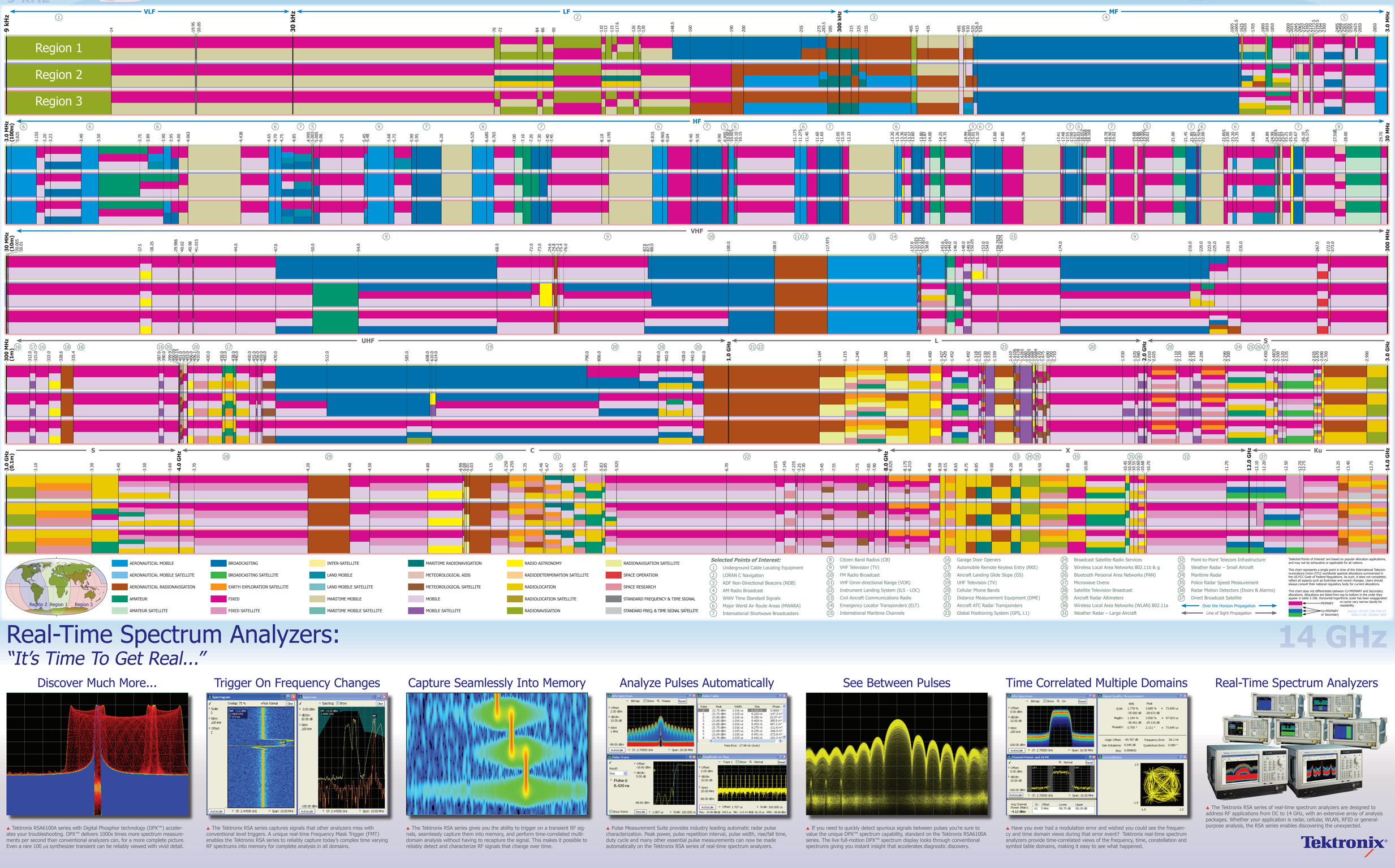
Worldwide Spectrum Allocations

Measured by Tektronix Real-Time Spectrum Analyzers



- AERONAUTICAL MOBILE
- AERONAUTICAL MOBILE SATELLITE
- AERONAUTICAL RADIONAVIGATION
- AMATEUR
- AMATEUR SATELLITE
- BROADCASTING
- BROADCASTING SATELLITE
- EARTH EXPLORATION SATELLITE
- FIXED
- FIXED SATELLITE
- INTER-SATELLITE
- LAND MOBILE
- LAND MOBILE SATELLITE
- MARITIME MOBILE
- MARITIME MOBILE SATELLITE
- MARITIME RADIONAVIGATION
- METEOROLOGICAL AIDS
- METEOROLOGICAL SATELLITE
- MOBILE
- MOBILE SATELLITE
- RADIO ASTRONOMY
- RADIODETERMINATION SATELLITE
- RADIOLOCATION
- RADIOLOCATION SATELLITE
- RADIONAVIGATION
- RADIONAVIGATION SATELLITE
- SPACE OPERATION
- SPACE RESEARCH
- STANDARD FREQUENCY & TIME SIGNAL
- STANDARD FREQ. & TIME SIGNAL SATELLITE

Selected Points of Interest:

1. Underground Cable Locating Equipment
2. LORAN C Navigation
3. ADF Non-Directional Beacons (NDB)
4. AM Radio Broadcast
5. WWV Time Standard Signals
6. Major World Air Route Areas (MWARA)
7. International Shortwave Broadcasters
8. Citizen Band Radios (CB)
9. VHF Television (TV)
10. FM Radio Broadcast
11. VHF Omni-directional Range (VOR)
12. Instrument Landing System (ILS - LOC)
13. Civil Aircraft Communications Radio
14. Emergency Locator Transponders (ELT)
15. International Maritime Channels
16. Garage Door Openers
17. Automobile Remote Keyless Entry (RKE)
18. Aircraft Landing Glide Slope (GS)
19. UHF Television (TV)
20. Cellular Phone Bands
21. Distance Measurement Equipment (DME)
22. Aircraft ATC Radar Transponders
23. Global Positioning System (GPS, L1)
24. Broadcast Satellite Radio Services
25. Wireless Local Area Networks 802.11b & g
26. Bluetooth Personal Area Networks (PAN)
27. Microwave Ovens
28. Satellite Television Broadcast
29. Aircraft Radar Altimeters
30. Wireless Local Area Networks (WLAN) 802.11a
31. Weather Radar – Large Aircraft
32. Point-to-Point Telecom Infrastructure
33. Weather Radar – Small Aircraft
34. Maritime Radar
35. Police Radar Speed Measurement
36. Radar Motion Detectors (Doors & Alarms)
37. Direct Broadcast Satellite

Over the Horizon Propagation
Line of Sight Propagation

PRIMARY
Co-PRIMARY or Secondary

'Selected Points of Interest' are based on popular allocation applications, and may not be exhaustive or applicable for all nations.

This chart represents a single point in time of the International Telecommunications Union (ITU) worldwide spectral allocations summarized in the US FCC Code of Federal Regulations. As such, it does not completely reflect all aspects such as footnotes and recent changes. Users should always consult their national regulatory body for current allocations.

This chart does not differentiate between Co-PRIMARY and Secondary allocations. Allocations are listed from top to bottom in the order they appear in Table 2.106. Horizontal logarithmic scale has been exaggerated on some very narrow bands for readability.

Source: US FCC CFR Title 47, Table 2.106, October 2003

14 GHz

Real-Time Spectrum Analyzers:

"It's Time To Get Real..."

Discover Much More...

▲ Tektronix RSA6100A series with Digital Phosphor technology (DPX™) accelerates your troubleshooting. DPX™ delivers 1000x times more spectrum measurements per second than conventional analyzers can, for a more complete picture. Even a rare 100 µs synthesizer transient can be reliably viewed with vivid detail.

Trigger On Frequency Changes

▲ The Tektronix RSA series captures signals that other analyzers miss with conventional level triggers. A unique real-time Frequency Mask Trigger (FMT) enables the Tektronix RSA series to reliably capture today's complex time varying RF spectrums into memory for complete analysis in all domains.

Capture Seamlessly Into Memory

▲ The Tektronix RSA series gives you the ability to trigger on a transient RF signals, seamlessly capture them into memory, and perform time-correlated multi-domain analysis without having to recapture the signal. This makes it possible to reliably detect and characterize RF signals that change over time.

Analyze Pulses Automatically

▲ Pulse Measurement Suite provides industry leading automatic radar pulse characterization. Peak power, pulse repetition interval, pulse width, rise/fall time, duty cycle and many other essential pulse measurements can now be made automatically on the Tektronix RSA series of real-time spectrum analyzers.

See Between Pulses

▲ If you need to quickly detect spurious signals between pulses you're sure to value the unique DPX™ spectrum capability, standard on the Tektronix RSA6100A series. The live full-motion DPX™ spectrum display looks through conventional spectrums giving you instant insight that accelerates diagnostic discovery.

Time Correlated Multiple Domains

▲ Have you ever had a modulation error and wished you could see the frequency and time domain views during that error event? Tektronix real-time spectrum analyzers provide time-correlated views of the frequency, time, constellation and symbol table domains, making it easy to see what happened.

Real-Time Spectrum Analyzers

▲ The Tektronix RSA series of real-time spectrum analyzers are designed to address RF applications from DC to 14 GHz, with an extensive array of analysis packages. Whether your application is radar, cellular, WLAN, RFID or general-purpose analysis, the RSA series enables discovering the unexpected.

Tektronix®