NASB NEWSLETTER

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Message from Jeff White, NASB President

I was honored to be elected the new NASB President (along with Paul Hunter of Word Broadcasting as Vice President) during our 2003 annual meeting in Washington. My mandate is a rather short one. Someone else will have to become president at next year's annual meeting because I will be ending my second consecutive term on the Board of Directors and must, therefore, rotate off the Board. But we can still accomplish a lot in one year, so full speed ahead.

First, however, I would like to thank Ed Evans and Dan Elyea for their great job as NASB President and Secretary/Treasurer, respectively, for the past two years (in the case of Ed) and four years for Dan. And while they both have rotated off the Board, they are remaining active in NASB affairs. Ed was named the head of the NASB BPL/PLC Committee, which is explained in more detail elsewhere in this Newsletter. Dan was re-elected as Secretary/Treasurer, as this position does not require that one be a member of the Board.

The NASB continues to grow. We want to welcome our newest member, KAIJ

in Dallas, Texas, directed by Mike Parker. KAIJ was originally founded as KCBI back in the 1980's, and the call letters were changed when it was sold to its current owners. Also recently joining us is Word Broadcasting, which operates WJIE in Kentucky and KVOH in California. KVOH had already been an NASB member through its former operator, High Adventure Broadcasting, but WJIE is completely new to us. NASB's membership now stands at 14 organizations representing 18 of the 25 FCC-licensed shortwave stations. Our newest associate member is VT Merlin Communications, which operates the world's largest shortwave transmitter network. Some of our NASB members are affiliated with Merlin. You'll find an article about them elsewhere in this Newsletter, and you'll be able to meet them personally at next year's NASB annual meeting.

The ITU's World Radiocommunications Conference 2003 (WRC 03) just ended at the beginning of July in Geneva. There were three main items on the agenda of interest to HF broadcasters. According to reports we have received from Don Messer and John Wood of the IBB, amateur radio operators were given an additional 100 kHz of spectrum from 7100-7200 kHz in Regions 1 and 3. In Region 2 (the Western Hemisphere), their allocations remained the same, but as a consequence of the amateur realignment agreement, 7350 - 7400 kHz was allocated to Region 2 for the broadcasting service, effective March 29, 2009. This doubles the existing 7 MHz band allocation of 7300 - 7350, which will be implemented in 2007. The old requirement that HF broadcasters convert to single sideband transmissions was eliminated, and the new regulations permit (and encourage) transmissions in the DRM digital mode. Unfortunately, the U.S. plan to give broadcasters extra spectrum between 4 and 10 MHz (apart from the 7 MHz band situation) was tabled until the 2007 conference, but of course the FCC will continue to allow out-of-band broadcasting on a non-interference basis.

The NASB Board has approved a one-year publicity campaign aimed at increasing awareness of the Association and its members (and associate members) among shortwave listeners in the three primary target areas of NASB member stations -- North America, Latin America and Europe. (Eleven of our 14 members broadcast to Europe and North America; 10 broadcast to Latin America.) We are putting together a large professional display with photos of all of our member stations, and we will take it to the largest gatherings of shortwave listeners on each of the three continents. The first event will be the Mexican National Meeting of DXers and Shortwave Listeners to be held in Tizayuca, Hidalgo (just north of Mexico City) July 31-August 3,

2003. The second event will be the Shortwave Listeners Winterfest in Kulpsville, Pennsylvania in March of next year. And finally there's the European DX Council Conference to be held somewhere in Europe in the summer of 2004.

I am happy to report that as of this writing in mid-July, already over half of our members have sent their photos for the display and a great variety of items to be handed out to listeners at the meeting in Mexico -- program schedules, stickers, pens, keychains, t-shirts, bags, pennants and many other promotional materials. I have also been asked by the meeting's organizers to give a presentation about the NASB and our participation in the recent HFCC Conference in Johannesburg, South Africa. Many shortwave club leaders, publication editors and program producers attend these meetings, and our objective is to introduce the NASB to these people and obtain contact information so we can provide them with news releases and articles about our future activities. We will also have the chance to chat with listeners about their likes and dislikes, listening habits, etc. And we will be able to meet colleagues from various Mexican and international shortwave stations who also attend the meeting. This campaign is being carried out at a very modest cost and should provide us with a lot of free publicity in the future which will reach our listeners and potential listeners in our primary target areas. We want to thank WSHB, which has loaned us a very nice professional display for these events. It would have cost us over $1000 to buy such a display.

At the Mexican shortwave meeting, we will have the pleasure of hosting the first-ever demonstration of DRM (digital shortwave) reception in Mexico at our NASB booth. Thanks very much to Adil Mina of Continental Electronics for this suggestion. The DRM Coalition (of which NASB is a member) is supporting us with dozens of brochures about DRM and CDs showing the difference in quality between analog and digital shortwave broadcasts. The Ten-Tec corporation is providing us with one of its new RX-320D DRM-ready receivers. VT Merlin is providing us with a license for the software necessary to use with the receiver. The Mexican organizers are providing a PC, external speakers and a longwire antenna. And Kim Elliott of the Voice of America is loaning us a sound card for the event. It is expected that we will be able to demonstrate reception of live DRM broadcasts from Sackville, Canada and Bonaire, Netherlands Antilles, among other sites.

And speaking of DRM, Mike Adams of FEBC was our NASB rep at the recent inauguration June 16th of regular DRM broadcasts which took place at the

WRC 03 Conference in Geneva. Elsewhere in this Newsletter, Mike reports that the inauguration went extremely well, and no doubt many of you saw the publicity for the event in trade publications and even the general-interest media around the world. Mike is working on a proposal for a possible joint NASB DRM program in the not-too-distant future.

And finally, we were happy to accept the generous offer of WEWN to share expenses so that we can have an official NASB representative at the next HFCC shortwave frequency planning conference August 25-29 in Tromso, Norway. Our rep there will be WEWN's Dennis Dempsey. We urge the frequency managers of all of our member stations who will not have representatives in Norway to send Dennis copies of your B03 schedules so that he can check for any inaccuracies or collisions at the HFCC Conference. Dennis' e-mail is: ddempsey@ewtn.com.

In the next issue or two of the NASB Newsletter, we'll have detailed reports on the Mexican National Shortwave Listeners Meeting and the HFCC Conference in Norway. In the meantime, if you'd like to contact me for any reason, my e-mail is: radiomiami9@cs.com.

DRM DIGITAL SHORTWAVE OFFICIALLY INAUGURATED IN GENEVA

Mike Adams of FEBC, who is NASB's DRM rep, reports:

I was pleased to represent NASB at the launch event of DRM June 16th in Geneva. Our NASB logo was on the large poster behind DRM Chairman Peter Senger as he sent the signal to begin broadcasts. The following report from the DRM Newsletter gives a summary of highlights of the week at WRC. I was really impressed by the total number of broadcasters who got on the air for the launch. Questions and comments are welcome at: madams@febc.org.

June 16th, 2003 -- As night falls across the city of Geneva during the International Telecommunications Union's (ITU) World Radiocommunication Conference (WRC 2003), the global broadcasting industry enters a new era.

With the flick of a switch, the world's leading broadcasters simultaneously send

the world's first, live, daily Digital Radio Mondiale (DRM) broadcasts.

DRM is the world's only non-proprietary, digital system for short-wave, medium-wave/AM and long-wave that uses existing frequencies and bandwidth across the globe. With clear, near-FM quality sound that offers a dramatic improvement over analogue, DRM will revitalize radio in markets worldwide.

International broadcasters BBC World Service, CBC/Radio Canada International, Christian Vision, Deutsche Welle, Kuwait Radio/MOI Kuwait, Radio France Internationale, Radio Netherlands, Radio Vaticana, Swedish Radio International, Voice of America, Voice of Russia and Wales Radio International launch their DRM broadcasts in tandem.

These live transmissions reach the WRC 03 delegates celebrating DRM's debut at Geneva's Château de Penthes, and far beyond -- throughout Europe, to the Middle East, down to Australia and New Zealand, and across to North America.

At the same time, national and local broadcasters such as Radio France, DeutschlandRadio and Georg-Simon-Ohm-Fachhochschule in Nuremberg deliver DRM broadcasts on medium-wave/AM.

"DRM's introduction will forever alter the course of radio broadcasting," says DRM Chairman Peter Senger. "The fading, noise and interference that have hampered analogue broadcasting for decades will be replaced by DRM's excellent reception quality. DRM will create exciting new opportunities for broadcasters to expand their audiences and increase time spent listening."

Coding Technologies GmbH has announced that production of a second-generation, DRM-capable, world band receiver is underway, for distribution in late 2003. Further commercial DRM-capable receivers should become available in stores within two to three years.

Listeners with PC-based receivers can hear DRM broadcasts now. Nearly 400 radio amateurs and DXers are actively participating in the DRM Software Radio Project, which opened last December. The project gives radio enthusiasts who purchase software licenses (price: 60 Euros) the opportunity to receive DRM's live transmissions. The project is managed by VT Merlin Communications.

DRM's broadcasts are available in Europe, the U.S.A, Canada, the Middle East, Australia and New Zealand. At the moment, about half of the project participants

are based in Germany. The rest are in the U.K., the U.S.A., the Caribbean, Holland, Austria, France, Belgium, Luxembourg, Denmark, Sweden, Finland, Spain, Italy, Hungary and New Zealand.

The DRM Software Radio is made by Fraunhofer IIS. Designed for private use, it is a downscaled version of an existing, professional Fraunhofer receiver. Its features include: audio MPEG-4, aacPlus and HVXC decoding, multimedia reception, selection of service and the possibility to log the reception quality. Its audio decoding library has been provided by Coding Technologies.

Thanks to an invitation from the IBB's Kim Elliott, the DRM Software Radio Project was showcased in March 2003 at the Winter SWL (Short-wave Listeners) Fest, an annual event held near Philadelphia, Pennsylvania, USA. More than 200 short-wave radio enthusiasts and professionals attended this year's event. James Briggs of VT Merlin Communications and Jan Peter Werkman of Radio Netherlands represented DRM at the event. They demonstrated live, DRM test transmissions.

The audience especially appreciated hearing live, comparative broadcasts of analogue and DRM back-to-back. The consensus was: A dramatic difference in audio and reception quality!

The DRM Software Radio Project will run for two years. Radio enthusiasts may register at www.drmrx.org, or via the DRM Web site at www.drm.org.

The following letter of thanks was directed to the NASB in care of its representative, Mike Adams:

Geneva / Bonn, 07 July 2003

Dear DRM members,

Please allow me to thank you personally for the support Digital Radio Mondiale has received from you and your organisation, and for the most efficient work and the help you and your colleagues provided during the first two weeks of WRC 2003.

The DRM launch on the 16th of June 2003 in Geneva proved to be a great success. The overwhelmingly outstanding audio and reception quality of the new digital technology on medium- and short-wave frequencies and the positive feedback from the WRC delegates and the national and international press concerning DRM' s inaugural broadcasts and the DRM demonstrations shown at the EBU, confirm the most efficient co-operation between the DRM member companies, the DRM staff working at the transmitter sites or on site Geneva. Your operational readiness has lead DRM to where it is now: a quite considerable achievement!

All active members of DRM participated, but some members and also non-members gave outstanding contributions, for which DRM would like to thank very much:

British Broadcasting Corporation, BCE / RTL, Christian Vision, Coding Technologies, Deutsche Welle, DeutschlandRadio, FH Nuremberg, Fraunhofer Institute, IBB - The Voice of America, Kuwait Radio, **NASB**, Nozema, Radio Canada Intl., Radio France, Radio France Internationale, Radio Nederland Wereldomroep, Swedish Radio Intl, RTRN - The Voice of Russia, TéléDiffusion de France, Telenor / NRK, Thales Broadcast & Multimedia, T-Systems, VT Merlin Communications and Wales Radio International.

Thank you all again for your perfect support. Let me please take this opportunity to express my hope that you will continue to give DRM the necessary assistance for the remaining period.

Yours Sincerely,

Peter Senger

NASB FILES COMMENTS WITH FCC ON BROADBAND OVER POWER LINES

Shortwave listener Martin Gallas of Jacksonville, Illinois recently wrote us with the following comments:

"I just received my NASWA [North American Shortwave Association] Journal with [your comments on] the FCC's plans to wipe out SW reception with BPL. I have written my letter to the FCC and in addition to noting the consequences for

SWL's, I mentioned how it would wipe out ham radio at a time when homeland concerns would seem to dictate that we maintain radio amateurs as a vital part of the communications network in case of natural or man-made disaster."

Similarly -- and quite alarmingly -- listener Bill Fuqua of Kentucky sent the following inquiry and comments:

"I am wondering what your organization's position, ideas, or concerns are about the FCC proposals on Broadband over Power Lines. This is a real concern to the amateur radio community and others. We now have in Lexington, KY shortwave listeners that have difficulty receiving some SW broadcast stations due to interference from the smaller in-home systems that are now being sold in stores such as COMPUSA. Even if these systems meet HomePlug standards they may still interfere with SWL activities. HomePlug made sure that their systems did not produce signals within the amateur bands but they do in the Shortwave Broadcast bands."

On July 7, 2003, NASB's attorney, Ed Bailey, filed comments with the FCC regarding a Notice of Inquiry about the issue of Broadband over Power Lines (BPL, sometimes also known as Power Line Communications or PLC) and the potential damaging effects this new technology could have on shortwave broadcasts in the United States. This document was the result of research done by NASB's BPL/PLC Committee, headed by Ed Evans of WSHB. The following is a transcript of our comments:

Introduction

These comments are submitted on behalf of the National Association of Shortwave Broadcasters ("NASB"), which represents eighteen FCC-licensed, privately owned shortwave broadcast stations located in the United States.[1]

The Commission has requested information and data regarding issues related to

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[1] KSDA; WMLK; WEWN; WYFR; KFBS; WTJC; WBOH; WSHB; WHRI; KWHR; WHRA; WRMI; KTWR; KAIJ; KVOH; WJIE; KNLS; and, WINB.

Broadband over Power Lines systems (BPL) as part of its consideration of changes to Part 15 of the Commission's rules in order to facilitate the deployment of this technology. NASB's position is that BPL, or any other developmental technology, should be introduced *only* if existing proven frequency applications are provided the maximum protection so as to prevent harmful interference with existing uses. To that end, NASB has consistently supported the reasonable concerns of public protection, disaster relief, defense and security users of HF frequencies when those users have expressed concerns regarding harmful interference from proposed users. Because NASB believes BPL to be a disruptive technology that significantly interferes with many existing radio applications now in use in the bands between 2 and 30 MHz, it concludes that BPL should not be authorized at this time.

Technical/Interference Concerns

These Comments address concerns related to two different BPL technologies: Access and In-House. Both systems employ multiple carrier signals spread over a broad range of frequencies. The conducted energy from a BPL system causes harmful interference to radio communications via two possible paths. First, the RF energy is carried through electrical wiring to radio receivers connected to the electrical wiring. Second, at frequencies below 30 MHz, where wavelengths exceed 10 meters, long stretches of power line wiring will act as an antenna, permitting the BPL RF energy to be radiated over the airwaves. Thus, it would have the effect of raising the already high noise floors for radio reception. Since there is relatively low propagation loss at these frequencies, such radiated energy would cause harmful interference to portable or mobile radio receivers, even those at a considerable distance from the power lines.

The adoption of a BPL system in the United States, using wide spectrum techniques from 4.5 MHz to 21 MHz would result in the *de facto* "jamming" of international shortwave broadcasts intended for listeners in the United States. Since the clear intention of the international Radio Regulations is to avoid harmful interference, the U.S. has a responsibility to limit, or remove, any source of interference with such reception. The concern of NASB is that BPL, in fact, introduces such harmful interference.

Several papers and commentators have raised significant concerns regarding the viability of BPL in light of the above issues.[2] The BBC and its broadcasting arm, VT Merlin, are strong in their objection to any relaxation of interference to the broadcast bands. A report[3] developed by Jonathon Stott of the BBC Research and Development Group, demonstrates that BPL systems are a serious threat to broadcasting. The European Broadcast Union developed a proposal on BPL systems and their emissions which was first presented as a report to the DRM membership.

DRM, the leading digital methodology for the future of radio, has expressed strong concerns, as has the European DX Council, the Radio Society of Great Britain[4] and the Austrian Amateur Radio Society.[5]

It will be impractical, if not impossible, to develop standardized measurement techniques to ensure compliance at any protection level that the Commission might adopt. BPL systems use electrical wiring within a building as the means to transmit data; consequently, the impedance of the building system changes every time a device or appliance is added, removed, or turned off or on. Such a widely fluctuating environment makes modeling of any such system extremely difficult, if not impossible. Radiated emissions from the RF energy imposed on the building's electrical wiring would vary from location to location based on each building's wiring and power requirements. Since the building wiring would also serve as an antenna, that wiring structure would have to be accounted for in any evaluation methodology. Certainly, measurements derived in any laboratory setting would be invalid, as each system would constitute a unique set of parameters to be measured and evaluated.

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[2] See, e.g. "Power Line Communications: A Threat for Radio Listening?" Prof. Filippo Gianetti, Universita' degli Studi di Pisa (http://www.edxc.org/modules.php?op=modload&name=Sections&file=index&req=viewarticle&artid=1&page=1). See also, "Physical and Regulatory Constraints for Communication over the Power Supply Grid" by Martin Gebhardt, Frank Weinmann and Klaus Dostert, University of Karlsruhe.

[3] See. http://www.bbc.co.uk/rd/pubs/whp/whp013.html.

[4] http://www.rsgb.org/emc/pltnew.htm

[5] http://www.powerline-plc.info/video

Public Protection, Disaster Relief and Defense

Many of the authorized services in the fixed, land mobile, aeronautical mobile, maritime mobile, radiolocation, broadcast radio, amateur radio terrestrial and satellite, and radio astronomy frequencies play an important role in Homeland Security and, arguably, would be severely compromised by interference from BPL. These services currently provide reliable and proven methods of communication when other means of communication have been disrupted. It would be untimely and ill-advised to introduce any new source of potential interference that might have an adverse affect on these communications. This effect would be quite noticeable in both urban and rural settings and imposes on *everyone* served by the power line, whether they receive the service or not.

Recommendation

In the event there is an adoption and deployment of BPL, NASB would require that operable BPL systems demonstrate, and the FCC certify, that the magnetic field of the emissions should be 0 dBu V/m, measured at a distance of one meter, in a bandwidth of 9 kHz, and utilizing a peak detector. This is the only methodology that can guarantee adequate protection to the radio spectrum from 2 to 30 MHz from BPL interference.

Conclusion

Accordingly, NASB believes that BPL systems jeopardize the current use of the radio bands between 2 and 30 MHz. NASB joins in the expressed concerns about BPL interference to other licensed radio spectrum users in these bands. NASB encourages the Commission to look beyond the temporary appeal of BPL to undergo a thorough examination of the science, to recognize the collateral damage caused by BPL and to provide maximum protection of the proven existing radio applications.

Respectfully submitted,

NATIONAL ASSOCIATION OF SHORTWAVE BROADCASTERS

Individual NASB member stations -- and anyone else -- may file reply comments with the FCC. Reply comments are due on or before August 6, 2003. The addresses are listed below:

(Hand or Messenger Delivered accepted between 8:00 a.m. to 7:00 p.m. only)
Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
c/o Vistronix, Inc.
236 Massachusetts Avenue, N.E.
Suite 110
Washington, DC 20002

(Commercial overnight mail, EXCEPT United States Postal Service)
Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
9300 East Hampton Drive
Capitol Heights, MD 20743

(All other mail, INCLUDING United States Postal Service Express Mail, Priority Mail, and First Class Mail)
Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Additionally, comments may be filed on-line by going through the FCC website (www.fcc.gov) and clicking on E-Filing at the top of the page. On the E-File page then scroll down to ECFS (Electronic Comment Filing System) and follow instructions.

Introduction to VT Merlin Communications
VT Merlin Communications

VT Merlin Communications is a leading provider of critical communications services to customers in the broadcast, defence and space communications industries, providing services in over 100 countries from 16 key locations around the world.

Merlin Communications International was founded in 1997 following the UK Government's decision to privatise the BBC World Service transmission business and in December 2001 the company was acquired by Vosper Thornycroft PLC (now VT Group PLC). The company was then rebranded VT Merlin Communications in August 2002 as part of the Group's rebranding strategy. VT Group is a leading civil and defence contractor focusing on support services, shipbuilding and marine products and is FTSE 350 quoted company on the London Stock Exchange. VT Merlin Communications now sits in VT Group's Support Services division, which encompasses both civil and military activities.

Our broadcast infrastructure includes four sites in the UK, three short wave (HF) sites at Rampisham, Skelton and Woofferton, and one medium wave (MF) site in Orfordness. We also operate and maintain a total of six sites in various locations around the world on behalf of the BBC World Service.

VT Merlin Communications has now established itself as a responsive transmission service provider and broadcast engineering company and as well as transmitting for the BBC World Service, VT Merlin Communications broadcasts for major international broadcasters including the Australian Broadcasting Corporation, NHK Japan, Radio Canada International, Radio Netherlands, Voice of America, amongst many others. Operating the world's leading commercial short wave network, VT Merlin Communications currently transmits over 1,000 hours of both short and medium wave broadcasts every day.

We have also developed strategic relationships with other broadcasters and now have arrangements with several sites worldwide including Emirates Media's in the UAE and Sentech's in South Africa, ranging from operation and maintenance contracts to brokering of transmission airtime.

VT Merlin Communications is a founder member of the Digital Radio Mondiale (DRM) consortium. The DRM consortium, founded in 1998, consists of a wide range of broadcast related organisations working to bring digital AM to the marketplace. DRM provides VT Merlin with a significant opportunity to offer customers comprehensive digital broadcast and data services. The DRM transmission signals offer customers considerable benefits in achieving near-FM broadcast quality whilst maintaining the expansive coverage offered by normal short wave transmissions utilizing existing frequencies. Following the DRM's inaugural broadcasts in June 2003, VT Merlin has recently commenced digital short wave and medium wave DRM broadcasts from two of its UK sites for a number of existing broadcast customers.

NASB Members:

Adventist World Radio
Assemblies of Yahweh
Family Stations Inc.
Far East Broadcasting Co.
Fundamental Broadcasting Network
Herald Broadcasting Syndicate
Le Sea Broadcasting Corp.
Radio Miami International
Trans World Radio
Two If By Sea Broadcasting Corp.
Word Broadcasting
World Christian Broadcasting
World International Broadcasters
World Wide Catholic Radio

NASB Associate Members:

Comet North America
George Jacobs & Associates
HCJB World Radio
IBB
IDT Continental Electronics Corp
TCI/Dielectric
TDP
Thales Broadcast and Multimedia
VT Merlin Communications

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