sY9Ddc>
- ku7m@ku7m.net