

# W5YI

## America's Oldest Ham Radio Newsletter REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable.

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Fred Maia, W5YI, Editor, P. O. Box 565101, Dallas TX 75356  
Electronic mail: <W5YI@w5yi.org> • Website: <<http://www.w5yi.org>>  
Tel. 817-274-0400 FAX: 817-548-9594

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## ITU WRC-2003 Decides Fate of future Radio Services

*The mandatory Morse code requirement in the International Law for HF Amateur Service access disappeared at the end of the conference. However, if any administration feels that it needs to keep the requirement, it has the right to do so.*

The World Radiocommunications Conference (WRC-03), the tri-annual meeting sponsored by the International Telecommunications Union (ITU) to revise the global radio regulations and spectrum rules, concluded, after four-weeks of negotiations, with a blueprint for the global radiocommunication sector that reflects its current and future needs.

The ITU's World Radio Conference allocates and manages the radio spectrum on a global basis for a variety of wireless uses, products and technology. WRC-03 was held at the Geneva International Conference Center adjacent to ITU Headquarters.

The WRC is the international forum where the various member countries meet to revise an international treaty known as the Radio Regulations. It contains frequency allocations for more than 40 radiocommunication services ranging from amateur and professional radio services to mobile wireless technologies and satellite communications.

A number of landmark decisions were taken by the conference to deal with the increasing pressure placed the radio frequency spectrum, which is a limited natural resource. The demand for spectrum is the result of the exponential growth of information and communication technologies. This was reflected in an unprecedented number of agenda items and the more than 2,500 proposals from Member States.

Topping the agenda were the frequencies gov-

ernments and industries will use for services such as Wi-Fi (wireless broadband), spectrum for the European Union-backed Galileo satellite navigation system, Internet access for airliner passengers, digital broadcasting below 30 MHz, global positioning and dozens of issues of lesser importance.

A key issue is global coordination of frequency bands for WLANs (wireless local area networks) in the 5 GHz range and ensuring that these do not interfere with fixed satellite services in different parts of the world.

The 189 countries affiliated to the ITU sent delegations totaling more than 2600 participants to the conference armed with their national, regional and global priorities and proposals for spectrum use. In addition, regional telecommunications organizations and standards bodies lobbied behind the scenes. The first order of business was to elect a Conference Chairman and Dr. Veena Rawat of Canada was elected by acclamation.

The conference agenda was the largest ever. While WRC 1997, held in Istanbul, Turkey, had 12 agenda items and WRC 2000 had approximately 20 items, WRC 2003 addressed, and resolved, 48 major issues.

Led by Ambassador Janice Obuchowski, the U.S. had the largest delegation ...over 170 representatives from the information, communications and aerospace sectors along with various

government agencies.

An intense preparation period taking more than 2 years was spearheaded by the Department of State, the Federal Communications Commission (FCC) and the Commerce Department's National Telecommunications and Information Administration (NTIA). The U.S. position was supported by input from commercial and federal spectrum users.

## 5 GHz Wireless LANs Get Global Allocation

WRC-03 successfully established new frequency allocations to the mobile service in the bands 5.150-5.350 MHz and 5.470-5.725 MHz for the implementation of wireless access systems including WLANs.

Approval of the unlicensed 5-GHz spectrum supports Congressional and FCC efforts to open up more airwaves for unlicensed wireless technologies.

The new frequency allocations for WLANs generated considerable discussion at the conference as delegates worked to accommodate new allocations into an already tightly packed 5150-to-5725-MHz band, which is also used by radar, aircraft navigation systems and earth-orbiting satellites. World telecom conference delegates agreed on 455 MHz of new global wireless LAN spectrum at 5 GHz.

Wireless devices that do not require individual licenses are being used to create broadband networks in homes, offices and schools ...and in public facilities in so-called "hot spots" such as airports, cafes, hotels, hospitals, train stations and conference sites to offer broadband access to the Internet.

An example of the efficiencies produced by these networks was seen at the heart of the conference center itself. The work of the conference was easier, in terms of providing delegates fast and easy access to documents and to their corporate intranets.

The lower part of the 5 GHz spectrum will be predominantly used for indoor applications with the first 100 MHz (5.150-5.250 MHz) restricted to indoor use. The use of these frequency bands is conditional to provisions that provide for interference mitigation mechanisms and power emission limits to avoid interference into other radiocommunication services operating in the same spectrum range.

The new spectrum for WLANs systems facilitates an industry that the FCC says will generate \$5.2 billion in hardware sales by 2005. Currently, WLANs in the U.S. operate under the 802.11a protocol use frequencies in the 5150-to-5350- and 5725-to-5825-MHz bands.

But not all countries use those bands. The agreement reached in Geneva resolved a controversy between the European Union and the U.S. over outdoor use of the 5-GHz Wi-Fi band. It was resolved by allowing member ITU states to choose whether they want to restrict the 5250-to-5350-MHz portion of the band to indoor use only.

This "flexible" approach satisfied the EU, which wanted to restrict outdoor use to protect Earth-sensing

satellite systems, which also operate in the same band.

Outdoor use of the 5-GHz WLAN band provides developing nations with a cheap way to deliver broadband.

## Global Positioning Satellite Issues

Allocation of frequencies for the EU-backed Galileo satellite navigation system in the 1164-to-1214, the 1260-to-1300 and the 1560-to-1595 MHz bands, as well as rules for power output from new Global Positioning System (GPS) satellites the U.S. plans to launch, emerged as another contentious issue.

According to Obuchowski, the issue before the conference was "...to deploy Galileo and upgrade GPS, [and] ensure we do not impede other services in the band."

Although the Galileo system got a green light at the WRC event three years ago, a number of follow-up items remained. This includes a new generation of higher-powered GPS satellites that the U.S. plans to launch to defeat enemy jamming.

A test Galileo satellite will be launched from Russia in 2005 and tested at an altitude of 22,000-km, to ensure the technologies for the \$3.5 billion project will work. The system, which will consist of 30 satellites, is due to be in operation by 2008.

U.S. officials said the previous coordination approach pushed by Europe would have harmed existing GPS and U.S. efforts to modernize the technology, which is embedded in some mobile phones that enable emergency dispatchers to locate consumers who make wireless 911 calls.

## Satellite-Based Broadband

Another key item for the U.S. delegation was the gaining of additional frequencies in the 14,000 to 14,500 GHz band so airlines may offer their passengers e-mail and other Internet services as they fly. The Boeing Company currently operates "Connexion," a satellite-based broadband Internet service under an experimental license.

The company will equip Lufthansa's long-haul fleet beginning early next year, and Japan Airlines and Scandinavian Airlines System have committed to installing the service on future long-haul flights.

## Amateur Radio Issues at WRC-03

Although Amateur Radio matters were but a small part of the conference, several items on the conference agenda were of great importance to radio amateurs. As a result, the International Amateur Radio Union (IARU) fielded its largest team of observers at an ITU conference in more than a decade.

The two high profile agenda items that were especially important to ham radio are: Realignment of 7 MHz allocations (Agenda Item 1.23) and the revision of the regulations governing the amateur and amateur-satellite services (Agenda Item 1.7).

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Three other lesser important agenda items were consideration of an allocation for satellite-borne synthetic aperture radars (SARs) in the 70-cm band (Agenda Item 1.38), the drafting of an agenda for the next WRC, scheduled for 2007 (Agenda Item 7.2) and the revision of footnotes to the Table of Frequency Allocations (Agenda Item 1.1).

Almost all of the critical agenda items for Amateur Radio were in Committee 4, chaired by Germany's Eberhard George, DL7IH. His selection to chair a key committee was based on his years of experience in ITU affairs, however, and not on his holding an amateur license.

Eberhard George, a member of Germany's national Amateur Radio society, the DARC, was chairman of Germany's national preparatory group for WRC-03 and is an officer of the Federal Ministry of Economics and Labor.

The DARC generally favors retention of the Morse code requirement for HF Amateur Radio operation, but this view was not shared by DL7IH. In fact, his personal position was to abolish S25.5 which contains the code requirement completely or at least modify it such that each administration can decide independently.

In his official German government capacity, he has several times told the DARC that Germany will not continue CW exams after a WRC-03 decision abolishing the requirement and he has strongly criticized the DARC for the club's attitude towards CW.

Block voting seemed to be the rule with most of the world's countries affiliating with neighboring nations. There were five major regional blocks of varying size and importance: an Arab group, an Asia-Pacific Group (APT), an Inter-American Group (CITEL), an African Group, and a European Group (CEPT.)

## Morse code positions

The Arabs wanted the Morse code requirement (S25.5) modified to:

25.5 § 3 1) Administrations shall determine whether or not a person seeking a licence to operate an amateur station shall prove that this person is able to correctly send texts in Morse code signals.

The Asia-Pacific Common Proposal is to "suppress" (or totally eliminate) the Morse requirement. "The question of whether there should be a domestic Morse code requirement should be left up to administrations," they said. "...this would give administrations further flexibility in revising and updating the qualifications related to the use of Morse code; and may encourage the development of amateur services."

The Asia-Pacific Group did, however, support the Incorporation by Reference of minimum Amateur Radio qualifications. Their proposed S26.6 reads: "Administrations shall verify the operational and technical qualifications of any person wishing to operate an amateur station. Standards of competence are contained in the most recent version of Recommendation ITU-R M.1544." In-

corporation by Reference is supported by the IARU but not the U.S. delegation. The Islamic Republic of Iran aligned itself with APT, the Asia-Pacific Group.

The Russian Federation (consisting of ten countries) wanted "No Change" to the code requirement, Article S25.5. They cryptically said in their proposal "Retain the provision on the need for persons seeking to obtain an amateur licence to prove their knowledge of Morse code. However, the need for such verification should be left up to individual administrations."

Uzbekistan (part of the Russian Federation) wanted the current S25.3 (It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties.) modified to: "The transmission of communications on behalf of third parties is permitted only under distress or emergency conditions."

The Inter-American Group (CITEL) Proposal, like those from the Asia-Pacific Group supported "suppression" of the code requirement "To eliminate the requirement to prove Morse code ability and to leave this matter to administrations." No mention of M.1544 or its Incorporation by Reference.

India proposed new wording to S25.5 "Administrations may determine the requirement of a person, seeking a license to operate the apparatus of an amateur station, whether he or she shall prove the ability to send correctly by hand and to receive by ear, texts in Morse code signals." Adding: "Morse code is no longer mandatory but if an administration chooses to require Morse code, it will be the concern of administration to apply such a rule and not an international obligation."

An African Group (primarily consisting of the Republic of Kenya, Republic of Uganda and the United Republic of Tanzania) supported modification of S25.5 to "...give administrations the powers to determine the requirements needed, i.e. Morse code knowledge to any persons seeking license to operate an amateur station. This will ensure that Morse code skills are maintained, where appropriate."

By far, the biggest document input on Agenda Item 1.7 came from the United States of America delegation. They mention that "At WRC-95, one administration (without naming 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. At WRC-2000, the item was confirmed on the agenda for WRC-03."

Article 25, the International Amateur Radio framework, 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

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## CUTTING EDGE TECHNOLOGY

**A**irline security takes a 'smart seat.' A British defense contractor, Qinetiq, has developed airline seats with sensors that can relay signals assessing a passenger's behavior to a central computer.

The system has a display, accessible only to the cabin crew, warns if a passenger's conduct is out of the ordinary. The seat, which has 8 sensors, 4 in the seat and 4 in the back indicates signs of too much movement, a potential sign of a nervous flyer. The crew can then assess the passenger and decide whether he or she presents a risk.

The company said more sensors and other techniques such as monitoring temperature and skin moisture levels could also be used to help the crew make their judgements.

The sensing seats are part of a bigger project to make airline cabins more friendly, with lighting that dims when you fall asleep, for instance.

## EMERGING COMMUNICATIONS

**C**able HDTV availability continues to grow nationwide. Cable TV customers in 78 of the top 100 Designated Market Areas (DMAs) -- including 18 of the top 20 -- were passed by at least one cable operator that provides HDTV service as of June 1, according to the National Cable & Telecommunications Association (NCTA).

NCTA also said that 34 markets beyond the top-100 also are being served by a cable operator offering HDTV, bringing the total number of DMAs in which at least one cable operator is offering a package of HD channels to 112 of the 210 DMAs nationwide. In terms of households, 55 million U.S. television households were passed by a cable system that offers HD, growth of nearly 50 percent since the first of the year.

The cable industry has invested \$75 billion since 1996 to upgrade its infrastructure and launch advanced broadband services such as digital cable, high-speed Internet service, local telephone service, HDTV and video-on-demand.

Networks currently offering HD content include HBO, Showtime, Discovery

HD Theater, ESPN HD, InDemand, Madison Square Garden Network, Comcast Sports Net and HDnet. Other networks that have announced plans to begin offering HD content in 2003 include A&E Networks, Bravo and Cinemax.

**T**he Yankee Group, an independent research company, expects over 40 million homes will be receiving HDTV signals by 2007. Increasing consumer adoption is already evident in HDTV-ready set and display sales.

The Consumer Electronics Association (CEA) reported that sales of digital TV (DTV) sets and displays (the majority of which are HDTV-ready) exceeded forecasts for 2002, with shipments totaling approximately 2.5 million units. The CEA predicts that nearly four million additional units will be sold in 2003.

**L**ook for hotels to begin offering high-definition television (HDTV) in rooms this fall. LodgeNet and Zenith have developed a way to deliver HDTV to guest rooms using the hotels' existing cable networks. A transcoder converts broadcast digital television signals to HDTV through a cable network box.

LodgeNet already provides on-demand digital movies, digital music and music videos, Nintendo® video games, high-speed Internet access and other interactive television services to nearly one million guest pay rooms in more than 5,700 hotel properties worldwide. More info on the Web at: <[www.lodgenet.com](http://www.lodgenet.com)>.

**A**ccording to The Media Audit, Satellite TV is growing fast and losing ground. From 2000 to 2002 Satellite TV increased its subscriber base in 85 metropolitan markets by 27 percent. In spite of its significant growth it fell further behind in its battle for market share with Cable TV.

While Satellite TV was growing by 27 percent, Cable TV was growing by 13 percent, but Satellite was building on a subscriber base of 11,632,000 while Cable was building on a subscriber base of 84,762,000.

From 2000 to 2002 Satellite TV increased its total penetration in the 85 markets measured by The Media Audit from 9.3 percent to 11.3 percent while Cable TV increased its market penetration from 67.7 percent to 73.1 percent.

Cable's subscriber count lead over Satellite grew from 73 million in 2000 to 81 million in 2002. Satellite grew from 11,632,000 subscribers in 2000 to 14,816,000 in 2002. Satellite gained

3,184,000 new subscribers in the 85 metro markets while Cable gained 11,351,000 subscribers. (More recent stats show nearly 20 million DBS subscribers.)

**E**ven though EchoStar's DISH (Direct-to-home) Satellite Network has 3 million less subscribers than DirecTV, DISH is adding new subscribers more than twice as fast as DirecTV. The DISH network added 1.8 million customers during the trailing year versus DirecTV's 850,000.

## COMPUTERS & SOFTWARE

**C**onsumer Reports recently tested six budget-priced computers from Compaq, Dell, eMachine, Gateway, HPO and Sony. Bought without a monitor they cost between \$480 and \$700.

The Dell Dimension 2350 at \$480 was rated the "best buy". It has an Intel 2.2-GHz Pentium-4 CPU, 256MB of memory ...and comes pre-loaded with Microsoft's Windows® XP operating system, and WordPerfect's Productivity Pack.

Buy it online at <[www.dell.com](http://www.dell.com)> (Click on "Home or Home Office") and get additional freebies ...such as free shipping and a 60GB hard drive upgrade. Cost is \$599 with a 17" (16" viewable) monitor.

**P**op-up ads on your computer annoy, but apparently generate business. Many online marketers say they receive at least twice the response from pop-ups as they do for banner ads.

Many users hate pop-up ads almost as much as they do spam. As a result, there are now dozens of pop-up killers available.

Google's newest toolbar, which is still being tested but available for free from the site, allows users to block ads from whatever Web site they're visiting - even if they don't use the Google search engine to reach the site.

Google Toolbar beta 2.0 requires a PC running Windows 95, 98, Me, NT, 2000, or XP, and works on the IE 5.0 and later browsers from Microsoft.

We have been using it for a month now and find it very effective. You can get it at: <<http://toolbar.google.com>>.

**S**pyware is watching you! Are you aware that thousands of Websites - many from big ethical

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**corporations – are constantly observing your web surfing habits?** They then use the information gleaned from your activity to target you with banners, pop-up ads and spam.

"Spyware" or adbots (advertisement robots) are any program that sits on your PC and watches what you do and then transmits the information back to vendors.

Some "system monitors" can even capture every keystroke you make and then use the Internet to transmit that information anywhere in the world. They are potentially more dangerous than viruses.

But you can now fight back by installing a spyware detector. I use "Spybot - Search & Destroy v. 1.2" (from PipiMK Software) to detect and remove spyware of different kinds from my computer.

PC Magazine reviewed this "sweeper" program in April of this year and gave it a very high rating. Spybot-S&D, free from: <<http://spybot.safer-networking.de/>.

## GADGETS & GIZMOS

**The world's largest retail chain, Wal-Mart Stores, Inc., has told its top 100 suppliers that they will need to have all their shipping cases and pallets fitted with radio tags to track and manage goods within their stores by the start of 2005.**

Radio frequency identification, or RFID, inventory management uses wireless signals to almost automatically track products from suppliers.

RFID has been touted for years as a replacement for bar codes that would eventually give companies the ability to track individual items on store shelves.

The technology is gaining ground as a better way to label retail items since the low-cost tags can be tracked by remote radio receivers, unlike bar codes, which must be visible to be read by laser scanners. For example, an RFID scanner can pick up signals from all the chips in a sealed box or on a shelf without moving the products ...something bar code systems can't do.

Teaming with K-Mart and other retailers in the 1980s, Wal-Mart helped to boost the use of bar code scanning. Now, at the Retail Systems 2003 industry conference held in Chicago last month, the retail giant has thrown its weight behind RFID. The theory is that, once Wal-Mart goes forward with the technology, com-

peting retailers will follow

It is estimated that it would take 5 billion to 10 billion RFID tags annually for all the cases and pallets delivered to Wal-Mart's distribution centers and stores across the nation.

Although cartons and pallets are the focus of RFID now, the technology isn't expected to truly take off until RFID tags are used on store shelves to give more up-to-date information on sales and in-store inventory.

Microsoft said that it would work to make its desktop, server and applications software work with RFID and also develop programs specifically designed to use the new retail tagging technology.

**Where is my luggage? Ask the computer. Delta Air Lines will begin testing high-tech passenger baggage and air cargo tracking using RFID (Radio Frequency Identification) technology.**

RFID technology uses small computer chips to send and receive information as radio signals. The 30-day test, done in coordination with the U.S. Transportation Security Administration, will use more than 40,000 disposable 900 megahertz tags.

The biggest obstacle until now has been cost. The least-expensive RFID tag costs about 50 cents today, but that should drop to 5 cents next year and under 1 cent a few years later.

## INTERNET & WORLD WIDE WEB

**A recent survey of the broadband Internet services landscape, show that 40% of current dial-up subscribers are currently considering switching to high speed data service, either through a cable modem or a DSL line. That puts potential penetration of high-speed data (HSD) in the near future at 54% of all Internet users.**

**On the other hand, new research from Ipsos-Insight indicates that many American dial-up Internet users are simply not convinced they need broadband, even if the price fell to half of what it has been so far this year.**

The survey of dial-up users shows that almost two-thirds of Americans are online, and most of them are still connected via dial-up. Four-in-ten dial-up users said cost was a reason they hadn't yet switched to high-speed Internet access. Another one-

third are not convinced they need broadband at all.

If prices moved down to \$20 a month, one-fifth of Americans with dial-up said they would sign up for high-speed (whether DSL or cable). But that still leaves 8 in 10 dial-up users who wouldn't switch, even at the \$20 price-point (which is roughly half of what it has been so far in 2003.)

**Nielsen/NetRatings has calculated that broadband usage continues to grow in the U.S., increasing 49% year-over-year. In May 2003, 13% of all Americans, or 40 million people, accessed the Internet via high-speed.**

Women (51% more than last year), seniors (64%), students (51%) and affluent Americans (55%) comprised some of the fastest growing demographic groups adopting broadband.

**After a eight-month trial, Wal-Mart has begun full-scale operations of its online DVD rental business, hoping to catch up with market leader Netflix. Both services allow subscribers to assemble a list of the titles online that they want to see.**

Wal-Mart is lowering prices and increasing titles and distribution points. The idea is to put the pressure on industry leader, Netflix. (Wal-Mart is now the world's largest company with sales of \$250 billion and has huge buying power.)

Wal-Mart began their DVD subscription service last fall with a single plan that allowed customers to order three DVDs at a time for \$18.86 a month ...5% lower than Netflix's \$19.95. Customers can sign up for Wal-Mart DVD Rentals at <[www.Walmart.com](http://www.Walmart.com)> (Enter "DVD rentals" in the search box.)

Wal-Mart now has three DVD plans: \$15.54 monthly subscription to have two DVDs out a time, \$18.76 for three DVDs and \$21.94 for four. Like Netflix, subscribers can keep the DVDs as long as they like without paying late fees. Once a subscriber has watched a movie, the film is mailed back in a prepaid envelope and the next title from their online list is released.

The service is similar to the one started in 1999 by Netflix, which allows subscribers to rent three titles at a time for \$19.95 a month.

Wal-Mart also has added 1,000 new film titles, bringing its total to 13,000 (The average video store only has 1,000.) And Wal-Mart now has six shipping centers around the country ...including California, Georgia, Arkansas, New York,

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Nevada, and Indiana, and plans to open more in the future.

By contrast, Netflix, based in Los Gatos, Calif., has 15,000 titles and 18 shipping centers. The company plans to open five more centers by year's end. Each holds about 100,000 DVDs.

And for the first time, Netflix is now profitable (quarterly earnings predicted at \$3 to \$4 million) and has more than one million subscribers.

The company says it will have \$1 billion in revenue, and 5 percent of American households as subscribers, by 2009.

**A**nti-spam vendor MessageLabs reported that **May 2003 marked the first month during which spam accounted for more than 50% of all the E-mail scanned by the vendor's anti-spam service.** During the month, one out of every 1.8 E-mails scanned, or 55.1%, of 133.9 million E-mails scanned, was spam, marking a 38.6% increase over April.

**P**aris Air Show Opens; U.S. Stays Home. At the recent Paris Air Show, Boeing – the world's biggest planemaker, announced the name of its next-generation 7E7 commercial airliner. Its first all-new plane in a decade will be called the "Dreamliner."

That name was selected after a Boeing-sponsored online poll at <www.new-airplane.com> attracted some 500,000 voters from more than 160 countries. The runner-up names were: Global Cruiser, Stratoclimber and eLiner. The 7E7 is scheduled to enter service around 2008.

The 250-seat aircraft has a range of up to 8,000 nautical miles, flies at 43,000 feet, uses 15 to 20 percent less fuel per passenger and sports always-on connectivity for real-time high-speed Internet and e-mail access.

Boeing aims to sell as many as 3,000 of the new jetliner over the next 20 years. Boeing's top seller is currently the smaller, single-aisle, fuel-efficient 737 Next Generation.

This year, lingering U.S. resentment over France's staunch opposition to the war in Iraq has led the U.S. Defense Department to scale back sharply on its participation at the show, which dates back to 1909.

Practically no high-level U.S. aircraft makers were in attendance, having been discouraged from attending the airshow by the Pentagon.

## WASHINGTON WHISPERS

**I**t looks like betting over the Internet – at least those located at offshore sites – is being torpedoed by Congress. Most Internet gambling is already illegal under U.S. and state laws, but those laws have little power over the 1,800 offshore gambling sites that are expected to take in \$2 billion from U.S. residents this year.

On June 10<sup>th</sup>, the House approved legislation outlawing credit card, wire transfer, and other payments used to gamble online.

The ban, intended to stifle bets placed at overseas Web sites, passed by a 319-104 margin. The bill cracks down on companies that provide the funds for interactive roulette, card games, and sports betting. Seventy-four countries regulate online gambling.

In a clear concession to state governments that operate lotteries, not to mention horse and dog-racing tracks that accept bets from remote locations, the bill included a loophole exempting from the ban "any lawful transaction with a business licensed or authorized by a state."

The measure now goes to the Senate. The Senate Banking and Finance Committee has held hearings on a similar bill but has not yet scheduled a vote.

The Justice Dept. says most of the thousands of gambling Web sites operate outside of U.S. laws and taxes.

**F**TC wants new powers to fight spam. In testimony before the House Energy and Commerce Committee, Federal Trade Commissioners said they need the ability to secretly investigate those who send deceptive e-mail and more leeway to go after spammers who send their messages across international borders.

The focus of the hearing was a proposal drafted by the FTC that would basically turn the agency's investigators into spam cops.

Listening to the FTC, one easily can get the impression that deceptive e-mail is downright un-American, since so much of it comes from places like Nigeria, Canada and Russia. That's why the top consumer watchdog agency is asking Congress for expanded power to pursue foreign spammers, among other requests.

E-mail marketers should be required to describe their products honestly and honor consumer requests to be taken off

their contact lists, the FTC said, while criminal penalties should be explored for those who falsify their return addresses.

The proposals "would provide more effective investigative and enforcement tools and would enhance the FTC's continuing law enforcement efforts," the five commissioners said in a joint statement.

Privacy groups have raised concerns about the FTC's plan, saying it does not contain sufficient checks and balances. The Electronic Privacy Information Center cautioned that the FTC proposal could open Americans to investigation by foreign governments.

**F**TC's 'Do Not Call List' to block phone sales pitches. Plunging long-distance rates and computerized dialers have led to a five-fold increase in telemarketing calls over the past decade.

The Federal Trade Commission's anti-telemarketing list went live on June 27th and already more than ten million Americans have signed up. At one point, more than 150 people per second were registering their phone numbers. The free "National Do-Not-Call List" prevents most telemarketers from bothering consumers at home. Funded by telemarketers, the list was unveiled by President Bush in a White House ceremony.

Telemarketers who call numbers on the list after Oct. 1 will face penalties of up to \$11,000 per call, as well as possible consumer lawsuits. Consumers can sign up by logging on to <donotcall.gov>.

The list does not cover all callers. Non-profit and political callers will be free to ignore it, but will have to honor consumer requests not to be called back. Businesses will be free to call customers for 18 months after making a sale, but they too will have to honor opt-out requests.

FTC officials predicted the list ultimately would curb telemarketing calls by 80 percent. The agency expects that eventually more than one-third of the nation's 166 million residential telephone lines will be on the list.

The Direct Marketing Association has sued to stop the Do-Not-Call list, arguing that it abridges free-speech rights and that it will wreak havoc on an industry that employs 2 million people.

**A**safety study commissioned by the Federal Aviation Administration (FAA) and the Air Transport Association is intended to resolve a long-standing question that is, do wireless telecommunications devices on commercial flights interfere with navigational

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equipment?

The study, to be conducted by the nonprofit group RTCA will investigate the effects of high-altitude communications from handheld computers, laptops and cell phones. Experts say there is no proof that wireless devices interfere with navigation systems.

The FAA and the FCC prohibit cell-phone use from the moment a plane's door is closed before takeoff to the time the plane arrives at a gate. All other wireless communication also is banned. The FCC is reviewing its guidelines, which are more than 15 years old, to account for changing technology. Passengers are permitted to use portable CD or DVD players and laptops without wireless modems after takeoff. *Source: Financial Times and the Washington Post.*

## AMATEUR RADIO

### FCC Amateur Radio Enforcement

**Jody Brewster** and **Keith F. Higginbotham** (Vienna, VA) have been notified by the FCC that their cordless telephones are causing RF interference to the Amateur Radio operations of Bernie Keiser, W4SW also of Vienna, VA.

"Under FCC rules, such equipment is classified as an 'intentional radiator' (which) must not cause harmful interference (to a licensed radio service.) If it does, the operator of the device is responsible for correcting the interference...."

"The interference must be corrected before its operation may continue. The manufacturer or retail seller of the device may be willing to allow you to return the device and exchange it for one that will not cause interference."

**Ronald E. Shapiro, N2CQT (Kerhonkson, NY)** has been advised that the FCC has information that on May 24, 2003, he deliberately interfered with and harassed operators on 3.906 MHz ...including playing music, making transmissions to no one in particular and deliberately transmitting on top of ongoing communications.

Shapiro is to respond to the complaint within 20 days. "The information you submit will be used to determine what action to take in this matter."

**Michael V. Swift, KG6QOB (San Ramon, CA)** has had his Technician Class license canceled on May 29th due to evidence that he made numerous false distress calls on Channels 16

and 22A Marine frequencies.

**Eric Dollar (Taylorsville, NC)** has been warned that the FCC has information that he has been operating radio equipment without a license on 26.895 MHz and 26.915 MHz.

"Those transmissions are causing interference to licensed stations in the Ten Meter Amateur Band." Continued operation will subject him to seizure of his radio equipment, a fine and/or imprisonment. "Monetary forfeitures normally range from \$7,500 to \$10,000," FCC said. He is to contact the FCC.

**Phillip C. Cox, KC5AMQ (Black River, NY)** has had his General Class renewal held up by the FCC due to complaints that have been filed against him. He is to respond to them within 20 days.

**Gregory Gordon, trustee of the W6SON (Sonoma County Radio Amateurs, Inc., Santa Rosa, CA)** repeater is embroiled in a dispute with Jack Rosevear, licensee of the KD6LSO, a coordinated repeater.

"SCRA has had more than ample time to resolve interference problems to the KD6LSO repeater, but the interference continues," FCC said.

Further information reveals that the SCRA repeater has deliberately interfered with the Sonoma County RACES operation on KD6LSO and that the SCRA repeater is no longer configured to monitor for a signal on the frequency before transmitting.

The FCC said it needed more information in order to determine what action to take. Gordon is to respond to several questions posed by the FCC including "...the exact measures taken by SCRA, if any, to prevent interference to the KD6LSO repeater."

**William F. Heath, KF4VWT (Lauderhill, FL)** is to respond within 20 days to a complaint that he intentionally interfered with ongoing repeater operations on 146.790 MHz. "The information you submit will be used to determine what action to take in this matter." The FCC also directed Heath to update his address in the license data base.

### The New RTTY Journal and W5YI Report Cease Publication

This is the last issue of The W5YI Report that you will receive.

For the past 25 years, Fred W3YI has been publishing this newsletter, The W5YI Report. He sold his company in 2000 ...and with it, the W5YI Report. Fred did agree, however, to continue providing the newsletter for three years ...until the July 15, 2003 issue. After that, newsletter subscriptions will be fulfilled with CQ Magazine beginning with the August issue.

The W5YI Report newsletter started in the late 1970's as input to a ham radio club ...the Richardson (Texas) Wireless Klub. I was 43 years old at the time. Others asked for the news input, so I made it available to them on a no cost basis. All I asked for was a batch of numbered stamped self-addressed envelopes which I filed in reverse order in 24 cardboard boxes in his garage ...one for each issue over a yearly basis.

I told my readers that when the envelope got down to 1 or 2, to send another batch. The system soon got out of hand when I had thousands of envelopes in his crude distribution system. It was then that I was forced to change to a paid subscription basis and printed (instead of photocopying) the newsletter. We still have subscribers to this day that have been with us since the beginning.

Fred, now 68, wants to retire from the twice-a-month grind. He will continue, however, writing his monthly column in CQ magazine. The following message will be printed in the August issue of CQ.

"We would like to extend a warm welcome to CQ to readers of The New RTTY Journal and the W5YI Report, both of which have ceased publication. Their respective publishers have arranged to have their readers' remaining subscriptions fulfilled by CQ, based on the value of the remaining portion of each subscription.

If you are already a CQ subscriber, your subscription will be extended by the appropriate number of issues. If you start getting two (or three!) issues of CQ each month, gather them all up, call our customer service number at 800-853-9797 and we'll get it all straightened out.

Amateur radio is the poorer for the loss of these publications. The New RTTY Journal and its predecessors have been part of the amateur radio landscape for more than 50 years. Fred Maia, W5YI, spent a quarter-century bringing hams the latest news of amateur radio and the broader electronics industry on his familiar pink bi-weekly newsletter."

## **60-Meter Amateur Radio Channels Now Available**

The ARRL released a bulletin giving radioamateurs additional information on the new 5 MHz allocation which became available at midnight (12 a.m.) local time on July 3. It said, the rules impose a new record-keeping requirement for hams that use an antenna other than a simple half-wave dipole.

"According to Part 97.303(s), a half-wave dipole on the 5 MHz allocation will be presumed to have a gain of 0 dBd." Licensees using other antennas must maintain in their station records either manufacturer data on the antenna gain or calculations of the antenna gain.

"Because the new rules also require hams to run no more than 50 W effective radiated power (ERP) on the new channels, the choice of antenna becomes an important compliance factor. The FCC rules stipulate, 'For the purpose of computing ERP, the transmitter PEP will be multiplied by the antenna gain relative to a dipole or the equivalent calculation in decibels.'"

The League has posted a list of frequently asked questions (FAQ) concerning 5 MHz operation on the ARRL Web site at: <[www.arrl.org/fandes/field/regulations/faq.html#sixty](http://www.arrl.org/fandes/field/regulations/faq.html#sixty)>.

The League said that the FCC gave the Amateur community five channels instead of 150-kHz at 5250 to 5400 kHz because the National Telecommunications and Information Administration (NTIA), which administers spectrum regulated by the federal government, cited "homeland security spectrum requirements" Only Upper Sideband modulation is allowed and marks the first time that CW is not allowed on Amateur spectrum.

One of the concerns is staying within the 2.8 kHz wide channel. "The channels the FCC has allocated for the Amateur Service are 5332, 5348, 5368, 5373 and 5405 kHz. The NTIA has told the FCC that hams "must assure that their signal is transmitted on the channel-center frequency." This means the amateur signal must be centered within the 2.8-kHz-wide channel.

The NTIA suggests appropriate tuning frequencies for each center-channel frequency as follows: 5330.5, 5346.5, 5366.5, 5371.5 and 5403.5 kHz ...1.5 kHz below the channel center frequency.

The new rules (§97.303(s)) state that "An amateur station having an operator holding a General, Advanced or Amateur Extra Class license may only transmit single sideband, suppressed-carrier (emission type 2K8J3E) upper sideband on the channels 5332 kHz, 5348 kHz, 5358 kHz, 5373 kHz and 5405 kHz. Amateur operators shall ensure that their transmission occupies only the 2.8 kHz centered around each of these frequencies. Transmissions shall not exceed an effective radiated power (ERP) of 50 W PEP. For the purpose of computing ERP, the transmitter PEP will be multiplied with the antenna gain relative to a dipole or the equivalent calculation in decibels. A half-wave dipole antenna will be presumed to have a gain of 0 dBd. Licensees using other antennas

must maintain in their station records either manufacturer data on the antenna gain or calculations of the antenna gain. No amateur station shall cause harmful interference to stations authorized in the mobile and fixed services; nor is any amateur station protected from interference due to the operation of any such station."

ARRL said that it "...anticipates that 5-MHz channelized operation will come to resemble repeater operation. Stations might be expected to break in to join a QSO in progress or grab a signal report and, rather than calling CQ, they'll just announce that they're 'monitoring' a particular channel (assuming that it's not already busy)."

## **FCC Proposes to Update Human RF Exposure Rules**

*"The current rules contain requirements for evaluating human exposure to RF energy emitted by FCC-regulated transmitters and facilities and date back to 1996-1997. Since that time, it has become apparent that certain aspects of our rules may warrant further revision to clarify the responsibilities of our licensees and grantees and to ensure compliance with the FCC limits in a more practical, reasonable and efficient manner."*

*Statement by Michael K. Powell, Chairman, FCC*

On June 26, the FCC released a *Notice of Proposed Rulemaking* seeking to update the Commission's rules pertaining to human exposure to radiofrequency electromagnetic fields. ET Docket No. 03-137 is a 48-page technically complex document that proposes to amend FCC Rule Parts 1 and 2 relating to the compliance of FCC-regulated transmitters and facilities to the FCC guidelines for human exposure to radiofrequency (RF) energy.

The FCC said, "While transmitters and devices regulated by the Commission typically would not result in levels of exposure high enough to cause injury, it is nevertheless important to ensure that human exposures are maintained well below levels that are suspected to be even potentially harmful."

To achieve that, the FCC proposed several modifications to their RF exposure rules including revising the criteria for determining whether transmitters used in a number of services are subject to routine evaluation for compliance with the RF exposure limits or are categorically excluded from such evaluations, clarifying the procedures for evaluating RF exposure, and adding more specific definitions and compliance procedures relating to RF (occupational) exposure of workers (occupational) exposure.

While the proposed rules mention Amateur Service transmitters, no changes were proposed over those already contained in Part 97.13(c)(1) which requires a routine RF evaluation if certain specified power levels are exceeded on the various Amateur wavelength bands.

The NPRM suggests that additional transmitters in other services can be categorically excluded from routine evaluation for RF compliance and that some transmitters and devices are inappropriately excluded. The three month comment period expires about September 1.