W5YI

America's Oldest Ham Radio Newsletter

REPORT

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The Way the FCC Allocates the Radio Spectrum May be Changing

The United States lags other developed countries in getting new generation wireless services in place. The trouble is there are few unallocated frequencies on which to operate.

To remedy that problem, the FCC is looking for innovative ways to enable more efficient use of the radio spectrum. Speaking at the University of Colorado School of Law in Boulder, Colorado last month, FCC Chairman Mike Powell said finding more spectrum for new telecommunications devices could lie in taking advantage of new technology.

> *"The government has an almost impossible task trying to keep pace with the ever increasing demand for spectrum and continuing advances in wireless technology and applications. In this fast-moving world, the Commission cannot rely on outmoded procedures and policies. We must establish new ways to support innovation and the efficient, flexible use of spectrum."*
> *Comment by FCC Chairman Michael*

"We are living in a world where demand for spectrum is driven by an explosion of wireless technology," Powell said. Yet, "...we are still living under a spectrum management regime that is 90 years old. It needs a hard look, and in my opinion, a new direction."

"Historically, I believe there have been four core assumptions underlying spectrum policy: (1) unregulated radio interference will lead to chaos; (2) spectrum is scarce; (3) government command and control of the scarce spectrum resource is the only way chaos can be avoided; and (4) the public interest centers on government choosing the highest and best use of the spectrum."

"While spectrum scarcity is a problem in some bands some of the time, the larger problem is spectrum access -- how to get to and use those many areas of the spectrum that are either underutilized or not used at all." He said the agency is looking at ways to overhaul government regulations of wireless licenses, including allowing commercial license holders to offer a variety of services as well as expand the use of existing spectrum that may be underutilized.

Powell wants an end to the century old system of totally government-decreed spectrum allocation. A better system might be for computer software and hardware to find vacant operating space, Powell observed.

Interference

The current system is to establish regulations to eliminate interference, "...but maybe that fear is no longer justified," Powell said. "Interference is often more a product of receivers. That is, receivers are too dumb or too sensitive or too cheap to filter out unwanted signals. Yet our decades-old rules have generally ignored receivers."

Powell said he favors relaxing rules intended to prevent signal interference altogether, and supports

new policies ensuring that interference stays within acceptable levels.

"The time has come to consider an entirely new paradigm for interference protection," Powell said. A more forward looking approach requires that there be a clear quantitative application of what is acceptable interference for both license holders and the devices that can cause interference. Transmitters would be required to ensure that a specified interference level is not exceeded. Receivers would be required to tolerate a certain interference level."

"Modern technology has fundamentally changed the nature and extent of spectrum use." Powell said the FCC "...should continuously examine whether there are market or technological solutions that can – in the long run – replace or supplement pure regulatory solutions to interference."

For the first time, the Commission is looking into requiring that receivers meet a certain threshold of quality, clearing the way for more services to be offered. Current anti-interference rules focus only on transmitters. "Manufacturers have developed technology that allows receivers to sift through the noise to find the desired signal," he said.

"Ultra-wideband" technology - an "underlay" approach that uses low power signals sent over a wide swath of already occupied frequencies - can also free up spectrum and defeat interference. "...if used right, spectrum is essentially limitless -- that is, with modern receivers and transmitting devices that make yesterday's interference problems go away."

Current spectrum policy

Since the 1930s, the U.S. Government has allocated specific parts of the airwaves to various government agencies and private companies, based on the principle that spectrum was a scarce and dwindling resource which had to be divided up fairly.

Powell's view is that even though fully licensed "...most spectrum is not in use most of the time." He said a spectrum survey conducted in five major cities showed that "...while some bands were heavily used, others either were not used or were used only part of the time." Powell believes these 'holes' in bandwidth or time could be used to provide significant increases in communication capacity, without impacting current users, through the use of new technologies.

Until now, the agency has auctioned frequencies for specific purposes, such as mobile-phone calls, under rules that block the license holder from changing the use of the airwaves.

Last summer, Powell launched a task force to study spectrum policies and make recommendations. The goal of the Spectrum Policy Task Force (their website is at <www.fcc.gov/sptf>) is to assist the Commission in identifying and evaluating changes and improvements in spectrum policy.

What might be done

Powell does not suggest an end to licensing (and much spectrum is already 'unlicensed'). Instead he wants a thorough study of spectrum policy and possible "multiple approaches to more efficient spectrum use" ...a move away from hard line regulation toward more flexibility. He wants to give companies greater leeway in determining how their airwaves are used, and to reduce government's role.

"We should develop policies that avoid interference rules that are barriers to entry, that assume a particular proponent's business model or technology, and that take the place of marketplace or technological solutions," he emphasized.

The end result might be that commercial users of the spectrum being able to use their frequencies for additional telephone, Internet, television and other services.

Companies also should be given the right to rent spectrum to others at times when it's not in use. For instance, a mobile-phone service provider could lease channels from a local business when the office is closed, Powell said. He also suggested that devices may be able to "find" spectrum open space and use it until the licensee needs those rights for their own use.

The FCC appears to be moving toward a completely new way to regulate -- or, in this case, deregulate -- the airwaves. But not all carriers and radio services are in favor of a new spectrum approach ...especially those who paid dearly for their licenses or have exclusive frequencies for their service.

FCC considering 'open spectrum'

The Commission also plans to free up more parts of the spectrum for people and companies to use without a license, for local wireless networks or other purposes. It would be sort of like the nation's highway system that anyone can use but no one owns.

The FCC believes that many new innovative services would spring up if more unlicensed spectrum were made available. An example is "wi-fi," ("wireless fidelity" – wireless computer data protocol 802.11) which connects computers to the Internet through high-speed wireless networks. This brand new multi-million dollar industry sprouting in cafes and airports has gone from nothing to widespread deployment in just a few years using unlicensed spectrum shared with others ...and totally without government regulation.

Wi-Fi operates on spectrum shared by baby monitors, garage door openers ...even ham operators. Although they haven't been derailed yet, some advocates are seeing a need for the FCC to establish Wi-Fi rules and enforce etiquette in this band. At present, unlicensed devices have no spectrum standing at all.

The core of this concept is that software, new modulation schemes (such as ultra-wideband) and intelligent equipment (like software-defined radios) will be able to

successfully navigate through congested public airwaves. It will be up to chip-makers, software writers and equipment manufacturers to create devices using common protocols that avoid or co-exist with virtual traffic jams. Many telecommunications experts believe that if the rules were written to allow mutual open-access, the notion of electromagnetic-spectrum scarcity could become a thing of the past.

Everyone, from ham operators to broadcasters would travel on the same highway, limited only by the smart equipment they operate. Consumers and tinkerers would be able to come up with their own devices and applications just like they have on the Internet. In turn, the growing number of applications would create equipment and software demand.

A goal would be to limit exclusive frequency allocations and spectrum auctions ...instead encouraging spectrum users to share the same highway. Instead of regulating the spectrum, the FCC would enforce rules governing how people "travel" on the spectrum highway – much like how public authorities oversee the use of our thoroughfares. The FCC could even allow people to "drive across" private (exclusively allocated) spectrum assigned to various services as long as they don't disrupt their operation.

Given this environment, entrepreneurs would develop new applications and equipment which would navigate through the public and private spectrum highway. Consumers would finance the development of the airwaves by buying new devices and software applications.

> *"The time is ripe for spectrum policy reform. Increasing demand for spectrum-based services and devices are straining longstanding, and outmoded, spectrum policies. While the Commission has recently made some major strides in how spectrum is allocated and assigned in some bands ...spectrum policy is not keeping pace with the relentless spectrum demands of the market."*
>
> *...Conclusion of FCC Spectrum Policy Task*

To make all of this become a reality, additional common spectrum would have to be found to provide "mutual airwaves" that form a public airwave transportation system ...where equipment makers, inventors and entrepreneurs could experiment. The unlicensed spectrum highway might even require a licensed "driver" or approved "automobiles" (equipment) to avoid causing "accidents" (harmful interference) The idea of "open-spectrum" access has found a powerful ally in Microsoft. They want to develop wireless broadband networks in unlicensed spectrum and have already explained their position to the FCC.

Some open spectrum advocates want the FCC hold a single large auction for all available spectrum then allow secondary trading of those rights ...sort of like permitting toll booths on the information highway. Many envision Microsoft with their huge multi-billion cash position entering the telecommunications business.

Notice of Inquiry coming

The FCC plans to update its rules next year to allow commercial wireless companies to use new innovative technology to provide new and telecommunications services without disrupting each other's signals. Such technology might also allow smaller companies to offer competing services without having to pay prohibitively huge amounts for frequencies.

On November 7th, the FCC's Spectrum Policy Task Force reported on its findings and made recommendations relating to the Commission's spectrum policy. As a result, the FCC plans to immediately begin a rule-making process seeking public input on how best to remodel the spectrum management process. Powell also said he would discuss needed legislative reforms with Congress. The following press release was issued by the FCC.

SPECTRUM POLICY TASK FORCE PRESENTS RECOMMENDATIONS FOR SPECTRUM POLICY REFORM

Washington, DC. -- The Federal Communications Commission's Spectrum Policy Task Force today [Nov. 7th] presented recommendations to modernize the rules that guide how the nation's spectrum is managed and utilized and to evolve from a traditional government "command and control" model to a more flexible, consumer-oriented approach.

The Task Force delivered its recommendations in a report presented to the full Commission. The Task Force's Report will provide a starting point for a long term review of spectrum policy approaches that could be implemented by the Commission.

The Task Force, created by FCC Chairman Michael Powell in June 2002, has conducted a comprehensive review of spectrum policy at the FCC.

Task Force key findings:

• **Access.** Based on preliminary research and review conducted by the FCC Staff and the Task Force, some spectrum bands are heavily used, but many are not in use in all geographic areas or are used only part of the time. Thus, there may be opportunities for spectrum-based services or devices to operate in the resulting "white spaces" - including both those that result from variability in the operations of existing spectrum users over time and those that result from the geographic separation of existing spectrum users.

• **Technology.** While technological advances are contributing to the increased diversity of spectrum-based consumer applications and greater consumer demand for spectrum-based services, technological advances such as the increased use of digital technologies and the development of software-defined radios are providing some

CUTTING EDGE TECHNOLOGY

Finding and keeping track of customers and people will be a popular use of mobile phones as networks become more advanced. Toward that end, Microsoft has purchased "Vicinity," an online mapping and location service that provides directions over the Web and allows companies and individuals to be directed to specified locations and people.

Direction services are expected to be widely used with the next generation cell phone. A caller's location can be pinpointed and then be directed to nearby gas stations, restaurants, shops or other services. It can send customers, for instance, to the closest FedEx collection box, mapping out the route and providing office hours.

Using cellular antennas and GPS technology, people could also use the service to determine the location of their friends and then meet them, such as at a crowded theme park or stadium.

Yielding to privacy concerns, the location service is not designed to keep track of the location or movements of consumers, gather customer identification information or to create customer profiles based on geographic information.

Microsoft plans to further develop Vicinity's location services and will collect fees for the use of its maps and directories. <www.mapblast.com>, currently operated by Vicinity will be phased out because it competes with Microsoft's MapPoint. <http://mappoint.msn.com> which uses Vicinity's mapping technology.

EMERGING COMMUNICATIONS

Wi-Fi comes to Schlotzsky's sandwich chain. Is McDonalds, Wendys and Burger King next? Schlotzsky's has rolled out its "Cool Cloud" network. They are getting out the word by marking sidewalks with chalk to let folks in Austin and Houston, Texas area know that they can use their own Wi-Fi-equipped computers in some of their deli locations to access the Internet, check e-mail while they enjoy Schlotzsky's sandwiches. And unlike other Wi-Fi spots announced by Starbucks coffee shops and Borders bookstores, Schlotzsky's network access is free.

The Leichtman Research Group Inc. reports that the number of U.S. high-speed-Internet subscribers has increased to 15.6 million as of October 1, 2002. (10.1 million cable – a 65% share – and 5.5 million DSL.) An additional 1.68 million new cable modem and DSL subscribers joined the high speed world during the third quarter.

Cable added more than 1.1 million subscribers in the quarter, or 68 percent of the total, while DSL added 540,000. Cable continues to maintain its 2-to-1 margin in high-speed-data additions.

The two largest cable modem operators are Time Warner (2.3 million subscribers) and AT&T (1.9 million); the largest DSL providers: SBC (1.9 million) and Verizon (1.6 million). Together, these four companies account for half of all high speed Internet subscribers.

LRG says there will be 17 million US broadband subscribers by the end of the year, about 13% of the US online population. <www.LeichtmanResearch.com>.

According to a study from Solomon-Wolff Associates, a New Jersey-based market research firm, the market penetration for satellite TV has begun to level off.

Cable TV continues to dominate the premium TV market with 75 percent of households, and its market penetration is still increasing, the firm said. "DirecTV and DISH Network together now account for one out of four households that use premium TV services, but their growth has slowed."

As for customer satisfaction, 22 percent of cable TV users surveyed are completely satisfied with their service, compared to 34 percent of satellite TV users. DirecTV commands the highest satisfaction level among DBS providers. The major cable TV service with the highest satisfaction level is Cox, with 29 percent of its customers being happy with their service.

The data is developed from a survey conducted through Solomon-Wolff's Web site. See: <www.consumerviews.com>.

HDTV plug-and-play televison sets are on the way. One of the major obstacles to popularizing high-definition TV may finally be falling. Cable operators and TV manufacturers have agreed on standards that would make DTV (digital television) sets 'digital cable-ready' ...that is, incorporating both cable HDTV tuners and descrambling technology in TV sets sold in retail stores. The idea is to take the hassle and risk out of buying HDTV sets.

Cable TV systems do not have to carry the DTV signals of local stations even though they are required by the FCC to carry the current analog signals. And, as a general rule, they don't because few consumers have a digital set with an installed HDTV tuner.

As it is now, even the highest end digital TV set requires a separate $250 or so set-top box from Scientific-Atlanta or Motorola in order to receive HDTV cable signals. What is needed is a cable-ready HDTV set. It is on the way ...although it might take two years.

Cable-ready HDTVs will be phased in over a three-year period beginning in 2004. The deal, five years in the making, cannot be implemented until the FCC passes rules to implement it. Digital-cable systems already have committed to showing at least five channels in HDTV next year.

HDTV service features a wide-screen picture with a width-to-height ratio of 16-to-9 – identical to that of most movie screens – and more than two million pixels (picture elements) per screen, which provides six times the sharpness of a standard TV analog picture.

More than 600 million people around the globe now have Internet access. According to newly released statistics, Europe has the biggest online population in the world with 191 million Internet users. The Asia-Pacific region is second with 187 million.

North America has seen little or no growth in its online population over the past few months. At the end of the third quarter 2002, the North American Internet population stood at 183 million.

More than 90 percent of the world's online population come from these three areas. (Each with a 30 percent share.)

Areas with the fewest Internet users: Latin America with 5.5 percent. Africa and the Middle East have one percent each.

The Internet, which started out as an English-speaking medium, is now two-thirds non-English speaking. Global Reach's latest statistics on the use of language online indicates that 63.5 percent (more than 400 million) of the total global online population are from non-English speaking zones. Only 36.5

percent of the world-wide online population are native English speakers.

Speakers of European languages (excluding English) account for 35.5 percent of the global online population, while 25.8 percent of Internet users have an Asian language as their mother tongue. After English speakers, the next biggest language group online are Chinese speakers who comprise 10.8 percent of the world's Internet users.

Japanese speakers are next (9.3 percent), followed by Spanish speakers (7.2 percent), German (6.6 percent) and Korean (4.4 percent). Italian is the native language of 3.8 percent of all Internet users. French: 3.5 percent. Portuguese speakers account for three percent of all Internet users, according to the study.

COMPUTERS & SOFTWARE

New Etch-a-Sketch like PC ditches mouse for pen-like stylus. Microsoft has introduced its long heralded Tablet PC, a pet project of CEO Bill Gates. The new device, and the software underneath, can do "reliable" handwriting recognition which can be inserted into a computer application. The gadget also has the ability to enter and store hand scrawls and doodles.

The Wall Street Journal said pen-based slate-like PCs "...should appeal to business people who want to take computerized notes during meetings without the clicking of a keyboard, air travelers who can more readily use the devices on their laps than laptop PCs, and executives who want to scribble notes in the margins of documents on screen." Some versions have detachable, built-in or a provision for external standard keyboards.

The best chance for success lies in Asia since the tablet PC can accept handwritten Japanese, Korean and Chinese characters.

Several PC makers including Compaq and Toshiba (but strangely not Dell, the world's largest) are in the process of unveiling initial versions of the slab-shaped computer which comes loaded with Microsoft's Windows XP software. Tablet PC prices start at just under $2,000. More at: <www.microsoft.com/tabletpc>.

Is making a backup copy of an owned DVD movie legal ...or piracy? Hollywood says it violates copyright law

and certainly defeats the built-in copy-protection. Chesterfield, Missouri (near St. Louis) based "321 Studios," developer of DVD-X Copy, says making a backup copy of software you already own has always been legal under the free speech rights afforded by the First Amendment.

The Motion Picture Association of America will probably file suit against "321 Studios." But the developer has already beat the MPAA to court. They have initiated pre-emptive legal proceedings against Hollywood, asking the court to affirm that consumers have the right to make copies of products they own. The MPAA position is that backup copies are primarily a means for trading copyrighted material.

The program is surprisingly easy to use. After software installation, you simply insert a blank DVD into your DVD burner and press "Copy Now." It works by transferring the movie to a hard disk (you need 4-GB of free space) which is then copied back onto a blank DVD. Nothing prevents users from copying other people's DVDs or rentals. The software can also be used to restore damaged or scratched DVDs. The program can be downloaded from <dvdxcopy.com> for $99.99.

The Christmas shopping season is all-important for video game sales in the United States. The big three, Sony, Nintendo and Microsoft shipped nearly 32 million units (accounting for more than $7 billion in revenues) of their next generation video game console last year. "Playstation 2" – which had a one year head start – is the leader. Market researcher InStat/MDR said Sony shipped its 40 millionth PlayStation 2 this fall, more than 10 million in North America.

Online gaming over the Internet is the next big draw with half of all video game consumers saying they are interested in that feature. And half of those say they are willing to pay for that capability. Sony and Nintendo GameCube video game console users can play online through a dial-up or broadband modem using their current ISP. Xbox Live, however, is a closed service run entirely by Microsoft.

Nearly one-third of all owners watch DVD movies on their video game consoles.

No longer a kid's toy, nowadays the average video game player is 28 years old. Of the big games of 2002, the biggest seller by far is Playstation's "Grand Theft Auto: Vice City" -

a $49.99 game about gangland murder, drugs, prostitution, and car theft.

Strangely, Tokyo-based Sony does not sell this title in Japan, saying that its subject matter "...is only appropriate for U.S. and European markets."

Critics have severely condemned this game. Its stated object: " The more you kill and the more crime you commit, the better." ABC news said the action in a typical game is: "Steal a police cruiser, and you're off. Kill a cop and take his gun. Kill an innocent — even better. Finish it all off by blowing up an ambulance and going down in a blaze of bullets." Certainly not the type of game you'd want your child to be playing in this terror-ridden age.

Grand Theft Auto has already earned blockbuster status: $160 million in sales before it even hit stores. The video game sells so well, that Amazon.com has a limit of one per customer and even sells used games at full price!

GADGETS & GIZMOS

According to the New York Times, human "branding" has arrived in the form of implanted electronic bar codes for people! Applied Digital Solutions of Palm Beach, FL, has developed a surgically implanted "subdermal microchip" that is based on RF identification.

The chip, called the VeriChip, is about the size of a grain of rice and carries a number that identifies you. The company says, the technology may eventually provide a way to make sure that only the right people gain access to secure sites, corporate offices or even personal computers.

The chip could also carry access to personal data, like medical information. Implantable microchips have been used for several years to track pets.

According to New Scientist magazine, ultra-high resolution DVD movies have been released in Europe ...and without Macrovision copy protection technology. Reportedly, making a digital copy from many/most DVDs to DVD-R is only somewhat more difficult than ripping Compact music disks. The tools for re-mastering DVDs are freely available for download from a number of CD/DVD hobbyist sites, including this one: <www.vcdhelp.com>.

INTERNET & WORLD WIDE WEB

Do you get a lot of Spam that promise to improve your sexual skill, excite you with all sorts of porn and help deposed Nigerian potentates get back on their feet.? You are not alone! Spam is the curse of Internet users everywhere.

An average 31 billion e-mail messages now traverse the Net every single day, according to market researcher IDC. And billions of it is Spam. E-mail usage is expected to double by 2006.

San Francisco-based Brightmail, the worldwide leader in anti-Spam technology, says one in eight unsolicited commercial e-mails is porn, an amount double that reported just a year ago.

BrightMail, Inc. has just released Anti- Spam 4.0 that adds new features aimed at recognizing sophisticated Spam that was previously undetectable. Anti-Spam uses an E-mail gateway filter created by computer-analyzing unsolicited commercial email from 200 million decoy E-mail accounts provided by the nation's top ISPs that are seeded to attract Spam.

The "probes" (as Brightmail calls these dummy Spam-gathering accounts) divide Spam messages into identifiable components, and then develops a "Spam DNA" profile. In September alone, the "probe" accounts attracted some 3.1 billion messages, of which 1.2 billion (or 38 percent) were Spam – providing a vast database that illustrate Spam trends.

The idea behind their technology is to find parts of a Spam message that identify it as unsolicited commercial E-mail and then filter it and all similar messages.

To do this, Brightmail's Network Operation Center creates "Spam fingerprints," (similar to ant-virus data files) which are distributed to their ISP clients. (Brightmail does not sell its services directly to individuals.) Because of the volume of Spam over the Internet, these updates are automatically sent out every five or ten minutes.

Six of the top 10 U.S. ISPs (Earthlink, Verizon, Comcast, AT&T WorldNet, Bell South and Microsoft) have Brightmail Anti-Spam software loaded on their mail servers. The cost to ISPs is determined by the number of users it serves.

The service is effective: only 1 in 100,000 Spam messages gets through its filter. By the end of the year, Brightmail says they will be protecting more than 250 million mailboxes. Check them out at: <www.brightmail.com>.

Amazon.com has gone into the online apparel business. It will be carrying clothing from several large retail operations including Nordstrom, Target, the Gap, Old Navy, Marshall Fields, and Lands' End, a division of Sears, Roebuck & Co. offering more than 400 brands of goods. Amazon's new clothing store opened November 7th on the Web at: <www.amazon.com/apparel>.

E-piracy blamed for falling CD sales. According to research firm, ComScore Media Metrix, illegal Internet file-swapping and computer CD-burning is responsible for a 25 percent (nearly $200 million) annual drop in music CD sales.

The estimate was developed by monitoring the online activities of 1.5 million people. Online sales of music CDs are plummeting three times as fast as traditional retail CD sales.

The report said big music labels have been unable get Internet users to sign up for their subscription music services while free music-swapping remains rampant. Since the collapse Napster, consumers have quickly flocked to such peer-to-peer file swapping alternatives as Kazaa, Lime-Wire and Morpehus. ComScore said Kazaa alone had 10 million users.

Music CD sales on E-Bay are another problem. Entrepreneurs are making the rounds of CD shops and buying up overstock and slowly selling merchandise at bargain-basement prices and auctioning them on the web.

WASHINGTON WHISPERS

New Spectrum allocated for third generation commercial wireless services. The FCC has designated 90 MHz of spectrum to provide advanced wireless services (AWS) such as "3G" ...otherwise known as "IMT-2000." 3G offers "always on" cell phone access to the Internet at speeds comparable to any fixed line broadband solution such as cable modem and DSL service.

The Commission allocated two contiguous 45 MHz frequency bands located at 1710-1755 MHz and 2110-2155 MHz. Both bands are allocated for fixed and mobile wireless services

In a companion Notice of Proposed Rulemaking, the FCC proposed licensing and service rules that permit these bands to be used for any service consistent with the bands' fixed and mobile allocations, including the provision of AWS.

FCC Commissioner Michael J. Copps said he hoped that potential service providers would "...study the European experience with 3G very carefully" where the launch has been less than successful.

The 1710 to 1755 MHz segment is currently used for Federal Government operations, but is scheduled to be transferred to "mixed use." The spectrum ranging from 2110 MHz to 2155 MHz is spectrum previously identified as suitable for new services.

The wireless licenses will be assigned through competitive bidding (that is, sold to the highest bidder.)

Political candidates have been slow to effectively use the Web as a campaign tool. A new study from RightClick Strategies (RCS) indicates that candidates in the recent U.S. elections have generally failed to take advantage of the Internet.

A review of candidates' Web sites showed that few had bothered to keep their sites up-to-date during the campaign.

Just 8 percent sent an E-mail reminder to supporters encouraging them to vote and only 12 percent of campaign Web sites offered visitors information about polling times and locations.

Many politicians were unable to reach potential voters by telephone since many use cell phones as their primary telephone service. The FCC prohibits them from calling cell phone users unless they have prior permission to do so. That's because the recipient pays for incoming calls to cell phones.

And many voters with fixed-line telephones are using caller ID or answering machines to screen their calls. If it seems as though a call is some sort of solicitation, it is screened out.

With the Republicans taking control, 80 year old Senator Ernest "Fritz" Hollings (D-S.C.) – an avowed opponent of deregulation – will no longer be Chairman of the powerful U.S. Senate Commerce Committee. A Republican will be selected replace him and it is virtually certain to be Senator John McCain (R-Ariz) who was previously Chairman.

It will be interesting to see what policies are emphasized in the new Congress. The Republicans are considered to be

more friendly toward technology issues and generally good for business.

The federal government wants libraries to block sexually explicit (porn) Web sites. The American Library Association and American Civil Liberties Union question whether public libraries should be forced to install the filtering software. They believe it violates free speech rights and would amount to the government mandating morality.

The American Library Association further believes forcing libraries to filter certain material would relegate librarians to being censors rather than information providers. They want no part of it.

Requiring the filters is the third try by Congress to find ways to protect children from Internet pornography without infringing on free-speech rights of surfers and Web site operators. The Supreme Court struck down the first law and prevented the second from taking effect.

The first law, the 1996 Communications Decency Act, made it a crime to put adult-oriented material online where children can find it. The high court ruled the law violated free-speech rights because it would keep material from adults who have a right to see it.

The 1998 Child Online Protection Act, which required Web sites to collect a credit-card number or other proof of age before allowing Internet users to view material, never took effect because of "unresolved free-speech issues."

In the latest attempt, President Clinton signed legislation in 2000 requiring public libraries receiving federal subsidies to install filters or risk losing funds received under the Library Services and Technology Act and E-Rate program.

A three-judge federal panel ruled that the 2000 Children's Internet Protection Act violates the First Amendment because the filtering programs also block sites on politics, health, science and other non-pornographic topics.

The judges recommended less restrictive ways to control Internet use, such as requiring parental consent before a minor is allowed to log on to an unfiltered computer or requiring a parent to be present while a child surfs the Internet.

That ruling was appealed to the Supreme Court by the U.S. Justice Department. On November 12th, the Supreme Court agreed to decide on the case.

The government has started work on a global computer surveillance system to give U.S. counter-terrorism officials access to personal information contained in various government and commercial databases around the world.

The U.S. Information Awareness Office (IAO) plans to sift through huge data bases in search of threatening patterns among everyday computerized transactions, such as credit card purchases, medical, e-mail, telephone, employment, ISP and travel records. The Transportation Security Administration will assist in developing a massive passenger-profiling system.

It is believed that if terrorist organizations are going to plan and execute attacks against the United States, their people must engage in various routine transactions which will leave a trail.

The objective of the Total Information Awareness (TIA) program is to be able to detect, classify, identify, and track terrorists so that their plans can be understood and action taken to prevent them from being executed.

Much of the data would be collected using computers that would, with permission of governments and businesses, enable intelligence agencies to routinely extract information that would identify users and create an audit trail.

The U.S. has already created a data base of billions of dummy transactions. The IAO is in the process of deploying a 'red team' that will act as a terrorist organization. They will insert simulated transactions into the database to see if their activity can be detected and understood.

AMATEUR RADIO

Dozens of legislators had signed on to H.R. 4720 The "Amateur Radio Emergency Communications Consistency Act of 2002" required private land-use regulators to "reasonably accommodate" Amateur Radio antennas in much the same manner as the limited federal preemption known as PRB-1, which applies only to states and municipalities.

H.R. 4720 contained only one line: "To provide that private land use rules be treated as State or local regulation for purposes of certain FCC regulations."

The bill was sponsored by Rep. Steve Israel (D-NY) last May. His father, Howard is K2JCC. Israel said the bill "...seeks to ensure the continued viability of a volunteer public safety resource which has been instrumental in providing our nation emergency communications services during times of disaster and crisis."

The bill aimed at providing relief to amateurs faced with private deed covenants, conditions and restrictions (CC&Rs) in erecting antennas died in the House Telecommunications and Internet Subcommittee and will have to be re-introduced next year.

The Radio Society of Great Britain reports that well known DXer, Ron Ford, 66, G3NKO, has been murdered in The Gambia (Africa), from where he operated as C56RF. His body was found at the end of October and was flown back to Britain for burial.

Ron, a probable victim of a robbery, had been an active member of the Royal Signals Amateur Radio Society for 30 years, and was a regular check-in from The Gambia to their 20-meter net.

He had also held a number of other DX calls, including MP4BFH in Bahrain, MP4TBV from the Trucial States, VS2FN in Malaya and VS9AFR from Aden. Ron had built a home in the Gambia and was planning to retire there but it came to a tragic end when detectives found his body buried in a shallow grave - shot in the stomach and head.. He was last heard on the ham bands on September 28.

His servant, Dawda Bojang has been charged with the murder and four other Gambian men have been cited as being accessories. The funeral took take place on November 11.

The Japanese Ministry of Posts and Telecommunications has decided not to roll out Powerline Telecommunications (PLT) systems that operate in the range 2 to 30-MHz. Japanese studies have shown that emissions from PLT are harmful to HF communications and all requests to operate PLT systems are being refused.

A PLT Home Network Standard is currently in development in the United States. Powerline networks allow the user to create a local area network using the existing powerline wiring of their house without disturbing the existing electrical system.

The belief is that PLT technology can be used to deliver high speed, low cost, 'no new wires' Internet access. PLT also allows power utilities the ability to read electricity meters remotely. In effect, the electrical system reports its own reading.

WEB PORTAL TO ATTRACT DISGRUNTLED YAHOO USERS

The businessmen who salvaged the Excite Network from one of the Internet's biggest bankruptcies are launching a new Web site targeted at disaffected Yahoo! users. ...Associated Press.

In what may be the first really new approach in Web portals, "MyWay" – based in , Irvington, N.Y. – is a totally "no ads" portal. You won't find out about this 'front page to the Web' from your present portal because they are in direct competition with it.

Internet users were exposed to 11.3 billion pop-up ads in the first six months of this year, according to Net-Ratings, an Internet research firm. What makes MyWay completely different is that there are absolutely no discernable ads, no banners, pop-unders or pop-ups ...and no fees of any kind.

And they never ask for an e-mail address, so it can't be rented ...resulting in Spam to the user. In contrast, Yahoo! sells some of the information collected about its registered users.

In December 2001, the bankrupt Excite name and Excite.com Web site was bought for $10 million by Bill Daugherty and the people behind CBS-backed sweepstakes Web site <iWon.com>. Nielsen/NetRatngs now ranks the privately-held Excite Network rank among the Web's 25 most popular destinations.

Daugherty, a marketing heavyweight, was previously Senior Vice President of Business Development at the National Basketball Association. He believes, "...the time is right for a commercial-free Web site that swears off pop-up advertisements."

The MyWay portal began operation on October 29th ...a service of the Excite Networks. It mimics Yahoo's layout, but without all the clutter.

MyWay gives you all the standard conveniences of free Web E-mail, news, financial, weather data, and searches. But all intrusive advertisements that are saturating other Web sites – Yahoo's in particular – are stripped. MyWay hopes to gain Yahoo! users who feel disenfranchised because Yahoo! has recently become much more aggressive on the advertising and marketing front.

The new portal's heritage is sort of confusing. MyWay.com is not a new Web address. It used to be portal subsidiary of CMGI, Inc., the owner of Alta-Vista. Before that, the service was known as "Planet Direct." The My-Way.com portal with its three million users went dark on December 6, 2000 ...only now to reappear two years later.

MyWay's search engine and directory come from Google and their implementation includes their cached links as well. Research shows that it is basically a Google-supported Web site.

The portal claims "My Way makes money through clearly identified sponsored listings and text links." We couldn't find any. That's because the sponsored links and ads only appear if you use the Google search engine. The site's revenue comes from the one interactive advertising sector showing strong growth: paid search. And even then, the ads aren't aggressive at all. Just a few lines of text near the top or side of the screen.

MyWay's business plan works like this: Google sells the text-based (similar to Yellow Page) ads, the advertiser pays Google and Google pays MyWay.

On November 12th, MyWay began an aggressive "Yahoo! is Toast" advertising campaign targeting Yahoo's worldwide audience of more than 200 million. The campaign consists of extensive online ads, spot radio in 38 markets, print media and college marketing.

"'Yahoo! is Toast' is a user-generated phrase that taps into the visceral feelings of today's portal and search engine users," said Bill Daugherty, CEO. "As Yahoo! and others have utilized increasingly aggressive advertising and direct marketing tactics, users are becoming further frustrated. My Way offers a refreshing alternative to this approach, and our advertising reflects that."

The portal content is pretty much what you find on the other major portals and you can easily import some of your content from Yahoo!, AOL and MSN into MyWay, but without any advertising whatsoever. Like the other portals, all content, colors, and layout is user selectable.

In fact, you can use MyWay to get much of the same content as your present home page since they have figured out a way to use their competitor's 'cookies' ...the little pieces of data held on your PC that personalize your screen.

In addition, MyWay has partnered with more than 50 content providers just like Yahoo! and the other major ISPs, including The Associated Press, Reuters, MSNBC, The New York Times, CBS, The Weather Channel, Standard & Poor's. And they are in discussions to add a major travel service.

According to "Keynote" (the leader in Internet performance measurement), the My Way portal pages load up to 51% faster than their corresponding Yahoo! pages. Keynote draws measurements during peak traffic times from 1,500 different computers in over 140 different locations connected through the major Internet providers.

Users are advised of the speed at which the MyWay pages load in the same way that Google does, that is in hundredths of a second. This makes us suspect that Google was very much involved in the launch of this portal and has more than a passing interest in it. In effect, it lets them get into the portal business in a very novel "third party" arms-length way.

MyWay says they are faster than other portals because there are no banner ads or pop-ups to access and display. They also claim that every page has been "re-engineered" for optimal performance and they have a really big connection to the Internet. MyWay says they have 157 employees.

To try MyWay, simply type in <MyWay.com> into your PC's URL address box. You'll have to play with it a while to get the content and layout you want.

(Continued from page 3, Spectrum Policy Task Force) potential answers to current spectrum policy challenges.

These technological advances enable spectrum rights to be parceled as a function of time, in addition to the currently-used parameters of frequency and geographic area. Also, they allow systems to be much more tolerant of interference than in the past.

● **Rights and Responsibilities.** Spectrum rights and responsibilities are not always clearly defined - users need more certainty. In addition, the rights and responsibilities that are defined need to better reflect more market-based models and policies.

Task Force key recommendations:

● **Migrate toward more flexible, consumer-oriented policies.** The Task Force recommends that the Commission evolve its spectrum policy toward more flexible and market-oriented spectrum policies that will provide incentives for users to migrate to more technologically innovative and economically efficient uses of spectrum. Specific recommendations include:

● **Provide incentives for efficient spectrum use by both licensed and unlicensed users** through flexible rules and facilitating secondary markets. This would enable spectrum users to make fundamental choices about how they use spectrum, taking into account market factors such as consumer demand, availability of technology and competition.

● **Clearly and exhaustively define spectrum users' rights** and responsibilities.

● **Investigate rule changes that promote more flexible power limits** in rural or less congested areas.

● **Adopt quantitative standards to provide interference protection: interference temperature.** The Task Force recommends the creation of a quantitative standard for acceptable interference that provides both greater certainty for licensees and greater access to unused spectrum for unlicensed operators.

Specifically, the Task Force recommends that, on a going forward basis, the Commission adopt a new metric - the "interference temperature" - to quantify and manage interference. The Commission could use the interference temperature metric to establish maximum permissible levels of interference on a band-by-band basis, thus placing a limit on the noise environment in which receivers would be required to operate.

To the extent, however, that the interference temperature in a particular band is not reached, users who emit energy below that temperature could operate more flexibly - with the interference temperature serving as the maximum cap on the potential RF energy they could introduce into the band.

● **Improve access through the time dimension.** The Task Force found that new technological developments now permit the Commission to increasingly consider the use of time, in addition to frequency, power and space, as an added dimension permitting more dynamic allocation and assignment of spectrum usage rights. This would provide access to unused or underused spectrum through time-sharing of spectrum between multiple users and lead to more efficient use of the spectrum resource.

● **Shift from "command and control" model to exclusive and commons models.** The Task Force recommends that the Commission base its spectrum policy on a balance of three spectrum rights models: an exclusive use approach, a commons approach and, to a more limited degree, a command-and-control approach.

While the command-and-control model currently dominates today's policy, the Task Force recommends altering the balance to provide greater use of both the exclusive use and commons models throughout the radio spectrum and limiting the use of the command-and-control model to those instances where there are compelling public policy reasons, such as some public safety applications.

To the extent feasible, more spectrum should be identified for both licensed and unlicensed uses under flexible rules and existing spectrum that is subject to more restrictive command-and-control regulation should over time be transitioned to these models.

AMATEUR RADIO AS ENVISIONED IN THE AMERICAS

CITEL, an acronym for the *Inter-American Telecommunication Commission,* is the main regional forum in our hemisphere in which the governments and the private sector meet to coordinate telecommunications efforts.

CITEL has 35 Member States (countries) and over 200 Associate Members (members of industry) in ITU Region 2 (North, Central, South America and the Caribbean.) They are part of the Organization of American States, OAS. CITEL's primary purpose is to establish cooperation among American States on telecommunications matters.

CITEL's Member States are: Argentina, Antigua and Barbuda, Brazil, Bahamas, Belize, Bolivia, Barbados, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Grenada, Guatemala. Guyana, Honduras, Haiti, Jamaica, Saint Lucia, Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Suriname, Trinidad and Tobago, Uruguay, United States of America, St. Vincent and the Grenadines and Venezuela

Headquartered in Washington, DC, CITEL is one of three major regional organizations. The other two are CEPT, the *European Conference of Postal and Telecommunications Administrations* headquartered in Copenhagen, Denmark (44 countries in ITU Region 1) and APT, the *Asia-Pacific Telecommunity* headquartered in Bangkok, Thailand (32 member countries in ITU Region 3).

All three regional organizations have been holding meetings to develop their positions on the various agenda items that will be taken up at the upcoming World Radiocommunication Conference (WRC-03) in Geneva (Switzerland) from June 9 to July 4, 2003. There are also several smaller regional telecom organizations including an African and a Middle Eastern group. There are 189 ITU

member states – each with one vote. The three regional organizations together represent 111 votes. (60 percent)

CITEL position on Amateur Radio

CITEL recently released a Draft Inter-American Proposal for Agenda Item 1.7; ...issues concerning the amateur and amateur-satellite services. Some excerpts:

Agenda Item 1.7.1 ...possible revision of Article 25

Background: At WRC-95, one administration (New Zealand) proposed to delete from Article 25 the requirement that amateurs demonstrate Morse code capability to be licensed to operate on frequencies below 30 MHz. Instead, a review of Article 25 was placed on the preliminary agenda for WRC-99. At WRC-97, this agenda item was moved to the preliminary agenda for WRC-01. The item was confirmed at WRC-2000 on the WRC-03 agenda.

Article 25 contains 11 paragraphs, only one of which relates to the Morse code requirement. In 1996, the International Amateur Radio Union (IARU), an ITU Sector Member, initiated a review of the entire Article by publishing a discussion paper and soliciting comment. Discussions at three regional conferences over a three-year period culminated in the adoption of a consensus view in 1998. This consensus view supports the following principles:

- **Retention** of the requirement that administrations shall verify the technical and operational qualifications of any person wishing to operate an amateur station. The specific qualifications are subject to change over time and more appropriately belong in an ITU-R Recommendation. Accordingly, Recommendation ITU-R M.1544 was developed in Working Party 8A.

- **Protection** of the non-commercial nature of the amateur and amateur-satellite services.

- **Inclusion** of specific provisions to recognize the disaster communications role of the amateur service and to facilitate global roaming by amateur stations.

- **Relief** from existing prohibition on transmitting international communications on behalf of third parties.

- **Elimination** of the provision forbidding radiocommunications between amateurs of different countries if the administration of one of the countries has notified that it objects to such communications.

- **Elimination** of redundant provisions that simply repeat regulations that apply generally to all radio services.

CITEL Proposal: ARTICLE S25 – Amateur services
Section I – Amateur service

25.1 §1 Any person seeking a license to operate the apparatus of an amateur station shall demonstrate his knowledge of the subjects specified in Recommendation ITU-R M.1544. To that end, the Administrations shall adopt such measures as they deem necessary to demonstrate the operating and technical capacity of such persons.

25.2 § 2 1) Transmissions between amateur stations of different countries shall be limited to communications incidental to the purposes of the amateur service or of a personal character.

2) Except with the authority of the relevant administration granted to meet a particular operational need, transmissions between amateur stations shall not be encoded for the purpose of obscuring their meaning.

25.3 §3 Administrations are urged to take the steps necessary to allow amateur stations to prepare for and meet communication needs in the event of a natural disaster.

Reasons: To recognize the disaster communications capability of the amateur service consistent with Recommendation ITU-R M.1042-1, which recommends that administrations encourage the development of amateur networks capable of providing communications in the event of natural disasters and that amateur organizations be allowed to exercise their networks periodically during normal non-disaster periods.

25.4 § 4 An administration may, without issuing a licence, permit a person who has been granted a license to operate an amateur station by another administration, to operate an amateur station while that person is temporarily in its territory, subject to such conditions or restrictions it may impose.

Reasons: Article 18 requires that all transmitting stations be licensed but provides for special arrangements in certain circumstances. None of these special arrangements applies to the amateur and amateur-satellite services. The proposed addition makes it clear that administrations are authorized and encouraged to permit visiting amateurs to operate without being required to issue them a licence while protecting the prerogatives of administrations.

CITEL countries agreed to eliminate the requirement to prove Morse code ability and to leave this matter to administrations ...and to eliminate references to maximum transmitting power since Article No. 15.2 provides that "Transmitting stations shall radiate only as much power as is necessary to ensure a satisfactory service."

Section II – Amateur-satellite service

25.5 §5 The provisions of Section I of this Article shall apply equally, as appropriate, to the amateur-satellite service.

25.6 §6 Administrations authorizing space stations shall ensure that sufficient earth command stations are established before launch to ensure that any harmful interference caused by emissions from a station in the amateur-satellite service can be immediately eliminated.

Recommendation ITU-R M.1544 (formerly RAM.QUAL) on minimum qualifications of radio amateurs was approved by circulation in August and is now in effect. The changes proposed for Article 25 and the introduction of the new Recommendation would essentially result in removing the Morse code stipulation from the Radio Regulations and incorporating by reference the stipulations regarding amateur operator qualifications.

Preliminary Views: Some Administrations are of the view that as a result of recent developments in equipment, the use of new technologies, and the need for improvement of operator qualifications, revision of the Radio Regulations provisions related to the Amateur and Amateur-Satellite Service is required. As such, we fully support the work of WP8A with respect to this issue and Recommendation ITU-R M.1544.