



Spectrum Management 2013

Wireless Roundup

Presented by David Meyer
May 14, 2013



- Part 25 / 74 / 101 Coordination Activity
- 3650 – 3700 MHz Filings/Deployments
- Satellite News
- NSMA Working Group #3
- Conference Topics

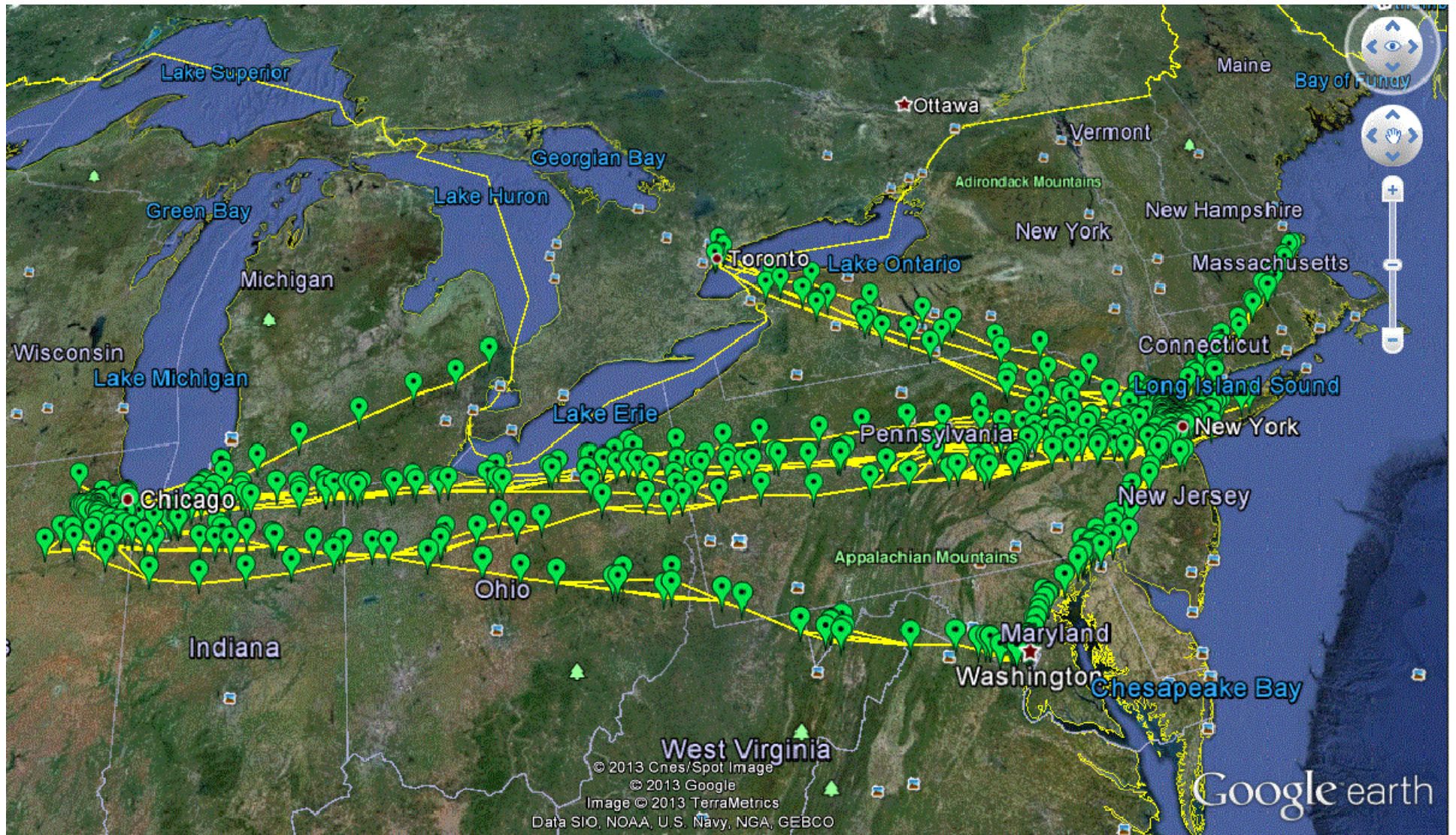
Coordination Activity



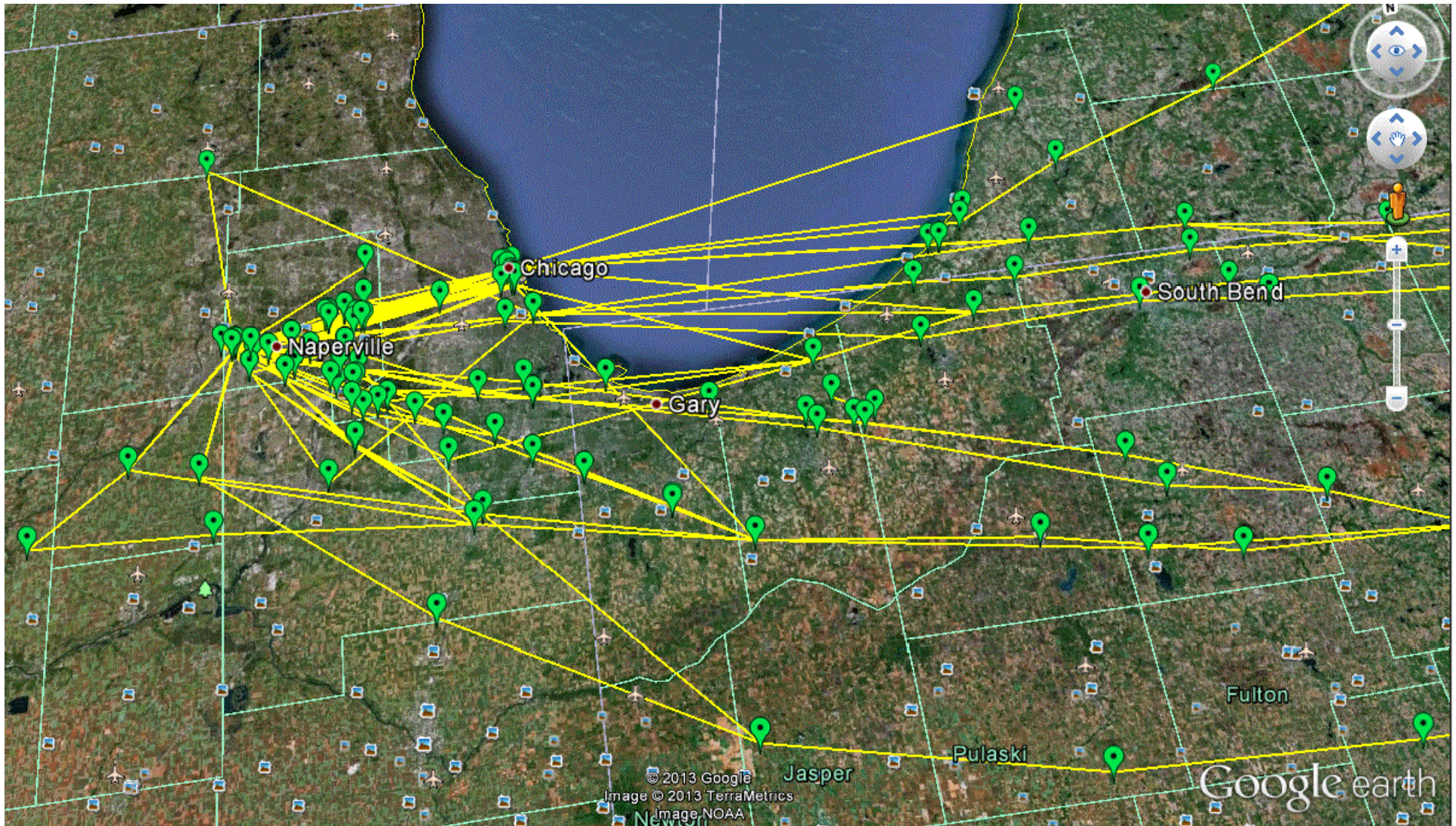
Type	May09–Apr10	May10–Apr11	May11–Apr12	May12–Apr13
Part 101–Mic Paths	34,140 + 132 %	25,378 - 25.7 %	27,488 + 8.3 %	35,160 + 27.9 %
Part 101 – (MAS)	507	450	580	454
Part 74 Mic Paths – CARs/Aux Brdcst Bands (2,7,13 GHz)	1,389	1,094	1,273	1,934 + 51.9%
Part 25 - ES Temporaries	1,120	1,299	1,333	1,515
Part 25 – ES Permanent	222	293	210	380
Total	37,378 + 98.8 %	28,514 - 23.7 %	30,884 + 8.3 %	39,443 + 27.7 %

- Part 101 Microwave Paths
 - Backhaul By AT&T, Sprint, T-Mobile, US Cellular, Verizon
 - Continued Growth/Usage of Licensed PTP Microwave
 - Continued Chicago – New York Activity
 - One Entity has over 4,000 point-to-point path variations coordinated within the last 24 months
 - Multiple Bands – 4, 6.1, 6.7, 11, 18, 23 GHz
 - Various configurations, routes
 - As of 05/13/2013 – only 6% of this set of coordinated paths have been licensed

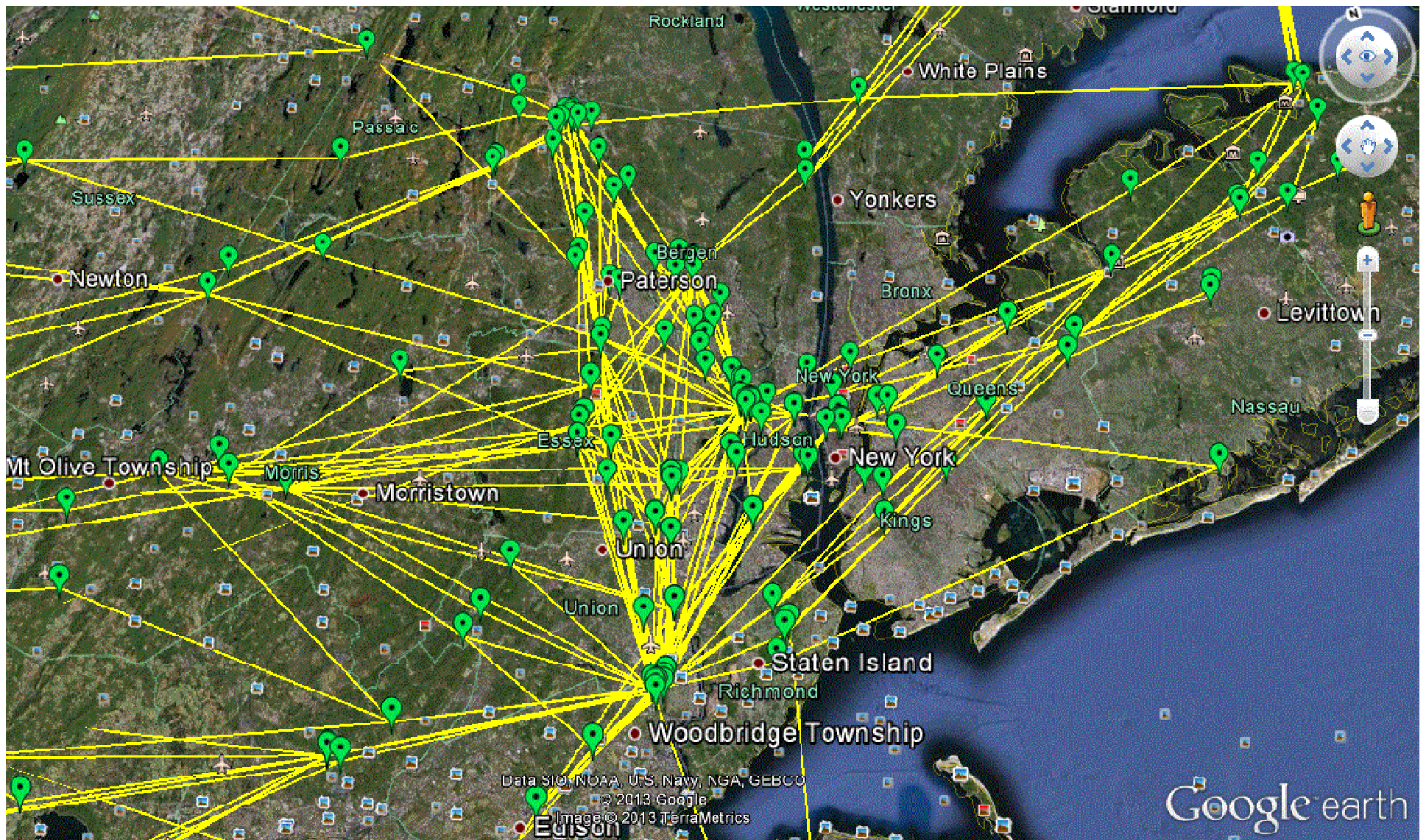
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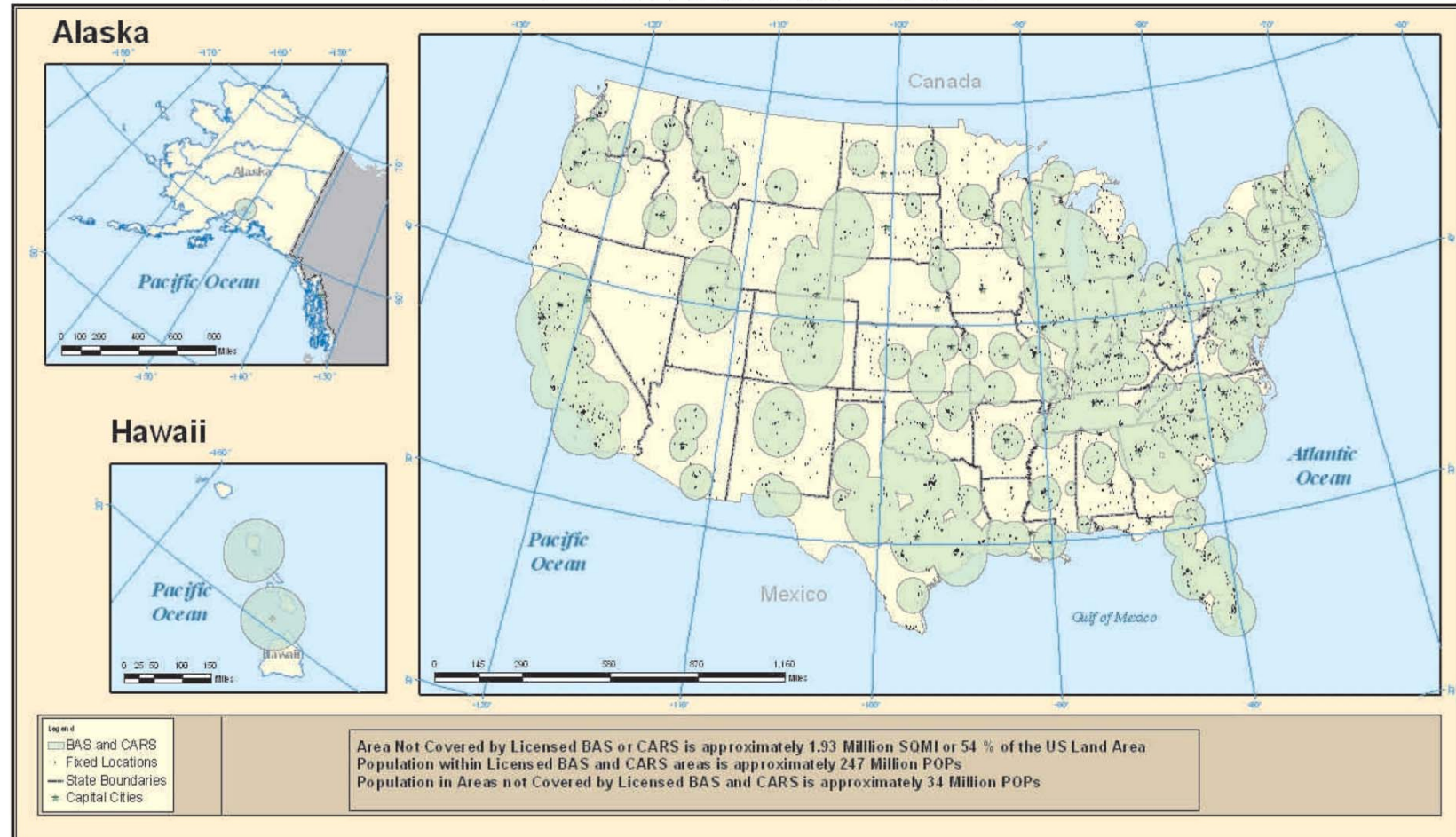


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- MAS – Driven by Availability
- Auxiliary Broadcast Band Activity
 - 950 MHz, 7 & 13 GHz
 - Addition of Remote Receive Sites
 - Expansion of 7 & 13 GHz by non Broadcast users
- ES Temps – Event Driven
- Part 25 – Earth Stations
 - Coordination of 4 GHz Terrestrial Paths
 - Impact of 3650 Service Growth
 - Also saw Associated Press Start to turn down over 1,000 Licensed R/O Earth Stations due to Change over to Internet Delivered Content/Programming

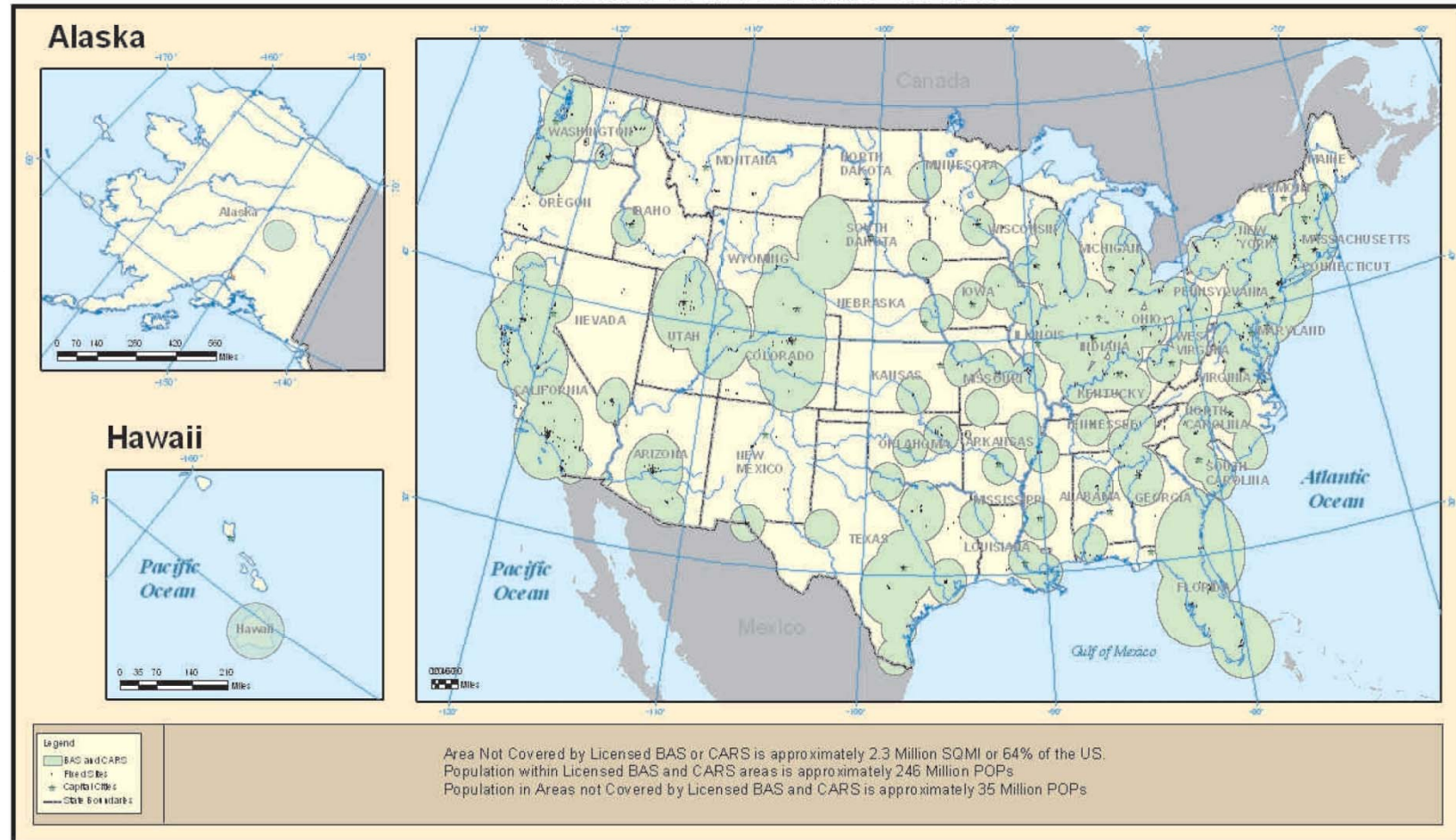
Fixed Service Usage of 7 and 13 GHz

7 GHz BAS AND CARS



Fixed Service Usage of 7 and 13 GHz

13GHz BAS AND CARS



3650 – 3700 Radio Service



3650-3700 Licenses (Nov'07 – Apr'12)

Total FCC Registrations

	Nationwide	Site
Totals	2113	17162
CENTERPOINT ENERGY INC	1	5594
Digis LLC	1	759
Chevron USA Inc.	1	729
PPL Electric Utilities Corp.	1	630
SWWG, LLC	1	516
Aventure Communication Technology LLC	1	414
PTA-FLA, Inc.	1	365
Antelecom, Inc.	1	340
N-1 Communications, LLC	1	265
OKLAHOMA GAS AND ELECTRIC COMPANY	1	260
Intelliwave LLC	1	245
Azulstar, Inc.	1	232

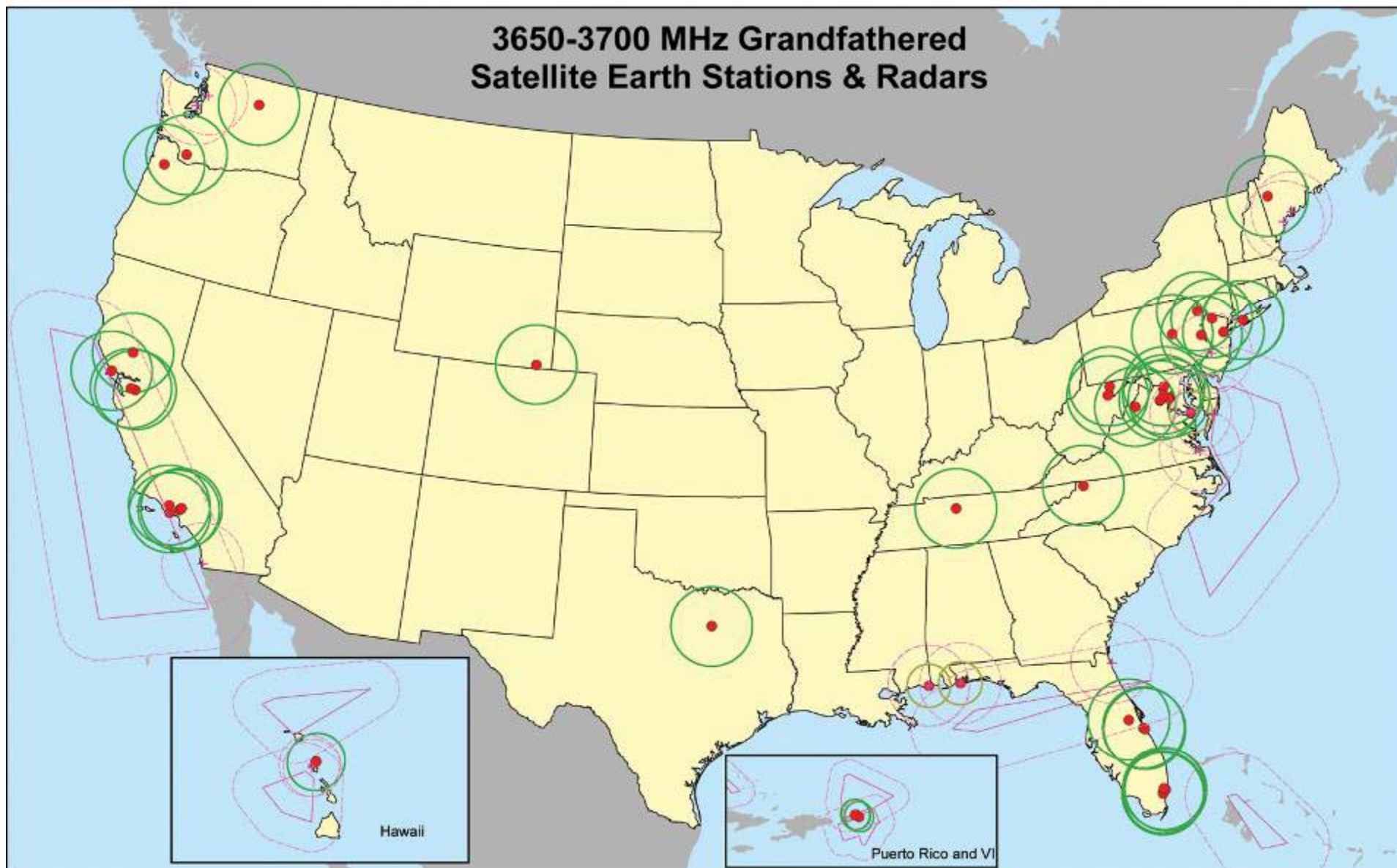
3650 – 3700 Radio Service



3650-3700 Licenses (Nov'07 – Apr'13)	Total FCC Registrations	
	Nationwide	Site
Totals	2408	23853
CENTERPOINT ENERGY INC	1	6237
Chevron USA Inc.	3	888
Digis LLC	1	763
Skynet Communications	1	741
Intelliwave LLC	1	561
Softcom Internet Communications, Inc.	1	516
SWWG, LLC	1	516
Aventure Communication Technology LLC	1	443
Antelecom, Inc.	1	417
PPL Electric Utilities Corp.	1	404
OKLAHOMA GAS AND ELECTRIC COMPANY	1	387
PTA-FLA, Inc.	1	365

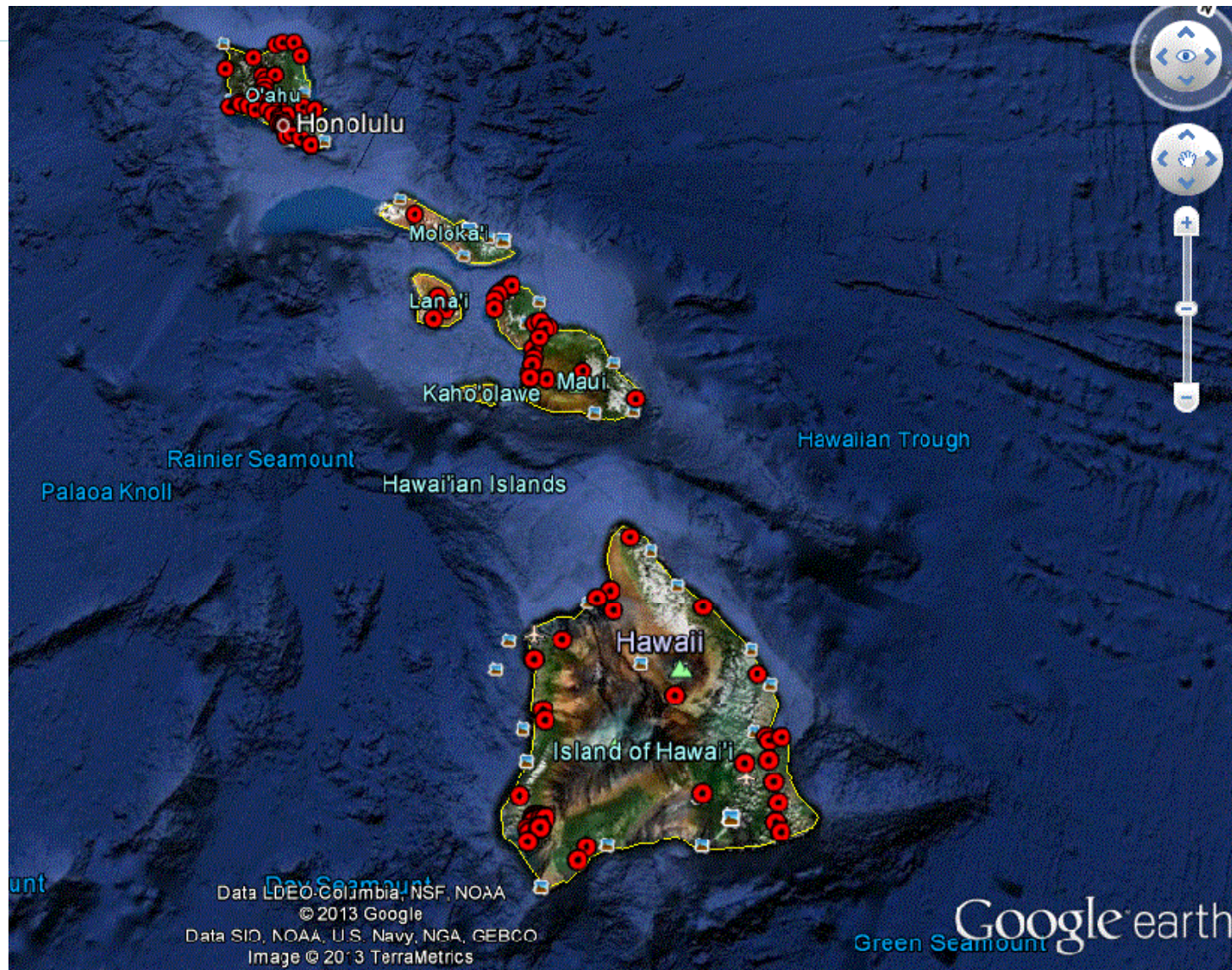
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3650-3700 MHz Grandfathered Satellite Earth Stations & Radars



Legend

- FSS Earth Stations
- ⊕ Radar Locations
- 80-KM Radius
- 150-KM Radius
- OPAREA Boundaries
- 150 km Contours



April 30, 2013 – Hawaii Detail

3650 – 3700 Radio Service



3650-3700 Licenses (Nov'07 – Apr'13)

Total FCC Registrations

	Nationwide	Site
Totals	2408	23853

of Registered Sites jumped 39%
from Apr 2012 – Apr 2013

Deployment is Nationwide – Variety of Uses
Limited in Exclusion Zones

Licensees Include Large Utilities, Petroleum
Main Licensees are Small WISP's

Issues with Adjacent Channel Operation
& 3650 Service Conflicts

Recent Satellite News - Regulatory

- **U.S. Govt. Use of commercial Satellite Services.**

The FCC is putting out for comment two proposals to allow Govt users of commercial Satellite services. Proposal 1: Modify the current allocation under Part 2.106 to include a Federal Allocation for the FSS bands. Proposal 2: Place a footnote in the Allocation Table in the FSS bands that provides protection to Federal Earth stations that communicate with FSS and MSS so they receive protection the same as non-federal earth stations.

- **NPRM Review of Licensing and Operating Rules for Satellite Services.**

<http://www.fcc.gov/document/review-licensing-and-operating-rules-satellite-services-0> Designed to provide some streamlining of current licensing procedures for satellite and earth station licensing.

- **Amendment of Part 2 and 25 of the FCC rules to Allocate Spectrum and services rules for VMES**

http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0108/FCC-13-1A1.pdf Firmed up the rules for Vehicle Mounted Earth Stations (VMES) and incorporated them into Part 2 and 25.

NSMA Objectives – www.nsma.org

Develop technical and procedural recommendations for coordination of wireless telecommunications systems and services

Provide a linkage between government regulations and industry practice by developing recommendations that streamline and standardize procedures used by the frequency coordination community.

Proactively advise regulatory bodies on matters affecting radio frequency spectrum policy pertaining to terrestrial microwave, satellite systems, and emerging technology radio services

Conference Topics – Tuesday May 14th



- Key Note Address - Recent Spectrum Developments - 9:15 AM
Adam D. Krinsky, Esq. – Wilkinson, Barker, Knauer, LLP
- Satellite Update – New Systems, Mobility, Regulatory - 10:30 AM
Ken Ryan – Skjei Telecom
- Public Safety's Community Garden Spectrum Approach - 11:15 AM
Robert Schwaninger - Schwaninger & Associates
- Squeezing New Technologies into the Spectrum - 1:15 PM
Mitchell Lazarus, Esq. – Fletcher, Heald & Hildreth

Conference Topics – Tuesday May 14th



- Micro/Pico Cell Development - 2:00 PM
Joe Sandri - FiberTower
- Ice Cream Break - 2:45 PM
- Overview of PCAST Report - 3:15 PM
Dr. Preston Marshall – Information Sciences Institute
- Cubesats: Tiny Objects, Big Spectrum Challenges - 3:45 PM
Dr. Andrew Clegg – National Science Foundation
- Reception - 4:30 PM

Conference Topics – Wednesday May 15th



- Update on NSMA Working Group 3 - 8:30 AM
Larrie Sutliff – AT&T, Chairman WG3
- Spectrum Management Activities at the OET - 9:00 AM
**Julius Knapp, Chief, Office of Engineering and Technology,
Federal Communications Commission**
- Addressing Spectrum Challenges through Spectrum Sharing
and Transition – A Federal View – Panel Discussion - 10:15 AM
Victor Sparrow – NASA
Stuart Timerman – Defense Spectrum Organization
Colonel Brian Jordan – DoD
Doug Smith – Oceus Networks

Moderator: Colin Alberts – Freedom Technologies Inc.

- Considerations of 3-D Buildings/Satellite Imagery for Path Surveys - 1:15 PM
Jim Wolfson - X-DOT, Inc
- NSMA/TIA – Bulletin 10 Collaboration Report - 2:00 PM
Larrie Sutliff – AT&T
- iPad 3 Giveaway – must be present to win.... - 2:30 PM
- NSMA Board Meeting - 2:45 PM



Thank You for Your Time

Enjoy the 2013 Conference

www.comsearch.com